SHORTAGE OF PUBLIC SECTOR HEALTH WORKERS: A CASE STUDY UNDERTAKEN AT A SELECTED HOSPITAL IN WINDHOEK, NAMIBIA

by

FOIBE NDAPEWA SHILINGE

Dissertation submitted in partial fulfilment of the requirements for the degree

Magister Technologiae in Human Resource Management

in the Faculty of Business and Management Sciences

at the Cape Peninsula University of Technology, District Six, Cape Town

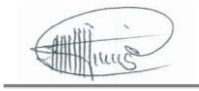
Supervisor: Prof. Abraham A. Rust

Co-Supervisor: Dr Jerome Kiley

Date submitted: 12 August 2022

DECLARATION

I, Foibe Ndapewa Shilinge, declare that the contents of this thesis represent my own unaided work and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.



12 August 2022

Signed **Date**

ABSTRACT

This mini-thesis was proposed to investigate the shortage of public sector health workers through a case study conducted at a selected hospital in Windhoek, Namibia. The study triggered by the media's (print and audio-visual) outcry that the public has been receiving insufficient and inadequate health care services at state clinics, hospitals and health care centres. The criticisms persisted over the years after Namibia gained independence that healthcare services delivery is inefficient in its quality due to the shortage of health workers in public hospitals. This accusation was probed to establish whether the public outcry could be substantiated.

This study was conducted using a qualitative inductive approach to accept the study's outcome and to allow the investigation of the causes and effects of the shortages of health workers in the Katutura Intermediate State Hospital (KISH) in Windhoek, Namibia. This approach allowed the research questions to be answered and the research problem to be dissected. The study's participants were drawn from all the key directorates and divisions responsible for delivering health care services in the Katutura Intermediate State Hospital (KISH). This study employed a descriptive design to organise data into patterns and themes that arose during data analysis. The data-gathering techniques employed in this study were individual and focus group interviews. The philosophical assumptions of this research study are epistemology, ontology and axiology.

The study employed the epistemology interpretivist philosophy because of the nature, validity and scope of the knowledge required to establish an understanding of the causes and effects of the shortage of health workers in the Katutura Intermediate State Hospital (KISH). The study sought to deduce the justifiable beliefs and opinions of the participants. The idea was to discover the participants' knowledge of possible remedial measures that could be employed in combating the shortage of health workers. In simple terms, the study aimed to employ interpretivist epistemology to gain an overview of the real situation by engaging in a holistic examination of the shortage of health workers at the KISH.

The study found that the KISH faces a dire shortage of health workers, especially in specialised disciplines, such as doctors and nurses. It was established during the interviews that the highly specialised health workers in the hospital, such as acute-care doctors, anaesthetists, cardiologists, internal medicine doctors, paediatricians, surgeons and urologists, are non-Namibians.

Namibia's number of health workers is insufficient to sustain both the public and private health sectors. Most specialists' positions in the hospital's organizational structures have been vacant for many years because the Namibian labour market does not have the required skills, and the local institutions of higher learning in the country do not train specialised doctors and nurses. Namibia's sole medical school trains only general practitioners, many of whom are not Namibians; thus, there are insufficient specialists to suppress the shortage. This study established that the Health Ministry is struggling to attract health workers from the private sector because of its low remuneration, poor employment conditions and working conditions.

It was found that the staff loss through issues such as retirement, demise, resignation, medical boarding and discharge due to misconduct contributes to the deficiency of health workers in Namibia. The poor retention policy is also one of the contributing factors because the KISH cannot constrain health workers due to gaps in Namibian Health Ministry's policy. The study revealed that the ratio of nurse/doctor to patient is excessive compared to the standard ratio of the World Health Organisation and that this shortage resulted in overwork and burnout among the health workers, which led to poor health care service delivery.

It is recommended that the Namibian Health Ministry should increase its training budget to enable more people to study medicine-related fields. It is also recommended that the said ministry should strengthen its retention policy by stipulating the employment conditions for health workers whose studies are/were funded by the MoHSS.

Furthermore, the study recommended that the Government of the Republic of Namibia should offer attractive remuneration packages to health workers and improve their working conditions as a retention incentive. Lastly, the study proposed the model that should assist the MoHSS to develop medical-related skills within the country.

ACKNOWLEDGEMENTS

I give all my praises to Almighty God, who blessed me with sufficient courage and capacity to carry out and complete this study – owing to my limitations and shortcomings, it was impossible to accomplish this work without His help.

I want to thank all the participants for dedicating their time and providing useful information that enabled the completion of this thesis.

I extend my deepest gratitude to my thesis supervisors, **Prof. A. A. Rust and Dr Jerome Kiley**; without their strenuous efforts and expert guidance, this dissertation would not have been concluded. Despite their busy schedule, they were always ready to take the time to assist me in the execution of research. Their continual scholarly disclosures, critical analysis, work design, valuable suggestions and excellent moral support and encouragement eased the burden of my research. Thus, it was a pleasure to have worked under the supervision of such resourceful and learned persons – I am really thankful for their guidance and support.

I am indebted to my family, who provided me with encouragement and support in pursuing this Master's of Human Resource Management.

DEDICATION

This thesis is dedicated to my husband, Dominicus N. Uugwanga; my sons, Nestor, Tobias and Wilhelm; my daughters, Aloycia and Ferciana; my brothers, Natangwe, Gerson and Wilhem; my sisters, Rachel, Aishe and Wilka, and my parents.

To my parents, husband, sons, daughters, brothers and sisters – you have made this study possible because you have been caring, loving and supportive of me. To my parents, you have laid a very strong foundation that has made me who I am today.

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ACRONYMS

AfGH:	Action for Global Health
CPUT	Cape Peninsular University of Technology
DoH:	Department of Health
GAA:	Global Agenda for Action
GHWA:	Global Health Workforce Alliance
HEAT:	Health Education and Training
HEW:	Health Extension Workers
HEPS:	Health Promotion and Social Development
HPA:	Health Poverty Action
HSDP:	Health Sector Development Programme
HRH:	Human Resources for Health
ICRH:	International Centre for Reproductive Health
IPAR:	Institute of Policy Analysis and Research
KISH:	Katutura Intermediate State Hospital
KMTC:	Kenya Medical Training College
MDGs:	Millennium Development Goals
MoHCW:	Ministry of Health and Child Welfare
MoHL:	Ministry of Health and Labour
MoHSS:	Ministry of Health and Social Services
NAMPA:	Namibia Press Agency
NGO:	Non-governmental organisation
NHS:	National Health Service
OECD:	Organisation for Economic Co-operation and Development
RCN:	Royal College of Nursing
UHC:	Universal Health Coverage
UNAM:	University of Namibia
VSO:	Voluntary Service Overseas
WHO:	World Health Organisation
WHR:	World Health Report

CLARIFICATION OF TERMS

Equity in health: This term implies “addressing differences in health status that are unnecessary, avoidable and unfair. In southern Africa, this term typically relates to disparities across racial groups, rural or urban status, socio-economic status, gender, age and geographical region” (Gupta & Bhaskar, 2011).

Expatriate: This term refers to “the person temporarily or permanently residing, as an immigrant, in a country other than that of their citizenship. In practice, the term is generally applied to professionals, skilled workers, or artists from affluent countries, often hired by companies, rather than all immigrants in general” (Castree, Kitchen & Alisdair, 2013).

Health care facility: The term refers to “health care facilities that range from small clinics and doctor's offices to urgent care centers and large hospitals with elaborate emergency rooms and trauma centers” (WHO, 2010).

Health workers: This term refers to **“**the people who work in health facilities to protect and improve the health of their communities. Health workers include physicians, dentists, pharmacists, physician assistants, nurses, advanced practice registered nurses, doctors (general practitioners and specialists), surgeons, surgeon's assistants, surgical technologists, midwives, dietitians, therapists, psychologists, chiropractors, clinical officers, social workers, phlebotomists, occupational therapists, physical therapists, radiographers, radiotherapists, respiratory therapists, audiologists, physiotherapists, radiologists, speech pathologists, optometrists, operating department practitioners, emergency medical technicians, paramedics, medical laboratory scientists, medical prosthetic technicians and a wide variety of other human resources trained to provide some type of health care services” (WHO, 2010).

Shortage of health workers: This term relates to “the situation in which the quantity of health workers available or supplied in health care facilities falls short of the demand” (Gupta & Bhaskar, 2011).

CHAPTER ONE

1.1 Introduction

Acute global shortage in the health workforce represents a crisis that will worsen in the years ahead. According to WHO (2013), there is a worldwide need for some 15 million more physicians, nurses, midwives, and two million more pharmacists and other paramedical workers by 2030. The report further alludes that currently, there are almost 60 million health workers globally, but they are unevenly distributed across countries and regions. The most affected countries are the developing countries, especially African countries. In addition, it is stated that the available health workers do not meet the population's demand for healthcare accessibility. Both developed and developing countries struggle to cope with the huge challenges posed by the imbalance between the increasing demand for health care and the faltering supply of health workers (WHO, 2013).

Globally, the health workforce shortage continues unabated in sub-Saharan African countries. The WHO (2013) reports that 24% of the world's disease burden currently has only 3% of health workers and less than 1% of the world's financial resources to respond to this burden. WHO (2013) estimates that the basic health-care system of 57 countries is affected by a shortage of human resources; about one-third of these countries are emerging market economies. Compounding the existing health workers' shortage and inequitable distribution of the health workforce the past few decades have witnessed an expansion in the international migration of health workers, with migration patterns becoming increasingly complex (Nair & Webster, 2013; Taylor & Dhillon, 2011). In addition, Nair & Webster (2013) assert that developed nations have increasingly relied on international migrants to fill health workforce positions across the skills spectrum, from home health aides and assistants to nurses, physicians and medical specialists. Given the increasing life expectancy and expanding elderly populations, this reliance is expected to continue in the coming decades. Nair and Webster (2013) further indicate that other factors, such as insufficient health systems, low wages, and poor working conditions, contribute to the migration of health workers.

It was reported by WHO (2010) that the chronic shortage of health workers in dozens of countries worldwide has serious consequences for the populations concerned, an implications that stretch far beyond their borders. The report further highlights that without adequate numbers of well-trained, skilled and highly motivated health workers located and supported in areas where they are most needed, national health systems cannot function, global improvements in health and the goal of universal health coverage (UHC) are seriously threatened.

In addition to the shortage of personnel, many health systems are plagued by inefficient and inequitable use of resources (WHO, 2010). Taylor and Dhillon (2011) concur that unmotivated, inappropriate and costly skill-mixes of health personnel are among the top ten (10) leading sources of inefficiency in health resources. The expanding, improving and supporting the health workforce collectively is of fundamental importance. Extending health coverage to more people and offering more services proves ineffective and almost impossible in many of theworst-affected countries (WHO, 2010).

In common with most African countries, Namibia faces a human resource crisis of a shortage of health workers in the public health sector. Public health services are provided by about 10 000 employees, of whom approximately 3 000 are trained medical doctors or nurses, while the rest are employed to provide administrative and other support services (NAMPA, 2013). Namibia's National Development Plan (2010/2011–2014/2015) highlights the shortage of health workers as a major challenge in improving the health of the Namibian population. In Namibia, nurses are trained at the University of Namibia (UNAM), with about 40 students enrolled yearly. Nghikembwa (2013) state that other health personnel, such as enrolled nurses, assistant pharmacists, assistant environmental health officers and assistant radiographers, are trained at seven regional health training centres. These centres are run by the Ministry of Health and Social Services (MoHSS). Nghikembwa (2013) also state that most, if not all, Namibian doctors have been trained outside the country; roughly two-thirds in South Africa and a further fifth in Europe. NAMPA (2013) indicate that 90% of the doctors are general practitioners, with only 2 to 5 doctors registering as qualified practitioners per annum.

According to Haufiku (2015), the Namibian MoHSS did not invest in human resources, especially doctors, during the past 25 years of independence and is still importing expertise for the health care sector. The MoHSS has entered into bilateral agreements with countries such as Cuba and Kenya for supplying foreign health workers on a contractual basis to supplement the country's health workers. The shortage of public health workers is so severe that in 2015, the Ministry spent nearly N$3,2 million on hiring expatriate medical personnel, particularly Cubans, to fill the gaps in various medical fields (Nakashole, 2016). Individual foreign health workers from other countries who are interested in working in Namibia are encouraged to apply for vacant positions. Sanzila (2013) indicates that more than 30 district hospitals in the country do not have a single Namibian doctor or pharmacist the government employs. The country instead relies on expatriates, a concern that the then Minister of Health and Social Services, Dr Richard Kamwi, deemed needed urgent attention.

In his report, Haufiku (2015) alludes that, generally, the MoHSS is faced with inefficient service delivery to citizens at the state health facilities, mostly due to the limited number of overworked health workers. State health institutions are facing a critical shortage of health workers, with hospitals in the Kunene and Kavango regions having no pharmacists. Haufiku (2015) further indicates that most of the regional hospitals are experiencing similar problems. He further points out that in the Zambezi Region, one dentist attends to over 90 000 patients, and the Robert Mugabe Clinic in Windhoek has one doctor and four nurses attending to about 248 people daily – an untenable situation which results in poor health service delivery.

Opuwo State Hospital, the only hospital in the Kunene Region, is also crippled by the shortage of medical doctors, which is not just a concern to the community but to the two doctors practising at this state facility. Patients referred to medical doctors at this hospital, such as someone requiring medication for high blood pressure, often have to wait for up to a week before being attended to by the doctor due to the long queues of patients (NAMPA 2013). Due to their extensive workload, and the shortage of doctors, the only two medical doctors at the Opuwo State Hospital cannot take leave.

According to NAMPA (2013), the quality of health care service, thus, is compromised because the two doctors strive to reduce the long line of up to 50 waiting patients per day. According to WHO (2013) recommended doctor-patient ratio, at least one doctor should treat or be responsible for a catchment area of about 1 000 patients. The current situation in Kunene is 1:25 000 (NAMPA, 2013).

The Namibian Office of the Auditor General conducted a survey in 2014 that revealed that the MoHSS is experiencing a shortage of health workers. The shortage of staff in state health facilities is mostly caused by the unavailability of health professionals in the country – foreigners fill most posts. The audit reveals that some clinics have only one nurse and an institutional worker due to the unavailability of health workers in the country. At the clinic level, there are supposed to be at least three nurses; a registered nurse and two enrolled nurses. The OAGR (2009/2010) highlights that the audit was motivated by the long waiting period patients spend at state health facilities and general complaints by the public in local newspapers regarding the inefficiency of the public health facilities.

1.2 Research Background

“Skills shortage” is an unveiled truth that the Namibian Government MoHSS and the private sector encounter daily. The MoHSS has been grappling with a shortage of staff that prevents the optimal working of the health system (Haidula, 2015).

Over the years after Namibian Independence, the nation has been inundated with complaints regarding the insufficient and inadequate health care service delivery at state hospitals, clinics and medical centres due to the shortage of health workers. Iihuhua (2013) alludes that Namibia has achieved a few milestones in reducing various diseases but still faces a monumental challenge to provide adequate health care to its 2.1 million citizens due to the shortage of health workers.

Namibia needs more specialists in public hospitals. Due to a lack of specialists across the country, patients from all fourteen (14) regions are referred to Windhoek. Muremi (2013) asserts that most patients must wait for as long as six months before they are given an appointment with specialists who can treat their conditions. Muremi further states that while the Khomas Region consists of one district (the Windhoek District) with only two Hospitals (KISH and Windhoek Central Hospital) and eight clinics, the total population of this region is 342 141 with an annual growth rate of 3.1%, projected from 2011, according to the Population and Housing Census (Muremi, 2013).

Since 2010, the influx of patients seeking medical attention at KISH has increased drastically because the frequency of chronic diseases and trauma incidents has increased significantly. According to Kapitako (2013). “The influx of patients is a lot, while the nurses are never enough”. Kapitako (2013) adds on that the situation is so dire that one nurse works simultaneously with 10 to 15 patients due to the increase in cases of chronic diseases and trauma involving victims of car accidents and stab wounds.

According to Kapitako (2013), KISH is overwhelmed because it caters for patients from all over Namibia before transferring them to Windhoek Central Hospital, the only referral hospital. Kapitako (2013) stresses that there are insufficient nurses to provide primary health care, antenatal care, counselling and services to HIV-positive patients at KISH, the only intermediate hospital. Kapitako (2013) further notes that the staff shortage at KISH has affected the outreach programmes in the Windhoek rural areas, and, thus, in 2012, only 24% of the health care programmes were timeously implemented in the outreach areas.

In 2013 the MoHSS conducted a Health Workers Audit to establish the staffing levels at KISH. The results indicated that the shortage of health workers occurs mostly among doctors and other specialists. This facility had eight medical practitioners and ten medical specialists (four surgeons, one urologist, one anaesthetist, one gynaecologist, two physicians and one paediatrician) in its employment during the audit period (2012/2013). The Health Annual Report (2013) reports that KISH is not fully functional due to the shortage of medical officers and other specialists and urgently needs an additional 350 specialised and non-specialised staff. However, the Health Annual Report reveals that it has proved difficult to acquire sufficient medical staff in Namibia.

The KISH's HIV clinic, although staffed at 68%, is still struggling to meet the patient demand for health services, with over 10,000 patients treated per month (Ministry of Health, 2013). The Health Annual Report (2013) establishes that there were no provisions for additional health workers to serve the recently introduced programmes such as anti-retroviral treatment (ARV). This problem has left the Ministry with no option but to use the existing health workers to serve these new programmes. However, the shortage of health workers contributed to the high workload and long waiting periods at the health facilities resulting in inefficient service delivery. The Health Annual Report (2013) reveals that patients spend not less than six (6) hours at health facilities waiting to attend due to staff shortages. According to the Auditor General's Report (2015), the ratio of health worker capacity to the Namibian population is 2.0 compared to the World Health Organization (WHO)'s benchmark of 2.5 per 1000 population. The audit found that the current health workers' capacity/population ratio in Namibia's public sector is below the WHO benchmark.

Furthermore, the Ministry of Health Annual Report (2013) highlights that staff shortages at KISH cause poor health service delivery. Some of the extreme conditions that the report singles out are the harsh conditions doctors have to endure when attending to patients. Most patients arrive late at the operating theatre because there are insufficient health workers to assist them. It is noted that the combination of health workers employed is sub-optimal because the majority are less qualified personnel, such as nursing assistants and support staff (Haufiku, 2015).

The pressure on health workers is increasing tremendously because KISH is always busy, with never-ending queues of patients waiting up to three days to receive attention from a doctor (Kapitako, 2013). He further emphasises that outpatients are often sent home without having received attention. This practice leaves outpatients at the mercy of the available nurses at the local clinics, posing a threat to their health conditions. This practice also means that the outpatients must seek medical attention within the clinics' operating hours, and should they fall ill or need medical attention outside the clinics' 5 operating hours, they are either turned away at KISH or forced to wait long hours before receiving attention.

Kapitako (2013) highlights that these patients may die due to a lack of available staff for emergency cases. Patients have to wait more than six hours to check their vital signs before they can be referred to a doctor (Kapitako, 2013). Outpatients who seek medical attention at 15h00 often can only be helped at 01h00 the following dayThe lack of health workers in KISH has agitated community members, and their grievances regarding this deficiency are expressed via radio and print media.

The shortage of medical staff has forced the Namibian MoHSS to employ medical personnel from other countries. NAMPA (2013) allude that over half (about 125) of all the doctors employed in Namibia are expatriates, thus, highlighting the shortage of skilled personnel in the public health system. These expatriates, however, are insufficient to ensure the efficient running of all the health services. This situation has forced the country to continue to engage medical expertise from other countries to fill the ever-increasing number of vacancies (NAMPA, 2013).

Research conducted by Isaacs (2008) shows that while the MoHSS continues to strive for the provision of better service delivery, the shortage of local doctors that has plagued it since Namibian Independence continues. He further indicates that, the MoHSS confirmed that foreign medical personnel hold senior positions (Medical Superintendent) on 32 of Namibia's 34 state hospitals, the only exceptions being the KISH and Windhoek Central hospital in Windhoek. According to Haidula (2015), the former Minister of Health and Social Services, Dr Richard Kamwi, announced in 2013 that the country needed 1 000 pharmacists in the private and public sectors but that there were only 55 pharmacists in the public health sector, and of these, only 10 were Namibians. Haidula (2015) stresses that 88 specialists, including dentists from Cuba, were to be deployed in Zambezi Region.

This current study aims to explore the shortage of public sector health workers to understand the circumstances surrounding the shortage of public sector health workers. The study recognises that there are health workers currently operating in Namibia but that they are extremely overworked and, thus, unable to provide a satisfactory healthcare service to patients, hence, the necessity of this study.

Due to overcrowding and the need to reduce the time patients wait in long queues, doctors often cannot pay sufficient attention when examining patients. Health workers are dealing with human lives and should be stress-free. Namibia's MoHSS relies upon the expertise of expatriates, a concern that needs an intervention. The crisis of too few health workers has aggravated Namibia’s population for almost 27 years. A complete overhaul is needed so that the youth of Namibia can be sent to foreign countries to be trained as doctors, pharmacists, midwives and other essential health care workers. If the shortage of health care personnel is not addressed, the adverse effect will grow and have further negative consequences. Hence, it is necessary to address the shortage of public sector health workers to improve the quality of health service delivery in Namibia.

1.3 Problem identification

1.3.1 Problem statement

Main problem

The main problem of the study is the shortage of the health workers in public hospitals in Namibia. It is allerged that the shortage is exhorbitant and has a negative impacts on the service delivery. This study examines how the shortage of health workers in public hospitals in Namibia impacts on the service delivery. Due to the shortage of health workers, KISH recorded a decrease in the quality and efficiency of its health service delivery from 80% to 47% from 2009 to 2014 (Office of the Auditor General's Report, 2015). According to this report, the decrease in service delivery was attributed to the length of hours the patients wait to see a doctor and/or a specialist.

1.3.2 Explanation of the problem

As an indication of poor quality and insufficient service delivery from 2009 to 2014; patients had been waiting for their appointments for more than 12 months to receive treatment, and some of them died while they were on a waiting list (Office of the Auditor General's Report, 2015). Some patients sent back to their regions because they could not be attended to at their visit. The maternal death rate has risen from 40% to 66% (Namibia Social Statistics, 2014). The Office of the Auditor General's Report (2015) revealed that a patient could be waiting to be treated for not less than six (6) hours. This statistic implies that a patient could wait from 06h00 and might only be attended to at 21h00 in the evening or even the next morning because there only one doctor on call.

As mentioned above, the Auditor General's Report further outlines that long queues and overcrowding of patients at KISH have become the norm, with patients usually spending a day or two at the institution waiting for medical treatment. At the pharmacy, patients often wait for their medicines to be dispensed for up to four hours. Due to overcrowding, some doctors do not pay sufficient attention when examining patients, possibly in an attempt to shorten the waiting for queue .

1.4 Research Questions

The following research questions will guide the study in investigating the shortage of health workers in the MoHSS in Namibia:

- To what extend is KISH experience a shortage of health workers?
- What factors contribute to the shortage of public sector health workers at KISH?
- What is the effect of the shortage of health workers on service delivery at KISH?

- What are the measures to be taken to combat the shortage of health workers at KISH?

1.5 Research objective

The main aim of this study is to analyse the shortage of health workers at KISH to determine whether this deficiency affects the delivery of health care services in Namibia's public hospitals.

The health service delivery is inefficient and of poor quality – the level of service delivery has decreased from 80% to 47% from 2009 to 2014.

The following objectives have guided this research study.

- To establish to what extend the KISH experiences a shortage of health workers.
- To investigate the causes of the shortage of health workers at KISH.
- To analyse the effect of the shortage of health workers on service delivery at KISH.
- To determine the measures to be pursued to combat the shortage of health workers at KISH.

1.6 Delineation of the research

The study has focused on the shortage of health workers in public hospitals. The case study was conducted at the MoHSS's institution, KISH. The Ministry of Health was contacted to provide an overview of how the MoHSS has attempted to address the need for skills development amongst health workers. The research was specifically focused on the extend of the shortage of health workers, the cause, effect, and the measures that can be pursued for Namibia to produce adequate health workers. Responsible stakeholders in health-related skills development were surveyed to provide answers to the research questions. This research established why the health service delivery in Namibia's public health is poor and what should be done to improve the number of health service providers.

1.7 Significance of the research

The MoHSS can use the findings of this study to craft its Strategic Plan and set its attainable goals and objectives for improving the number and specialisation of health workers. The research may contribute to the achievement of National Development Plans and the realization of Namibia Vision 2030 of human capital development. One of the Namibia Vision 2030 is to develop diversified, competent and highly productive human resources institutions that fully utilise the human potential and achieve efficient and effective delivery of competitive customer-focused services nationally, regionally and internationally. The findings of this study may also be useful to relevant stakeholders, such as non-governmental organisations (NGOs), the private health sector and other public institutions, to make economically viable decisions on addressing the national backlog of skills scarcity.

This study may also be beneficial to health workers because suggested possible remedies to address the problem of understaffed medical facilities and eliminate the burn-out and work-related depression among healthcare personnel.

Finally, this study is significant in that it was conducted in the only national intermediate state hospital in Namibia (KISH). Patients from all the regions in Namibia who require highly specialised medical care are sent before they are transferred if deemed necessary to the only referral hospital in the country – Windhoek Central Hospital (WCH).

This study is very important because it contains the correct and up-to-date findings, especially the organisational structure of the KISH that shows the current status of the filled and vacant positions of all health care practitioners and the number of expatriates operating within that structure. This data was obtained in 2021, hence, the findings are up to date.

It also indicates the limited number of specialists available at KISH, which is a good indicator of the shortage of health workers. This study will assist the MoHSS in making economic viable decisions and planning skills development for healthcare personnel. Scholars and research institutions may also find it valuable for their future research. The study will also assist the private sector and other institutions rendering healthcare services to plan their health care workforce. Public universities and private institutions of higher learning may find the study valuable in terms of the design and introduction of their new health-related academic programmes and courses. Moreover, students who intend to pursue a medical career may also wish to use the findings of this study to decide upon the medical field in which to specialise. Lastly, this study will contribute to all stakeholders' national skills development strategy for the health personnel.

1.8 Expected results and contributions of the research

The study was expected to highlight the factors limiting Namibia from producing sufficient health workers to deliver excellent health services. It was also expected to highlight the effect of the shortage of health workers on health service delivery. The outcome of this study was expected to map the way forward on what Namibia should do to abate the shortage. The study should contribute to the skills development of human resources for health. It should also awaken the Namibian youth to pursue related medical programmes. This study has established the current number of health workers in the KISH and has indicated which of these are foreigners. The study may also contribute to Namibia’s national archive because the MoHSS will file copies of the research paper.

1.9 Chapters outline

The chapters of this mini-thesis are outlined in chronological order as follows:

Chapter One: This chapter outlined the introduction and background of the problem that informed the research.

Chapter Two: This literature review chapter reviewed secondary sources on the causes of shortages, and the effects thereof of global shortage of health personnel. The literature focused on the experienced shortage of health workers from certain countries and how they improved the shortage.

Chapter Three: This chapter has emphasized the research methodology employed in the study to deduce the data that answered the research questions.

Chapter Four: This chapter highlights the analysis and discussion of the study's findings.

Chapter Five: The conclusions and recommendations on what should be done by the Namibian Government to lessen the shortage of health workers was discussed in this chapter.

1.10 Chapter Summary

Chapter one discussed the background of the shortage of health workers in general around the world. The chapter outlined that the shortage of health workers is a global predicament, which mostly affects the poor and developing countries, especially in Sub-Sahara Africa. It further deliberated on the shortage of health workers in Namibia. Namibia was described as badly affected by the shortage of health personnel because the country failed to invest in human resources for health for more than 25 years after independence (Haufiku, 2015).

The background of the problem that informed this study and the problem statement is also outlined in this chapter. The research problem explained that certain factors, such as waiting periods on a waiting list to receive medical speciality or to see a doctor, long queues and overcrowding of patients at public hospitals, and maternal mortality, were considered as an indication of poor quality and insufficient service delivery by the Office of the Auditor General’s report (2015) and the Namibian Social Statistics report (2014). Moreover, this chapter contented the research questions to be answered by the study’s findings to establish whether the study's problem exists. The objective, delimitation, and significance of the study were also mentioned in this chapter. Lastly, the chapter indicated this study's expected results and contribution.

CHAPTER TWO

SHORTAGE OF HEALTH WORKERS IN DEVELOPED AND DEVELOPING COUNTRIES

2.1 Introduction

The previous chapter emphasized the shortage of health workers worldwide, mostly in poor and underdeveloped countries. The discussion of the shortage of health workers later narrowed to Namibia set-up, where the research problem was found.

This chapter reviews past studies on the general shortage of health workers in developed and developing countries. Section 2.1 focuses on the international shortage of health workers, and section 2.2 focuses on the shortage of health workers from randomly picked countries. These case studies were conducted in countries such as the United Kingdom, the United States of America, Australia, Italy, Canada, New Zealand, Switzerland and the African Continent. Section 2.3 focuses on the causes of the shortage of health workers in public sectors in developing countries. The effect of the shortage of health workers on service delivery is discussed in Section 2.4. Section 2.5 provides details of the strategies implemented by some countries to curb the shortage of health workers, namely: Australia, the UK, Uganda, Ghana, Zimbabwe, Switzerland, Malawi, Somalia, Mozambique, and Ethiopia. The chapter's summary is outlined in Section 2.6.

2.2 International shortage of health workers

The world is facing a huge deficiency of health workers, the cause of which is difficult to apprehend. The World Health Organisation (2010) estimates an instant global need for an additional 15 million health personnel by 2030. This 15 million figure is significantly high and shows the world's deficiency in specialised human resources. The World Health Assembly stresses the human resource shortage in the health sector in 2010 as a catastrophe in health care.

According to the regional classification system (WHO, 2010), 57 countries experience a critical shortage of health workers: 36 are in Africa, 7 in the Eastern Mediterranean region, 6 in Southeast Asia, 5 in Central or South America, and three (3) in the Western Pacific region. Africa carries 25% of the world's disease burden but has only 3% of the world's health workers and 1% of the economic resources. In particular, there is an extreme imbalance in the distribution of the estimated 12 million working nurses worldwide; the nurse-to-population ratio is ten times higher in Europe than in Africa or Southeast Asia and ten times higher in North America than in South America (WHO, 2010).

The shortage includes more than physicians and nurses, extending to health workers, including pharmacists, dentists, laboratory technicians, emergency medical personnel, public health specialists, health sector management and administrative staff. The human resource crisis affects developed and developing countries, but the global poor countries suffer excessively, not only because they have a much smaller workforce but also because their needs are much greater (WHO, 2010). WHO (2010) estimates that at least 2 360 000 health service providers and 1 890 000 management support workers, or a total of 4 250 000 health workers, are needed to fill the current deficiency. Without prompt action, the shortage will become even greater.

Most countries of the world are committed to improving their populations' health. However, there are enormous challenges in attaining that goal, and some states have not devoted the planning and resources needed to achieve success (Robinson & Clark, 2008:23). Robinson and Clark (2008) further highlight that a health system works effectively only if the appropriate mix of skilled health care workers is in place. However, the world is experiencing a staggering global health worker shortage of staggering proportions. These researchers further stress that without adequate numbers of trained and employed health workers, people cannot access the health care they require, particularly the globally poor. In addition, they believe that the causes of the shortage are complicated, with some having emerged due to poor planning. They also highlighted that a significant contributor to the skills shortage is the reliance of developed countries on foreign-trained health workers to meet their workforce needs, increased purchasing power for health services, population growth, health workers' skills being in demand in diverse settings, and the rise of chronic diseases.

Hagopian, Thompson, Fordyce, Johnson and Hart (2013) point out that the causes of human resource shortages are multifaceted and complex but not so difficult that they cannot be understood and acted upon. Hagopian *et al*. (2013) further emphasise that the factors that trigger health workforce shortages are not the same in all countries or all parts of countries. In designing solutions, policymakers must take into account local causes and conditions. However, some factors are common across cultures, even if their local manifestations vary. In most countries with shortages, for example, there is inadequate funding for health workers education and training (Hagopian *et al*. 2013).

The research by WHO (2010) indicates that some of the causes of local health workforce shortages are internal due to inadequate planning, financing and policies. In addition, WHO (2010) reports that some of these shortages can also be caused or exacerbated by conditions in other countries. One country's domestic and foreign policies can significantly affect health worker shortages in other countries.

These policy choices are often made without regard for the potential negative impact on the health workforce of other countries. Robinson and Clark (2008) opine that several indicators can be used to determine whether there is a health worker shortage in a country or a region within a country. About nursing, for example, process indicators, such as vacancy rates, job turnover or wastage, use of temporary staff, application rates for training positions, and outcome indicators (e.g., mortality rates, cross infection, and patient accidents) may all point to a staffing shortage (Robinson & Clark, 2008).

Health workers are inequitably distributed worldwide, with severe imbalances between developed and developing countries. WHO (2010) indicates that this global workforce shortage is made even worse by imbalances within countries. In general, there is a lack of adequate staff in rural areas compared to cities. Sub-Saharan Africa faces the greatest challenges. While it has 11% of the world's population and 24% of the global disease burden, it has only 3% of the world's health workers (WHO, 2010). The urgency to address the health worker crisis is a challenge for all high, middle and low-income countries alike. According to the report issued by the Institute of Medicine (2011), more than a quarter of the world's countries do not have enough health workers. Health worker shortages affect Germany and the USA, just as they affect India or Uganda.

WHO (2010) indicates that shortages of skilled health workers arise from many factors, such as underinvestment in training and recruitment, weak incentives for healthcare workers, low remuneration and high-stress levels. Furthermore, it highlights that the migration of skilled health workers from developing countries to industrialized nations is encouraged by the burgeoning demand for health workers in industrialized countries with ageing populations, which has also taken its toll on health care service delivery. Western countries import workers from developing countries because they are also short of trained health workers (Institute of Medicine. 2011).

In line with the findings by WHO (2010), McDonough (2011) concurs that demographic trends within countries also strongly influence the health worker shortage. McDonough (2011) supports WHO (2010) by stating that rapid urbanization in developing countries aggravates the shortage of health workers in rural areas because trained health professionals seek work in more affluent urban conurbations. Health workers, who usually qualify in urban settings, are often reluctant to base themselves in a rural location because it involves greater hardship, poor basic living conditions and less access to urban services and entertainment. A survey conducted by Pogge (2013) finds that rural postings are avoided because of lower income, low prestige and social isolation.

Health workers are in demand worldwide, and, as indicated earlier, virtually every country struggles with an excess demand for health workers. Carl (2008) argues that the global shortage is partly driven by the significantly increased demand for health services globally, particularly among the world's well-resourced countries. This increased demand is caused by a higher incidence of chronic diseases, the spread of HIV, increased economic capacity to purchase health services, population growth, increased life expectancy, health workers' skills in demand in diverse settings, and the diversification of venues in which health care is delivered (Carl, 2008:50). Rosenberg, Hayes, McIntyre and Neill (2010) support Carl (2008) by stating that an increase in demand has not been met with a corresponding increase in the supply of health workers. Many countries have not implemented new policies, accompanied by the necessary funding, to create the supply of health workers that their countries need.

Rosenberg *et al*. (2010) believe that rich and poor societies require an expanding health workforce to meet their population's needs for preventing and treating injuries and diseases. The number of people in the world needing health services is rising, with the global population increasing at a rate of about 240,000 people per day. There is expected to be a 10% increase in demand for nurses' skills in nursing homes and home care settings between 2010 and 2020 (Rosenberg *et al*., 2010).

A high proportion of the demand for health workers leads to their migration worldwide. The research conducted by Pang, Lansang and Haines (2012) indicates that the migration of their health professionals has badly damaged the health systems of Sub-Saharan Africa. WHO (2010) reveals that Africa has 2.4 health workers per 1000 population, compared with America, where there are 24.8 healthcare workers per 1000. Robinson and Clark (2008) warn that the estimated shortage of health workers in Africa is 819,882, and to fill the shortage gap, Africa requires a 140% increase in health workers.

A study by the South Africa Department of Health (2011) reveals that developing countries lose some of their most valuable health workers to richer countries. For example, 75% of doctors trained in Mozambique now work abroad. The majority work in Portugal (1,298), and the rest work in the USA (820), the UK (616) and South Africa (261). When significant numbers of doctors and nurses leave, the countries that financed their education lose a return on their investment (South Africa Department of Health, 2011).

2.3 Cases of the shortage of health workers in randomly selected developed and developing countries

The background and introduction informed the use of case studies of countries featured in this chapter of the research problem in chapter one. It was revealed in chapter one that the shortage of health workers is a worldwide dilemma that is unabated, and it requires time to diminish. It further highlighted that the most affected are the developing countries in Sub-Sahara Africa.

The case studies were selected randomly from developed and developing countries. The purpose of selecting the countries under review was to establish the status of the shortages of health workers and the progress made in combating the shortage. Furthermore, the cases were chosen to relate and see whether there are correlations with the Namibia shortage status.

2.3.1 The United Kingdom's case

The UK has traditionally taken a successful or bust approach to health-worker migration (Boseley, 2011). Buchan (2009) notes that the United Kingdom has a long history of actively recruiting health workers. Between the late 1990s and the mid-2000s, the number of internationally trained doctors and nurses migrating to the United Kingdom increased rapidly when the Department of Health (DoH) recruited international health workers as part of an attempt to increase the numbers of National Health Service (NHS) staff (Buchan, 2009). New full registrations of internationally trained doctors and nurses peaked in 2010, after which they started to decline again, seemingly due to a combination of increasingly restrictive immigration policy changes to Nursing and Midwifery Council Guidelines (Buchan & Seecombe, 2012) and the economic climate. The Royal College of Nursing (RCN), however, noted a small rise in registrations of nurses from outside the United Kingdom (EU & non-EU) since 2010. The College also notes that the economic crisis may have prompted the rise in registrations from nurses from EU countries such as Portugal and Spain (Buchan & Seecombe, 2012).

2.3.2 The United States of America's case

Mainstream media outlets have reported widely upon an impending doctors shortage expected to accompany the enactment of healthcare reform in the United States (Long, 2012; Lowrey and Pear, 2012; Sarah, 2012; Wayne, 2012). The USA Department of Health and Human Services, which measures present-day shortages, estimates that over 7000 primary-care physicians would be needed to eradicate all shortage area designations in the United States as of September 2012 (USA Department of Health and Human Services,

2013). Despite concerns about nursing workforce shortages during the mid-2000s being attributed to limited capacity at training institutions (Aiken, 2007; American Association of Colleges of Nursing, 2012), the domestic supply of nurses has increased considerably since the beginning of the recession in the USA.

The USA is the world's largest employer of foreign-trained nurses and needs to invest in nursing education and develop training and retention strategies for its nursing professionals (American Association of Colleges of Nursing, 2012).
According to the American Association of Colleges of Nursing (2012), the nursing workforce in the USA, numbering almost 4 million, is the largest in the world. However, the USA does not produce enough doctors and nurses to meet its growing demand. It was projected that by 2020, there would be a shortfall of about 2 million doctors and nurses.

2.3.3 Australia's case

Australia's shortage of doctors is related to early retirement, emigration and the trend for doctors to favour reduced working hours. Australia continues to benefit from migration from South Africa, Asia and the UK; 2.4% of its medical workforce was born in Sub-Saharan Africa and 6% in Asia. In 2010, 42.9% of its workforce was of migrant origin; by 2012, the figure had increased to 45% Organisation for Economic Co-operation and Development (OECD), 2013).

2.3.4 Italy's case

Italian health service is undermined by public budget constraints caused by a financial crisis in the country. Italy runs the risk of slowly becoming a net exporter of health professionals (Sisto, 2011). Italy currently ranks among the first countries in the world for the density of practising physicians. Italy has more physicians per capita than most other OECD countries. In 2009, Italy had 3.8 practising physicians per 1000, which is above the OECD average of 3.1 (OECD, 2013).

The Italian nurses' professional organisation estimates that the health system needs 81 000 more nurses at work to make the situation satisfactory. Furthermore, the deficit is expected to widen. Every year, 18 000 nurses retire, but only 8000 are recruited (European Migration Network, 2012:205). A worrying signal is the recent downsizing of the planned numbers for nursing training, measured by the National Conference of Regions. This reduction is linked to progressive national and regional health budget cuts and rising sector unemployment. Professional organisations estimated that 34 399 university training posts were required for nurses in the Academic Year 2013–2014 to ensure the sustainability of the health system.

The regions (i.e. the health sectors' employers) provide a lower estimate of 19 555 posts (there were 30% more in 2012–2013). Moreover, the University National Conference is not likely to have sufficient funding to increase the 16 346 training posts made available in 2013 (Mastrillo, 2013).

2.3.5 Canada's case

More than 50% of doctors in rural Saskatchewan are immigrants, with about 20% originating from South Africa. The study by Hagopian (2012) indicated that 3,151 doctors working in Canada were from countries in Sub-Saharan Africa. Overall, about 30% of doctors practicing in Canada were born and trained overseas.

2.3.6 New Zealand's case

There is no specific immigration policy for health professionals, and the permanent and temporary routes make it relatively easy for doctors and nurses to migrate to New Zealand once their qualifications have been accepted. It was reported by OECD and WHO (2011) that New Zealand has the highest proportion of migrant doctors, and one of the highest for nurses. At the same time, New Zealand also has high rates of health worker emigration to other OECD countries.

2.3.7 Switzerland's case

According to experts of the OECD and WHO (2011), the Swiss health system is highly efficient and has achieved several important objectives, including establishing Universal Health Coverage (UHC) and allowing access to a wide range of healthcare services. Life expectancy is one of the highest in the world, and according to a 2010 Commonwealth Fund survey, the Swiss population is generally satisfied with its healthcare system (Commonwealth Fund, 2010). However, this excellence comes at a price. Switzerland spent 11% of its GDP on health in 2011 and will have to face challenges to maintain and improve the level of its system (Commonwealth Fund, 2010).

2.3.8 Africa's cases

The availability of health personnel in Africa is substantially worse than in other regions of the world and is one of the major stumbling blocks to delivering adequate healthcare services (Chankova, 2010). Health workers are vitally important for effective healthcare systems (Ndetei, 2010). An inadequate health workforce (with a high population-to-health worker ratio) contributes to the general deterioration of health indicators (Dolvo, 2009, 2012 & 2013). Africa faces the daunting problem of eliminating poverty and diseases due to the lack of an effective healthcare workforce. African countries do not focus enough on ensuring the proper training of doctors, nurses, and other health service personnel.

AIDS has killed thousands of healthcare workers, and some physicians are migrating to richer countries to pursue their career development (Chankova, 2010). According to Mungai (2015), Uganda currently suffers from a severe deficit in healthcare workers, with only 80 medical personnel for every 100,000 people. This shortage disproportionately impacts rural areas. To address this shortage, Uganda has recently turned its attention toward task shifting, which is the transfer of certain responsibilities from a doctor or nurse to a healthcare worker with less training. A cornerstone of this concept is the training of Village Health Workers (VHWs). This project took place in Kiboga, a rural district in central Uganda with a population of 300,000 and a mere five physicians responsible for direct patient care (Mungai, 2015).

A statement released by World Health Organisation (2013) indicates that 47 countries in Sub-Saharan Africa have a critical shortage of healthcare workers, the shortfall totalling 2.4 million doctors and nurses. There are two doctors and 11 nursing or midwifery personnel per 10,000 members of the population, compared with 18 doctors and 49 nursing or midwifery personnel per 10,000 in America and 35 doctors and 80 nursing or midwifery personnel per 10,000 people in Europe. In addition, whereas there are 30 doctors and 90 nurses or midwifery personnel per 10,000 persons in high-income regions, there are only five doctors and 11 nurses or midwifery personnel per 10,000 persons in low-income regions.

In Africa, the public health sector is seriously affected by the migration of health professionals, and the majority of the continent's population relies on its country's public health system and most of these people are very poor (WHO, 2013). The World Health Organisation (2013) mentions that considerable attention has been focused on the actual shortage of health workers in countries with the poorest health indicators and the potential impact of this shortage on countries' ability to fight diseases and provide essential life-saving interventions. A recent study by (WHO, 2013) estimates that the current workforce in some of the most affected countries in Sub-Saharan Africa would need to be scaled up by as much as 130% to attain international health development targets, such as those in the Millennium Declaration. The problem is so serious that there is the insufficient human capacity to absorb, deploy and sufficiently use the substantial additional funds considered necessary to improve health in these countries (WHO, 2013:51).

In Kenya, the health system faces various human resource problems, primarily an overall lack of personnel in key areas, which is worsened by high numbers of trained personnel leaving the health sector to work overseas. Furthermore, the personnel who remain are unevenly distributed between urban and rural areas (Dambisya, 2012). The situation is even worse in rural areas, with fewer staff than in urban facilities.

Many Kenyan health professionals, such as doctors and nurses, migrate to developed countries to seek better employment prospects. Within the country, they are leaving rural areas to work in urban areas for the same reason. The crisis originated in the structural adjustment programmes that the government signed with the World Bank and IMF in the 1990s, which demanded a freeze on recruitment for the public health sector and mandatory staff retrenchments (Corkery, 2010; Kenyesigye & Ssedyona, 2013). Although the government's Economic Survey of 2012 shows greatly increased spending on public health, the sector remains severely underfunded and migration to urban areas in Kenya and overseas continues undiminished (Kenyesigye & Ssedyona, 2013:35).

Ethiopia is one of the African countries most critically affected by the loss of health workers, and, in its Health Sector Development Plan for 2005 – 2020, it is focusing especially on human resource development and rehabilitation of its health facilities. It planned to train 5,000 health officers by 2015 and to increase its annual medical student intake from 250 to 1,000 (WHO, 2013:41).

In terms of the appropriate numbers recommended by the World Health Organisation (2013), a country is expected to have a minimum number of various categories of health workers to cater to the country's population. For instance, the recommended ideal doctor/patient ratio is 1:600, even though the minimum doctor/patient ratio for developing countries is usually taken as 1:1000 (Enabulele, 2012). In Nigeria, an average of 2 500 medical doctors qualify annually. However, this number is still grossly inadequate, considering Nigeria's average doctor/patient ratio is 1:6300.

Dovlo (2015) outlines that similar reasons in many developing countries coerce doctors and nurses to leave their countries or the health sector for other sectors. He maintains that factors include low remuneration, lack of continuing educational opportunities, inflexible working hours with many extra duties, difficult working conditions, high numbers of demanding patients, poor health infrastructure or facilities and shortages of supplies and equipment.

In his research, Dovlo (2015) reports that recent statistics indicate that in Ghana, half of the medical school graduates emigrate within 4-5 years of graduation, and 65% leave the country within a decade. Dovlo (2015) alludes that more than 300 specialist nurses leave Ghana annually, many never to return. Dovlo (2015), in his findings, indicates Europe and the USA as being the main destinations for Ghana's migrant health workers. These facts are confirmed by Buchan and Seecombe (2011), who state 21 that one-third of the health workforce originates from other countries in the UK.

Dovlo (2015) maintains that the number of health workers (doctors, nurses, midwives) in Europe and the USA is more than ten times higher than in Sub-Saharan Africa. However, according to Habte, Dussault and Dovlo (2012), the AIDS epidemic and armed conflict are some of the most prominent causes underlying the depletion of health workers in developing countries, particularly in Sub-Saharan Africa.

It was alluded by Chikanda (2014) states that skilled health professionals are significantly migrating from developing or emerging countries to industrial or highly developed areas worldwide. He further highlights that there is little evidence or no hope that these proportions will decrease shortly. Many scholars (Freckloton, 2016; Hagopian, Thompson, Fordyce, Johnson & Hart, 2014; Kingma, 2011) have reached a common consensus that there is a discourse on economic emancipation and development that the migration of health workers constitutes a brain drain of human resources from the sending country because it invests a lot of money in the human capital development that will be at the disposal of the recipient country.

A report by Aisha and Loflers (2015) indicated that Africa is losing its best-skilled health workers to industrialised countries. These health workers constitute a substantial proportion of the human capital necessary to establish a solid foundation for economic growth. It is usually proven that health workers are the most likely professionals to relocate, leaving behind the less needed ones. The brain drain leads to socio-economic challenges for developing countries, especially in Africa (Aisha & Loflers, 2015: 25).

According to Chikanda (2014), Zimbabwe, similarly many other countries in Sub-Saharan Africa, is badly affected by a shortage of health workers. Chikanda (2014) outlines that many of the health indicator improvements achieved during the first ten years of Zimbabwe's independence are on the decline, and the main reason for this regression is a shortage of skilled and experienced health workers. Chikanda (2014) also points out that the demand for healthcare services is increasing due to a growing population and the challenges posed by HIV/AIDS and many pandemics. The Zimbabwe public sector provides as much as 75% of health care services in the country (MoHCW, 2014), so a shortage of public sector health workers affects a great majority of the population. Chikanda (2014) affirms that Zimbabwe's public health sector has been facing a staffing crisis and that this sector employs only 28.7 per cent of Zimbabwe's registered doctors. This implies that 72.3% of the doctors registered in this country by 2013 were employed in the private sector. He maintains that health professional groups with the highest loss rate in Zimbabwe are doctors, nurses and pharmacists. Chikanda (2014) further states that the shortage of these three key clinical professionals limits accessibility to primary and secondary health care for most patients, especially those economically disadvantaged and located in geographically-deprived areas.

According to MoHCW (2014), it was evident that there is a disparity in the staffing of health workers in the Zimbabwe public sector because most personnel favour urban areas. The rural-urban staffing disparity became more obvious when the Ministry of Health and Child Welfare compared the proportions of posts filled in 2014. The Ministry's study revealed that 80% of doctors were appointed in hospitals in urban areas, and only 20% of doctors were appointed in rural areas. The Ministry reports that 67% of nurses were appointed in urban areas, while 33% were appointed in rural areas. The Ministry, however, cautioned that it should be considered that data on staffing and distribution patterns do not always tally between the Ministry of Health and Child Welfare, the Public Service Commission and independent audits at facilities (WHO 2014; MoHCW 2014).

Chikanda (2014) points out that uneven distribution is common in urban areas, with cities such as Harare and Bulawayo totalling 60% and 40%, respectively, for all public sector urban doctors and nurses. The rest of the smaller cities and towns share the remainder of doctors and nurses. Rural areas serve larger populations than general hospitals and provincial referral centres. Nevertheless, even though the provision of more staff advantages them, the urban public sector health facilities are still infamous for overcrowding and delayed services for patients because not all healthcare posts are filled Chikanda (2014:31).

Chikanda (2014) indicates that, as of 1999, more skilled health workers migrated from Zimbabwe to regional and international destinations. He further alludes that this health worker shortage has worsenedsince 2010. The Ministry of Health and Child Welfare (2014) published figures that indicated that 2,825 work permits were approved for Zimbabwean health professionals to enter the United Kingdom. The figure represents about 25% of the professional health workforce in the Zimbabwean public sector (MoHCW, 2014:13).

The backlog of prevalent shortages has caused public concern, thus, priority needs to be given to improving management and the better allocation of human resources in healthcare systems in Zimbabwe, an area that is witnessing deteriorating health indicators due to a shortage of health professionals. In its study, MoHCW (2014) explored the distribution of Zimbabwe's public sector health workers to show how its pattern impacts equity objectives in health care delivery.

According to Mutizwa-Mangiza (2011), Zimbabwe's public sector has the infrastructure to train sufficient health workers to run national health facilities without having to source them from outside the country. Mutizwa-Mangiza (2011) states that all central and provincial hospitals have a long positive history of producing internationally recognised health professionals, such as dental technicians, nurses, radiographers and pharmacists.

However, it takes a long time to train health workers because of the nature of the health professions and, thus, it is a dilemma if experienced health staff are not retained because replacing them becomes difficult and expensive no matter what training infrastructure is in place (Mutizwa- Mangiza, 2011: 33). This situation relates particularly to the case for doctors because there is only one training institution, the University of Zimbabwe. The newly established Medical School at the National University of Science and Technology (NUST) has been struggling to produce its first medical graduates. This problem results from various reasons, including a shortage of tutors and teaching staff, lack of teaching equipment, space and students accommodation, and the training institution cannot increase the intake of students and output of graduates. Therefore, the average annual increase in health workers is still insufficient to overtake attrition rates (Mutizwa-Mangiza, 2011:33). Consequently, a reduction in the percentage share of expenditure on human resources in the form of a reduced salaries bill has drastically contributed to the decreasing numbers of health workers (Mutizwa-Mangiza, 2011: 33). The different strategies employed to retain staff in Zimbabwe's public sector have had a mixed impact on the distribution of health workers, mainly because of a lack of complementary policies between the other public sector departments and the Ministry of Health and Child Welfare (MoHCW).

A report from the World Bank (2015) illustrates that since the mid-1980s, Africa has been losing about 23,000 qualified health workers annually in search of better working conditions in industrialised and developed countries worldwide. The report establishes that this movement of human capital affects the most highly trained professionals, in whom many African governments have invested heavily through training and professional development. In response, Africa has been trying to mitigate the migration trend by spending nearly $4 billion a year to replace the lost health professionals with expatriates from other continents (Oyowe, 2016).

According to Chikanda (2014), an overwhelming brain drain phenomenon has become a contemporary issue in Zimbabwe in which the deteriorating economic, social and political conditions adversely affect the expatriation surge. The country's health delivery sector is the worst affected by this phenomenon because health workers are relocating in search of "greener pastures" in Western Europe, North America, Southern Africa and Australia (Chikanda, 2014).

2.3.9 Namibia's case

Namibia has one of the lowest population densities in the world with about three people per square kilometer. According to The World Bank (2019), 48.9% of Namibians live in rural communities. Therefore, providing access to healthcare is a significant challenge. Another of Namibia's largest healthcare problems is the lack of public doctors. There are more private doctors than public doctors in many regions of the country. In Hardap, 80% of the doctors work in the private sector. A shortage of public doctors increases the cost of healthcare. According to The World Bank (2019), there are approximately 1,222 doctors; 784 doctors work in the public sector and 438 work in the private sector. Half of Namibia's physicians work in Khomas, the region containing Namibia's capital. In 2018, there were approximately 0.33 doctors for every 1,000 people. This situation though conceals the fact that there is a very unequal distribution with most health workers concentrated in urban areas and a high percentage found in the private sector in particular in private clinics (National Health Policy Framework, 2020).

Overall 26.9 percent of posts in the public sector are vacant, 36% for doctors, 21% for registered nurses, and 42% for social workers. The country depends very much on the recruitment of expatriate doctors. Karuuombe and Nambadja (2021) reported that the Ministry of Health and Social Services is experiencing a shortage of healthcare workers nationwide. According to an advertisement for vacant posts at various healthcare facilities (see the attached Apendix D), the ministry needs to fill various positions, from medical officers to enrolled nurses. Posts in more more than 10 job categories have been advertised.

Ngutjinazo (2018) mentions that the government needs over 470 doctors in order to meet the required international standards on how many patients should be attended to by one doctor. She further mentions that the recommended doctor-to-patient ratio is one doctor per 5 000 patients a year, or over 410 patients per month. In her report, Ngutjinazo (2018) states that the former Health Minister Bernard Haufiku said that the government is lagging behind in meeting that requirement, to the extent that Namibia would need 25 years to reach the United Nations recommendation.The doctor-to-patient ratio in Namibia is still below 50%, with a total of 23 hospitals out of 35 in all the regions still needing additional doctors, and specialists (Ngutjinazo, 2018).

Ngutjinazo (2018) alludes that Dr Haufiku revealed these statistics in the National Assembly. According to statistics, the top five hospitals in the country which are short of doctors are the Katutura Intermediate (106), Oshakati (71), Rundu (53), Onandjokwe (43) and Engela (21) hospitals. The Katutura Intermediate Hospital currently has 51 doctors, Oshakati 50, Rundu 25, Onandjokwe 26 and Engela 5. Dr Haufiku said the Okongo Hospital in the Ohangwena region and the Nankudu Hospital in Kavango West only have one doctor each. In the Erongo region, the Swakopmund and Walvis Bay hospitals need nine additional doctors while the Omaruru and Usakos hospitals need three doctors each.

Hamalwa (2022), reported that Nurses at the Opuwo District Hospital are not happy about the nursing staff complement, which has not changed for many years, while the population is increasing. Nurses say they are overwhelmed and working under tremendous pressure due to the staff shortage, and are demanding that the ministry urgently recruits more nurses. The hospital is one of the biggest hospitals in Kunene, and serves patients from Opuwo and surrounding villages.

It was highlighted by Karuuombe and Nambadja (2021) that lack of the health-care providers in the Namibian labour market has vehemently contributed to the shortage. Namibia has no capacity to produce enough and specialized health workers. According to National Health Policy Framework (2020), there is a problem with attrition, as conditions of service have not been adequately updated. Special incentives for working in remote area settings are needed to retain staff. Work overload has also been quoted as a reason for attrition.

Wells (2022) reported that the health ministry has hired 278 retired nurses on temporary contracts across the country for periods ranging from three to six months as part of the response to address staff shortages. Wells (2022) mentions that the Health Ministry's Executive director Ben Nangombe in an interview with NAMPA said the ministry has been recruiting additional staff, particularly healthcare workers, since 2020 to address the country's labour supply shortage, adding that these contracts are renewed based on the ministry's needs."The ministry has recruited retired nurses under the age of 67 years through this process. In addition, the Executive explained that the nurses were hired to mentor and guide newly-hired graduates (Wells, 2022).

In 2020, World Bank reports that Namibia aims to improve the accessibility and quality of its healthcare system. The Namibian government aims to spend 15% of its GDP on healthcare. However, Namibia only spent about 8.6% of GDP on healthcare in 2017. Unfortunately, as it became an upper-middle-income country, Namibia's healthcare fell behind. Funding from donors has been declining since Namibia's reclassification in 2009. World Bank (2020) further mentions that the country must overcome obstacles to continue improving its healthcare system. These obstacles include a shortage of doctors, inadequate funding and income inequality within the health sector.

National Health Policy Framework (2020) outlines the strategic responses to the shortage of health workers. The strategic responses are: development and implementation of the MOHSS Human Resources plan; review of staffing norms in health facilities based on the service profile and the workload; increment in the output of health professionals from all training institutions in Namibia; offering new courses for health professionals in Namibia according to feasibility and targeted training of health professionals outside the country; review of the scope of practice for professions and provision of the necessary institutional and legal protection; developing nursing professionals, who can perform important management and public health and clinical functions, e.g. specialised nurses (psychiatry, community health, diagnosis and treatment, advanced

midwifery); developing other health and social welfare professionals as required; corresponding recognition of health and other professionals; paying attention to career path development; introduction of extension workers to work under supervision of local clinics and health centres; introduction of incentives for working in remote areas and introduction of community service for all newly graduated health professionals; establishment of a performance management system to improve services and management of human resources; and strengthening continuing education.

2.3.10 Jamaica's case

Goffe (2015) comments that Jamaica, a middle-income nation in the Caribbean, has an exceptional medical education system. According to the World Bank (2014), the Organisation for Economic Co-operation and Development (2012) and the International Monetary Fund (2013), the Caribbean region has been adversely affected hit by migration, with Jamaica topping the list. Statistics from the IMF (2013) and the IOM (2013) indicate that more than 80% of all Jamaicans with tertiary education have migrated to the country. WHO (2014) also reports that Jamaica has been drastically affected by the "brain drain" in all sectors, including health. IOM (2013) established that in 2012 in Jamaica, there were 25 physicians per 100,000 people, which may also decrease due to the high migration rate of health workers. A study by Mullan (2015) displays a high percentage of medical school graduates from source countries now working in Australia, Canada, the USA, or the UK, with Jamaica being the leader at 41.4%. In his report Mullan (2015) also indicates that each year Jamaica loses 8% of its registered nurses and 20% of its specialist nurses to high-income countries, most of them emigrating to the USA and the UK. Mullan (2015) estimates that two-thirds of Jamaica's nurses have emigrated to high-income countries leading to nationwide vacancy rates in 2014 of 37% for registered nurses, 28% for public health nurses, 17% for nurse practitioners, and 61% for assistant nurses. In 2015, the overall nursing vacancy rate reached 58% (Mullan, 2015:180).

In his research, Freckleton (2016) indicates that migration has become so rampant that many Jamaican nurses enter nursing school already determined to migrate after graduation. The effects of such a practice are felt throughout the healthcare sector (public and private). Freckleton (2016) further outlines that the Ministry of Health is aware that mental health requires more attention in Jamaica but insufficient human resources support patients' treatment and rehabilitation. However, according to Goffe (2015), Jamaica has been heavily subsidising the training of nurses and other healthcare workers, which means that this Caribbean Island, which is heavily in debt, is funding the provision of health workers to some of its creditors (Goffe, 2015:15).

Goffe (2015) is further of the opinion that the shortage of health care workers has a profound effect on patient's health care service delivery, health outcomes, production and the economy. He argues that these factors are not the only negative consequences of excessive migration. The majority of Jamaican nurses are female, and it is a common practice for children to be left behind with relatives when mothers migrate (Goffe, 2015:15). This practice means there is an increased ratio of dependents to caregivers, with increased costs that, according to the IMF (2013) and World Bank (2014), are not offset by remittances from the mothers, even though remittances make up nearly 20% of the country's GDP. Goffe (2015) indicates that due to overcrowded households, three of every ten households in Jamaica include these "barrel children", who are at risk of poor school performance, anti-social behaviour and/or sexual abuse.

Mullan (2015) points out that even though Jamaica has urged the UK government in the past to stop depleting its health workers, it has started recruiting healthcare workers from poorer countries. Mullan (2015) states that Guyana, Ghana and Nigeria have become source countries for Jamaican nurses, physicians and pharmacists – a practice that contributes to the shortage of health workers in these countries.

Freckleton (2016) argues that active recruitment and financial incentives play major roles in healthcare worker migration in Jamaica as in other industrialised countries. However, there are factors "pushing" as well as "pulling": some nurses leave to escape the system that limits advancement, some because of lack of benefits and others to receive further medical training that is either unavailable in Jamaica or not of high quality. Freckleton (2016) further states that many health workers perceive Jamaica as offering no worthwhile opportunities for personal or academic advancement; thus, these Jamaicans go overseas for further education and training and accidentally find better conditions abroad and never return. Freckleton (2016) also cautions that working within a system that is persistently depleted of human resources can be extremely frustrating. He further asserts that the country is often unable to meet the demands of either healthcare consumers or providers, at least within the public system with its constantly underfunded Ministry of Health. He adds that many health workers may want to return to Jamaica after migration but may be kept away by the island's high crime rates and other hardships.

2.4 Causes of shortage of health workers in developing countries

According to Benson, Peterson and Salazar (2016), the brain-drain problem has a devastating impact on the healthcare systems. The migration of skilled health professionals is a cause of grave concern for many developing countries (Benson *et al.,* 2016: 54). Massive migration of skilled health professionals from emerging countries to rich countries around the globe has been recorded by many researchers (Chanda, 2014; Collier, 2016;

Dovlo, 2015; Goffe, 2015; Thaitu, 2012). Other forms of movement by health workers within a country, for example, from poor rural areas to less poor urban or metropolitan areas or from the public to the private sectors and from the health to other sectors such as mining, are also reducing the pool of skilled health workers involved in primary health care in many developing countries (Collier, 2016: 69). In his research, Loefler (2015) states that though the causes for the shortage of health workers differ between countries, four common primary reasons have been identified. These motives include migration, poor or uneven distribution of health workers, insufficient supply and training of health workers, and the inefficient utilisation of health workers.

Health workers persistently move from the public to the private sector or programmes funded by donor organisations and NGOs (Naicker, Plange-Rhule, Tutt, & Eastwood, 2015). Health workers' migration from poorer countries in the southern hemisphere to wealthier countries in the northern hemisphere further exacerbates the shortages experienced in many emerging countries. As previously mentioned, these migration patterns are often motivated by a combination of 'push' factors in the home countries (Naicker *et al.,* 2015), such as lack of infrastructure, health facilities, training opportunities, promotion and positive career paths, a heavy workload, low wages, poor management structures, failing health services and a declining national economy. The 'pull' factors within destination countries include the prospect of better remuneration, the ability to save money, upgrading qualifications, better living conditions and a safer environment (WHO, 2016: 99).

Authors such as Benson, Peterson and Salazar (2016:90) claim that numerous challenges, including internal and external forces, impact the shortage of health workers and their ability to deliver high-quality healthcare services globally. These factors comprise demographics**,** disease burdens**,** epidemics**,** working conditions (compensation**,** non-financial incentives and workplace safety), health systems (financing**,** technology and consumer preferences), and context (labour, education**,** public health sector reforms and globalization). In a Ugandan case study, Marshall (2014) highlights that in emerging countries, health workers struggle with high workloads, limited availability of equipment and essential medical supplies, lack of adequate training opportunities and poor salaries – all of which hurt healthcare service delivery, and in many instances, contribute to health workers' desire to migrate in search of improved working and living conditions.WHO (2013) reported that many countries of the northern hemisphere rely on internationally-trained health workers to fill gaps in their own country's healthcare delivery. In 2013, it was estimated that 55% of all doctors and 45% of nurses trained in Sub-Saharan Africa were working in OECD countries (WHO, 2013:99). Even though more recent data indicates that the inflow of internationally-trained health workers has become stable or declined in some OECD countries, overall migration of health personnel to OECD countries is growing (OECD, 2015:2).

It is projected that in the future, the crisis of the dire shortage of human resources for health care will further deepen, influenced by an ever-growing demand for health workers in both wealthier and poorer countries (WHO, 2016: xix). Changing demographics and health needs in affluent countries are among the core factors expected to enhance the overall demand for health workers in the long term (Dussault *et al.,* 2014; OECD, 2015:4). At the same time, experts have warned that the number of health workers being trained domestically in many poorer countries is threatened by the limitation of public finances caused by the ongoing economic crisis (OECD, 2015: 4). In the future, richer countries are likely to have an even greater dependence upon internationally-trained health workers than at present. These countries keep advancing the dire shortage of human resources available for health care in poorer countries and widening global inequalities (WHO, 2013:99).

According to Lofters (2015), no healthcare system can exist without a workforce to staff it and thus, problems within a healthcare system cannot be tackled without adequate staff. In recent years in Canada, much media attention has been given to the shortage of physicians in both the private and public sectors (Canadian Institute for Health Information [CIHI], 2015). CIHI (2015) reports that politicians have proposed concrete plans to resolve this problem. However, the situation in Canada is minimal compared to the shortage of health workers in many lower and middle-income countries. High-income countries, on average, have a physician ratio of 300 per 100,000 people.

Canada's ratio of 203 per 100,000 in 2014 is considered low among OECD countries (OECD, 2015). Lower-income countries, in contrast, have an average physician ratio of only 17 per 100,000 (OECD, 2015: 30). As indicated previously, a major cause is the migration of health workers from lower to higher-income countries. Researchers such as Freckleton (2016) and Kingma (2015) established the causes for the dramatic differences in healthcare worker supply between higher and lower-income countries. Freckleton (2016) maintains that in many lower-income countries, the ‘brain drain’ of healthcare workers has devastating impacts on healthcare service delivery because it is often the best-qualified health professionals with the greatest chance of migration (Freckleton, 2016:51).

The International Organization for Migration (IOM, 2015) estimates that lower-income countries pay the USA $500 million annually to train health workers who migrate to high-income countries. The Caribbean and Sub-Saharan Africa are the regions that have been most seriously affected by health worker migration. For example, Nigeria’s overall estimated loss of return on investment for physicians who have migrated to high-income countries is USA $1.41 billion (Freckleton, 2016:55).

Unfortunately, the Caribbean and Sub- Sahara Africa are also the areas with the highest HIV prevalence rates in the world. Habte, Dussault and Dovlo (2014) claim that brain drain can even occur within a resource-poor country, in which disparities between conditions in rural and urban health centres encourage health professionals to move into the urban areas. Relocation to an urban centre can be the first step that leads to international migration, a process that perpetuates the country's brain drain (Habte, Dussault & Dovlo 2014:80).

According to Marchal and Kegels (2013), a disturbing practice that triggers the prevalent problem of healthcare workers' migration is that high-income countries have actively recruited many health professionals working in low and middle-income countries. It was reported by Naicker *et al.* (2015) that in 2014, 41% of migrant nurses in Britain moved there primarily because of recruitment. Naicker *et al.* (2015) believe that recruitment strategies for foreign health workers in high-income countries have been successful because the recruitment offers are very lucrative compared to earnings in low and middle-income countries. They further establish that high-income countries can offer higher salaries, sometimes up to 34% higher than low-income countries. Carl (2013) concurs that in addition to higher salaries, recipient countries offer conducive working environments, better health facilities and medical infrastructure, and many extremely attractive resources. Naicker et al. (2015) state that in the UK, New Zealand, USA, Australia and Canada, nearly one-quarter of physicians are foreign-trained, and 50-85% are from lower-income countries. Boseley (2011) claims a positive relationship exists between the shortage of health workers in emerging countries and the demand for health workers in richer ones. Hence, as the shortage in emerging countries increases, the demand from richer countries increases.

In his argument, Philp (2014) cautions that it is misrepresenting the problem to put all the blame for health worker migration on recruitment strategies of high-income countries. Philp (2014) argues that everyone should have the right to migrate to another place or country, irrespective of the reason. He maintains that migration is both likely and certain due to the current global situation of uneven development. Philp (2014) confirms that a large number of health workers leave their home countries without any recruitment having taken place. In many cases, health workers leave their home countries due to the situation within their home countries that may have frail economies that lead to weak public healthcare systems with poor working conditions. A weak economy is directly responsible for dilapidated health facilities, the shortage of medical instruments and pharmaceutical supplies, the outbreak of many contagious diseases, low salaries and fatigue and burnout amongst health professionals due to the vast number of patients, and many other factors (Philp, 2014: 52).

The contemporary understanding of the shortage of healthcare workers advocates that limited efficiency, poor implementation of healthcare programmes and inadequate supervision have fuelled high labour turnover figures in developing countries (Mills *et al.,* 2014: 25). Marchal and Kegels (2013) describe the immense migration of health professionals and the impact of AIDS which, in some countries, is at a level of high prevalence that has drastically reduced the workforce. The authors further point out that armed conflict prevents many developing countries from progressing in human capital development.

Within such circumstances, it is almost impossible for developing countries to attain/retain adequate health workers (Marchal & Kegels, 2013:32). Chanda (2014) states that, as already mentioned, the emigration of health workers from developing countries is a common practice triggered by the widespread availability of jobs in the health sectors of developed countries. Lawrey and Pear (2012) confirm that many health professionals have been actively recruited away from high-income countries. Mills *et al.* (2014) report that 41% of migrant nurses in Britain have moved there because of better employment conditions and the fact that recruitment policies and approaches in most developed countries have proven successful. Mills *et al.* (2014) likewise confirm that in the USA, the UK, New Zealand, Australia and Canada, approximately one-quarter of practising physicians are foreign-trained, while Lawrey and Pear (2012) stress that 75% of these physicians are from lower-income countries.

In the opinion of Robison and Clark (2014), it is overgeneralising the lack of health workers to place all the blame on the recruitment strategies of richer countries. In common with Philp (2014), they argue that everyone has the right to migrate to countries of their choice and that in a world with uneven development, migration is inevitable. Their statement is supported by McDonough (2011), who contents that many health workers leave their home countries without active recruitment. Long (2012) conversely indicates that health workers are forced to migrate because of conditions in their home countries. He adds that these source countries often have weak economies that directly result from weak public health care systems with poor employment and working conditions. Long (2012) cautions, however, that recipient countries can offer salaries up to 24 times higher than the home country of the migrating health workers. Health worker shortages in Sub-Saharan Africa arise from many sources, including past investment shortfalls in pre-service training, international migration and career changes among health workers, premature retirement, illness and premature mortality. However, the dynamics of entry into and exit from the health workforce in many of these lower-income countries remain poorly understood. This lack of understanding limits the capacity of national governments' capacity and international development partners' capacity to design and implement appropriate intervention programmes (WHO, 2013).

It was highlighted by Enabulele (2012) that the reasons for health worker shortages in health facilities in Nigeria are multitude. They include poor health human resource development plans; inadequate training infrastructure and health facilities to support the production of human health resources; migration of health workers (particularly medical and dental practitioners) due to insecurity and poor job satisfaction, mostly as a result of uninspiring workplace conditions, poor health infrastructure and equipment, inadequate remuneration and welfare conditions. Enabulele (2012) adds that the attractive remuneration, security guarantees, better incentive packages, conditions of service and workplace conditions in developed countries, such as the USA, UK, Germany and Australia, encourages the migration of health workers from developing countries in Africa.

In his research, Muula (2016) mentions that the public health system in Malawi is completely overwhelmed by an insufficiency of health workers. Malawi has a population of 11 million people and 352 doctors, 438 clinical officers and 701 nurses registered with the Malawi Medical Council in 2015 (Muula, 2016). This number of health professionals is distributed among mission, public and private health facilities and research organisations (Muula, 2016). He further stated that the public health system is threatened by the AIDS pandemic, which has increased the attrition of health workers due to ill health and death. Muula (2016) maintains that in Malawi, other factors such as retirement, death and the 'brain drain' of health workers to other countries (the UK, Saudi Arabia and South Africa) are major causes for the shortage of health workers. Muula (2016) also states that even without the migration of health workers, Malawi's health sector's personnel numbers are inadequate to serve the country's needs.

Malawi's reliance on health workers graduating from domestic training institutions is unlikely to overcome this problem. Muula (2016) indicates that Malawi has only one medical school with an annual output of about 20 medical doctors. The first-year intake of medical students was between 45 and 60 in 2014 and 2015. Most of the clinical and operative duties within the public health service are performed by clinical officers (Muula, 2016:30). Medical assistants, who are below the level of clinical officers, are not permitted to perform surgical roles but, due to the shortage of health workers, these medical assistants are posted mainly to rural health centres (Muula, 2016:31). Dovlo (2014) notes that In Malawi, there also seems to be a lack of interest among young school leavers in the health professions. Muula (2016) likewise concurs that most of the public health systems in southern Africa are suffering from a shortage of health workers generated by a combination of the following factors: migration of health workers, retirement, high attrition due to ill-health, and death mostly as a result of AIDS and migration from the public to the private sector.

In their study on the migration of health professionals, Pang *et al.* (2012) document the advantages and disadvantages influencing health workers' decisions to migrate. They further allude that a wide range of factors affects health professionals' temporary and permanent migration. As mentioned previously, the disadvantages include lack of opportunities for postgraduate training, underfunding of health service facilities, lack of established posts and career opportunities, poor remuneration and conditions of service and retirement provision, governance and health service management shortcomings, civil unrest and personal security, long hours/no holidays, large workloads and too many patients, lack of flexibility for ageing workers or workers with family responsibilities, few health co-workers, fear of being unable to care properly for patients, lack of medicines and equipment and disorganized health management. The incentive for migration includes the attraction of centres of medical and educational excellence, availability of posts, greater financial rewards and improved working conditions (Pang *et al.,* 2012).

In the Ugandan case study, Mensah, Mackintosh and Henry (2012) highlight that the specific reasons health workers migrate from poorer countries are multiple and context-specific. Notwithstanding, over the years, research has identified several 'push factors' that regularly motivate health workers' migration, including the already mentioned issues of low remuneration, poor working conditions, poor health facilities, discrimination, lack of funding, narrow career structures, poor intellectual inspiration, lack of security as well as no provision for a good education for children, a violent political climate and harassment of intellectuals (Hardill & Macdonald, 2010; Mensah *et al.*, 2012:29; Pang *et al.*, 2002; VSO, 2012).

2.5 The effects of the shortage of health workers on healthcare service delivery

Mensah, Mackintosh and Henry (2015) allude that the lack of adequate healthcare workers in many developing countries is a major barrier to crafting an integrated approach for improving maternal, newborn and child survival, health and nutrition at the community level. Mensah *et al*. (2015) affirm that the ratio of health workers per 1000 children, specifically nurses and doctors, is a substantial determinant of the high rates of infant, under-five and maternal mortality within many developing countries. For example, their research reveals that the projections for achieving 90% coverage of measles and polio immunisation and skilled birth attendants will be improved only when the health worker ratio exceeds 2.5 per 1000 inhabitants. Many developing countries are adversely affected by devastating diseases, particularly those within Sub-Saharan Africa, because of overwhelming shortages of health personnel (Mensah *et al.* (2015). These researchers concur with Mutizwa-Mangiza (2011) that the severe impact of the lack of health workers on delivering health services in developing countries has already been described in detail in this chapter. Muula (2016) indicates that the shortage of trained healthcare workers in Malawi has severely limited the quality and quantity of healthcare services delivered by the Malawi public health system.

According to Rosenberg, Hayes, Mclntyre and Neil (2015), more than half of the USA's health workers are experiencing substantial burnout symptoms. Physicians who work in the speciality clinics at the front line of health care, such as emergency medicine, family medicine, general internal medicine, neurology and surgery, are at the highest risk of burnout. Burnout is near twice as rampant among health workers compared to other professions because of the severe shortage of health personnel (Rosenberg, Hayes, Mclntyre & Neil 2015:61). Between 2011 and 2014, the prevalence of burnout increased by 9% among health workers in the USA while remaining stable amongst other workers. A study by Dyrbye, Thomas and Massie (2015 established a high prevalence of burnout and depression among medical students, with rates higher than those of age-similar individuals pursuing other careers.

Rosenberg, Hayes, Mclntyre and Neil (2015) also highlight that the workplace of health workers has financial implications for healthcare centres. In the USA, the cost of turnover among health workers is estimated at 1.5 to 1.8 times their salary (estimated total costs of $82,000–$88,000 per health worker in 2013). The cost of replacing one physician depends on speciality, location and length of vacancy, with estimated costs ranging from hundreds of thousands to more than $1 million (Rosenberg, Hayes, Mclntyre & Neil, 2015: 62). Several researchers (Collier, 2016; Dovlo. 2015; Dyrbye, West & Satele 2014; Kooper, 2015) point out that many physicians experience burnout because of their high workload. The high prevalence of burnout among health workers is a concern because it affects the performance, quality and safety of healthcare systems, and efforts need to be made to address this emergent problem (Dyrbye, West & Satele, 2014:443). Burnout may also indirectly increase healthcare expenditure through higher medical errors, malpractice claims, absenteeism, and lower job productivity (Dyrbye, West & Satele, 2014:443). These authors call for adequate funding to ensure the implementation of systematically sound studies and collaborative efforts to curb the ever-growing shortage of health workers.

In their study of nurses, Habte, Dussault and Dovlo (2012) report a similarly high prevalence of burnout and depression among health workers. A 2011 study of more than 10,000 registered nurses highlights that 43% experienced high levels of emotional exhaustion. A subsequent study of approximately 68,000 registered nurses in 2014 by Dovlo (2015) reported that 31% of homecare nurses, 37% of nurses working in other settings, and 32% of hospital nurses suffered emotional exhaustion and opines that burnout may be higher among nurse practitioners and physician assistants than other USA workers.

According to Muula, Mfutso-Bengo, Makoza and Chatipwa (2013), in Africa, low salaries and poor employment conditions triggered by the unsuccessful implementation of Structural Adjustment Programmes (SAPs) have fuelled the extremely high incident of 'brain drain'. Subsequently, health service provision has been negatively affected, particularly in remote locations (Mullan, 2015; Muula, 2014; Salmon, Yan, Hewitt & Guisinger, 2017). As mentioned previously, there is a shortage of healthcare workers in middle- and low-income countries due to their migrating to wealthier industrialised nations. Connell, Zurn, Stilwell, Awases and Braichet (2017) point out that migration is caused by numerous aspects such as poor working conditions in developing countries and the fringe benefits richer countries offer. This practice is devastating the delivery of quality healthcare services globally, specifically in the Caribbean and Sub-Saharan Africa.

2.6 The strategies to curb the shortage of health workers

It was found relevant to this study to investigate the strategies pursued by some developed and under-developed countries to combat the shortage of health workers. It was necessary to explore the strategies to establish whether the findings should be helpful to the Namibian government in combating the shortage of health workers.

Loefler (2015) stresses that the UK, New Zealand, EU countries, Canada, the USA, and Australia, urgently need to establish standards for the minimum number of health workers to be trained in developed countries. Loefler (2015) points out that 23% of physicians in the USA were trained outside the country, including more than 5 000 doctors from Sub-Saharan Africa. He further emphasises that the above standards should be referenced to the anticipated national/international health care provider level. Without such internationally accepted minimum training targets for developed countries health workers, the most vulnerable of these countries will continue to lose many of their health workers to richer countries (Loefler, 2015:506). Likewise, some developed countries, especially the UK, continue to lose their health workers to other developed countries, such as the USA, thus fuelling their need to recruit healthcare workers from developing countries (Loefler, 2015:506).

Aiken (2012) highlights that one way to limit the damage to the most vulnerable developing countries is to ensure that all developed countries train sufficient numbers of health professionals to maintain at least their own national requirements. He further points out that developed countries should train more doctors and other health professionals to meet the needs of developed countries; establish rules for training doctors, nurses, and other health professionals; end active recruitment from developing countries; increase development aid and technical assistance from developed countries.

Aiken (2012) notes that developed countries may also consider compensating the country of origin of the migrating health professionals. Aiken (2012) mentions that such compensatory funds could be directed toward specific measures agreed with each country to assist in recruiting and retaining health professionals, particularly in rural areas (for example, assistance with housing and transport incentives), and to improve postgraduate training programmes, including investment in better training facilities and higher salaries for doctors, nurses and other health workers. He proposes that if these initiatives can be made effective and are simulated elsewhere in Sub- Saharan Africa by developed countries and other donors, it could make a real contribution to reducing the frequency of the migration of health workers.

Robison and Clark (2014) suggest that developing countries should embrace selecting medical students who are less likely to migrate; encourage role models to foster eagerness and commitment for the provision of the population's health care needs; ensure medical training is appropriate for the needs of the country; offer bonding schemes to delay migration and conduct in-country training.

Mungai (2015) supports Robison and Clark's (2014) suggestion that developing countries must retain healthcare professionals by providing incentives, improved pay and tax incentives, career opportunities, a better quality of life, research budgets and laboratory facilities. Mungai (2015) also maintains that for developing countries to regain healthcare professionals, they must offer 'return of talent' programmes and in-country postgraduate and specialist training courses to encourage the permanent return of the migrating healthcare workers to their native country. In addition, Mungai (2015) believes that it is important for developing countries to establish their postgraduate training programmes to strengthen the morale of local health workers because the lack of such programmes contributes to the migration of health professionals. In their code of practice, Commonwealth (2013) indicates that several UK hospitals and teaching centres have found that establishing working links with similar institutions in Africa is mutually constructive because there can be major benefits for trainees in both countries. In the longer term, college-based training programmes should ensure the sustainability of health care services. Pagett and Padarath (2017) argue that developing countries must address the uneven distribution of doctors within their countries and, as an example, report that the Ghana College of Physicians and Surgeons, inaugurated in 2003, has made considerable progress towards meeting the training needs of its specialist trainees.

According to Salmon, Yan, Hewittt and Guisinger (2017), there should be direct financial compensation for those developing countries whose health professionals (usually trained at public expense) have migrated to developed countries. Such compensation would cover the cost of undergraduate medical training and compensation for the loss of a fully trained health professional who would be a potential role model and mentor for future healthcare workers. However, Pagett and Padarath (2017) argue that financial compensation is not a satisfactory answer because there is the little immediate prospect of developed countries agreeing to this form of direct compensation.

According to Sarah (2012), countries in the southern hemisphere need to prioritise and strengthen their health systems to confront the shortage of health workers. Many authors (Collier, 2016; Hangopian *et al.,* 2013; Long, 2012) have highlighted that it is important to maintain, manage and monitor the health workforce rather than solely to train adequate numbers of health workers. Strategies for training, managing, maintaining and monitoring the health workforce require ample funds. In 2016, the WHO projected that every country had to spend an average of US$ 176 million per year on training sufficient doctors and nurses to eliminate the healthcare workers deficit by 2025, as well as a further US$ 345 million to employ those newly trained health professionals (WHO, 2016: 221-222). Still, many countries within the southern hemisphere have limited capacity and finances to invest in their health systems (WHO, 2016:221). Debt obligations and decades of structural adjustment policies that restricted government spending have negative consequences on investment in health systems (WHO:228). The WHO (2016) points out that an improved government budget and international development assistance are ideal sources for obtaining the funds necessary to invest in adequate and reliable health systems (WHO, 2016:146).

According to Lawrey and Pear (2012), policymakers are working continuously to find solutions to the shortages caused by migrating health workers. Lawrey and Pear (2012) describe the situation as unfortunate because the reasons for this practice are unclear and emphasise the urgency of discovering these factors. In his report, Buchan (2014) states that attempts have been made to establish international codes of conduct to target the issue of recruitment in richer and developed countries. Some of the efforts coordinated by international bodies to respond to the health workers' crisis to identify its negative impact on service delivery include: approaches to improving health workers' management in source and designation countries and bilateral and multilateral agreements that are legally binding between such countries. According to Mensah *et al.* (2015): the Aspen Institute (2012) emphasises the futility of efforts to address the challenges associated with the international migration of health workers.

This view, however, is disputed partly by Aiken (2011), who states that the success of the WHO Code of Practice is difficult to monitor and, more notably, cannot address the root causes of international health worker migration, for example, economic problems. Aiken (2011) stipulates that implementing the WHO Code of Practice needs to be recrafted in favour of addressing the 'push factors, and this regulation should not be seen as a separate international instrument to address the problems of health worker migration.

According to Mungai (2015), the Global Health Workforce Alliance conducted two Global Forums on Human Resources for Health, the first in 2011 and the second in 2014, respectively, with the ultimate goal of improving human resources for health in order to achieve the health-related Millennium Development Goals. Mungai (2015) further explained that a Global Agenda for Action was created at the 2011 forum to advance an international code of conduct for both recipient and donor countries. He outlines that key elements in the WHO Global Code of Practice on the International Recruitment of Health Personnel include; calls for ethical recruiting, fair treatment of migrant workers, the support of return migration, and the prioritisation of public sector spending on health. Mungai (2015) reports that a progress report on the WHO Global Code of Practice was presented to the World Health Assembly.

Mungai (2015) points out that the Global Health Workforce Alliance has shown a commitment by convening the two global forums, which is the first step in correcting the global health workforce crisis. However, at the 2014 forum, participants emphasized the need to take action to ensure that every person on earth has access to effective health care (Mungai, 2015:37). Buchan (2014) and Mungai (2015) both indicate that the WHO Global Code of Practice is an important achievement. However, it is not legally binding. They believe that it is detrimental to low and middle-income countries that such codes are not legally binding because the high-income countries will not honour them. They further indicate that emerging countries cannot solve the problems of migrating healthcare workers independently; thus, adherence to this international code of conduct is ultimately voluntary.

High-income countries and international agencies such as the World Bank and the International Monetary Fund (IMF) need to recognize these codes of conduct and do more to slow and eventually reverse the brain drain (Mungai, 2015:40). Mungai (2015) and Goffe (2015) suggest that high-income countries should formulate specific policies, such as Canada's agreement only to recruit healthcare professionals from other high-income countries with similar or higher physician densities. Alternatively, high-income countries should create formal linkages with source countries to provide support for developing the sustainability of their healthcare systems (Goffe, 2015:60).

Hangopian *et al.* (2013) highlight that it is now broadly agreed that supporting workforce development to strengthen health systems in vulnerable countries should be among the development partner/donors' key responsibilities within the international aid framework. There are some disagreements, though, regarding the extent to which countries (and international donor agencies) should be obliged to support health systems and strengthen workforce development as a result of their contribution to the human resource for health crisis through their reliance on internationally trained health workers (Hangopian *et al.,* 2013:35).

It is stipulated in the WHO Code of Practice (2011), for example, that 193 member states that adopted this Code of Practice should be encouraged to provide technical assistance and financial support to developing countries or countries with transitional economies aimed at strengthening health systems' capacity, including health personnel development in those countries. In another section, the WHO Code (2011) also states that setting voluntary international principles and coordinating national policies on international health personnel recruitment are desirable to advance frameworks to strengthen health systems worldwide equitably. WHO (2011:41) further stipulates that the setting of voluntary international principles on international health personnel recruitment is to mitigate the negative effects of health personnel migration on the health systems of developing countries and to safeguard the rights of health personnel. This Code, therefore, indirectly associates the plea for financial support from destination member states with their contribution to the negative effects of migration on source countries.

The Commonwealth Code of Practice (2013) for the International Recruitment of Health Workers and the Pacific Code of Practice (2013) went even further because they explicitly mentioned compensation as a potential mechanism to mitigate the negative effects upon source countries as a result of international migration (The Commonwealth, 2013:5; WHO, 2016:8). It is important to note that eventually, the Codes mentioned above will fail to address the human resource health crisis if receiving countries save more money by employing migrant health workers than they contribute to the workers' home countries in the form of development assistance for health services (The Commonwealth, 2013:5; WHO, 2016:8). Authors such as Mensah *et al*. (2015) propose some recommendations for actions that will curb the 'push factors' for health workers' migration in source countries. They also advise that source countries must introduce compulsory public service schemes (bonding) as widely used strategies, especially to increase the numbers of physicians working, albeit temporarily, in destitute or rural areas (Mensah *et al.*, 2015:21).

Nonetheless, they caution that these schemes might not always be successful, because high inflation in some countries may make these bonding schemes unsuccessful, and additionally because such an approach might effectively increase the barrier for globular migration. Mensah *et al.* (2015) propose the following actions should be taken to combat health workers crisis and better health workforce retention, especially in rural and remote areas: improved financial and non-financial incentives, stronger protection and fairer treatment of health workers who may face difficult and often dangerous working conditions and poor pay, improved domestic training of health workers, better adaption/substitution of skills, continuous efforts to improve living conditions for health workers and the general population, development of policies that facilitate the return of migrants, and improving the availability and international comparability of migration statistics for health personnel.

However, Mensah et al. (2015) highlight several measurements undertaken by the Ghanaian government to address the shortage of doctors that seem to have had damaging effects in many cases (Mensah *et al.,* 2015: 21-22). For instance, Ghana embarked upon a Healthcare Project with the Netherlands to transfer knowledge and skills to health workers, facilitate short internships for Ghanaian medical students, and develop a centre for maintaining medical equipment in Ghana (Mensah *et al*., 2015:22). As is highlighted in WHO (2016)'s report, there seems to be a common agreement that destination or receiving countries should minimise their reliance on migrant health workers through the following actions: better planning, training, monitoring and management of their health workforce, guaranteeing fair treatment of migrant health workers, providing support to source countries by strengthening the activities of health systems, and implementing HRH management as specified in the World Health Report (WHR, 2016:312). The extension of bilateral agreements and memoranda of understanding (despite these being geographically limited) and support for other programmes that encourage circular migration, seems to be generally accepted strategies to mitigate the effects of the skills drain from low- to high- income countries (WHR, 2016).

It is also proposed by Dovlo (2015) that destination countries that accommodate migrant healthcare workers could help ease the burdens placed upon source countries by taking part in cooperative programmes that strive for managed migration. Dovlo (2015) proposes that several changes must be made to address Sub-Saharan Africa's acute shortage of healthcare workers. Policymakers should consider and directly address some of the 'push' and 'pull' factors that motivate health workers to migrate, thus addressing both source and destination countries (Dovlo, 2015:62). He further alludes that policymakers should first work to increase healthcare worker salaries in source countries in Sub-Saharan Africa. The current variances in salaries between African and destination countries are considerable (Dovlo, 2015:62).

This author concludes that policies regulating the brain drain must not only reflect what might reduce healthcare workers' critical shortages in African countries but must also outline what ethical and practical behaviour is. Given the limitations of the WHO Code of Practice (as highlighted in Chapter 5 of this research dissertation), it can be argued that the Code in its current form cannot be the sole tool to address the responsibilities of destination countries towards source countries of migrant health workers. There is a clear need for sustainable financing mechanisms to enable source countries to adequately address their health worker shortages (Mackey & Liang, 2013; Mensah *et al.*, 2015). Mensah *et al.* (2015) propose that calculating the cost of training for health professionals is the best way to measure the extent to which destination or receiving countries benefit financially.

In the instance of doctors and nurses migrating from Ghana to the UK, Mensah *et al.* (2015) estimated that in 2014 the UK government had saved approximately £75 million from the employment of 295 Ghanaian-trained doctors and about £58 million from the employment of 1121 Ghanaian trained nurses. Possibly these figures could increase to over £3.5 billion if all doctors and nurses originally trained in Sub-Saharan Africa and registered in the UK in 2014 were included (estimates are based on the number of Ghanaian doctors and nurse registrations in the UK from 2008-2009 and 2013-2014 and on the assumption that it costs £220,000 to train a doctor in the UK and £12,500 to train a nurse) (Mensah *et al*., 2015:35). The authors mention that putting a value on the benefits gained by employing the migrant health workers, by assessing the value they deliver through their services or by looking at their respective salaries is other ways to estimate the perverse subsidy (terminology adopted by the World Health Report of 2012 (WHO, 2014:101) that is highlighted by Mackintosh *et al*. (2016:761) and Mensah *et al*. (2015:35). According to their calculations, in 2014 Ghanaian-trained health workers delivered a value of nearly £49million to the UK health service consumers that are equivalent to 60% of the UK's official development aid to Ghana for the same year (Mackintosh *et al.*, 2016).

Putting into consideration the healthcare skills debt payable by destination countries in the northern hemisphere to supplying countries in the southern hemisphere, some critics have disputed that destination countries must compensate source countries through the payment of a reimbursement (Bueno de Mesquita & Gordon, 2015; Mackintosh *et al.*, 2016; Mensah *et al.*, 2015). Referring to the case of Ghana, Mensah *et al.* (2015) maintain that the amount of money saved by the UK government through the employment of migrant health workers might, in some cases, exceed the amount of development assistance for health services paid by the UK to the migrant workers' source countries. Mensah *et al.* (2015) underline the argument that health workers' international migration institutes a subsidy from poor to wealthy countries.

To rectify the imbalance of this benefit, Mensah *et al.* (2015) argue that receiving countries should pay compensation to supply countries of migrating health workers. Compensation could be either paid as government-to-government transfers or a settlement fund to address the 'drive' factors for migration in source countries (Mackintosh *et al.*, 2016:762-765; Mensah *et al.*, 2015:40).

The authors' further state that this compensation is a combination remedy to address the sources and benefits of international migration (freedom of movement, knowledge exchange through global migration, etc.) and urge that destination countries take greater responsibility. As highlighted previously by Mensah *et al.* (2015) and Mackintosh *et al.* (2016), stakeholders have already reached an agreement that addressing 'push' factors through incentive projects might be a significant strategy in restraining the brain drain and that destination countries should help to mitigate the negative effects by supporting the strengthening of health systems and health workforces in source countries (WHO, 2012:60, 2014:4). The background of a call for compensation could pose a challenge to the expectations that lie beneath the main development aid or charity frameworks, by acknowledging the debt owed by affluent destination countries. In the arguments of Mackintosh *et al.* (2015), the payment of reimbursement could shift development aid relationships away from a framework of charity towards a less neo-colonial commitment to advanced international monetary transfers (Mackintosh *et al.*, 2016:757). WHO (2014) advises that this call for compensation would also offer a prospect for developing new markers as backup indicators for the success of international reactions to the global HRH crisis that might be more informative than health worker migration statistics. Though authors such as Mackey and Liang (2013) have published a few similar suggestions in recent years, the call for compensation has so far not been acknowledged.

As mentioned earlier, the World Health Report of 2012 adopted the terminology 'perverse subsidy' (WHO, 2014: 101), and the (OECD, 2015) released a report: The looming crisis of the decreasing health workforce necessitated the mention of the issue of compensation, but it was dismissed due to practical, theoretical and ethical difficulties (OECD, 2015:71). Even though the WHO Code of Practice accepts the need for Health and Social Services and destination countries' accountability in vindicating the negative impacts of international migration, the calls for compensation from several source country member states during the early stages of negotiations were ignored in the final drafting of the WHO Code of Practice. This exclusion appears to stem from practicality with a sense that destination countries were likely to reject it and a feeling that a limited Code was better than none. Some stakeholders, however, anticipated a return to this issue of compensation (Dhillon & Taylor 2013: 15).

Muula (2016) reports that parliamentarians in Malawi suggested policy changes and the implementation of corrective measures. He further avows that there may be a need to describe the perceptions of the legislature on what they perceive as the cause of the problem, which could contribute to the solutions and an evaluation of these solutions. One of the solutions suggested by Malawi Parliamentarians is to train more health workers. Training new but lower-level health workers who are not marketable to the outside world and improving the working conditions and remuneration of health workers are some of the suggested solutions.

2.6.1 Australia's strategy

Australia has dramatically increased its domestic supply in the past decade to address the challenge of the shortage of health workers. Most notably, these increases relate to medical schools. Enrolments in existing medical schools have expanded, with new medical schools established in New South Wales (Notre Dame Sydney Western Sydney & Wollongong) and Queensland (Griffith, Bond & Cook, 2012; Deakin, 2012; McNeil & Stoelwinder, 2010).

According to Mason (2013), on 2010, 9 308 commonwealth-supported students were enrolled for medical degrees, with the number rising to 21 873 in 2011. The number of domestic full-fee medical students also doubled from 405 to 905, with local graduates rising from 1 214 in 2010 to 1 925 in 2011. This rapid growth similarly occurred when the number of nursing graduations rose from 5 094 in 2010 to around 12 000 by 2013, and in dentistry, 168 graduations in 2010 rose to 616 in 2011 (Mason, 2013). Notwithstanding this level of government investment modelling, Health Workforce Australia (2012) suggests that Australia's scale of dependence upon migrant health professionals will remain strong. Should 50% reduce immigration in 2025, a shortfall of 139 828 nurses and 9 600 doctors are anticipated (rising to -148 113 nurses and -15 240 doctors should migration be cut by 95%)? Workforce maldistribution remains an entrenched challenge in Australia; one largely addressed to date by migration. Few local medical graduates choose rural or remote work (except nurses) or commit to less popular sectors.

Rural incentive programmes are problematic, with few existing outside medical facilities. It is difficult to prove the effectiveness of retention and relocation payments. Only a very small subset of practitioners would consider moving to a rural location of 6 000 people or less, within a context in which 96% of Australian doctors would not move at all (Scott, 2013:25). In terms of domestic training, there is debate about the effectiveness of the 4% rural origin target in influencing distribution, few students undertake rural internships (10%), and bonded scholars are likely to buy themselves out of their regional service obligations (Mason, 2013).

The risks in terms of health service provision are severe, with less accessible services for Australians living in rural, remote and outer metropolitan regions. The bottlenecks are inefficiency and incapacity in the training system, especially for doctors; and continued reliance on poorly-coordinated skilled migration health professionals to meet essential workforce requirements resulting in Australia having a high level of dependence upon internationally-recruited health professionals relative to most other OECD countries (Health Workforce Australia, 2012.)

2.6.2 Ghana's strategy

According to Thaitu (2012), Ghana is working with the World Economic Forum and World Bank on a health management training programme and has developed a strategic plan for human resources for health care to increase between 2014 and 2018, backed by strong political will and implemented by the Ministry of Health and its agencies. Priorities are for training mid-level workers working in rural areas and improving retention. The community-based health planning services, initiated in 1999, places community health officers (specially trained enrolled nurses or field technicians) in rural and deprived communities. Another project aims to bring Ghanaian professionals living abroad back to Ghana for short periods, during which they can transfer their skills to local health professions. Regarding retention, salaries have improved, and incentive schemes involving housing and rural bonuses and bonding schemes have been developed (Thaitu, 2012).

2.6.3 Zimbabwe's strategy

Research conducted by Ndlovu, Bakasa, Munodawafa, Mhlangu and Nduna (2011) indicated that in order for Zimbabwe to improve the distribution of health workers in urban and rural areas, there should be pro-poor and needs-based distribution policies which could be executed by putting a moratorium on the expansion of staffing levels in urban areas and prioritising employment within district and lower level facilities. Re-assigning municipalities and local authorities to provide more primary care services in urban areas release workers from Central Hospitals for redeployment within the rural districts. Ndlovu *et al.* (2011) suggest that introducing improved conditions of service in rural areas and other incentives, such as better housing, a car allowance, a rural allowance, communication and other infrastructure, will influence the health workers to stay. However, Ndlovu et al. (2011) caution that the current lack of such incentives pushes health workers away from rural areas and even out of the public health sector.

The Zimbabwe Commission of Review into the Health Sector (2013) confirms that the Ministry of Health cannot yet resolve the shortage of health practitioners because the appropriate development policies are the responsibility of other government departments. The Commission establishes that Zimbabwe is to test whether the recently introduced Primary Care Nurses, trained for rural deployment, will stay there in their allocated rural area despite the absence of improved conditions of service. Regardless of its staff retention strategies, the public health sector is expected to continue experiencing shortages and maldistribution of health workers because of the 'pull factors' of private for-profit practices and migration (ZCRHS, 2013: 15). Most doctors, nurses and pharmacists transfer to private practice or migrate to 'greener pastures' for the associated status and financial rewards. In their studies for the WHO, Stilwell *et al.* (2014) noted that for Zimbabwe, the need for better salaries was the most important 'push factor' reason for health workers' migration.

Ndlovu *et al.* (2011) propose two scenarios; however, that supposedly will assist the public health sector to retain health workers, specifically doctors and nurses. Firstly, the government should invest in incentives that will make the public health sector competitive with the private health sector. Secondly, the government should regulate the rapid growth of private for-profit practices to reduce the health industry's profitability, especially for doctors. Such a step will encourage more doctors to either remain in the public sector or engage in the dual practice. Ndlovu *et al.* (2011) also expose the drawbacks of dual management of health workers by the Public Service Commission (PSC) and the Ministry of Health and Child Welfare (MoHCW).

On one hand, the establishment of the MoHCW is managed by the PSC and is not regularly expanded to keep pace with the expansion of the health sector and the increased demand due to population growth. On the other hand, the MoHCW requires more than twice the PSC-approved establishment to achieve minimum staffing levels necessary for health facilities expansion and responding to epidemiological trends and the challenge of shortages (Ndlovu *et al*., 2011:25). While health training institutions increase outputs, the public sector should complement expanding establishments by creating posts that offer employment opportunities to medical graduates. The MoHCW can only recommend that the PSC employ more health workers, but it has no power to recruit civil servants. This lack of power partly explains the need for the Health Service Board (HSB) to streamline the planning and management of human health resources (Ndlovu *et al*., 2011:25). In 2015 the HSB lobbied for expanding the MoHW's establishment with a mandate to implement health sector reforms suggested by the MoHCW and other stakeholders. Ndlovu *et al.* (2011) point out the danger of losing more health workers because of the inherent frustration in managing transitions.

Secondly, they recommend that the public sector take advantage of the declining fortunes in private for-profit practices by investing more in providing incentives to key health professions to retain them in the public health service sector and assume a competitive advantage over private for-profit establishments. The trend will likely continue as the saturated private for-profit industry becomes unaffordable for most patients due to the country's poor economic performance.

Unfortunately, achieving adequate staffing levels in the public health sector cannot be achieved quickly, but still, the system should be able to tolerate gradual health improvements (Ndlovu *et al*., 2011: 25). One way of achieving this goal is to increase the productivity of the available human resources. Acute as the shortage may be, it is obvious that improved performance by the existing health practitioners could, in the short term, minimize inequalities in health care (Ndlovu *et al*., 2011:26). This practice includes reducing absenteeism by health workers due to engaging in private practice during government working hours, selling personal merchandise in offices and other engagements that do not extend health benefits to the public health service patients.

Ndlovu *et al*. (2011:26) further noted that many of the inputs necessary for equitable health workers' equitable distribution lie outside of the MoHCW's control. Ministries responsible for housing, transport and other infrastructural development could play an important role by creating the conditions necessary for health workers to stay longer in needy areas (Ndlovu *et al*., 2011:26).

2.6.4 Switzerland's strategy

In order to achieve greater self-sufficiency, measures have already been taken in recent years in Switzerland in the field of education. Between 2000 and 2010, medical school student capacity increased by 15%. In late 2011, the Swiss government proposed various measures to fight the shortage of doctors and encourage primary care medicine practitioners (Switzerland, Federal Office of Public Health, 2011). Its report stated that 1 200 to 1 300 physicians should be trained annually to sustain the current volume of health services provision, which constitutes an increase of approximately 50% compared to the current graduates. The Swiss Confederation and the cantons thus agreed to train 1 300 additional doctors annually starting in 2018/2019, increasing the number of medical graduates from 800 to 1 100. In 2011, Switzerland launched the Masterplan Family Medicine, and Basic Medicine aims to upgrade and promote the profession of family doctors in universities and strengthen, in general, basic health care in Switzerland (Switzerland, Federal Office of Public Health, 2012). In parallel, the revision of the law on university medical professions (LPMed) aims to improve the position of primary care medicine in university and postgraduate education so that these professions receive higher recognition.

Pilot projects have been developed to allow future family physicians to become familiar with their work through internships in private practices (Switzerland, Federal Office of Public Health, 2012:211). In 2010, the Masterplan for Training Health Care Professionals was developed to increase nursing capacity and strengthen training for all skill levels so that the staff's qualifications are adapted to needs. The State Secretariat for Education, Research and Innovation (SERI), the Federal Office of Public Health, the cantons and health-related organizations are working together to implement the required measures by 2015 (Switzerland, SERI, 2010). Meanwhile, working groups seek new forms of collaboration and distribution of roles within the health workforce at the cantonal and federal levels. Thus, the Federal Office of Public Health and the Swiss Conference of Cantonal Directors of Public Health (CDS) (Switzerland, Federal Office of Public Health and SCCDPH, 2012) jointly published a report on new models of care in primary care medicine.

These models can improve collaboration between occupational groups, particularly in the division of labour, and thereby maximize the use of skills. A platform called 'The Future of Medical Education was established in 2010 in collaboration with various partner organisations to address issues such as inter-professionalism (Switzerland Federal Office of Public Health, 2010). A national concept, Palliative Care and Training was also approved in 2013 (Switzerland Federal Office of Public Health, 2013).

These initiatives align with the overall "Health 2020" strategy, which the Swiss government approved in January 2013 (Switzerland, Federal Office of Public Health, 2013). Covering the entire health system, "Health 2020" includes 36 measures to ensure the quality of life, strengthen equal opportunities, and improve quality of care and transparency. These measures will be progressively implemented in collaboration with the main stakeholders over the next few years. The goals of this programme are to ensure the Swiss health system is sufficiently prepared to meet future challenges, to ensure that costs remain financially sustainable, and also to ensure that, in future, Switzerland has the necessary health staff with the appropriate education to meet the needs of the population (Switzerland, Federal Office of Public Health, 2013).

2.6.5 Jamaica's strategy

Mullan (2015) confirms that the governments of Jamaica and Ghana have come together and established limits on the number of nurses that Jamaica can recruit from the African nation. Jamaicans who went overseas for further education and training are now funded through international cooperative arrangements. Mullan (2015) and Freckleton (2016) agree with Goffe (2015) that Jamaica is vigorously working on ethical solutions and ways of making better use of its available resources, human, financial and otherwise.

An initiative called the Managed Migration Program of the Caribbean was spearheaded by the Pan American Health Organization and built upon a Jamaican notion (Freckleton, 2016:16). This programme has incorporated methods such as temporary migration programmes, partnerships with overseas nurses associations, and the recruitment of international nurses for short-term stays. The country also hopes for increased US support for education in Jamaica.

Finally, Jamaica is working with the IOM to develop a national, international migration policy (IOM, 2016). The Pan American Health Organization (2016) proposed areas to be addressed in this policy that include facilitating short-term labour migration, developing returning resident programmes to encourage repatriation of health workers currently overseas, and improving the extent of the impact of migration on health and education within the country.

2.6.6 Somalia's strategy

In his research, Pogge (2013) describes that civil war broke out in the Federal Republic of Somalia after the downfall of its central government in 1991. The civil war led to the ruin of many of the country's social, economic and political institutions, as well as the public healthcare system (Pogge, 2013:42). As a result of the war, Somalia was left in a fragile state with underinvestment, poverty and bad health indicators.

It was estimated by WHO (2013) that by the end of 2013, up to 1.5 million people were displaced due to the civil conflict. Many people are internally displaced, and returnees have moved to urban areas due to the conflict and the loss of their livelihoods (WHO, 2013). Somalia is listed by the World Bank as a low-income country, with a GDP per capita that is among the lowest worldwide (World Bank, 2013).

Somalian people had an average life expectancy of 51 years in 2013, which is among the lowest in the world (World Health Statistics, 2014). Equally, maternal mortality (1.200 per 100 000 people) and under-five mortality (180 per 1 000 live births) are among the highest in the world. Data from 2013 shows that only 9% of women in Somalia are attended by skilled health workers at birth (Unicef, 2014). The shortage of health workers critically threatens the delivery of essential healthcare in Somalia. Somalia has just 0.4 doctors per 10 000 people and only 1.1 nurses and midwives (WHO, 2014).

The health systems profile of Somalia was highlighted in the WHO (2013), which stated that since 2001, most of Somalia's health workers had migrated overseas. This loss is regarded as the severest setback to the country's health system (WHO, 2014:55). Many Somalis have severely restricted access to healthcare due to a shortage of health workers. The situation in Somalia is extremely difficult, with many inhabitants experiencing one of the lowest health statuses in the world.

According to results of the 2013 UNICEF Multi-Indicator Study (MICS, 2013), in the five years prior to the survey, the under-five-year mortality rate was 91 deaths per 1 000 live births, and infant mortality was 72 deaths per 1 000 live births. These figures indicate that one in every 14 children dies before their first birthday, and one in every 11 dies before their fifth birthday (UNICEF 2014:2). Pogge (2013) describes many health centres in Somalia as dilapidated, poorly equipped and stocked with discouraged health staff. Somalia lacks public transport, which the Ministry of Health and Labour has identified as a barrier preventing health workers and patients from accessing the health centres. Pogge (2013) indicates that Somalia's Ministry of Health and Labour (MoHL) has been planning to provide a minimum essential package of health services and improve the human resources for health (HRH) policies, such as standard salary levels. A report compiled by Somalia's Ministry of Health and Labour (2013) indicates that the Somalian Government has insufficient capacity and finance to implement the initiatives.

Pogge (2013) describes Somalia's public health referral system as a loosely hierarchical arrangement with minimal supervisory and frail operational linkages between primary units and referral hospitals. Furthermore, he points out that the referral system is inadequate because many health facilities are managed by independent organisations over which the MoHL has no control and cannot regulate the quality of services they provide.

MoHL (2013) reports that in 2013, there were only five schools of nursing and two medical schools in Somalia. This problem is further intensified by the fact that some nurse/midwife training institutions produce nurses without professional examination or registration (MoHL, 2013).

Pogge (2013) mentions that in the public sector, qualified health workers receive very low remuneration; for example, a medical doctor receives 51 USD per month. He further contends that another aggravating factor is that government often fails to pay health workers their salaries timeously. In contrast, the private sector pays much higher salaries, and many health workers work in or run private clinics to supplement their income (Pogge, 2013:60). One result of poor health care services is that the government cannot implement the MoHL strategy's target of opening health centres 24 hours a day, seven days a week. Most health centres are only open from 9 am to 5 pm (Pogge, 2013:60).

Somalia's health workers also perform extra jobs because of the prevailing low levels of motivation and supervision and, thus, limit the time available for community members to access health services (Pogge, 2013:60). This limited access the health care services contributes to the growing trend of women and girls' preference to use Traditional Birth Attendants (TBAs) and deliver their babies at home (Pogge, 2013:61).

It is also highlighted in UNICEF (2013) report that the situation in Somalia has deteriorated to the extent that women who deliver their babies in public health facilities do not receive access to reproductive health (SRH) services, or sometimes the utilisation of such services is low because of a lack of midwifery nurses. This problem has resulted in the majority of pregnant women who face complications do not receive the emergency obstetric care (EOC) required. The situation of a lack of health care providers is even worse for the survivors of sexual and gender-based violence (SGBV); many rape victims may have severe physical injuries such as fistulas or tears, which leave these women with chronic urethra problems resulting in their being rejected by their families and communities (UNICEF, 2013:15). Many Somalian health centres lack health workers, the equipment and the supplies to provide basic EOC for pregnant women. A study conducted by Health Poverty Action (2012) (HPA) in the town of Maroodi Jeex indicates that failure to access maternal and child health services is due to the lack of healthcare providers. It further reports that 75% of childbirths occur at home, generally attended by a TBA whose awareness of maternal and child health (MCH) issues is low.

Health Poverty Action has been working in the vicinity of Maroodi Jeex, Somalia, since 1994 to support primary health care services. HPA creates an enabling environment for health workers to render essential obstetric care. This practice was achieved through the thorough training of midwifery nurses, installation of solar panels, water and electricity, repair and refurbishment of health centres, provision of supplies such as family planning commodities, emergency contraceptives for rape survivors, supplies and equipment, blood giving sets, and provision of an ambulance based at the hospital for patient referrals from the target health centres (HPA, 2012: 28).

It is also indicated in the HPA (2012) report that HPA conducted extensive training for medical staff on topics including family planning, counselling, emergency obstetric care, life-saving skills for obstetric emergencies, management of fistula, injuries from female genital mutilation (FGM) and gender-based violence (GBV), health education/promotion, and the development of information, education and communication (IEC) materials, in addition to two quality improvement training. Key MoHL health staff were also trained and coached to provide supportive supervision to their medical staff. In addition, intensive training for TBAs as safe motherhood promoters was also conducted. This training was part of a scheme to redefine their traditional role to facilitate referral for mothers to deliver their babies in the improved health facilities (HPA, 2012:30). The HPA (2012) further reports that the HPA project facilitated the implementation of performance-based payment schemes to motivate health staff to keep the facilities open 24 hours a day, seven days a week, and provide quality services.

Pogge (2013) comments that the innovative model implemented by HPA continues to yield remarkable results. The model stimulates eagerness and passion in health work and commitment amongst staff without compromising the quality of health care service. HPA also implemented a scheme whereby pregnant women who deliver their babies in health facilities and TBAs who refer women for delivery in health facilities receive incentives as a mechanism to increase safe deliveries (HPA, 2012: 31). In some health centres, the project offered cash incentives to TBAs for every mother they accompanied for a skilled delivery at the health centre. During postnatal visits, mothers were also provided with gifts such as baby blankets, nappies and soap) to encourage their utilisation of post-natal care services to avoid post-delivery complications (HPA, 2012:31).

Moreover, the HPA includes promoting culturally sensitive health messages on family planning, safe motherhood, STI/HIV/AIDS prevention and awareness of sexual and gender-based violence, including female genital mutilation (FGM). This instruction was facilitated through the provision of educational materials, community outreach drama, and the broadcasting of the *Saxan Saxo* radio programme (HPA, 2012:32).

The projects also support Clinic Health Committees, attached to each health facility, in their role as representatives of the community. These clinics link the community and the Regional Health Office/MoHL to provide feedback on services, mobilise communities, improve community-level referrals for obstetric emergencies, FGM complications and SGBV, and resolve conflict and misunderstandings between service providers and the community (HPA, 2012:32).

The HPA (2012) further confirms that the success of the HPA projects has been evident at different levels. On a health-indicator level, the projects have successfully increased skilled birth attendance from 23% to 75% and opening hours from 8 hours to 24 hours a day, seven days a week, at its associated health centres. Since the start of HPA's work, the number of deliveries at health facilities associated with the project has increased from 993 in 2009 to 5 939 in 2014; family planning has increased from 350 clients in 2009 to 1710 clients in 2014; total antenatal care visits increased from 8 143 in 2010 to 17 122 in 2010 and 22 476 in 2014, and postnatal care attendance rose from 1 072 in 2010 to 4 492 in 2014 (HPA, 2012:40). Many health workers involved in projects have also been positively changed.

In the report (HPA, 2012), it is highlighted that several health workers have indicated that the working environment has been enhanced through improved health facilities and better availability of medical supplies and equipment, and a generally improved working environment at the health facilities. Many health workers are motivated to provide high-quality healthcare service.

The HPA (2012) affirms that the implementation of performance-based payment schemes has yielded good results of longer opening hours of health facilities and higher enthusiasm amongst health workers. It has also led to improved access to safe and skilled birth delivery for women, and enhanced training opportunities have motivated health workers. Other successes of HPA include improving the referral system at associated health facilities and providing the ambulance, which has been useful in ensuring that those who require emergency evacuation receive it timeously. Finally, the close collaboration between HPA and the Somalian MoHL has provided a positive environment to engage on operational and policy issues (HPA, 2012: 42).

2.6.7 Mozambique's strategy

In its report, the World Bank (2013) indicates that Mozambique is situated in the eastern part of Africa and has a population of approximately 24 million people, most of whom live in rural areas. In Mozambique, there are severe barriers to accessing healthcare, particularly for the rural population. Even though there are multiple reasons, a lack of qualified health workers significantly contributes to the problem of the shortage of health workers (World Bank, 2013:12). Mozambique has one of the lowest ratios of health workers to population worldwide, with only 0.3 doctors and 3.4 nurses and midwives per 10 000 people, (World Health Statistics, 2012). OECD (2013) confirms that the international migration of health workers worsens this problem of lack of health workers in Mozambique.

In 2013, the OECD listed Mozambique among the countries with expatriation rates of doctors above 50%. As a result of a shortage of health workers under five, infant and maternal mortality in Mozambique continues to rise (OECD, 2013:33). Immunisation coverage rates fall below international targets (WHO, 2012). Mozambique has a life expectancy at birth of 50 years. Hence, it ranks far below the average life expectancy in other low-income countries and Sub-Saharan Africa (World Bank, 2013). The Tete Province in central Mozambique is described as topping the list of regions hit hard by the current shortage of health workers. In 2013, a group of Action for Global Health (AfGH) staff visited Tete and established that there are just 2 000 health staff, including only 63 qualified doctors and 300 registered nurses, to serve the country's large population of 2 million people who mainly live in that province. These figures indicate that, on average, one medical doctor provides health care services to 30 000 people, while one nurse takes care of 8 000 people.

AfGH (2013) describes the situation further intensified by the fact that more than 50% of Mozambique's population lives at least 10km from a health facility. AfGH (2013) reports that the critical lack of health workers contributes to the population's high barriers to accessing healthcare. AfGH (2013) mentions that only 45% of women in Tete give birth in a health facility, and many of these facilities are understaffed and lack drugs and equipment.

The Mozambican government launched the Human Resources Plan 2012-2018 (HRP) to tackle the immense shortage of health workers (AfGH, 2014:10). This plan aimed at improving access to healthcare by increasing the number of health workers from 30 000 to 75 000 by 2018. It also encourages health workers to work in rural and remote areas. AfGH (2014) mentions that European donors, including Italy, have focused on supporting the Mozambique HR Plan to increase the number of health workers and bring qualified health workers to work in areas of desperate need. In an interview (AfGH, 2014), Giulio Borgnoli of the Italian Embassy in Mozambique explained how Italy aligns its priorities with the Mozambican Ministry of Health and supports the government's HRP by working within the collaborative Health Partner Group (HPG). HPG is a group representing all development partners (donors) supporting the Mozambique health sector. The HPG provides funding through the pooled funding instrument PROSAUDE (AfGH, 2014:10).

AfGH (2014) highlights a health training school in Tete that trains medical staff from the local area to retain health workers in rural areas instead of migrating to large cities such as Maputo (Mozambique's capital) or other countries. AfGH (2014) also reports that the MoH funds about 70% of courses presented at the Tete Health Training School, and the remaining 30% is funded by the province and other development partners, such as international donors. Training more people in the health sector is one of the solutions to improve the health of Mozambique's population (AfGH, 2014:12). Several other initiatives are taking place across other regions of the Tete Province to increase access to health services.

AfGH (2014) further reports that the local authorities of Tsangano have joined forces with a Danish donor, Danida. This partnership encourages community members to come together to tackle the shortage of human resources for health. Moreover, the International Centre for Reproductive Health (ICRH) will work with the community to design the next five-year health plan. This collaboration also seeks to pinpoint other obstacles to well-being within the Tsangano community and to develop strategies to ensure that health, nutrition, water and sanitation are all prioritised and planned for in the future (AfGH, 2014). The Tsangago project is one example of several encouraging initiatives implemented across the Tete province and other rural areas in Mozambique.

Dr Rezique Uaide pointed out to AfGH (2014) that simply training more health workers will be insufficient to deal with Mozambique's Human Resource Health crisis. Apart from training, there is a need to focus on retaining health workers and motivating them to work in rural areas. The latter issue involves a much broader initiative, including building houses for health workers, starting agricultural programmes and other incentives.

2.6.8 Uganda's strategy

Uganda is a Sub-Sahara African country located within the region of East-Central Africa. The World Bank classified Uganda as a low-income country with a gross domestic product (GDP) per capita of US$ 511 in 2012 (World Bank, 2013). Its population is estimated at approximately 35 million. Uganda was recorded in 2012 as having the fourth-highest growth rate, and the third-highest birth rate in the world (CIA Factbook Uganda, 2013) and consequently, the Ugandan health system faces a severe challenge as a result of these demographic trends. Another unabated challenge faced by the health system is the exceptionally high proportion (estimated at 87%) of the Ugandan population who live in rural and remote areas where access to electricity, water and healthcare is very difficult (CIA Factbook Uganda, 2013; VSO, 2012:15-17, 22). VSO (2012) points out that Uganda's health care budget never exceeds 10% of its public expenditure and is far below the 15% Abuja Target. The census statistics of 2012 illustrate that Uganda had only 1.2 doctors and 14.5 nurses, midwives and nursing assistants per 10 000 people (VSO, 2012: 22).

According to WHO (2016:14), Uganda, therefore, is one of the many countries with a critical shortage of health workers, making adequate provision of vital health services seem impossible. It was reported by the Uganda Ministry of Health that, according to the internationally agreed health outcomes indicators, Uganda's maternal, infant and under-five death rates remain high, despite recent improvements (Uganda MoH, 2013/2014:7, 2014: 2-3; World Health Statistics, 2015; VSO, 2012:15). Normally, only 42% of births are attended by a skilled health professional, and measles immunisation coverage among one-year-olds remains low (World Health Statistics, 2015). Moreover, only 9% of under-five-year-olds sleep under a mosquito net (World Health Statistics, 2015). Uganda's life expectancy of 53 years is one of the lowest in the world (CIA Factbook, 2013). Nevertheless, a comprehensive Human Resources for Health (HRH) policy and a strategy to prioritize Human Resources for Health constraints are in place, and the training of health workers has improved in recent years. However, the shortage of health workers and their unequal distribution remain major obstacles to access to quality health care for the population, particularly in rural areas (Uganda MoH, 2014: XVIII). Trained health workers filled only 58% of approved posts in health facilities in 2014 (Uganda MoH, 2013/2014:7). VSO (2012) describes the situation for Uganda's health workers as extremely critical; their poor working conditions have been labelled as challenging, with high workloads, limited availability of equipment and essential medical supplies, a lack of adequate continuing professional development and training opportunities. The salaries of Uganda's health workers are ranked the lowest amongst the East African Countries (VSO, 2012:7,9,13). Inevitably, health workers' negative attitudes and behaviour lead to insufficient health care service provision and seem to obstruct further people access to health care (VSO, 2012:9,12).

Uganda has improved the remuneration of health workers to meet those of neighbouring countries such as Kenya. Otherwise, there is a risk that trained staff will continue to leave for better-paying jobs outside the health service or in other countries (Labonte, 2014). Other incentives include providing staff accommodation or adequate travel allowances if accommodation is not provided in remote areas. In addition, health workers are provided with subsidised meals, childcare facilities and support for further studies. Labonte (2014) also states that health workers are now remunerated according to their qualifications and experience as opposed to the previous structure, whereby salaries were lower than those earned working elsewhere. Uganda has increased the intake of medical students and, to overcome the shortage of doctors, especially in rural areas, has expanded the number of trainees for mid-level healthcare positions (Labonte, 2014).

2.6.8.1 The Voluntary Service Overseas Valuing Health Workers Initiative

VSO, in partnership with the Coalition for Health Promotion and Social Development (HEPS-Uganda, 2012), conducted research among Ugandan health workers and managers to obtain their opinions on the effect of working conditions upon their attitudes, behaviour and practices (VSO, 2012: 6). The overall objective of the research was to make health workers' views. Complaints were heard, and to use the findings to improve relationships between healthcare workers and users, as well as to campaign for improved employment conditions for health workers in Uganda (VSO, 2012:12). The research revealed that health workers are frustrated, distressed, and demoralized and exhausted by continually overloaded working conditions, inadequate infrastructure and lack of medical equipment, supplies and medicines. In addition, health workers feel undervalued and unrewarded for their work (VSO, 2012:53).

Research also discovered that this combination of inadequate and unconducive working environments and remuneration hurt the quality of patients' care. Despite the difficult conditions under which they work, patients blame the health workers for poor healthcare delivery, which, in turn, heightens the health workers' frustration and misery (VSO, 2012: 53). Research has identified two significant work plans for action in order to encourage positive and radical change to the above negative conditions. Firstly, health workers should be valued for their work; secondly, employment and working conditions that prevent health workers from providing quality healthcare services should be identified and addressed (VSO, 2012: 57). In addition, VSO (2012) outlines the following strategies to address these priorities: implementing in-service training (ongoing professional development); nurturing the 'voice' of health workers (through labour unions, membership associations, as well as civil society organisations); improving the public's negative perception of health workers; and enhancing relationships between health workers and communities (VSO, 2012:55-57).

VSO (2012) highlights how challenging working conditions negatively impact health workers' well-being and ability to provide adequate health services (VSO, 2012:12-13). This report also highlights the impact of the Human Resources for Health shortage on health workers and their patients. VSO (2012) points out that factors such as excessive workloads and poor pay might affect health workers' decision to migrate. On the positive side, VSO (2012) identified potential solutions to problems that could play an important part in developing the HRH strategies necessary to improve healthcare provision in Uganda. On a more general scale, research into health care provision can help to initiate and/or improve the dialogue and relationships between stakeholders responsible for delivering health care in a particular country. Their study also outlines the importance of assessing the challenges of HRH shortages from the perspective of the involved individuals instead of only focusing on the challenges to the health system as a whole (VSO, 2012: 13).

2.6.9 Ethiopia's strategy

Ethiopia is an African country located at its horn and has a long war history with its neighbouring country, Eritrea. The World Bank classified Ethiopia as a low-income country, with a GDP per capita of US$ 370 in 2011 (World Bank, 2013). Health outcomes in Ethiopia are poor compared to other low-income countries, and according to WHO (2014), despite improvements in the last few years, maternal and infant mortality for those under five remain high. It was also reported that only 10% of births are attended by a skilled health professional (WHO, 2014). Life expectancy at birth is 59 years, which, although higher than the Sub-Saharan average, is lower than in high-income countries (World Bank, 2013). Inadequate access to clean water and sanitation facilities, widespread poverty, low levels of education, and limited access to health services cause high levels of ill health in Ethiopia (WHO, 2014:11). Ethiopia continues to suffer from a severe shortage of human resources for health, notwithstanding a significant improvement in human capital development during the last decade.

WHO (2015) listed Ethiopia as one of 57 countries having a critical shortage of healthcare workers, a situation that continues to exist with the ratio of health workers to patients being amongst the lowest globally. The latest available data shows less than one doctor and only 2.4 nurses per 10 000 people (WHO, 2015:124). The situation is worsened by the country's disproportionate allocation of health workers. WHO (2015) shows that a large portion of health professionals (1/3 of doctors and 1/6 of nurses) work in Addis Ababa, where only approximately 4% of the population lives. As a result, accessing even basic health services in rural areas, where 85% of the country's inhabitants live, is extremely challenging (WHO, 2014:2).

The shortage and unequal distribution of health workers in Ethiopia are further intensified by health workers moving into urban areas, the private sector and abroad. According to OECD (2016), Ethiopia is one of the main countries in Sub-Saharan Africa source countries for migrating doctors and nurses. Data released by OECD (2016) indicates that up to 35% of Ethiopian doctors and 19% of Ethiopian nurses migrate to other countries. This migration has resulted in increasingly inequitable access to health care in Ethiopia compared to other countries (OECD, 2016:212).

According to OECD (2016), the Ethiopian government introduced the Health Extension Programme (HEP) in 2012/13 as a key strategy to restrain its health workers shortage as part of the second phase of its Health Sector Development Programme (HSDP II). The primary objective of the HEP is to improve access to primary healthcare in rural areas through a community-based approach focused on prevention, healthy living, and basic curative care (WHO, 2013:14). OECD (2016) emphasised that the approach is fundamentally driven by the assumption that by equipping households with appropriate basic health care knowledge and skills, they can take responsibility for improving and maintaining their health.

In order to achieve this objective, Ethiopia's Federal Ministry of Health (FMoH) introduced a new category of health workers, to be known as health extension workers (HEW), who would be responsible for delivering a defined package of essential health interventions and guidance in rural communities (WHO, 2013:14). Apart from increasing the number of HEWs, generous investments were made to improve other areas of the Human Resources for Health crisis such as health care infrastructure and pharmaceutical supplies, and ensuring the successful enactment and operation of the programme for improving the populations' basic health. The programme swiftly showed some success, and HSDP III recorded major achievements in expanding the coverage of rural areas by HEWs, as well as people's access to and usage of health services (WHO, 2013:26).

According to WHO (2015), AMREF Ethiopia proposed to upgrade the basic health knowledge and skill of Ethiopia's HEWs in 2015 to enhance their initial successes, based upon the assumption that HEWs could mostly support Ethiopia's progress towards achieving the Millennium Development Goals (MDG) 4 and 5. AMREF Ethiopia collaborated with Ethiopia's FMoH and the Open University in the UK to prepare learning materials and train tutors/mentors, to establish a unique north-south collaboration that could bring world-class health education to Ethiopia (WHO, 2015:15). UNICEF, the WHO and several Ethiopian Universities have also joined this programme. WHO (2015) reports that these organisations rolled out a pilot phase of the Healthcare Education and Training programme (HEAT) in February 2014.

The purpose of HEAT also to advance the skills of Ethiopia's 43,000 HEWs, with the help of 16 modules developed and specifically based on a combined learning methodology, tutor-directed, self-study and hands-on practical skills training (WHO, 2015:16). AMREF, in partnership with the Ethiopian FMoH conducted a national assessment and, subsequently, implemented a project termed 'Strengthening Knowledge and Skills of Primary Health Care Workers'. The project aimed to benefit 3 000 HEWs and improve the training capacity of twenty training institutions through the development of curricula and learning material and the training of the trainers. Currently, 1 341 HEWs have already been elevated to a higher training level (IV), and over 1 704 are enrolled in four regional states, with a further 553 earmarked to be enrolled in the remaining three regions (WHO, 2015:16).

This innovative approach of the HEW initiative hopes to curb the Human Resources for the Health crisis in Ethiopia by significantly increasing the number of health workers who can provide basic healthcare. There are still concerns to be addressed regarding the roll-out of the HEW project in the most remote regions of the country (WHO, 2015:20 and OECD, 2016:11). It is deliberated that by the end of the project, over 3 500 qualified HEWs will be deployed in 3 000 community-based facilities in rural areas. The aim of deploying HEWs is to improve and extend community-based health services to 6 million people by 2018. Consequently, access to quality healthcare services and the provision of essential healthcare is expected to be improved eventually, predominantly in rural and remote areas. Moreover, the national upgrading scheme has the potential to be a fruitful approach to maintaining the health care service through the retention of health professionals (OECD, 2016:11).

First assessments show that this upgrading programme has increased enthusiasm among HEWs because they see it as an instrument to improve and advance their careers. Their improved levels of training have also been reported to boost communities' assurance and confidence in HEWs, which is likely to increase further the public's uptake of health services (OECD, 2016:11). The programme also intends to indirectly promote ownership, participation and gender equality in rural areas.

These innovative programmes, while improving both the delivery of and public access to essential healthcare, may also address some of the root problems that drive the Ethiopian Human Resource for Health crisis and the migration of its health workers in general (WHO, 2015:22 and OECD, 2016:14). Cooperating partners are also planning to roll out the HEAT initiative across several other countries in sub-Saharan Africa. With its aim of training an additional 250 000 community health workers (HEWs) by 2020, the project, therefore, could have an enormous impact towards supporting some of those countries that are most seriously affected by the global shortage of health workers (WHO, 2015:22 and OECD, 2016:14).

2.7 The key trends, similarities and differences between the different countries under review in the implementation of their strategies

Many countries around the globe include Namibia share smilar attributes that causes the shortage of healt-care workers. WHO (2022) listed education and training as one of the factors that contribute to the shortage of health-care providers. The lack of investment in training a health care workforce is a major factor, especially in low-income countries. However, wealthy nations also suffer from a training shortage. Secondly, it is very difficult to deploy health workers to remote regions. Wealthy countries have been partly solving their staffing crisis by hiring workers from other countries by providing economic incentives for health care workers to emigrate, they add to the shortages in workers' home countries. Since poorer countries can't compete on salary, professionals make the decision to leave for better compensation and financial opportunity for themselves and their families. According to the American Association of Colleges of Nursing, health-care staffing shortages lead to poor patient outcomes and burnout among the health-care practioner.

Many countries are trying to combat the shortage of health workers. All of them are working hard to increase the domestic supply of health workers. According to Mason (2013), Australia has increased the number of medical students admitted to universities yearly and established new medical schools. All countries under review have introduced retention incentives and allowances for health workers, although their implementation varies from one country to another. Financial resources and lack of funds made it difficult for developing countries such as Zimbabwe to implement their strategies effectively to produce more health workers (Ndlovu *et al.,* 2011). Unlike developed countries such as Australia, which has sufficient funds to finance the education of health workers. Other countries, such as Jamaica, have sent students abroad to study medicine and nursing to combat African health workers' migration (Mullan, 2015).

According to World Bank (2019), Namibia has a serious limitations in health workforce planning and management that pose barriers to service delivery and lead to inefficiencies in financing. Health workforce planning and management has not been decentralized and is under the responsibly of the MoHSS. However, the Ministry does not have the necessary management tools to ensure the effective planning, deployment and monitoring of health staff. While the number of newly graduated medical doctors have remained at a similar level in the past years, there has been a shift among the nurses. Fewer nurses graduated as registered nurses, some nurses graduated with a diploma between 2017/18 and 2018/19 (World Bank, 2019).

2.8 Chapter Summary

The above literature review has emphasised the shortage of health workers worldwide. It was found that most countries today face the same dilemma of an uncontrollable shortage of skilled health professionals. High-income countries such as the US, UK and Canada are capitalising on migrant health workers because they can offer competitive remuneration, conducive working environments, better allowances and opportunities for career progressions.

Developing countries, especially Africa, experience the 'brain drain' of health workers due to their unabated migration to industrialised countries. Some countries, such as Australia, Switzerland and the UK, have embarked on programmes and strategies to increase the training of health personnel in response to the health service demands. African countries such as Zimbabwe, Somalia and Uganda have also tried to implement measures to combat the shortage of health workers. However, other environmental factors such as political unrest, economic instability and poverty make it difficult for the said governments to implement the programmes and offer competitive remuneration and better working conditions to retain health professionals.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology that has been used in this study. The methodology used complements the aim and problem statement of the study. The study focuses on probing the scarcity or lack of health workers in public hospitals, particularly in KISH in Windhoek, Namibia. It also investigated the causes and effects of the said problem and identified possible remedies to mitigate this lack of health workers. The methodology includes the research philosophy, design, and methodological approach employed to collect and analyse the data. It is vital to note that this study is empirical and uses empirical evidence gained from information or knowledge contained in both primary and secondary sources (Creswell, 2014:35). The selected methodology was carefully chosen in terms of this research problem, its objectives and the presented research questions. This chapter will also outline the population under study, the sampling technique used to select suitable participants, research tools, the data collection process, ethical considerations, planning, and structuring and execution of the research study.

3.2 Philosophy of the study

Under this section, the study highlights its trust in how the data about the shortage of health workers in KISH was gathered and analysed and how it should be utilised. The following issues dictated the choice of the philosophy of this study: the source of the required information or knowledge, the reality of the shortage of health workers, and the ways the study's values impact the research procedures and processes. The philosophy of this study directed how the research questions should be comprehended, what research techniques should be used, and how the data should be interpreted.

Saunders, Thornhill and Lewis (2012) note that when conducting business or management studies, researchers must consider the philosophical obligations they are undertaking through their selection of research strategy because, subsequently, this decision will have a major impact on what they do and how they comprehend what they are probing.

Robson (2010) states that a research philosophy guides how the researcher decides how facts about phenomena being studied should be collected, scrutinised, analysed, interpreted and utilised. Similarly, Mugo (2010) defines a research philosophy as a composition of assumptions and traditions about the conception of knowledge. Conducting research involves generating knowledge within a certain field (Howell, 2013:40).

Howell (2013) expands upon Mugo's (2010) viewpoint by stating that developing knowledge when pursuing research does not only involve discovering significant new facts but also solving a certain problem in a specific department of an institution. Which in the case of this study, the health sector in Namibia .

Howell (2013) notes that different viewpoints can be expressed and recorded at each research study phase, intentionally and inadvertently. Saunders *et al.* (2012) identify some assumptions about the source of knowledge (epistemology), realism experienced in one's research (ontology) and the level and ways the researcher's values impact the research process (axiology). Saunders *et al.* (2012) further postulate that philosophical assumptions and procedures direct how a researcher formulates and comprehends the research questions, the techniques used, and the interpretation of the research findings/outcomes. The philosophical assumptions of this research study are epistemology, ontology and axiology, which allowed the researcher to design a rational and fully integrated research project.

According to Denzin and Lincoln (2011), epistemology is a Greek word for *episteme and logos,* which means awareness/science of a theory of knowledge. Another researcher, Flick (2009), highlights that epistemology refers to the assumptions concerning knowledge, the kinds of contributions necessary to create knowledge*,* what constitutes valid quality data (authentic knowledge) and the channelling of such knowledge to others.

Flick (2009) maintains that different types of knowledge can be considered legitimate, especially in the multidisciplinary field of business and management, and range from print and visual data, numerical information, facts, and explanations, and includes stories, descriptions, and even imaginary accounts. Thompson (2006) defines epistemology as a theory of knowledge often used in connection with an individual's epistemological standpoint, especially regarding its validation and the method used to generate and/or collect knowledge.

Taylor (2008) defines epistemology as how a person views and interprets the world, while Tuli (2010) explains epistemology as an approach to acquiring knowledge and understanding the world. Epistemology comprises how knowledge can be accepted, created or recognised (Brannen & Coram, 2008). Denzen and Lincoln (2011) define epistemology as the theory of the scope, validity and nature of knowledge and acceptable opinions and beliefs and stress that it explores types of knowledge and their relation to reality, beliefs and validation. Denzen and Lincoln (2011:52) also stipulate an approach for creating knowledge and pose questions about what institutes knowledge, justified belief, rationality and the limits of what can be known.

According to Barbie (2015), the epistemology philosophy ponders objective and subjective ways of conducting research and states that objective 60 epistemology identifies the outside world, which is hypothetically neutral, while subjective epistemology accepts that the external world is the result of interpretations based upon reflection. McNamee and Hosking (2012) state that epistemology can include both positivism and interpretivism.

Hammersley (2013) states that the interpretive paradigm is initially embedded in the approach applied to obtain knowledge related to human and social sciences and, thus, cannot be related to physical sciences because humans assume their world and then behave based upon these suppositions. Individuals are complex beings, and different people understand and experience the same situation in different ways (Hammersley, 2013:26). Through the use of interpretivism, studies gain a philosophical understanding of a phenomenon, and its density in its distinctive setting is contrary to assuming that the understanding of the phenomenon can be generalised to the entire population (Creswell, 2007).

Hammersley (2013) stresses that because numerous interpretations are created through humans' association of different ideas, interpretivist studies should attempt to distinguish the different ways of viewing and experiencing the world through different circumstances and cultures. Researchers should also avoid judging people and events according to their interpretations because it can cause prejudice. Saunders *et al.* (2012) state that the interpretivist methodology is grounded in the natural data collection methods such as observations and interviews. The interpretivism research viewpoint embraces human concerns within the study. Subsequently, the interpretivist assumption underlines qualitative investigation over quantitative (Bryn, 2008:40). As clarified by several scholars (Denzin & Lincoln, 2011; Hammersley, 2013; Saunders *et al., 2*012), in the interpretivist research approach, the qualitative approach is an ideal method for data gathering. Hammersley (2013) clarifies that a qualitative method is a methodological approach, the interpretivist philosophy is a means of gathering the data, and there is a robust relationship between the two.

This study employed interpretivist philosophy because of the nature and scope of the knowledge required to understand the causes and effects of the shortage of health workers in the KISH. The researcher used this approach to gain a holistic view of the actual reasons causing the shortage of health workers in KISH. The study sought to deduce justifiable beliefs and opinions from the participants regarding possible remedial measures for combating this adverse situation.

The study used multiple techniques, such as interviews and focus groups, to gain the participants' view about the investigated phenomena. This approach was pursued because the participants had different understandings of the situation and the researcher wanted to gain a holistic understanding of the different reasons, causes, actions and meanings offered by the participants (Saunders *et al.,* 2012: 25).

In addition, the philosophy was chosen in relation with the research methods and the qualitative approach of the study that sought to explore 'the how and why' of a certain phenomenon, and not only the 'where what and when. For this reason, a small concentrated sample was investigated at great depth (Saunders *et al.*, 2012:27).

The issue of reality is also one of the underlying philosophies of this study. Okasha (2002) states that ontology is a rational study of the concepts of being, becoming, actually or reality. Ontology involves the issue of how entities happen to exist and how such objects/events can be clustered according to similarities and variances (Okasha, 2002:21). He adds that experience and perception are used to study complete, interactive and multifaceted systems that can be described and interpreted in many ways. Okasha (2002) claims that knowledge shifts and changes over time. Okasha (2002) accepts that bias and lack of real influence on the research's outcome.

Reality is the totality of everything that is real or exists, as opposed to what is merely imaginary and is the term used to refer to the ontological position of things, signifying their existence (Hammersley, 2013:28). Hammersley (2013) also states that reality is the nature of matters as they are, rather than as they may seem to be. Other researchers, such as Cohen, Manion and Morrisson (2011), offer a theory with a broader definition; reality comprises everything that has occurred, occurs, or will occur, whether or not it can be seen and/or comprehended. To discover the details about the lack of health workers and to understand the reality of this shortage of health workers, this study has gathered data from experienced participants and presented it objectively.

An axiology philosophy was also considered for this study**.** Axiology is a Greek word for the study or theory of values (Dudovskiy, 2018). Axiology is a part of standards, ethics, and values or morals within the research procedure. This process integrates queries regarding how studies handle the values of the researcher and the study participants (Dudovskiy, 2018:48). Sound collaboration between the researcher study and participants made the values unambiguous and, thus, generated good results. Values are of two types (Dudovskiy, 2018) – what one should value and what one values.

For the research findings to be trustworthy, the values of both the researcher and the participants must play a major role in all phases of the research process (Dudovskiy, 2018:48). Myers (2008) states that personal values the control the cause of all human action and further maintains that researcher demonstrates axiological ability in order to articulate both sets of values as the basis for concluding. An understanding of personal and participants' values was vital for this study. Axiology was embraced to ensure that the researcher recognised her values while not violating those of the participants.

3.3 Research Approach

This section focuses on how this study was approached and outlined a set of principles of actions and procedures that includes details of the phases of data collection. As mentioned above, this study employed a qualitative inductive approach (defined and described earlier in this section and the reasons for employing this method). The use of the qualitative approach led to the acceptance of the outcome of the study and allowed the assessments of the cause and effects of the shortages of health workers in the KISH, together with the provision of answers to the research questions and the dissection of the research problem.

Saunders *et al.* (2012) stress that with the inductive approach, the research questions guide the collection of empirical data that can generate theories and hypotheses. The approach's employment has necessitated objective research without any predetermined ideas about the nature of the study findings. The study begins with collecting data relevant to the research topic (Dudovskiy, 2018:30) to generate new findings.

According to Cresswell (2011), a qualitative study is a systematic inquiry into social phenomena in natural experiences. He points out that individuals experience their lives according to how they group themselves, how organisations work, and how relationships are shaped by interactions (Cresswell, 2011). Thus, the qualitative approach seeks to explore phenomena. Zikmund (2000) highlights that the qualitative approach is grounded on narration, stories, visual representations, word interpretations, and observations, not numbers. The qualitative approach enables the collection of deep knowledge and understanding of the objects under study. It enables a further investigation, understanding and interpretation of the phenomena using an inside perception (Zikmund, 2000). Miles and Huberman (2002) state that well-grounded data can be deduced in qualitative research because it is the source base of detailed descriptions and explanations of the data collected in an identifiable local setting.

Pope and Mays (2000) indicate that qualitative research employs a realistic approach that always seeks to comprehend phenomena in true-to-life situations, such as a factual world setting. Thus, the study cannot influence the phenomenon being studied. The qualitative research approach entails any study that generates outcomes without employing numerical or statistical procedures (Corbin & Strauss 2008:52). Further, it is the type of research that produces findings by embracing real-world situations that treat the topic interest naturally (Pope & Mays, 2000:37). King and Horrocks (2010) also indicate participants in a qualitative study understand the subject matter as it exists.

The qualitative approach is flexible in terms of location and time because the researcher/interviewer does not have to interview many people. Saunders *et al.* (2012) concur with King and Horrocks (2010) that the qualitative research approach is inexpensive because the researcher does not need to personally. Cresswell (2014) likewise points out that qualitative research projects can be finalised quickly and easily on a minimal budget due to their smaller sample sizes. This author describes the qualitative research approach as a detailed investigation of subject matters not limited by rigidly definable variables. In addition, Bryman (2008) mentions that the choice of employing a qualitative research methodology is determined by the ability of a researcher to guarantee participants' autonomy and to eliminate all possible limitations that the study might impose, generally through a self-administered questionnaire, as in the quantitative methodology. Bryman (2008) further maintains that a qualitative approach equates with the natural progress of the study to reveal the outcomes without influencing any form of variables, thus making it an ideal approach for any domain within the social sciences and management sciences regarding human relations.

The qualitative exploratory, descriptive, phenomenological research approach described above was employed in this study to empower the researcher to understand the participants' viewpoints by asking detailed questions and probing to find a holistic answer to the research question/sub-questions. The motive for implementing a realistic approach to the matter under investigation originated from the necessity for conducting a thorough understanding of why there is a lack of health workers in KISH and how this problem affects service delivery.

An effort was made to collect and explore all the pertinent information concerning the shortages of health workers in the KISH to draw useful findings and establish a profound understanding of the research problem. The study utilised a case study design to explore the participants' experience of the phenomenon being investigated, namely the impact of the shortage of health workers in KISH. The design's element of flexibility guaranteed that the main research questions could be answered by participants and useful qualitative data collected. Howell (2013) indicates that case studies are ideal techniques for obtaining the required information that leads to an in-depth understanding of the research problem.

3.4 Research Design

In this section, the research design is defined and described. It underpins the design chosen to connect the components of this study in a logical way that leads to the efficient handling of the research problem. The descriptive route was chosen based on the nature of the study and the type and amount of data required. The design describes and investigates the situation at KISH as it existed at the time of the study. It was employed because of its appropriateness, flexibility, efficiency and economic viability for handling the research activities.

A semi-structured interview guide with open-ended questions ensured the answer to the 'where', 'what', 'when', 'who', and 'how' queries were reasonably answered.

Creswell (2007) defines research design as:

> A context of procedures and systems opted by a study [researcher] to cartel several components of research in a defined and logical manner to address the research questions efficiently.

The design of this study was dictated by the characteristics of the research problem, study objectives study and, initially, the research questions that dictated that the design should be more descriptive. The design was also influenced by the data-collection procedure and the technique used to analyse this data. In a descriptive research design, the researcher is exclusively interested in describing the case under study (Creswell, 2007: 36) and collects information about the present prevailing situation.

A descriptive design seeks to define the present standing of a variable or phenomenon (Cooper & Schindler, 2009: 45) and includes the description of events, and an outline of the data collection procedure and then analyses, organises, depicts/tabulates and interprets the findings**.** This study employed a descriptive design to organise data into patterns and themes that occurred during analysis (Creswell, 2007) to define the nature of the problem as it exists at the time of the study and to discover the causes of this problem. The study utilised a qualitative design to obtain new data from the participants by articulating coherent and sound findings, conclusions and recommendations for resolving the identified problems.

Other researchers (Bryman, 2008; Flick, 2009; Saunders *et al.*, 2012) describe a research design as a comprehensive description of a study that is proposed to investigate the problem at hand. Bogdan and Biklen (2006) affirm that descriptive research comprises different types of inspections and exploratory enquiries. The main purpose of descriptive research is to describe the state of the research problem as it existed at the time of the study (Saunders *et al.,* 2012).

According to Creswell (2007), descriptive research discloses facts about the nature and position of a situation at the time of the study. Saunders *et al.* (2012) assert that descriptive research includes thoroughly assessing the research problem to distinguish it from other phenomena. Moreover, a descriptive design also defines/describes the association of the practices that occur, the enduring beliefs and events, and the effects being felt or trends developing because of the existing problem under investigation. Therefore, a descriptive design is ideal for describing the current problem and situations based on the participants' impressions and insights (Creswell, 2007:39)

The descriptive design is the most appropriate design for this particular research study. It has been used to describe the existing causes and affects/effects of the lack of health workers in KISH. However, the study also included an analytical approach because the researcher aimed to understand the phenomena under investigation and exhibit the results of the analysis of the collected data. Barbour and Schostak (2005) note that research methods involve a range of techniques (depending upon the nature of the study) used to deduce, sort and scrutinise data to reach conclusions and formulate answers to the research questions.

Creswell (2009) noted that when conducting a qualitative study, the data is gathered by using questionnaires during interviews. He stated that interviews are more effective than observation in prompting narrative or descriptive data that enables researchers to explore participants' views in detail. Cohen, Manion and Morison (2007) also confirm that interviews are a vital method for exploring the construction of meanings in a naturalistic sphere.

The interpretivist epistemology philosophy and the qualitative approach of this study dictated the method utilised to gather, categorise and examine the data. The study is descriptive in design; hence, focus groups and individual interviews were employed to gather the information. This method was adopted to gather the information that was required to address the research question and to attain the study's objective. Qualitative interviews and focus groups were used to achieve a high response rate and generate large amounts of detailed data (Neuman, 2007). In support of Berg's (2007:94) arguments, the qualitative method was selected because it encouraged the participants to develop ideas collectively and freely express their assumptions and perspectives, thus, creating a theory grounded in their authentic experiences.

This method also saved the researcher's time and money while providing a broad range of information. According to Barbour and Schostak (2005), focus group interviews are a data collection instrument in which participants are randomly selected and grouped, either through a purposive sampling of a specific population, an approach that used by the researcher to obtain information relating to the problem of the shortage of health workers at the KISH.

Blaxter, Hughes and Tight (2006) point out that the best means of obtaining and exploring concepts or ideas is by talking to people; thus, the interactive nature of the individual and group interviews enabled the researcher to probe for clear and rich answers with the research topic. The design was also employed to identify and describe the causes and effect of the lack of health workers in KISH without manipulating the subject matter in any manner (Dudovskiy, 2018:36). Wellington and Szczerbinski (2007) recommends that to gather reliable and valid data from the available resources, an appropriate research design with a logical rational between research questions and methods be employed.
This study's research design has been employed to minimise bias in data and increase trust in the collected and analysed research information.

3.5 Research Methods/Techniques

The section uncovers the strategies, processes and tools utilised to gather data to unfold new information and develop a good understanding of the shortages of health workers in the KISH. The techniques employed for this purpose are individual and focus group interviews in which an objective and impartial approach were utilised to ensure that the required data was obtained from the participant's responses. The section also includes details of the print materials used to gather the secondary data, both historical and current information, to conclude the study findings.

According to Collins (2010), a data collection method is a mode of gathering information for many decision-making situations. These methods can vary and/or be combined to achieve results necessary for obtaining the required outcome (Collins, 2010:40). In his study, Yin (1994) postulates that the groundwork for data collection can be intricate and problematic, and all such prior work can be jeopardised if not handled properly. Zikmund (2000) points out that documentation, interviews, archival records and direct observations are instruments for collecting qualitative empirical data. In qualitative research, interviews, document reviews and observations are the most common sources of data collection (Creswell, 2014; Gillham, 2008; Marshall, 2003; Saunders et al., 2012; Zikmund, (2000). According to Saunders et al. (2012), an interview comprises an interrogation between the interviewer and one or more interviewees, during which the interviewer asks questions to obtain information from the interviewee(s). In addition, primary and secondary data can be collected through interviews, focus groups, questionnaires, e-mail responses, observations and print and audio-visual materials (Creswell, 2014; Gillham, 2008) Zikmund (2000) highlights that data can be classified as primary or secondary, the latter being data previously collected for projects other than the one currently being studied. Secondary data is gathered from letters, diaries, memoranda, journals, brochures, statistics and official publications (Gillham, 2008).

Secondary data is readily available and saves the researcher time, effort and money (Zikmund, 2000). It might have been used in previous research and enables future studies to identify gaps in knowledge and deficiencies and detect the information still needed (Zikmund, 2000). For this study, secondary data was gathered from the MoHSS's annual reports, journals, and other government Departments' official publications on health-related matters, such as reports from the Office of the Auditor-General and the Prime Minister and newspapers.

Focus groups are relatively small groups of 4-10 participants who are usually knowledgeable/experts in the subject under review (Saunders *et al.,* 2012). The focus group is assigned an interviewer who is experienced in facilitating the discussion and plays an important role by asking participants relevant research questions, thus, enabling the collection of pertinent information (Saunders *et al.,* 2012:45). Focus groups are useful for obtaining a large amount of data from the group and stimulating extensive discussions of matters of concern to both the groups and the researcher. Creswell (2017) describes individual interviews as a well-planned technique conducted with one participant at a defined time and place. A researcher prepares relevant and vital questions before the interviews and encourages the participants to respond to them (Creswell, 2017:42).

This study used a semi-structured interview guide to collect data from the healthcare employees of KISH during individual and focus group interviews on collecting a large amount of primary data from the participants in a relatively cost-effective way. These interviews were employed because of their credibility in collecting qualitative data on personal assumptions, experiences and viewpoints when complex topics are being investigated and, thus, helped the research to achieve the study's objectives. Individual and focus groups were conducted due to the availability of the participants. Some participants were interviewed individually because they occupy critical positions. Their schedule and availability could not allow them to join focus groups. Focus groups were conducted because it was easier to get many participants at one time. The participants work in an environment where their time for other activities is limited; hence, focus group interviews opt. Secondly, focus group interviews were conducted to gather a large number of data from many participants simultaneously to shorten the data-gathering process.

Gillham (2008) describes questionnaires as popular data collection instruments for academic research. Questionnaires are an expedient and inexpensive way of deducing the required information from a target population (Creswell, 2011). This study used a semi-structured interview guide to gather information from highly literate and cooperative participants. The researcher administered a semi-structured interview guide covering various aspects of this study during individual and focus group interviews on obtaining participants' views.

The guide comprised two sections: Section A elicited socio-demographic information from the participants. Section B comprised open-ended questions aimed at exploring the participants' perceptions of the shortage of health workers in KISH, focused on the possible causes and effects of this phenomenon and explored possible remedial measures for combating this shortage. This technique aimed to gather credible data regarding the subject matter under study from well-experienced health practitioners.

Therefore, open-ended questions were used for data gathering. Creswell (2014) states that open-ended questions are the preferred method for obtaining detailed information because they can prompt significant answers from participants that, while often unexpected by the researcher, are both rich and descriptive (Creswell, 2014:39).

The qualitative methods employed in this study were flexible because they allowed greater freedom of communication and interaction between the researcher and the participants. During interviews, the participants were free to use their own words to express their perceptions. They were not compelling them to choose between pick fixed responses as in quantitative research surveys (Dudovskiy, 2018:43). Participants' retorts were more varied than the 'yes' or 'no' because questions were not necessarily phrased in precisely the same way for each participant. Participants could answer elaborately and in greater detail than normally when using quantitative techniques. The researcher adapted follow-up questions to responses when participants reacted immediately to questions posed to them. Thus, the study provided greater flexibility for the researcher to probe participants' replies by asking further 'why', 'when' or 'how' questions.

3.6 Population

The collection of particular information (data) can usually be collected from a specific source (for example, a specific group of people) with the potential to provide the information. This source comprises the 'population'. The population of this study was chosen based on its characteristics and the type of information required to answer the research questions. The study was conducted on the population of around 348 health staff members.

Hammersley (2013) classifies population as an aggregate of all the participants, subjects or objects that conform to a set of specifications. Mugo (2010) also refers to objects in the universe with specific characteristics, such as a population. Creswell (2014) views population as a term that arrays boundaries on the units of study and a set of individuals or events the researcher seeks to conclude. Dudovskiy (2018) defines a research population as an assortment of objects or individuals utilised for scientific interrogation. Saunders *et al.* (2012) identify a research population as a group of distinct individuals or items known to possess similar binding features or attributes.

The target population of this study consisted of all healthcare employees of the KISH because this group of individuals has one or more similar elements of interest that are relevant to this study (Creswell, 2014:48). In addition, Mugo (2010) defines a target population as a whole group of objects or persons that are linked to the same environment and, therefore, can provide valid information about that environment which will enable the researcher to generalise the study results.

The target population of this study includes the Department of Planning, Policy and Human Resource Development, and the Department of Human Resources Management at the national level (Health Ministry's headquarters). The population also included the following sub-divisions from the KISH: the Medical Superintendent: Head of Administration; Subdivision: Human Resource Management; Sub-division: Medical Services; Sub-division: Paramedical Services; and Sub-division: Nursing.

The target population of the staff members of the Health Ministry were able to guide the study on the causes and effects of the shortage of KISH's health workers and on what should be done by the Namibian MoHSS to curb the shortage of health workers in the public hospitals to ensure the delivery of quality primary and secondary healthcare services.

3.7 Sample

Commonly, populations are too large to enable the researcher to interview every member of the population. Hence, the sample must be selected from the population representative of the whole population under scrutiny. The study sample that was selected from the entire population is presented in this section. This section further highlights the sampling technique used to select the research sample. The section details the aim and importance of the sampling technique utilised to identify the selected sample and the reasons for selecting the sample. The section also described and defined a sample and highlight what sampling entails.

Creswell (2014) describes a sample as a 'slice' of the study population comprising participants, elements or subjects from which the data is collected. Myers (2008) theorises that a sample is a subset of a population. He further posits that the notion of a sample arises from the researcher's inability to test all members of a given population. Myers (2008) maintains that the subset must be descriptive of the set from which it was selected and must comprise a substantive size to enable data analysis. Flick (2009) describes a sample as a group of people or objects from which the study opts to abstract the findings that can be generalised to the situation. He explains that the core function of a sample is to enable the researcher to contact certain population participants to obtain data to formulate findings and derive conclusions that can be applied to the whole population.

Pope and Mays (2000) state that in some cases, the study population might be small enough for all members to be included in the survey. Nevertheless, all the members cannot be studied when a study involves a large population. Hence, the section of the population being studied is classified as a sample of that population (Pope & Mays, 2000: 69).

Sampling involves choosing a portion of the population to represent the total population under study (Denzin & Lincoln, 2011; Taylor, 2008; Tuli, 2010). Saunders et al. (2012) define sampling as a process, act, system, or procedure of picking an appropriate population representative by considering the entire population's parameters or characteristics to formulate conclusions about populations. In addition, Saunders et al. (2012) postulate that it is cheaper and easier to observe a part of the study population than the whole, but the researcher must be able to cope with the disadvantages of using samples. King and Horrocks (2010) state that generally, a population is too huge for a researcher to probe all members of the population and, hence, sampling is the process of pointing out items from an entire population so that after studying them, the research may generalize the results to the population from which they were drawn. Mcnamee and Hosking (2012) state that in a qualitative study, even though it is manageable, it is not compulsory or essential to collect data from every element or participant to ensure valid findings. They add that a subset of a population selected for any study can be called a sample in qualitative research.

This study has adopted a non-probability sampling process which, according to Wellington and Szczerbinski (2007), is a dynamic process that seeks to generate correct and representative samples. In contrast, Burns and Grove (2001:804) argue that non-probability sampling entails that some elements of the population do not have a chance of being included in the sample, for example, convenience (accidental), quota, purposive and network sampling procedures. It is possible that the findings of the non-probability sampling procedure might not be generalizable (Burns & Grove 2001:804).

This study employed a purposive sampling technique to ensure the research sample is representative of the study population. Purposive sampling involves a judgemental sampling technique whereby the researcher deliberately chooses participants because of their qualities regarding the required research information (Zikmund, 2000). Zikmund (2000) regards the purposive sampling technique as one of the best sampling approaches for grouping participants based upon certain criteria linked to a particular research question which decided the objectives upon which the methodology was based.

The aim of selecting the purposive sampling technique for this study was that the researcher considered that the sample of experts and participants who were chosen had sufficient knowledge relating to the topic under study. Therefore, the researcher attempted to sample participants with appropriate knowledge, skills and capabilities to contribute to achieving the research objectives. Furthermore, the purposive sampling technique was preferred during this study because specific information was maximized and emphasized rather than generalising information to the study population. Hence, in this study, a sample is a lesser group of participants selected through a sampling technique from an accessible population of all the healthcare employees of the KISH. The participants who comprise this study's sample are those studied employees.

A small sample size of participants from the KISH, who reflected the attributes of the population from which it was selected, was carefully chosen and used to represent all KISH medical staff members. The purposive sampling method was pursued to select a sample of 20 healthcare employees from the population under study. The sample size was directed by the following factors: resources and time available, the objectives of the study, the attributes of the population under study, the credibility of the study, the sampled participants' experience of the subject matter, the applicability and validity of the data to be collected, and, finally, the magnitude of the total population. Moreover, the sampled participants were selected based on their positions in the organisational structure and their years of experience and employment in the hospital. Participants who met the primary selection criteria from all the KISH's departments and divisions render health care services were selected. Health workers with fewer years of experience and employment were not considered.

The sample was divided into two groups. The first group was for individual interviews, and the second comprised focus group discussions. Six individual interviews and four focus groups were used. Two focus groups consisted of three participants each, while the other two focus groups each comprised four participants. The individual interviews were arranged via the Head of Policy Planning and HRD at the National level, the Medical Superintendent, Chief Medical Officer: Medical Services, Chief Medical Officer: Paramedical Services, Control Registered Nurse: Sub-division: Nursing, and the Senior Human Resources Practitioner at KISH. The focus group interviews were contacted: One focus group comprised three participants from Policy Planning and HRD and HRM at the national level, and the second focus group comprised three participants from Subdivision: Medical Services at KISH. Four participants' fourth and fifth focus groups comprised paramedical and nursing staff members.

3.8 Data Collection Procedure

This section delineates the process undertaken to collect the data for this study. It entails the procedure followed from the onset of requesting permission from CPUT and Namibia's Minister of Health for the study to be conducted within the MoHSS, particularly the KISH. It indicates how permission to conduct the study was granted; the approval of CPUT's Research Ethics Committee for the study to be carried out because it met the university's ethical requirements, seeking the consent of the participants, and scheduling and conducting of individual and focus group interviews.

Data collection is defined by Corbin and Strauss (2008) as follows:

> The procedure of gathering and computing information on variables of interest establishes a systematic model that allows one to answer defined research questions and objectives, measure hypotheses, and assess the findings.

In the case of this study measurements were not done to test hypotheses.

Corbin and Strauss (2008) state that recognised data collection procedures must be instituted to ensure that credible and reliable data will be gathered. The procedure that was followed by this study, as per Corbin and Strauss (2008), was as follows: categorise problems and opportunities for collecting data, choose threats and opportunities and establish goals, map an approach and method, and collect the data. This study followed these steps in collecting the data to answer the research questions.

3.8.1 Meeting with the Ministry of Health and Social Services' Research Committee

The researcher scheduled a meeting and met the research committee of the Health Ministry to identify prohibited issues when conducting research within the MoHSS. The research committee also highlighted the code of conduct regarding research. The researcher was cautioned by the MoHSS' Research Committee not to use recording devices such as voice and video cameras.

The MoHSS research committee reviewed the study proposal and recommended various amendments. The committee also pointed out appropriate research techniques that would enable the researcher to deduce valid information from knowledgeable and experienced participants. An official letter requesting permission from CPUT to undertake the research study, together with the research proposal, the data collection questionnaire and a letter seeking the Permanent Secretary of the Health and Social Services Ministry's approval to conduct the research, was submitted via the MOHSS's research committee, and approval was granted.

After approval was received from the Permanent Secretary of the MoHSS, the consent of the Medical Superintendent of the KISH was sought and obtained, following which the consent of participants to participate in the research study was also sought and obtained. Based upon all the required documents submitted online to CPUT''s High Degrees Committee, CPUT's Research Ethics Committee approved this study to be carried out because it met the university's ethical research requirements.

3.8.2 Familiarisation with Ministerial Staff for enrolment of participants

The researcher familiarised herself with the staff of the Namibian MoHSS and took note of the locations of study participants and the convenient times for meeting the participants, and their availability for such meetings. After the approval was granted to conduct the research in the KISH, the researcher identified the participants and informed them about the purpose of the research project, the confidentiality of the information to be collected, the voluntarily participation, the anonymous of their identity, their right to withdraw from the study, and sought and obtained their consent to participate in the research study. The were consulted regarding suitable interview times and venues and provided them with copies of the interview guide to be used during the interviews. The study's interview schedule was then designed, and the researcher applied for two weeks' leave from work to conduct the interviews with participants at the KISH.

3.8.3 Conducting Individual and Focus Group Interviews

The individual and focus group interviwews took place in the boardroom that was booked before the date of the interviews. The venue was well ventilated and free from the noise pollution. The participants hounoured the interview schedules as it was agreed with the researcher. During the individual interviews, the interview guide with semi-structured questions was used to collect data from the participants. Six individual interviews were conducted, and each, on average, took 30 minutes. Before commencing the interview, the researcher introduced herself and explained the purpose and objectives of the study and what was required from the participants. After that, the participants introduced themselves. Next, the researcher ensured the participants about the confidentiality of the information provided that the interviews were aimed at gathering information for academic purposes only and that the findings would be used solely for this study and for compiling a report that would be treated with confidentiality and submitted to CPUT for graduation purposes. They were also assured that their names or identity will never linked to the report. They were also informed that they have the right to withdraw from the study any time without any prejudice. The participants signed the attendance register that assured the researcher that they gave their consent. The interaction with participants and the information acquisition was worthwhile because the participants felt sufficiently at ease to provide useful information.

The participants' excellent knowledge and experience of the research problem were established by the researcher asking them relevant questions such as "To what extend is a shortage of health workers in KISH"; What do you think contributes to the shortage (if any) of health workers at KISH?; In your opinion, what are the possible push factors that escalate the shortage (if any) of health workers at KISH?;

What do you think are the remedies or measures to curb the shortage of public health workers?; Please elaborate on the effects of the health workers' shortage (if any) in the KISH. During focus group interview sessions, the interview guide, with semi-structured questions, was used to collect data. This was the same interview guide that was used during the individual interviews. The study objectives dictated the design of the interview guide. The researcher developed the interview guide and reviewed it with this study's supervisor before CPUT's Research Ethics Committee.

Creswell (2003) stipulates that interviews should include asking questions that prompt information about the participant's attitudes, opinions, perspectives and meanings that help yield valid descriptive data. Four focus group interviews were conducted. Two focus groups consisted of three participants each, while the other two focus groups each comprised four participants. Each focus group interview took approximately one hour and 30 minutes on average. The introductory part and the registration was followed the same way as it was done during the individual interviews. The researcher guided the interview discussions, clarified issues and then asked follow-up questions. The researcher used the interview guide to ask questions. Handwritten field notes were taken during the interviews. The researcher took notes of the themes emerging during the focus group discussions. Interviews took place in the boardroom, which was free from noise pollution and had good ventilation. The participants provided relevant information with the study's questions.

3.9 Data Analysis

This section outlines scrutinising, inspecting, cleansing, transforming and modelling data to discover suitable information to answer the research question/subquestions, enlightening conclusions and supporting the findings. The section also delineated the approaches, facets and multiple techniques used to analyse the data. It also indicates the deconstruction of data into various themes and patterns and how data is visualised, exhibited and disseminated. It also points out how the data was integrated and linked to create meaning from it. This section also details how the data was interpreted and converted into information useful for making decisions regarding the shortages of health workers in the KISH.

Zikmund (2000) mentions that data scrutiny is the application of meanings and reasoning to create sense from data gathered about a particular question. Description analysis may involve determining constant and reliable patterns and succinct appropriate details discovered in the research data. Zikmund (2000) adds that data analysis begins after collecting data. During the analysis phase, interconnecting procedures are performed to recapitulate and summarise the data. Hammersley (2013) explains that during data analysis, processes are employed to generate sense and meanings out of the collected data.

Yin (1994) postulates that analysing data aims to treat the evidence fairly, generate persuasive analytical conclusions and discover alternative clarifications. This analysis includes examining, categorising, tabulating and recombining the collected data. The enquiry must have a general analytical strategy for the researcher to determine why and how to analyse the data. Miles and Huberman (2002) claim that data analysis entails three simultaneous streams of activity, data reduction, data display and conclusion illustration and verification. Data reduction was conducted to sort, emphasise, remove and organise the data to enable ultimate conclusions (Miles & Huberman, 2002:60).

In this study, after the data was gathered from the focus group and individual interviews, the analytical data procedures, such as coding, including descriptive and multivariate analysis, were pursued while considering the objective of this study. During the data analysis phase, strategies such as inferences, synthesis, inductive reasoning, and derivation were used. In an inductive research approach, the study begins by collecting data that applies to the problem of interest. This study employed a grounded theory, an inductive approach that is an efficient and flexible method for analysing qualitative data and generating theories grounded in the actual data (Burns & Grove, 2009: 33).

Coding involves reviewing the records and field notes and giving labels (names) to section parts (Creswell, 2014). During the reading phase (reading the participants' feedback), the researcher began to look for emerging themes and sub-themes. In the coding process, the researcher began attaching codes or labels to the 'chunks' of text representing those themes and sub-themes.

Qualitative data from the interviews were sorted and grouped by the researcher into emerging patterns, themes, concepts, ideas and phrases while looking for consistencies and differences by making comparisons and contrasts to ascribe meaning and significance to the research objectives. The categorising and sorting assisted the researcher in arranging ideas emerging from the data, making a well-informed assessment of the shortage of health workers in the KISH, and proposing a strategy to curb these shortages (Cresswell, 2014).

The multivariate method, which involves reading, comparing, contrasting, displaying, reducing, interpreting and categorising data, was employed to draw meaning from the collected data (Cresswell, 2014:45). The researcher clustered data according to emerging patterns and looked for uniformities and variances to make comparisons and contrasts. During the reading phase, meticulous reading and thorough re-reading of all notes was carefully conducted, and the meaning of the information was underlined.

The researcher further explored the main categories of data that shaped the substance of the research objectives and displayed the subcategories using tables and charts for the socio-demographic data. The data was then reduced to the essential points after displaying detailed information relevant to each theme. The data were reduced by choosing, concentrating, streamlining, extracting and converting the information that had emerged while writing the field notes. This data reduction process was repeated until the final report was completed and the conclusions were drawn and verified (Mugo, 2010). Finally, the researcher interpreted the overall study findings based on themes and the study's objective. In addition, the description or narrative scrutiny method was used to analyse multifaceted textual descriptions of data collected from primary and secondary sources.

The data was analysed and presented in a report format. Secondary and primary data were integrated – the motive being to provide adequate discussion to help readers of this study gain a more in-depth understanding of the issues and multiple variables involved in this research study. MoHSS employees (management and non-management) have been interviewed to gather the primary data. Ministerial reports, such as annual reports, magazines, newspapers and other government departmental reports on health-related issues, were reviewed for secondary data.

3.10 Objectivity and Validity

A research study must be objective and valid to meet the demand for truth. This section depicts the importance of objectivity and validity in any scientific research study. The section sets out how the need for objectivity and validity was realised in this study. Furthermore, the section also highlights how the study is impartial and free of biases. The CPUT's Ethical Committee approved the interview guide before it was employed. Moreover, it did not show any need for amendment during the data collection process because it was deducing the required data; hence, piloting was unnecessary. According to Creswell (2011), Flick (2009), and Gillham (2008), validity means the study or a test is measuring precisely what it is meant to measure. Duvovskiy (2018) stipulates that validity must be considered when selecting both the methods and the design of a research study and maintains that validity in data collection can be confirmed when the outcomes accurately signify the phenomenon that it claims to have tested.

A well-constructed interview guide with semi-structured questions (see Annexure A) was used during the individual and focus group interviews to explore the views and experiences of participants relating to the causes and effects and possible remedies to fight the shortage of health workers employed at the KISH. The tool used to test these phenomena was correct because the study's findings are very pertinent and precise.

The same tool with open-ended questions was used throughout the study; identical questions were posed to all participants in the same manner via an interview. Research validity involves the context of accepting the excellence or distinction of a study (Gliner & Morgan, 2000). The validity of this study was achieved through precision and objectivity when data was gathered, analysed, interpreted and presented the findings, which answered the research question, thus achieving the study's main objective.

In addition to the above, other factors that were considered include the following: variability of participants, the size of the population, the time frame to collect the data, interaction of participants' selection and research, data collection method, researcher effects and effect of the research environment. Participants were selected purposefully from different departments of the KISH to represent different specialisations. Moreover, participants were selected because of their knowledge and experience of the phenomenon under study. This approach aimed to ensure the study's validity.

The sample size of 20 participants was large enough to deduce the required information. Data saturation was considered as it might lead to time-consuming and unnecessary data during data analysis. This was according to the approach of the study, which is qualitative. In addition, a qualitative study requires a small sample of participants. The researcher was acquainted with the study's total population, where the sample size was drawn. The conducting of interviews with participants was a very convenient method to probe for further detail by asking follow-up questions to elicit information. Data was gathered over two months to ensure quality data was generated during the interviews.

The research environment was conducive to ensuring the participants' 'buy-in', participants were interviewed at their convenience, and all scheduled interviews were successfully conducted. The issue of subjectivity could have been a reality with the purposive sampling, but how the interviews were conducted and the data collected cancelled this possibility. Therefore, subjectivity was rejected throughout the study; hence, the study's outcome is valid and objective. Saunders *et al.* (2012) describe objectivity as a term that is generally associated with quantitative research and is mostly defined as the level at which research projects are undistorted by the prejudices of researchers. Bryman (2008) mentions that objectivity means eliminating a bias to achieve objectivity in research; a truth or independent reality must exist outside any investigation or observation.

Corbin and Strauss (2008:44) state that objectivity means a lack of bias, judgment, partiality or prejudice. Thus, a study's designs, methods, claims and outcomes must not be prejudiced by the researcher's viewpoints, values, personal interests or study bias. Though the philosophy of the study is epistemology interpretivist, objectivity was observed to a high extent. Thus, the study's outcomes reflect what was investigated and are not influenced by the researcher's personality, beliefs and/or values.

The findings are accurate and reliable because the researcher remained impartial, and the study was carried out without manipulating the methods to acquire specific outcomes. The research goal was uncovered without the collected data being contaminated because all preconceptions were avoided, and the study was conducted unbiased and value-free. The information acquired was credible because the primary sources of the information (the participants) were knowledgeable in the subject matter under study. The information provided in the various chapters was well-researched and, thus, not questionable. The sources of information were cited and referenced. The language used was unbiased and free of emotional provocation. Moreover, the study participants also validated the credibility of the results in order to give this research trustworthiness. The researcher allowed the participants to review the data collected and the interpretation thereof. Participants had a chance to verify their statements to ensure there had been accurately recorded. Theoretical and conceptual validation was employed.

3.11 Ethical Considerations

This section outlined the ethical considerations adhered to in this study. It delineates the ethical principles and procedures that were followed during the research. Dodd (2020) states that ethical principles must guide research designs and practices, while Koporc (2019) and Van Steenbergen, Abma, Van Meijl and Lepiacka (2020) advise researchers to always adhere to an ethical code of conduct when collecting data from study participants. Ethical principles were considered throughout this research study: honesty, objectivity, and respect for the participants' confidentiality and intellectual property, while fabrication and plagiarism were avoided. The researcher strictly adhered to research ethics during data collection and took care not to violate any of the rules or procedures followed at the KISH. As indicated previously, all information gathered was confidential, and the participants' anonymity was guaranteed. Participants' identity was not linked to the research material nor revealed in the study reports. The data collected was used solely for academic purposes and was not fabricated to achieve a particular outcome. This study was conducted independently and impartially and attempts were made not not to tarnish the reputation of the Namibian Government nor that of the KISH or any person or entity by publishing controversial information. All sources were accurately referenced and acknowledged.

The researcher strictly adhered to the methods and procedures in Chapter 3 of this study and strived to avoid bias when collecting, analysing and interpreting data. All sources were accurately referenced and acknowledged. This study was conducted independently and impartially, and attempts were made not to tarnish the Namibian Government nor the KISH or any person or entity by publishing controversial information.

3.12 Summary

Chapter Three: Research Methodology – outlines the approach, design, methods, techniques, population, sample, data collection and analysis processes used in this study. It also outlined the study's epistemology interpretivist philosophy, its use of the qualitative approach and a descriptive design. The qualitative methodology was employed to collect and analyse data relating to the shortage of health workers in Namibia's public hospitals, specifically in KISH.

The researcher initially reviewed publications to gather secondary data and then used focus group discussions and individual interviews to collect primary data from participants. The population and sample size of the participants has highlighted the data collection procedure and scrutiny technique used to analyse and interpret the data. The objectivity and validity of the study were stressed together with the fact that the researcher adhered to strict research ethics during and after the research process. Reasons for employing the chosen methods were given, and the structure and the schedule for executing the study were stipulated. All sources were accurately referenced and acknowledged in the list of references.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter focuses on the analysis and presentation of the data. It also discusses the research findings by comparing the gathered empirical data with the reviewed literature. This chapter begins by delineating the research approach employed to gather the data and the reasons for its use. It then states the research objectives, how the data was analysed and presented and concludes with a comparison of the reviewed literature and empirical data.

As Chapter 3: Research Methodology, this study employed a qualitative inductive approach. The researcher opted to use this approach because it led to the acceptance of the study's outcome and allowed an assessment of the cause and effects of the shortages of health workers in the KISH. The qualitative inductive approach allowed the research questions to be answered and the research problem to be dissected.

Saunders *et al.* (2012) stress that in the inductive approach, the research questions guide empirical data collection, which is then used to generate a theory and hypothesis. This approach was employed initially without any predetermined ideas of the findings. The researcher collected data relevant to the topic of interest (Dudovskiy, 2018:30). The study objective was to generate new information based on the data collected. Dudovskiy (2018) and Miles and Huberman (2002) state that well-grounded data can be deduced in qualitative research because it provides a source base of detailed descriptions and explanations of the data collected in an identifiable local setting.

The findings of this mini-thesis were derived from the following objectives as outlined in Chapter One:

- To ascertain the extend at which KISH experiences a shortage of health workers.
- To investigate the causes of the shortage of health workers in the KISH.
- To analyse the effect of the shortage of health workers on service delivery in the KISH
- To propose the measures that should be implemented to combat the shortage at KISH.

4.2 Participants' Demographical Data

The demographical data gathered include gender, age, level of education, position, division, and length of employment at MoHSS. The purpose of gathering demographical information was driven by the purposive sampling technique. This study employed a purposive sampling technique to select the sample of participants to represent the study's population.

As mentioned, Zikmund (2000) described purposive sampling as a judgment sampling technique whereby the researcher deliberately chooses participants because of their qualities regarding the required research information. Zikmund (2000) regards this method as one of the best sampling approaches to group participants based upon certain criteria linked to a particular research question, which decided the objectives upon which the methodology was based. The reason for selecting the purposive sampling technique was that the researcher believed the chosen participants should have sufficient knowledge and experience of the study's topic. Therefore, the researcher attempted to find participants with the appropriate skills and capabilities to contribute to achieving the research objectives. Furthermore, the purposive sampling technique was preferred because specific information was maximized and emphasized rather than generalising information to the study population.

Moreover, the study's main aim was to ensure that the surveyed participants were experienced, knowledgeable and well-acquainted with the investigated phenomena. The participants' position and length of employment in the MoHSS were key demographic factors that ensured that the study data was gathered from qualified and experienced healthcare workers.

The participants' demographic data were analysed and presented using charts, graphs and tables.

4.2.1The Gender of the Participants

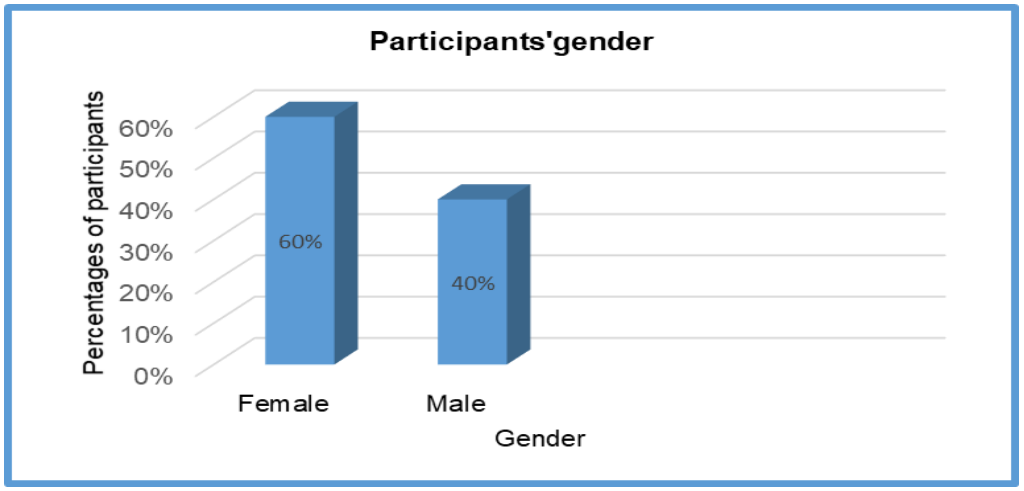

Figure 4. 1 Gender of the Participants

A total of 20 participants were interviewed. Sixty-60 % (N = 12) of the participants were female, while 40% (N = 8) were male.

4.2.2 The Age Groups of the Participants

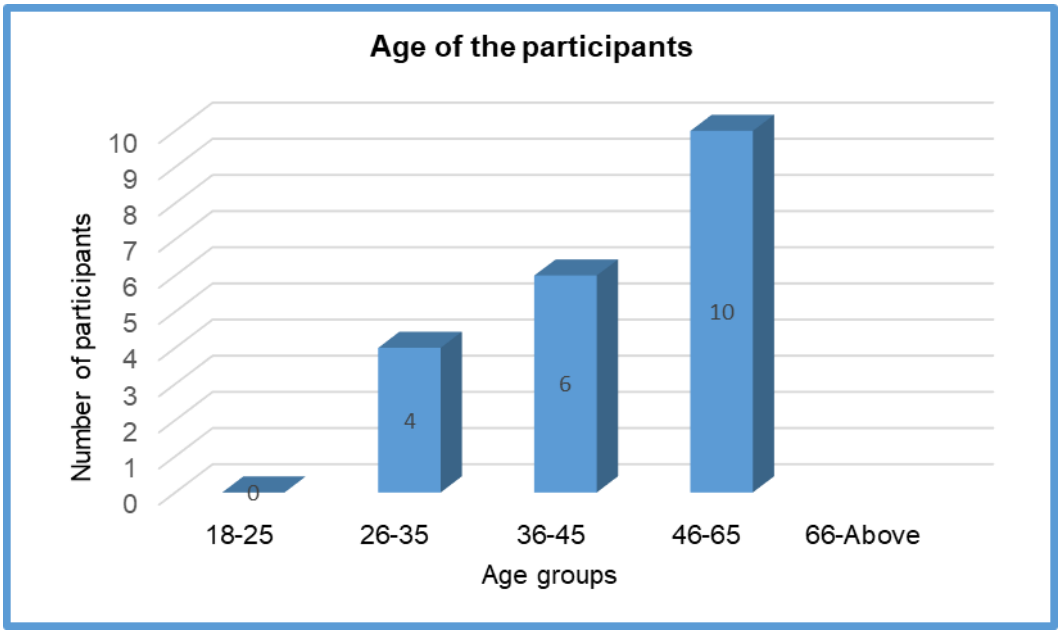

Figure 4. 2 The Age Groups of the Participants

Figure 4.2 above shows that the age groups of the health workers who were interviewed (*N* = 20) ranged from 26 to 65. The concentration was more on older participants from 26 to 65. Through the use of the purposive sampling technique, it was perceived that older participants have more experience and knowledge in the phenomena under study. The age group of 18 to 25 was not sampled because at this age is assumed that healthcare professionals are studying or were only recently employed by the *KISH* and would not be able to provide the required information. The age group of 66 and above were also not part of the selected population because this age group was assumed to already be out of health care service due to retirement. The Namibian government retires its employees at 60 years but retains their services after retirement when there is a need to do so, up to the age of 67. This need currently exists, and health workers are employed on contract after 60 years because hospitals struggle to fill vacant positions.

4.2.3 The Education Level of the Participants

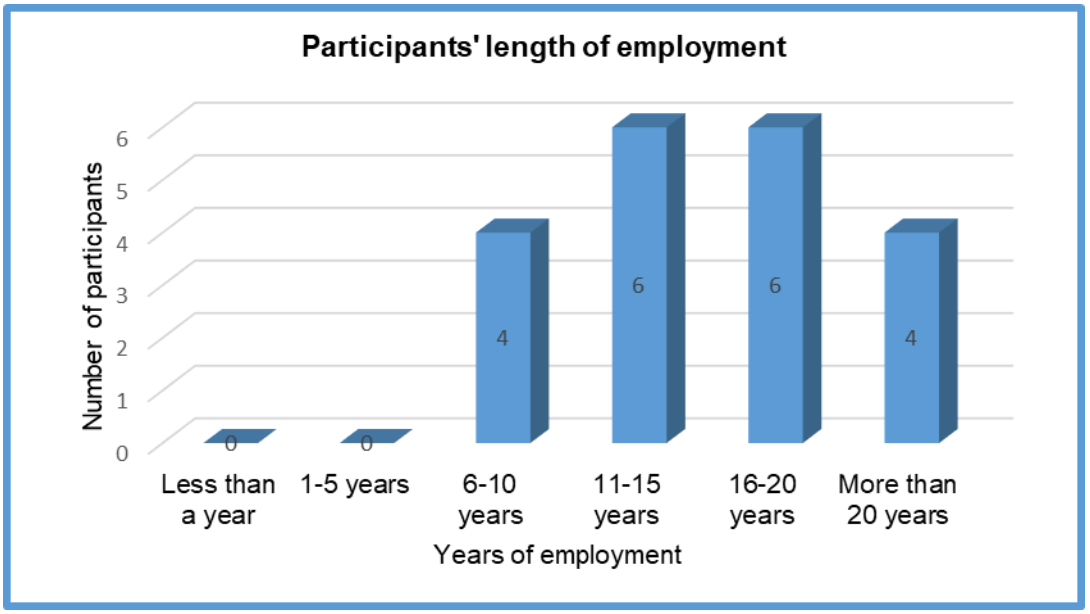

Figure 4. 3 The Education Level of the Participants

As indicated in the graph in Figure 4.3 above, only employees with a Bachelor's degree, Masters' degree, and/or PhD degree were surveyed. The results show that ten out of twenty (20) participants are bachelor's degree holders, eight of them have a Masters' Degree, and two hold a PhD. It is a general perception that high qualification holders are knowledgeable and, thus, will be well acquainted with the matter under study. This assumption is also one of the reasons why the purposive sampling technique was used to obtain reliable information from the participants.

4.2.4 The Positions of the Participants in the MoHSS

Table 4.1 below indicates that the study participants were, according to the Ministerial organisational establishment, from all the key directorates and divisions responsible for delivering the health care services in the KISH. All these participants could voice their experiences regarding the shortage of health workers within their divisions, how they are affected by this shortage and their recommendations for combatting this situation.

The KISH's Human Resources and Administration Division provided the hospital's organisational structure. The reason for depicting the divisions in which the participants work is to indicate the range of health care services offered at the KISH that were represented in the study.

Table 4. 1 Position of Participants

Number of Participants	Position	Directorate/Division
1	Hospital Superintendent	State Hospital
1	Chief Medical Officer: Family Medicine	Medical Services
1	Chief Medical Officer: Obstetrics and Gynaecology	Medical Services
1	Chief Registered Nurse	Nursing Services
1	Senior Human Resource Practitioner	Human Resource and Administration
4	Nurses	Nursing Services
1	Doctor: Oncology	Medical Services
1	Doctor: General Surgery	Medical Services
1	Doctor: Cardiologist	Medical Services
1	Doctor: Orthopaedic	Medical Services
1	Doctor: Intensive Care Unit	Medical Services
1	Radiographer	Paramedical Services
1	Emergency Care Practitioner	Paramedical Services
1	Pharmacist	Paramedical Services
1	Physiotherapist (Principal)	Paramedical Services
1	Social worker	Social Worker
1	Occupational Therapist	Paramedical Services
Total: 20		

4.2.5 Participants' Length of Employment

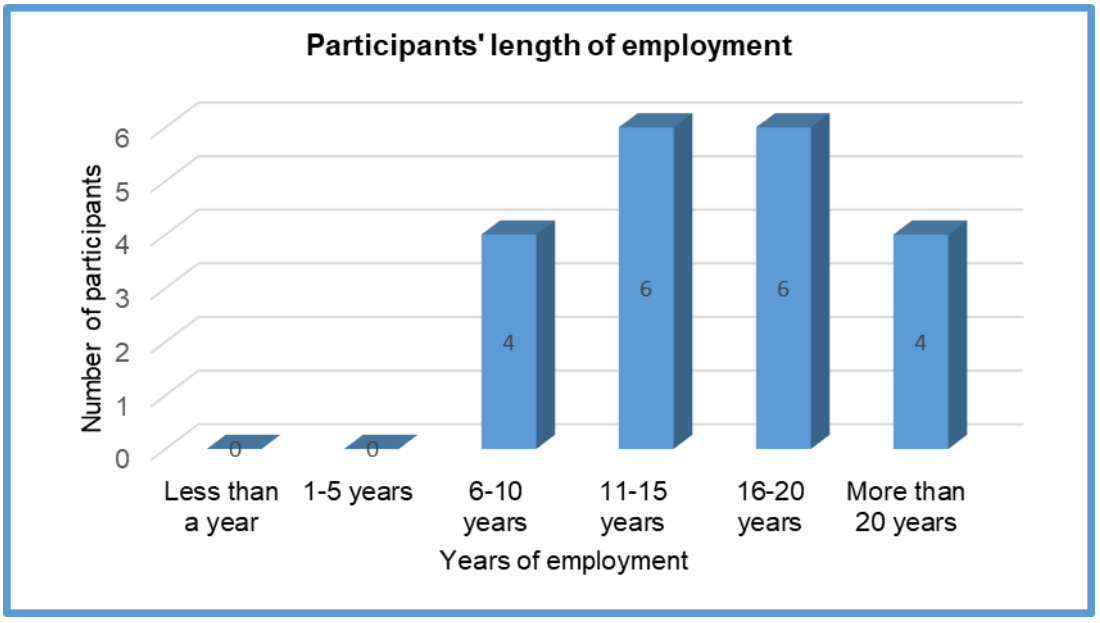

Figure 4. 4 Participants' Length of Employment

The Methodology chapter indicated that the purposive sampling technique was used to identify knowledgeable and experienced participants who were well-acquainted with the research topic. Figure 4.4 above confirms that the sampled participants have been employed by the MoHSS for six (6) years up to more than twenty (20) years, were interviewed and that the majority of them (16/20) have been employed for more than ten years.

4.3 Data Analysis and Discussion

As previously mentioned, this study employed a qualitative approach to gather the required data and utilised a semi-structured interview guide to elicit relevant information from the participants. Section A of the interview guide sourced the participants' demographic data, while Section B comprised research questions that aimed at finding the causes and effects of the shortage of health workers at the KISH, together with possible strategies for dealing with this problem.

As Ryan and Bernard (2003) outlined, an open coding method was used to scrutinise, deconstruct, inspect and arrange the collected data into categories. The emerging information gathered from the participants was coded and labelled according to the similarity of concepts that arose during the reading and re-reading of the field notes. The data were then clustered into categories according to the similar and consistent concepts, patterns and themes that materialised during the reading phase.

This process enabled a well-informed assessment of the shortage of health workers at the KISH. This multivariate method was used to compare, contrast, interpret, integrate and link the data to create meanings. A combination of methods advocated by Strauss and Corbin (2015) and Tesch (2013) was used to analyse the data. Strauss and Corbin (2015) describe thematic analysis as an approach that focuses on what was said and not how it was said. However, Tesch's method involves creating meanings from written and visual data. Tesch (2013) further highlights that this process is ongoing and involves repeated reflection on the data, posing systematic questions, and writing comments throughout the study.

The design of this study is descriptive; thus, each theme was discussed and supported with appropriate citations from the participants. Relevant pieces of literature have also been quoted to support the findings of this study. Secondary and primary data were combined and integrated to help readers and other researchers to understand the issues and variables studied. The participants also validated the accuracy of the analysed data.

4.4 Categories and Themes

The thematic data analysis technique was employed to analyse the data collected during the individual and focus group interviews and, as mentioned above, involved procedures such as coding, descriptive and multivariate analysis together with strategies such as inferences, synthesis, inductive reasoning and derivation. The analysis included examining, categorising, tabulating and recombining the collected data. Miles and Huberman (2008) state that data analysis entails three simultaneous streams of activity: data reduction, data display, and the illustration and verification of conclusions.

In this study, it was coded and later 'chunked' into categories when data with similar characteristics was observed. These four categories are labelled as follows: Category One: experience of shortage, Category Two: contributory factors of shortage, Category Three: the effects of the shortage and Category Four: strategies to overcome the shortage. Categories One and Four are linked to the study's objectives, which are highlighted at the beginning of this chapter. The prime purpose of categorising the data in this manner was to ensure effective data analysis and interpretation and stimulate discussion to unveil the desired outcome. Data reduction was conducted to organise the data in a manner that enabled the ultimate drawing of conclusions (Miles & Huberman, 2008:60). The researcher identified similar keywords and phrases frequently appearing in all the participants' commentaries. This data was abstracted and conceptualized further to detect logical and semantic associations, a process that led to the creation of paradigms and domains (labelled themes) listed under a relevant category.

This process enabled the researcher to report the findings of the research. Komori (2019) guided the researcher, who describes thematic analysis as a technique that focuses on exploring patterns or themes of meaning within data. Komori (2019) also comments that the thematic analysis technique can feature detailed descriptions and organisation of the data set that provides a hypothetically informed analysis of meaning. Patton (2002) states that when the thematic analysis is employed rigorously in qualitative research, it can guarantee the impartiality of the data analysis.

Nowell, Norris and Deborah (2017) describe themes as the participants' ‘versions’ that denote particular experiences and/or perceptions the researcher comprehends as relevant to the research objective. According to Constas (2012), themes comprise the internal characteristics of a category that are formulated when researchers continually note units of similar meaning within a particular category.

In this study, the themes and categories identified with the participant's answers were analysed and discussed with complementary citations from the participants and quotations from the reviewed literature. The contributions the participants were acknowledged in the text. The focus group interviews were also labelled as follows: Focus Group A: four paramedical services staff (physiotherapy, radiography, pharmacy, social work), Focus Group B: four medical doctors from different specialisations including psychiatry, surgery, oncology, cardiology, intensive care unit) Focus group C: three medical doctors, moreover, focus Group D: three nurses from the Nursing Services Department.

Table 4. 2 Categories and Themes of the Data

CATEGORIES	THEMES
4.4.1 Experience of shortage	• Foreign health workers • Critical shortage of health workers
4.4.2 Contributory factors of shortage	• Population density • Availability of skills (limited number of qualified Namibian health workers) • Private Practice (Demand of health workers by many sectors) • Remuneration • Staff loss • Poor working conditions (no uniform; overcrowded wards; lack of medical equipment) • Lack of promotion • Lack of planning
4.4.3 The effects of the shortage	• Overworked leading to burnout • Poor service • Absenteeism
4.4.4 Measures to overcome the shortage	• Government must provide funds for study • Strengthening government policies to retain health workers • Attractive remuneration packages. • Attractive salary packages • Improve working conditions • Build another intermediate hospital

4.4.1 Category one: Experience of the shortage of health workers.

Participants were sampled according to their years of experience. It was anticipated that participants with more years of experience would be able to give the relevant and required data.

4.4.1.1 Theme one for category one: A large number of foreign health workers

This theme indicates that the KISH has been experiencing a shortage of health workers. A significant number of participants endorsed this statement. According to the participants, many vacant posts for healthcare workers at KISH exist. Participants unanimously said that the hospital had recruited foreign expatriates because it failed to attract local health workers. The Namibian labour market cannot provide the relevant skills required to deliver health care services. The participants also mentioned that local medical and health training institutions could not produce the required number of health workers. Furthermore, only a few Namibians pursue medical and health-related fields in foreign countries.

Many healthcare-related specialisations are unavailable within the Namibian labour market because of lack of supply by the educational institutions and lack of specialist training. It was highlighted by the participants that the only Medical School that operates under the auspices of the University of Namibia only trains general practitioners and does not offer medical specialisations such as cardiology, oncology, paediatrics, and many others. Moreover, most of the students per intake are foreigners. Namibian students often did not meet the admission requirements of Medical School. The Office of the Auditor General's report (2018/19) findings also revealed that more health professionals are required by the MOHSS, especially registered doctors, nurses, pharmacists and social workers. The report further states that the unavailability of health professionals in Namibia has led to a severe shortage of health professionals in state health facilities, resulting in most of the posts being filled by foreigners.

The lack of highly specialised health workers was voiced mainly by participants from the Department of Medical Services, comprised of medical doctors. These participants indicated that the only cardiologist in the hospital is an expatriate who participated in the focus group comprised of medical doctors.

During one of the focus groups, the majority of senior medical officers in the KISH (a paediatrician, an anaesthetist and a urologist) are also non-Namibians. Participants further indicated that senior positions in the departments: of Pharmacy, X-Ray, Occupational Therapy, Acute Care, Maternity, Casualty, Pediatric, specialised Nurses, and doctors in these fields are expatriates because Namibians lack qualifications in these specialisations.

The participants felt that the shortage of skilled health workers had peaked, requiring a state of emergency for Namibia to curb it. They further advised that Namibia will be relying more and more on expatriates in the future, which is not a valid solution to the problem. Examples of participants' contributions in this regard include the following:

> *"Yes, the shortage is real; the Katutura Hospital gets pharmacists from Kenya and Nigeria."*

This perception was confirmed by the foreign nurses who part were of a focus group who stated that:

> *"Yes, the shortage exists because of the lack of qualified Namibians, and the government hires foreigners, but the numbers are still insufficient to cater for the population."*

Furthermore, the participants indicated that:

> *"Health workers are few per specialisation due to staff shortage which leads to few staff allocation to different divisions and units."*

Participants agreed that:

> *"foreigners are working in every ward/department to cover the workload in the hospital."*

They further mentioned some of the wards where foreign health workers are hired:

> *"Yes, foreigners are placed in Acute Care, Casualty, Maternity Ward, Head Injury, Paediatric wards, plus most for Specialised Services".*

Moreover, they emphasised that the shortage exists even though the hospital hired expatriates:

> *"Yes, the shortage always exists even if the hospital employs foreigners.*

The participants indicated that the shortage is extensive, mainly for highly specialised medical practitioners and nurses and the few the hospital has are expatriates:

> *"Yes, the shortage is rampant, especially for (specialists) medical doctors, highly specialised are foreigners."*

The above quotes from the participants are also supported by the narration of Haufiku (2015) that the Namibian MoHSS has failed to invest in human resources development, especially doctors and pharmacists, for the past 25 years. He further states that Namibia still imported expatriates after 25 years of independence. Haufiku (2015) affirms that the MoHSS has embarked on a N$3.2 million bilateral agreement with countries such as Cuba and Kenya to supply foreign health workers on a contractual term to complement the Namibian health workers.

Nakashole (2016) confirmed the above findings by stating that the shortage of health workers is severe, and the MoHSS encourages medical experts from other countries to apply for vacant positions. The Ministry always indicates this perspective within its advertisements for vacant positions.

4.4.1.2 Theme two: Category One: The critical shortage of health workers

It was echoed by the study participants that the KISH has been facing a dire shortage of health workers. The participants strongly acknowledged their frustration related to the shortage of health workers in the KISH.

The HR statistics (2021) for health workers, provided by Participant A from the Division of Human Resources and Administration in support of his claims that the KISH faces a severe shortage of health workers, indicate that the total staff complement of health workers at the KISH is 346, of whom 125 are expatriates. Participant A also expressed his dismay at the challenges he faces in filling the vacant positions in the organisational structure of the KISH, especially for the highly specialised skills. This claim is supported by the audit report (2018/19) that states it takes the MOHSS up to 15 months and more to recruit foreign health professionals to fill promotional posts, which are supposed to be filled within three months.

The statistics of the approved filled and vacant posts of health workers in the organisational establishment of the KISH. The HR statistic (2021) further shows all the job categories and main fields of specialisation of the professional health workers employed at KSH, the total number of approved posts for each job category, and all the filled and vacant posts per specialisation. It also presents the domain of the incumbents and whether they are Namibians or Non-Namibians.

Table 4. 3 Statistics of job categories, approved posts and filled and vacant posts of health workers in the organisational establishment of the KISH.

JOB CATEGORY	APPROVED POSTS	POSTS FILLED	VACANT POSTS
Medical Superintendent	1	1	0
PROFESSIONAL SERVICES			
Chief Medical Officer	2	1	0
Senior Specialist	3	3	0
Specialist	12	5	6
Senior Medical Officer	10	4	6
Medical Officer	53	25	28
Chief Dentist	1	1	0
Dentist	6	3	3
Dental Technician	1	1	0
Dental Therapist	1	1	0
Dental Surgeon	3	1	2
PARAMEDICAL and CLINICAL SUPPORT SERVICES			
Senior Physiotherapist	1	1	0
Physiotherapist	4	1	3
Senior Occupational Therapist	2	1	1
Occupational Therapist	2	1	1
Speech Therapist	1	0	1
Senior Radiographer	1	1	0
Radiographer	8	4	4
Radiographer Assistant	3	0	3
Optometrist	1	0	1
Dietician	1	1	0
Ophthalmic Assistant	3	0	3
Chief Pharmacist	1	1	0
Senior Pharmacist	1	0	1
Pharmacist	3	2	1
Senior Pharmacist Asst.	2	1	1
Pharmacist Assistant	4	2	2
Chief Social Worker	1	1	0
Senior Social Worker	1	0	1
Social Worker	3	2	1
Emergency Care Practitioner	15	10	5
EEG and ECG Technician Assistant	1	1	0
NURSING SERVICES			
Control Registered Nurse	1	1	0
Chief Registered Nurse	1	1	0
Senior Registered Nurse	26	8	18
Registered Nurse	230	128	102
Enrolled Nurse	244	130	114
TOTAL	654	348	310

The organisational establishment of the KISH comprises a total of 654, 346 approved and filled posts, while 310 posts are vacant. The HR office provided the statistics to support its arguments that there are numerous vacant positions at the KISH while the total of approved filled positions is too little to meet the patients' demands. The researcher requested these

statistics to substantiate the participants' claims.

The significance of these statistics is that they prove that the organisational structure is not responsive to the demand of the patients. The staff complement is too small substantiated o cater for Namibia's population of approximately 500 000 patients from 14 regions country-wide. These figures will hopefully make the government more aware of the need to expand the organisational establishment of the KISH so that its healthcare professionals can respond timeously and efficiently to the patient's needs. Despite the vacant posts at the KISH, the total approved cohort cannot render the required healthcare services. The researcher noted that due to the size of the KISH, many crucial health skills are not found in the hospital, which contributes to the skewed provision of providing health care services to patients on time. The statistics show that only twelve specialists are employed at the KISH (two surgeons, one urologist, two gynaecologists, two paediatricians, two internal medicine specialists and one acute care specialist). These figures highlight that the doctor or nurse/patient ratio is too low and, consequently, the KISH has a dire shortage of health workers because it is impractical to have only one or two specialists catering for the population of 500 000. These statistics affirm the participants' assumptions that the current staff complement needs to be expanded to respond effectively to the patient's needs.

Table 4. 4 Statistics of citizenship of the health workers

JOB CATEGORY	DOMAIN	NAMIBIAN	NON-NAMIBIAN
PROFESSIONAL SERVICES			
1x Medical Superintendent		1	
1x Chief Medical Officer		0	1
3 x Senior Specialist	Internal Medicine	0	1
	Surgery	0	1
	Urology	0	1
5 x Specialist	Obstetrics and Gynaecology	1	0
	Surgery	0	1
	Physician	0	0
	Paediatrics	0	1
	Acute Care	0	1
	Internal Medicine	0	1
4 x Senior Medical Officer	Anaesthesia	0	1
	Surgery	0	1
	Paediatrics	0	1
	Internal Medicine	1	0
25 x Medical Officer	Internal Medicine	1	2
	General Surgery	1	3
	Obstetrics and Gynaecology		2
	Paediatrics	1	2
	Casualty	1	3
	Anaesthesiology	1	2
	Orthopaedic	2	0
	Urology	0	1
	Cardiac Unit	0	1
	Oncology	0	1

	Ophthalmology	0	0
	Psychiatric	0	0
	Intensive Care Unit	0	1
1x Chief Dentist		0	1
3x Dentist		1	2
1x Dental Technician		1	0
1x Dental Therapist		1	0
1x Dental Surgery		1	0
1x Dietician		0	1
PARAMEDICAL and CLINICAL	**SUPPORT SERVICES**		
1x Senior Physiotherapist		0	1
2x Physiotherapist		1	1
2x Senior Occupational Therapist		1	1
2x Occupational Therapist		0	2
1x Senior Radiographer		0	1
4x Radiographer		2	2
Radiographer Assistant		0	0
Optometrist		0	0
Ophthalmic Assistant		0	0
1x Chief Pharmacist		0	1
Senior Pharmacist		0	0
2x Pharmacist		1	1
1x Senior Pharmacist Asst.		1	0
4x Pharmacist Assistant		4	0
1x Chief Social Worker		0	1
Senior Social Worker		0	0
3x Social Worker		3	0
1x EEG and ECG Tech Assistant		1	0
10x Emergency Care Practitioner		10	0
NURSING SERVICES			
1x Control Registered Nurse		0	1
1x Chief Registered Nurse		0	1
8x Senior Registered Nurse		4	4
128x Registered Nurse		68	60
130x Enrolled Nurse		115	15
Total		224	124

4.4.1.2.1The statistics of the nationality of health workers in the KISH

The HR office provided the above statistics to indicate the citizenship of the health workers at the KISH. The researcher requested statistics on the health workers' citizenship to substantiate the participants' claims. Participants argued that the KISH employs many foreign health workers, and expatriates fill many highly skilled posts. The statistics show that out of 346 filled posts, 224 posts are occupied by Namibians, while expatriates fill 124 posts. It is also indicated that most specialists and senior medical officers are foreign nationals. The importance of these statistics is to prove that the hospital has a severe lack of highly specialised Namibians health workers because most of these positions are occupied by expatriates. This information will hopefully enable the government to develop skills within the local Namibian labour market.

The above statistics were also necessitated by the participants' perceptions that the Namibian labour market does not have the necessary skilled HR for effective health service distribution between the public and private sectors. As indicated previously in this study, according to the KISH's HR office, the hospital has failed to attract skilled health workers from the local labour market; hence it has been forced to advertise its vacant positions outside the country and has managed to secure the services of a few specialised doctors.

Focus Group D, comprised of nursing staff, unanimously indicated that the healthcare worker shortage is ongoing, especially among registered nurses. This argument is supported by the HR statistics (2021) that state that out of the 502 approved nursing posts, only 268 are filled. Participants from the Nursing Services also alluded that the Division of Nursing Services has been struggling to attract registered nurses, especially from the Namibian labour market.

Participants from the Paramedical Services also stated that their division has a staff shortage of health work skills. These participants further indicated that the division could not manage to attract specialities such as physiotherapists and speech therapists. A few physiotherapists, audiologists and speech therapists currently assisting at the KISH are contracted part-time because they have private practices.

Participants highlighted that the post of speech therapist has a record of not being filled since 1990. In response to the question of whether there is a shortage of health workers at the KISH, the participants note that the shortage of registered nurses is exorbitant. One participant stated:

"Yes, the shortage has existed, especially for registered nurses."

They further indicated that all the KISH's departments suffered from a serious shortage of health workers with different specialities and alluded:

"Yes, the shortage has existed throughout the hospital."

Participants perceived that it would take time to combat the shortage because they assumed it was an infinite predicament. They highlighted that:

"Yes, the shortage exists and is an endless dilemma."

Participants noted that they do not anticipate a solution soon to the shortage because it has existed for many years. They mentioned that:

"Yes, the shortage exists and has been ongoing for a long time. Most critical positions had never been filled for more than two decades."

They further mentioned that the shortage affects the quality and efficiency of health care service delivery because the hospital's organisational structure is not responsive to the patient's demand. They highlighted that:

"Yes, the shortage exists to the extent that it affects the quality of health care services for the patients because the hospital's staff complement does not meet the patients' demands."

It is worth noting that the findings under this theme revealed that all study participants indicated that the KISH dire needs health workers in many areas of specialisation.

4.4.2 Category Two: Contributory factors of the shortage

The following factors formed themes as participants answered the question about the factors contributing to the shortage of health workers in the KISH. These factors were explored to establish how they contributed to the shortage.

4.4.2.1Theme One for Category Two: Population density of patients

Regarding the factors contributing to the shortage of health workers in the KISH, participants expressed their dismay at the density of the patients transferred to the KISH. This theme emerged because many responses indicated there were long queues of patients at all times, plus overcrowding of patients in wards.

This was a recurring theme among the responses. According to the participants, KISH to which patients from all 14 regions in Namibia are admitted or passing through *en route* to the Windhoek Central Hospital, the only referral hospital in Namibia. The participants pointed out that the KISH's capacity is incompatible with the population density. The patients ratio to nurse or doctor ratio is high. The total population of the Khomas region is 342 141, with an annual growth rate of 3.1%, projected from the 2012 Population and Housing Census (Muremi, 2015).

Khomas is the region in which the KISH is located, and according to the MoHSS Report (2014), the Khomas region has a very large population. In addition, the KISH serves public patients from all over Namibia (Namibia National Referral Policy, 2018).

The study participants stressed that the KISH serves a population of around 500 000 while the staff complement is far too small to meet patients' demands. The Namibia Health and Social Services Review (2018) reports a marked disproportion in health workers' volume between the private and public sectors. Furthermore, this Review (2018) outlines that the public sector has two health workers per 1000 population, which is below the World Health Organisation's benchmark. The Review (2018) also highlights that the situation in the public sector is worsened by the prolonged shortages of frontline health workers such as nurses and doctors, a problem which needs to be addressed by the MoHSS for Namibia to reach the WHO benchmark of 4.5 health workers per 1000 population. The following comment was made by one of the participants:

> *"Health workers are working under pressure due to the flocking of the patients into the hospital."*

The researcher noted that the KISH health workers are overwhelmed by the number of patients they have to serve. They further alluded that they perceive the hospital's accommodation capacity, medical staff and number of patients are incompatible; hence, the hospital should be expanded and the staff increased. A participant stated:

> *"I think the hospital needs to be expanded because its capacity in terms of accommodation and medical staff cannot accommodate the number of patients as the number increases daily."*

Participants further mentioned that health workers left the hospital because they could not handle the workload and long hours on duty. Participants noted as follows:

> *"One factor contributing to the shortage of health workers in KISH is workload because wards capacity is always high."*

> *"The number of patients is the main contributor; right now, the ratio is abnormal. One nurse attends to 50 patients or more in one medical ward."*

The participants felt that the working conditions are not conducive because of the extreme imbalance of the health worker/patent ratio. They further indicated that they developed acute stress and major depression due to burnout.
They noted that;

> *"Many health workers do not stay long in the KISH because they develop emotional stress due to burnout caused by the workload in the wards. After all, we are not working according to the nurse-patient ratio."*

The viewpoints expressed by the participants support those of Collier (2016), who states that work-related stress triggers job dissatisfaction and burnout amongst healthcare practitioners and that factors such as excessive workloads, long working hours and unreasonable nurse-patient ratios as some of the common factors that result in burnout.

4.4.2.2 Theme Two of Category Two: Availability of skills (limited number of qualified Namibian health workers).

The interview results showed that all participants expressed grave concern that the lack of skilled medical personnel in the Namibia labour market heightened the shortage of health workers at the KISH. This theme recurred many times in participants' responses. Some overlaps were observed during the data analysis because this theme appeared in many responses to various questions. The findings of this study correlated with that of the Health and Social Services Review (2018), which reports that Namibia's health system is faced with a major challenge due to a lack of skilled human resources, which are vital for the provision of health care.

Given the availability of skills, the following citations are from the participants:

> *"One of the core factors contributing to the shortage of health workers in our hospital is the unavailability of skills; the graduates are not enough to fill the gap."*

The participants established that the number of graduates per annum is not sufficient to fill the gap of the shortage of required skills.

The participants alluded that positions are being re-advertised because the hospital failed to attract the necessary skills from the labour market. This is what a participant said:

> *"The unavailability of the skills challenges the hospital. Positions are being advertised and re-advertised, but we failed to get qualified candidates to fill the positions."*

Participants outlined some of the crucial specialisations that are struggling with the shortage by saying:

> *"Some of the areas of specialisations that face dare shortage of health workers are neurology, dermatology, diagnostic radiology, orthopaedic surgery, otorhinolaryngology, nuclear medicine, surgeons, cardiology, ophthalmology, paediatric, urology, acute care, etc."*

They further mentioned other specialisations that are affected by the shortage, mentioning:

> *"The hospital experienced shortages of health workers in critical specialisations such as pharmacology, radiography, occupational therapy, physiotherapy, medicinal, surgery, TB, and trauma."*
> *"The KISH has only two urologists, one ophthalmologist, one oncologist, three surgeons, one anaesthesia (non-Namibian), and one gynaecologist."*

The findings of this theme are supported by the statistics of the staff compliments of the KISH provided by the Division of Human Resources and Administration. These statistics (2021) support the shortage of specialists per specialisation mentioned by the participants. Also, the MoHSS's annual report (2017/2018) indicated that specialised medical doctors and nurses are the key health professionals most required in the public service. The MoHSS's annual report indicated that during the period under review, there were 348 medical doctors and 66 medical specialists in the employment by the MoHSS countrywide (Social Services Ministry annual report, 2017/2018). The report states that the MoHSS needs more than 10 000 medical practitioners.

4.4.2.3 Theme Three of Category Two: Private Practice

This was a dominating theme in the participants' responses. Every participant blamed the high number of qualified health practitioners in private practice as the primary factor contributing to the public sector's shortage of health workers. There are only three (Eyes, Nose and Throat (ENT) specialists) in Namibia. One is a Namibian and two are expatriates but both are in private practice. The government had agreed with private specialists to assist the KISH with special medical cases. It was further noted that foreign medical doctors had also established their private practices after a few years of being employed by the MoHSS. The participants highlighted that many health workers left the public sector to work in the private sector. After graduating from universities or training institutions, some health workers start working immediately in private practices or hospitals. Participants also mentioned that the number of health practitioners in the country is insufficient to cater for both the public and private sectors. The participants vehemently indicated that the vast private sector had consumed many health workers.

This assumption was also supported by the MOHSS's annual report (2016/2017), which indicated that the public sector is suffering from losing health workers to the private sector. The annual report (2016/2017) further outlined that 58 medical doctors were registered in 2016 with the Health Professions Council of Namibia and that from these, 56 were authorised to enter private practice, and the MoHSS appointed only two doctors. Participants further mentioned that many nurses are employed in private hospitals, mines, insurance companies, and other Government Departments such as Correctional Service, Defence, Gender and Child Welfare. The following are citations made by the participants:

> *"Apart from the limited number of trained health personnel, most prefer to work in the private sector. Many government ministries are hiring doctors, social workers, and nurses, which leads to the shortage of health workers in public hospitals."*

> *"Health workers are leaving the state hospital to join the private sector."*
> *"Many medical doctors are doing their private practice and do not want to work for the government."*

"The government faces the challenge of hiring medical doctors from the private sector."

"Most registered nurses have left the hospital and joined private hospitals. The hospital struggles with the shortage of physiotherapists because they are in private practice."

Most participants commented that the private practice depleted the health workers from the public hospitals. They stressed that:

"The hospital is in dire need of specialists, especially the ear, nose, and throat (ENT), Radiologists (Diagnostic), Radiologists (Radiotherapy), Intensivists, Nuclear Medicine, Ophthalmologists, Oncologists, and many more. All these specialisations are only found in the private sector."

"even foreign health workers left the hospital to set up private practices."

Furthermore, the participants specified that some health skills are not found in public hospitals but are only available in the private sector, and these specialists are few; hence, the deficit is high in the country. The participants stated:

"Some of the factors that contribute to the shortage of health workers are the lack of Namibians specialised in pharmacology, radiography, occupational therapy, physiotherapy, surgery, trauma, tuberculosis, and specialists in medical and only a few are available in the private sectors."

The researcher found that Namibia has only one Namibian who specialised on ear, nose and throat (ENT) but in private practice and, occasionally, in state hospitals. The three ENTs are expatriates. The participants mentioned this fact when they discussed the scarcity of highly skilled health personnel.

4.4.2.4 Theme Four of Category Two: Remuneration

This theme frequently recurred in the participants' comments. Participants indicated that public health workers' employment conditions were unattractive compared to those of health workers in private practice. It was reported in the MoHSS annual report (2016/2017) that the government cannot afford to attract health workers, especially highly skilled ones because it cannot afford to pay them. The research findings revealed that public health workers are poorly paid compared to administrative personnel.

In their research, Naicker *et al.* (2015) mention that low wages are one of the 'push' factors that motivate health workers to leave their home countries. The World Health Organisation (2016) has also outlined that some of the 'pull' factors in destination countries include better salaries and good living conditions.

The researcher took note of the following participants' citations:

> *"There is a high proportion in terms of salaries of public sector's health workers compared to the salaries of private sector's health workers." The participants felt they are less paid in the public sector than their private sector counterparts."*

The participants further mentioned the issue of low remuneration:

> *"The hospital cannot afford to attract medical practitioners because of low remuneration."*

> *"Many nurses do not want to accept the offer because of low salaries and lack of allowances, and the hospital cannot recruit highly skilled health workers because there is no attractive package."*

> *"Many health workers have turned down their offers because of the unattractive remuneration package."*

The researcher summarised the findings of this theme that poor remuneration has been fueling the shortage of health workers. It was found that the MOHSS is struggling to attract health workers because of the poor remuneration package.

4.4.2.5 Theme Five of Category Two: Staff loss

Participants postulated that a high rate of resignation and retirement in all departments at the KISH has also contributed to the shortage of health workers in KISH. This statement was supported by the MoHSS's annual report (2016/2017) that the ministry faces a dilemma due to the loss of many health workers. The report further highlights that despite the efforts made by the ministry to recruit new health workers, the position has not improved. It was indicated in the MoHSS's annual report (2017/2018) that resignations constituted the highest factor for staff losses, with retirement coming close behind and through the termination of contracts when these ended. Death was rated as the fourth factor contributing to the staff loss of health care practitioners, medical boarding or Ill health was ranked fifth, dismissals on account of disciplinary issues came second and last, and abscondment came last on the list (MoHSS Annual Report, 2017/2018).

The participants also mentioned that many health workers leave the KISH after their contracts end due to advanced age or as per bilateral agreements between their governments and Namibia. Participants also referred to other reasons for staff loss, such as ill health, death, dissertation and dismissals, because disciplinary actions are experienced but are not as severe as resignation and retirement. Concerning this theme, participants have cited as follows:

"The high attrition rate, such as resignation, had severely contributed to the shortage of health workers, and the department of nursing services has lost many nurses due to resignation and retirement."

"The factor that contributes heavily to the shortage of health workers and is topping the list is resignation."

"Many factors such as resignations, retirement, termination of a contract, ill-health are contributing to the shortage of health workers, and many health workers, especially nurses, are not willing to work after retirement or renew their contracts."

The researcher further inquired about the most affected specialisation that losses many personnel. The participants stated:

"Medical doctors do not work for the hospital for a period longer than (3) years; they resign immediately. Furthermore, many foreign health practitioners resigned even before they complete the time of their contracts with the government to set up their private practices."

It is vital to highlight that the participants strongly indicated that the current level of resignation is untenable. Retirement also hurts staff compliments because it is on the increase.

4.4.2.6 Theme Six of Category Two: Poor working conditions

Regarding this theme, all participants indicated dissatisfaction with working under deplorable conditions. They expressed their disappointment that they do not have sufficient modern medical equipment to use; some existing medical equipment is dysfunctional; their uniforms are worn out; wards are always full; there is insufficient medication in the pharmacy, and some of the most critical ones had been out of stock for longer than a year. The following are the participants' citations:

"It is very discouraging when you need to full fill your duty, but the medical equipment is not functional, especially the x-rays are out of service most of the time."

"Many health workers went to private hospitals for better quality service with modern equipment."

"The hospital staff establishment must be reviewed to have enough staff on board to respond to the patients' population and demand."

Participants stressed that the hospital needs modern life-supporting machines and equipment because many are dilapidated:

"Much medical equipment is outdated; it can no longer serve the patient population. They either break easily or cannot continuously support more than ten patients."

Participants were asked to mention more factors that aggravated their working conditions, and one said:

> *"I am not motivated to come to work with a very old uniform; one has to look professional as a health worker. Due to the shortage of uniforms, we are forced to wear very old and incomplete uniforms."*

Participants from the pharmacy section also expressed their disappointment by saying:

> *"Many patients have turned away from buying medications from private pharmacies because of a lack of medicine in the hospital's pharmacy.*
> *Besides, critical medicines for hypertension, HIV, contraception and many others are out of stock, and it has been a while without them. Patients are being sent to buy them from private pharmacies."*
>
> *"I am always discouraged by the long queue in front of the pharmacy."*

Collier (2016) mentions that poor working condition is one of the contributory factors causing a shortage of health workers in public hospitals. Many health workers migrate to other countries seeking better working conditions.

In his statement of 13 March 2020, Dr Hage Geingob, the President of the Republic of Namibia, responded to the social media outcry that the conditions at KISH are deplorable conditions. Dr Geingob (2020) mentioned that he paid a surprise visit to KISH and found that it was an old hospital built in 1975. The hospital, therefore, required some facelifts. He said he was satisfied with the available medical equipment but agreed that the KISH was experiencing a dire shortage of health professionals.

4.4.2.7 Theme Seven of Category Two: Lack of Promotion

The participants indicated that lack of promotion triggers the health workers' turnover. Many health workers left the hospital to seek promotion in private practices. The study findings revealed that promotional positions in the KISH's organisational structure are very limited. Participants further expressed that the promotional policy is very rigid and that it is difficult to obtain promotion because firstly, an employee has to serve 12 calendar months probation and then often serve as long as six (6) years in a position before being considered for promotion. Lastly, employees cannot jump from a functional grade to a higher one. For example, a Registered Nurse in Grade 8 would not be promoted to a Chief Registered Nurse in Grade 6 before being appointed a Senior Registered Nurse in Grade 7. Promotion occurs strightly through a vertical movement upwards into a position immediately senior to the current one. Regarding this theme, the Health and Social Services Review (2018) supported the research findings,which stated that the limited career movement in the public health sector has led to a high staff turnover.

The Health and Social Services Review (2018) outlines that according to the Public Service Management Circular No. 32 of 2002, staff members in the public service may only apply for promotional posts one grade higher than their own. Nevertheless, applicants not in the public service are permitted to apply for posts at any level. Participants' comments support the lack of career progression in the public health sector. They argued that they are condemned to remain in an entry post until retirement or only to be promoted once in their working life. This practice happens because the MoHSS's organisational structure has become outdated. This structure is not responsive to the actual demands of medical personnel. Secondly, the Public Service Commission administers the current inflexible promotional policy, and the KISH/MoHSS cannot implement it differently without violating the promotional policy.

Participants pointed out that the promotional policy is no longer applicable and does not support the current influx of patients and their needs. Participants said that:

> *"The hospital staff establishment is outdated and non-responsive to the new developments and programmes, hence lack of promotion. In addition, Promotional positions are very limited in the staff establishment, for example, only one Control Nurse Grade 5 for the entire Nursing Directorate."*

> *"Many experienced health workers left the hospital because of lack of promotion due to limited competition for promotional positions."*

> *"Promotion is a lengthy and cumbersome process done through the Public Service Commission, requiring several steps and procedures to be followed. Moreover, Public Service Promotional Policy is very strict on the promotion of public servants, unlike the members of the public."*

The findings noted that a candidate from outside the public service could apply for any high position in the structure, unlike the serving staff member who must apply for the next promotional level in line with their job category.

4.4.2.8 Theme Eight of Category Two: Lack of planning by the ministry

In response to the question of what factors contribute to the lack of health workers, it is imperative to highlight that participants have agreed that the MoHSS has failed to plan in terms of human capital and to identify the areas of specialisation that the KISH requires. Also, the MoHSS did not consider the size of the workforce that has to be operational at the KISH to cater to the ever-increasing number of patients. The participants made the following comments:

> *"Lack of and/or gaps in policies made it cumbersome for the hospital to retain and maintain health workers for a specified period. Participants mentioned that: "policies and regulations of the Health Ministry do not bind employees that are assisted financially to work certain years for the ministry."*

Nevertheless, poor training and development policies made it difficult for the MoHSS and the KISH to develop the required skills. Participants pointed out that:

> *"The shortage of health workers has been skyrocketing since independence, but the ministry still has no responsive plan or policy to curb the dilemma. Furthermore, the ministry failed to send more staff or students to study medicine because the ministry failed to identify the gap in the availability of specialisations, especially those not produced in the country."*

The participants called for the MoHSS to have relevant regulations, policies, protocols, and scopes of practice to curb the shortage of health workers. They said new guidelines and policies would address HR development and budget allocation for health workers to ensure equity in work distribution. Lastly, that the MoHSS must develop regulations and guidelines for granting financial assistance to train more staff in specialised fields and to retrain and retain existing staff.

4.4.3 Category Three: Effects of the Staff Shortage

The participants highlighted the following themes as the effects of the shortage of health workers.

4.4.3.1 Theme One of Category Three: Overwork and burnout of health care workers

This theme recurred in all categories because all participants expressed their exhaustion due to being overly extended at work. The study findings displayed that although the KISH had more health workers than the lower-level health facilities, the workload at the KISH put the health professionals under tension, leading to fatigue and, eventually, burnout.

Participants from the Directorate of Human Resources indicated that most medical leave certificates stated that absence was due to acute stress or major depression. Many participants highlighted that most health workers suffer from emotional stress due to their excessive workload, causing them to lose empathy for their colleagues and patients. Participants narrated that the demanding nature of their work meant they did not have enough time to rest:

> *"I developed acute stress and high blood pressure because of anxiety and fatigue."*
>
> *"I do not rest well and am always over-exhausted by work.*
>
> *"The work is so much that it overwhelms us, and we lose peace."*
>
> *"The workload leads to some health workers developing backache and* [being] *boarded on a medical basis."*

Some participants related that the workload forces staff to resign by saying:

> *"One thinks to resign and stay at home to rest rather than killing yourself with overworking."*

Participants alluded that they require supporting programs such as gyms, boot camps, and team-building exercises to release anxiety and stress. This is what they cited:

> *"Medical staff are working under pressure with no support programmes for them; hence, many staff are suffering from emotional stress."*

> *"The health ministry must look into our health because many health workers developed lifestyle diseases such as major depression and physical impairment."*

Participants also alluded that anxiety had affected their eating patterns, resulting in a low appetite and a loss of affection for other people. A participant said that:

> *"The workload has burdened me, and most of the time, I lost my appetite and interest. I lost the sense of humour with everybody."*

4.4.3.2 Theme Two of Category Three: Poor service

Participants affirmed that the KISH is critical in delivering health services in Namibia and renders various medical services such as diagnostic tests, pharmaceuticals, treatment and rehabilitation, emergencies and counselling. They also revealed that the hospital serves as a referral centre for the lower-level facilities (health centres and clinics) and is operational 24 hours a day.

Namibia has a serious shortage of health workers at numerous levels of its health sector. However, the current deployment of health workers no longer meets the service demands at the national level. In support of this statement, it was highlighted in the Health Ministry's Health Plan (2017) that human resources are the backbone of health service delivery. The Health Plan (2017) further outlined that the shortage has led to insufficient patient care, resulting in poor health throughout Namibia.

Another aspect mentioned by the participants was the delay patients experienced in receiving health care services. Health promotion was also inadequate, and behaviour change communication was very weak because of the limited capacity of health workers at the national level. The study findings revealed issues regarding the lack of friendlessness/empathy on the part of some healthcare workers. Participants stated that there were complaints about some healthcare workers being arrogant and rude and not paying attention to the patients.

The researcher asked the participants to clarify the attribution of poor service and the exact determining factors. The participants contended that their availability, distribution, accessibility, time frame, range of services delivered, hospital management, and attitudes of health professionals could determine the perception of quality services being rendered to the patients. The participants again stressed that the KISH is Namibia's only intermediate hospital receiving patients from all fourteen (14) regions. Consequently, the KISH is overcrowded because of nationwide referrals from lower-level health facilities. The overutilization of the KISH has led to the inadequacy of service provision.

The participants further maintained that the implications for both the workload and morale of health workers impact the delivery of quality services. It was outlined that some doctors leaving the hospital to undertake other remunerative activities, such as private practice, during working hours had adversely affected the service delivery at the KISH.

The participants identified major constraints on service delivery, such as inadequacy in numbers and the skills mix of key health workers such as nurses, doctors, social workers, physiotherapists, radiographers, pharmacists, and occupational therapists, among others. Another crucial constraint that emerged was the insufficient level of infrastructure at the KISH, which contributes to poor service delivery.

It is imperative to state that the regular breakdown of some crucial machines and equipment, and the lack of equipment spare and replacement plans, hampered the delivery of quality service. A participant from the pharmacy section mentioned that*:*

> *"The major issue contributing to long queues and waiting long hours is the shortage of pharmacists."*

Another participant from the radiography section expressed that*:*

> *"The hospital provides 24 hours radiographic services but is affected by the inadequate number of staff as well by a frequent breakdown of equipment."*

While participants from paramedical services indicated that*:*

> *"The health workers that provide emergency services are inadequate; hence the services are not provided optimally."*

In addition, participants from the maternity ward stated:

> *"The number of pregnant women always outweighs the number of midwife nurses on duty."*

Participants from the medical services stated:

> *"A patient can wait in the queue for a doctor for more than 6 hours since only one doctor is on duty, while many patients have to be on a waiting list for a longer period because of lack of specialists."*

Generally, participants emphasised that*:*

> *"Long queues are everywhere in the hospital where service has to be provided because the hospital does not have the required number of human resources, and this harms the health care service delivery.*

4.4.3.3 Theme Three of Category Three: Absenteeism

The participants strongly emphasized that the shortage of health workers has negatively impacted the attendance of the health staff. They indicated that it had become an uncontrollable trend whereby health workers seek rest by taking sick or compassionate leave of absence. When health workers become exhausted, some visit doctors to request sick leave, while others apply for compassionate leave. According to the study participants, each health worker is entitled to 132 days of sick leave with full pay and 132 days of sick leave with half pay for three (3) years.

Participants mentioned that: "Many health workers are on study leave" and that long study leave is very problematic because the MoHSS/KISH does not appoint new staff in the positions of those on paid study leave but redistributes their workload among the available health workers. The participants further stressed that this policy caused a burden on the health workers who were on duty during the absence of other staff who had taken sick leave without giving prior notice of their absence or arranging for a relief worker to take their place. Furthermore, participants reported that some health workers apply for study leave of four (4) years or more to pursue their studies in other medical fields or for specialising. Below are some citations made by the participants regarding absenteeism:

> *"The level of absenteeism is very high among health workers because of tiredness."*

> *"Abuse of sick leave among health workers is uncontrollable. Health workers have been abusing compassionate leave as a reason for staying away from work."*

The researcher probed why sick leaves are not more strictly monitored; one participant mentioned that*:*

> *"it is impossible to control sick leave because sick leave certificates are authentic and issued by registered health professionals."*

4.4.4 Category Four: Measures to Overcome the Shortage of Health Workers

The following themes were explored to determine how to overcome the shortage of health workers in KISH.

4.4.4.1 Theme One of Category Four: Government should provide funds for the study

Participants stated they wanted to further their studies but did not have the money to do so.

They emphasised that the MoHSS should provide funds to enable medical doctors and nurses to specialise and other health workers to further their studies, for example, enrolled nurses, pharmacist assistants, and emergency care practitioners.

The participants pointed out the onus with the MoHSS to ensure a sufficient training budget. The MoHSS should fund students who want to pursue health-related careers or study medicine to increase the number of health workers in the Namibian labour market. The researcher noted that advancement opportunities for the KISH health workers are vital. The participants made the following statement:

> *"The Ministry must send health workers for training, and medical Doctors must further their studies to specialise."*

> *"The Ministry must send many students to study medicine. Also, the government must establish more medicine and nursing training schools to train more health workers.*

> *"Learners must be encouraged to pass matric with high marks to be admitted to medical schools."*

The issue of the Namibian government funding students to study medicine received different perceptions from the participants. Some participants cited that it was difficult for learners to pass Grade 12 with sufficiently high marks to be admitted to prestigious medical schools. Some participants highlighted that the MoHSS should give incentives to schools to encourage learners to pass with good marks to enable them to pursue medicine. The participants further affirmed that if learners passed their grade 12 exams with good marks, it would be advantageous for the MoHSS to fund their studies because, once qualified, they would be available in the labour market. The participants pointed out that the MoHSS has had a long-term strategic HR framework, projecting the future needs and supply of required health workers in the country for thirty years (2007/2037). Afterwards, a Medium-Term Human Resources Plan (2007-2017) and two Five-year Human Resource Development Plans (2010-2015; 2016-2020) were developed to guide HR planning for the MoHSS. About the Medium-Term Human Resource Plan (2007/2017), participants stressed that Namibia still has a serious shortage of health workers at different levels of its health sector. It was further extended that the expansion of the primary care level-triggered new requirements for the health workers; hence, the MoHSS must set up training programmes.

4.4.4.2 Theme Two of Category Four: Strengthening of government policies to retain health workers

Participants expressed that the government/MoHSS should strengthen its policies to retain health workers. Participants stated that the MoHSS does not have strong policies to retain medical practitioners after completing their post-graduate studies.

The participants claimed that many health workers are granted study leave with full remuneration – an entitlement for all public servants – to further their studies. Upon completing these post-graduate studies, they resign from the public service and take up employment in the private sector. Participants have also mentioned that the Namibia Student Financial Assistance Fund funds some health workers, but the MoHSS has failed to compel them to work for the public service for a specific number of years. It was revealed in the Health and Social Services Review (2018) that the government does not compel students supported financially through NSFAF to work for it after the completion of their degrees and other forms of training. Students are free to be employed within any sector, provided they have reimbursed NSFAF. The Health and Social Services Review (2018) further indicated that this policy gap contributes to the shortage and high turnover of health professionals in the public sector. Foreigner health workers terminate their employment contracts before these end to take up employment in other government departments or the private sector. Most apply for more remunerative work outside the public service or set up private practices. The government/MoHSS's failure to compel foreign health workers to complete their employment contracts is one of the reasons for the shortage of public service healthcare workers. Participants displayed their opinions regarding this situation as follows:

> *"It is a pity that medical doctors resign from the hospital immediately after completing their internship and registered with the National Health Council as qualified medical doctors."*

> *"The MoHSS failed to bound health professionals because there are no statutory provisions."*

They highlighted that poor control mechanism created loopholes and made it difficult for the hospital to control the staff movement and commented as follows:

"Many health workers left the hospital immediately after their special study leave with remuneration. Foreign health practitioners are employed elsewhere before their contracts with the ministry of health end."

It was also noted that expatriates are granted the right to undertake lucrative private work outside of their normal working hours and often spend more hours at their private practice than they spent working for the MoHSS: Participants commented on this issue as follows:

> *"All health workers, including foreigners, have the right to engage in private remunerative work outside the public service as provided in the Public Service Act. This gap encourages health workers to be full-time at their private practices and render part-time work to the hospital."*

> *"Most foreign health workers capitalise on this gap as an escape gate to put up their private practices."*

"Some foreign health workers were employed by the hospital for less than five years and quit to do their private work."

Participants proposed that the government/MoHSS must compel healthcare graduates to work for a specified time after completing their studies. If they enter private practice, they should also work part-time in the public health sector for a certain period. Regarding foreign health workers, participants proposed that the MoHSS must work closely with the Ministry of Home Affairs and Immigration to strengthen the laws regulating foreign health professionals' visas and work permits. They propose that they should not be granted a permit to work in the private sector before they have completed their years of service in the MoHSS. They should also not be able to engage in private practices until they complete their contract with the MoHSS, and only then can they apply for and practice private work.

4.4.4.3 Theme Three of Category Four: Attractive remuneration packages

Participants highlighted that the MoHSS should design an attractive remunerative package that would enable it to hire and retain highly qualified medical practitioners. The participants further stated that well-paid employees are always motivated to work hard and remain with an organisation.

Participants alluded that:

"The ministry must consider competitive remuneration packages, especially for highly qualified health workers such as specialists."

"All health workers deserve a reasonable remuneration."

"The government must introduce incentives to retain medical staff."

"The ministry failed to attract specialists because of low salaries. The ministry failed to attract physiotherapists because the salary is too low."

Participants noted that the KISH has many unfilled posts because the MoHSS is unable to attract health personnel with its current remuneration packages:

"Many posts are vacant because the ministry cannot attract medical staff due to poor salaries."

Furthermore, participants listed poor remuneration as one of the 'push' factors that forced the nurses to resign from the hospital.

"Many registered nurses left the hospital because of poor salaries."
"Salaries for health workers in public hospitals are far lower than salaries of health workers in private practices; hence, many medical personnel have their practices and are unwilling to work for the government because they earn much money."

"Many health workers, especially highly specialised personnel, do not accept employment offers from the MoHSS or resign after a few months in public service. Poor remuneration and incentives were listed as a 'push' factor for health workers moving from the public to the private sector".

4.4.4.4 Theme Four of Category Four: Improved working conditions

Participants emphasised that the MoHSS should improve the working conditions in the KISH hospital and that they are not motivated to work because of the deplorable general conditions. They called for outdated and non-functional equipment and machinery to be removed and replaced. Many participants stated that the KISH should be furnished with up-to-date medical equipment. They also proposed that a medical equipment maintenance and repair centre should be established to avoid sending equipment outside of Namibia or waiting for foreign engineers to come to Namibia to repair or service the machines and equipment. Most participants called for the KSH/MoHSS to supply them with sufficient uniforms. These sentiments are supported by the already statement of the President of Namibia that the KISH urgently requires a facelift and more health workers. Here are some comments made by the participants:

> *"The working conditions in the hospital are getting worse every day, the tools and equipment are outdated and are not compatible with new diseases trends, shortage of medical equipment hampers service delivery, medical equipment is very old and worn out, hence, they are breaking very easily, most of the equipment is at the workshop waiting to be either send outside the country or fly in an expert to repair them, and we are waiting on an expert from Hungary to come and repair the x-ray. Hence, we propose modern medical machines and equipment for speedy and quality health care service delivery."*

4.4.4.5 Theme Five of Category Four: Build another intermediate hospital

Participants indicated that to address the issue of too many patients, which results in overcrowding, the MoHSS should build another intermediate hospital to complement KISH in the northern part of Namibia, where most of the population resides. They claimed that the expansion of the KISH is impossible because the physical space is too small, and it would only cause further congestion of staff and patients. Most participants indicated that the MoHSS needs to ensure that resources are available for supplying a new intermediate hospital in terms of medical personnel, equipment and machinery, administrative personnel, and their tools.

The participants made the following comments:

> *"The hospital serves a population of more than 500 000 patients, the physical space is too small for expansion, and likewise, another intermediate hospital must be built to complement the KISH."*

> *"The number of patients will be possibly manageable in Katutura hospital once another intermediate has become operational."*

> *"It will be a big relief to health workers if another hospital can be built."*

The participants perceived that the service delivery time would also be shortened because some patients would be referred to the new hospital.

> *“Patients will also not wait for a long time to be transferred to Katutura hospital, the only intermediate hospital in the country.”*
>
> *“The government must also plan for the health personnel who will work in the proposed hospital; otherwise, the shortage will hinder the operation of the new hospital.”*
>
> *" The new intermediate hospital must be built in the country's northern regions where the high population resides.”*
>
> *“it will be a big relief for health personnel because the number of patients will be reduced. There will be no more workload that causes fatigue and emotional stress on us.”*

4.5 Summary

This chapter presented the analysis and discussion of the collected data and the findings of the study that indicated that the objectives of the study were achieved, the research questions suitably answered, and the research problem confirmed. The study's main findings are as follows: the researcher noted that the KISH is faced with an ongoing shortage of health workers. Half of the organisation’s approved posts are vacant. In order to lessen the shortage, the hospital has employed many foreign health workers due to a lack of required medical skills in the Namibian labour market. This researcher found that most health practitioners with crucial skills such as cardiology, oncology, ophthalmology, urology, paediatric, orthopaedic, and many others are not trained locally. The study findings confirmed that only three senior medical officers (the paediatrician, urologist and anaesthetist) are expatriates. Further, half of the filled posts are occupied by foreign medical experts.

This researcher found that the health workers and the KISH’s physical capacity are overwhelmed by the patient population, which totals at least 500 000. This study further noted that an excessively high number of patients resulted in anxiety, depression and major stress for the healthcare workers, which contributed to poor and inefficient healthcare service.

In addition, the private sector is a threat to the public sector because it employs the majority of skilled health care in Namibia because many health workers have left the KISH to work in the private sector because of competitive remuneration packages. It was further established that poor employment and working conditions had also contributed to staff loss from the KISH hospital due to the majority of them preferring to work in the private sector.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter outlines the key conclusions about this study's objective, limitations, implications and suggestions for future research, significance and contribution. The recommendations based upon the study findings, and the limitations encountered by the researcher during data collection, data analysis and compilation of the research paper.

The discussion centres on the shortage of public sector health workers investigated through a case study conducted at a selected hospital in Windhoek. The study was triggered by the media outcry that the MoHSS has encountered inefficient service delivery to the citizens at the state health facilities due to the shortage of health care staff. The study investigated the problem in the KISH, Windhoek. The main objective of the study was to find out whether the service delivery, which recorded a drop in efficiency from 80% to 47% from 2009 to 2014, as indicated by the Auditor General's Report (2015), was the result of a shortage of health workers in the KISH. According to the Auditor General's Report (2015), the drop in service delivery was determined by the length of hours the patients have to wait to see a doctor and the length of the waiting period to see a specialist. KISH is the only intermediate hospital in Namibia that receives patients needing advanced treatments from all fourteen regions of the country.

The following objectives guided the study: firstly, the researcher attempted to find out whether the KISH experienced a shortage of healthcare workers, the factors that contributed to this shortage, its effects and the measures needed to overcome the shortage.

5.2 The Indicators of the Shortage of the Health Workers

This section summarises the factors identified as the pointers of the shortage of health workers in KISH.

5.2.1 Many expatriates at the KISH

The KISH is reliant on the services of a large number of foreign health workers to ensure service delivery. This indicates that the hospital fights the shortage of health workers by recruiting expatriates. It was confirmed during this study that foreign health workers are present in every department, division and section within the KISH. Most of them render critical health care services. It is evident from the HR statistics provided by the HR office that foreign health workers fill highly specialised posts.

Furthermore, the statistics indicated that half of the filled posts are occupied by expatriates. The only senior paediatrician, senior urologist, and senior surgeon were interviewed and confirmed that they were not Namibians. It was found that the Namibian labour market could not provide the necessary highly specialised health practitioners. This fact is due to the followings issues: the only Medical School in Namibia does not offer critical specialisations such as cardiology, surgery, anaesthesia, pediatric, urology, ophthalmology, orthopaedic, TNE (throat, nose and eye specialists), and many other specialisations. Secondly, a few specialised health workers in the country are employed in the private sector. Lastly, most Namibian health workers who studied medicine in foreign countries have not yet specialized in a particular medical field. Hence, the MoHSS has recruited non-Namibian health workers to stabilize the exorbitant shortage of health workers. However, this effort has not yet reduced the shortage of health workers. Hence, the government should put greater effort into developing health-related skills to ease the shortage of healthcare practitioners.

5.2.2 High Rate of Vacancies in the Organisational Establishment of the KISH

The participants expressed dissatisfaction regarding the shortage of health workers at the KISH. The MoHSS has worked hard to fill the vacant posts with foreign health workers, but the shortage is still serious.

The study findings indicated that the KISH has struggled with the shortage of health workers for many decades. This statement was confirmed during the interviews because many positions are vacant as per the statistics provided by the HR Division. It is found that it is meaningless for the MoHSS to expand the current organizational structure of the KISH while there are no human resources for health to fill the vacant positions.

Participants and the statistics obtained from the KISH's HR office indicate that the KISH's currently has many vacant positions. This finding is supported by Robison and Clark (2008), that some of the staff shortage indicators are found in the high vacancy rates for long periods (sometimes years), the use of foreign staff and the poor nurse/patient ratio.

It was found that the MoHSS is struggling to fill the vacant positions, especially the highly pecialised posts because the Namibian labour market cannot supply these experts. (See the attached advertisement of the vacant positions of some hospitals, Annexure D, advertisement of 11 June 2021). The labour market does not have sufficient specialised health skills because most specialities are not trained locally. This claim was supported by the Auditor General's Report (2018/19), stating that the MoHSS takes up to more than 15 months to fill vacant posts, which are supposed to be filled within three months.

The Health and Social Services Review (2018) reported that Namibia's health system is faced with a major challenge because of the lack of skilled human resources, which are vital for outstanding health care. It was evident in the MoHSS's Annual Report (2017/2018) that this Ministry needs more than 10 000 medical practitioners. Moreover, the findings revealed that the number of Namibian students/post-graduates pursuing medical-related studies is insufficient to fill the vacant positions. This situation was confirmed during the individual and focus group interviews conducted by the research with medical practitioners from KISH.

5.3 The Contributory Factors of the Shortage of Health Workers in the KISH.

The factors that are contributing to the shortage of health workers in KISH are summarised in this section.

5.3.1 The high population density of the patients

It was found that the population density of the patients is one of the contributory factors to the shortage of health workers in the KISH. Participants revealed that the capacity of the KISH does not meet the service demands of the population density of patients. The nurse or doctor ratio to the patient is too small.

The study participants indicated that the ratio is abnormal; one nurse attends to 50 patients or more in one medical ward at a time. Furthermore, the participants highlighted that the average doctor/patient ratio of over 1:1 700 and that this figure could even be higher.

The World Health Organisation (WHO) stipulates a minimum doctor/patient ratio of 1:1000. The Health Ministry's Health Plan (2017) also outlines that Namibia has a serious shortage of health workers at numerous levels of its health sector and the shortage has led to insufficient patient care, which results in poor health results. It was found that health services are neither rendered timeously nor sufficiently due to the medical staff's exhaustion because of the extreme length of patient queues. Hence, the quality and efficiency of health care delivery at the KISH are poor.

The KISH serves a population of around 500,000 people while the staff complement is far too small to meet such a demand. This finding was further confirmed by the Namibia Health and Social Services Review (2018), which reported a marked disproportion in health workers' volume between the private and public sectors. The Review (2018) further highlighted that the public sector has 2.0 health workers per 1 000 population, which is below the World Health Organisation's benchmark. According to the Audit General's Report (2015), the health workers' capacity to the population ratio in Namibia is 2.0 compared with the World Health Organization (WHO) benchmark of 2.5 per 1 000.

This report indicated that the current health workers' capacity in the public sector per population ratio in Namibia is below the WHO benchmark. Moreover, the Social Services Review (2018) highlights that the situation in the public sector is worsened by the prolonged shortage of frontline health workers such as nurses and doctors.

5.3.2 Limited number of qualified and specialised health workers

It was found that patients can wait for between six to eight hours to be attended to by a nurse or doctor. According to the Auditor General's Report (2017/2018), patients who need special medical attention may wait six to twelve months because the available specialists are fully booked or placed on a long waiting list to be sent outside Namibia. The participants confirmed that the shortage of specialists contributes to poor service delivery.

These findings supported those of Chankova (2010), who stated that the shortage of health personnel in Africa is worse than in other regions of the world and is a major contributing factor to poor healthcare service.

5.3.3 Private practice

Another identified factor that contributed to the shortage of health workers in the KISH is that most health workers leave the MoHSS for private practices. This fact is outlined in the MoHSS's annual report - the staff turnover, under the resignation category (MoHSS Annual Report 2017/2018). Participants also stated that Namibia has insufficient health practitioners to cater to both the public and private sectors.

Private practice is the major competitor with the public sector in terms of employing health workers. This study confirmed that the vast private practice employs a huge number of the few available health workers and that foreign nationals also left the KISH for private practices. Newly graduated Namibian health workers establish their private practice immediately after registration with the Namibian Health Council. (The Health & Social Services Ministry's Annual Report, 2016/2017). It further reported that out of 58 medical doctors registered in 2016 with the Health Professions Council of Namibia, 56 were authorised to undertake private practice, and the MoHSS appointed only two doctors. According to the Ministry's Annual Report (2016/2017), this disparity continues unabated.

5.3.4 Poor remuneration

Poor remuneration is another factor contributing to the shortage of health workers in KISH. Participants stated that the remuneration packages and retention incentives for public service health workers are very low compared to those in the private sector.

This researcher noted that many health workers, especially highly specialised personnel, do not accept employment offers from the MoHSS or resign after a few months in public service. Poor remuneration and incentives were listed as a 'push' factor for health workers moving from the public to the private sector.

The findings of this study support the MoHSS's Annual Report (2016/2017), which states that the Government cannot attract nor retain health workers, especially highly skilled practitioners, because it cannot afford to remunerate them. Public health workers' remuneration is equivalent to that of administrative personnel. This finding supports Naicker *et al.* (2015) regarding the 'push' factors that motivate health workers to migrate from their home countries.

The WHO report (2016) also indicated that destination countries 'pull' factors include better salaries and living conditions. The government/MoHSS is urged to improve the remuneration and incentives for health workers to encourage them to remain in public hospitals such as the KISH.

5.3.5 Inadequate budgetary provision

Participants stressed that the MoHSS annually indicates that it does not have money to fund the studies of health care practitioners, which prevents many health workers from further studies due to the lack of funds. According to the MoHSS's Annual Report (2016/2017), the Ministry of Health does not grant bursaries to students to pursue medical-related studies. The participating HoDs stated that the lack of budgetary provision humpers the implementation of skills production because their departments' training budgets are very small or zero in some years. The researcher further found that the shortage of health workers was caused by poor training, exacerbated by Namibia's limited education budget. This situation results in students' low admission figures to higher learning institutions such as medical schools.
Chankova (2010) also found that Africa does not pay sufficient attention to training doctors, nurses and other health service personnel. It is recommended, therefore, that more funds should be allocated to fund education and training for health workers.

5.3.6 Staff attrition

The study findings indicated that MOHSS is severely undermined by staff loss due to the high rate of resignations and retirements, as stated earlier in the MoHSS Report (2016/2017). The report further highlights that despite the efforts made by the MoHSS to recruit new health workers, it has not managed to change the situation.

Dovlo (2015) indicated that a major cause of the lack of health workers in many developing countries is that doctors and nurses are forced to leave their countries or public health sectors due to low remuneration, lack of continuing educational opportunities, inflexible working hours with many extra duties, numerous patients, poor health infrastructure and shortages of supplies and equipment.

5.3.7 Poor working condition

It was found that health workers; working conditions at the KISH are very poor due to the deplorable state of this ‘old’ facility, a fact that supports comments made by the President of Namibia Dr Godfried Hage Geingob (2019) in his speech during his visit at the KISH. The President indicated that the KISH, built in 1986, requires a facelift. The study findings also indicate that the KISH requires sophisticated and highly technical medical machines and equipment because currently available machines are old and continually break down, which can endanger patients' lives. It was indicated that the health workers’ protective gear is no longer safe.

5.3.8 Lack of promotion

The study findings show that the health workers adversely affected by the MoHSS’s stringent promotion policy. Participants indicated that apart from the organisational structure that limits promotional posts, the promotion policy makes it difficult for healthcare practitioners to achieve rank progression.

5.3.9 Poor planning

It was found that there are no mechanisms to combat the shortage of healthcare practitioners at the KISH. Well-articulated HR strategic plans expired without implementation for five (Human Resources Plan for Health Workers, 1995-2000) and ten years (Human Resources Plan for Health Workers, 2000-2010).

The Human Resources Plan for Health Workers, 2010-2025) will shortly expire, probably without yielding the desired results because the MoHSS has consistently failed to prioritise, avail funds and implement the plans to produce the required number of specialist health care practitioners. Therefore, it is recommended that health skills development mechanisms should be drafted and implemented timeously to develop scarce health skills. Further studies should be conducted to recommend appropriate skills development mechanisms.

5.4 The Effects of the Shortage of Health Workers

This section summarises the effects of the shortage of health workers.

5.4.1 Burnout due to overwork

The researcher also concluded that the shortage of healthcare works at the KISH has negative effects, and many health workers are overworked, developing acute stress and major depression due to burnout. It was also confirmed that some health workers developed chronic ailments such as high blood pressure and back ache. The findings of this study were in line with those of other studies, such as Collier (2016), who postulate that work-related stress triggers job dissatisfaction and burnout among healthcare practitioners. Collier (2016) pointed out that factors such as excessive workloads, long working hours, and unsatisfactory nurse-patient ratios are common factors that generate burnout.

5.4.2 Poor service

The researcher identified poor service as one of the KISH's effects of the shortage of health workers. There are insufficient health workers to deliver certain health care services, while others are exhausted due to the excessive number of patients requiring their attention.

5.4.3 Absenteeism

Another effect of the shortage of health workers at the KISH is the extremely high absenteeism rate due to overwork. Many health workers use compassionate and sick leave excuses to stay away from work.

5.5 Measures to abate the shortage of health workers

The researcher noted that some measures the participants proposed should be implemented in order to combat the shortage of health workers in the KISH. These included the following:

(1) Sufficient funds should be availed to fund further studies and produce more health workers. (2) The Namibian Government/MoHSS should have adequate and appropriate policies to regulate the provisions of health workers' production and practices in the public service. (3) The Namibian government/MoHSS should offer attractive remuneration packages and retention incentives to attract and retain healthcare practitioners.

(4) The Namibian Government/MoHSS is urged to improve the working conditions of health workers in state hospitals to ensure a conducive working environment, and (5) More intermediate health facilities should be built to complement the KISH that currently is the only intermediate in Namibia.

5.6 Limitations

This section highlights the following limitations that were encountered by the researcher study during the processes of data collection, data analysis and the compilation of the study findings:

This study was contacted in the Khomas region of Namibia, where the researcher resides, because she was not required to travel and could take a short study leave to conduct interviews.

The study was conducted on a population of around 348 health staff members, and a sample of 20 participants was interviewed. It would have been more valuable if the study had been conducted in three or more regional intermediate state hospitals within the most densely populated regions. Statistics of the filled and vacant positions and the population of the patients from other hospitals could have been combined, and this would have enabled the findings of this study to be generalised to all hospitals throughout Namibia.

The literature review indicated that the whole of Namibia suffers from a shortage of healthcare workers. Thus, a research study could be implemented to establish the validity of this claim. According to Muremi (2013), Namibia needs more medical specialists in public hospitals, and due to this lack of specialists, patients from all fourteen regions are referred to the KISH in Windhoek. It would be ideal if the MoHSS could establish or upgrade regional intermediate state hospitals at Oshakati, Rundu, Katima Mulilo and, Opuwo, Keetmanshoop. Opuwo is one of the hospitals where earlier research indicated there is a crippling shortage of health workers. NAMPA (2015) stated that it only has two doctors who serve a population of 25 000.

Another limiting factor in this study was that the researcher did not have sufficient funds to travel to other regions to interview other healthcare practitioners.

Time constraints were another limiting factor that prevented the researcher from travelling to other regions to conduct interviews and collect data from the participants – she was required to take limited leave to conduct the current study.

5.7 Recommendations

After the data analysis and the study's findings were established, recommendations were proposed for addressing the shortage of health workers. This section outlines the primary recommendations for the findings of this study and other recommendations regarding further research on the problem that informed this study.

5.7.1 Main recommendations

This section presents the main and subsidiary recommendations based on the study findings after data analysis and discussions with participants during this research paper's compilation.

5.7.1.1 Use of expatriates for skills development

The Namibian government/MoHSS is urged to invest in skills development for non-Namibian health practitioners at the KISH to leverage better service delivery at this facility. These specialists are anticipated to transfer knowledge and skills to new medical practitioners.

5.7.1.2 High rate of vacant posts at the KISH

The findings of this study indicate that the shortage of health workers at the KISH is extensive; hence, the health service delivery is inefficient and of poor quality caused by the lack of medical-related skills available in the Namibian labour market. This fact was indicated in the HR statistics regarding the filled and vacant posts within the hospital's structure. The researcher recommends that to mitigate the shortage of relevant medical skills, the Namibian government/MoHSS should explore short and medium-term interventions to ensure that it can supply the Namibian labour market with relevant health skills. These interventions should involve the Namibian government/MoHSS agreeing with the private health sector to render health services in the public service and also re-appoint retired health workers who are fit and willing to continue to work for the MoHSS. The government/MoHSS should also ensure that it pursues a long-term strategy to provide the labour market with the required health skills by educating/securing the services of more health workers. This practice will ensure the timeous delivery of improved healthcare services.

There should be a marketing drive by the government at schools to encourage scholars to pursue health care occupations.

The researcher further recommends that the government/MoHSS avail an adequate training and skills development budget to make resources available for more Namibians to study medicine and to specialise in those medical fields that are currently scarce in Namibia. This process will enhance health personnel's skills development and availability within the Namibian labour market. Sufficient budgetary provisions will enable the MoHSS to implement its strategic plans for HR health development. It is recommended that the government of Namibia should also improve the MoHSS's budgetary provision to ensure that resources are available to fund health workers' training and further studies. Private hospitals and institutions that render health care services should be approached to assist the government in funding medical-related studies to provide more medical-related skills in the Namibian labour market.

Local institutions of higher learning should introduce medical-related courses to enable more people to study locally and eliminate the cost of travelling and housing in foreign countries. Local institutions of higher learning and health facilities should work together to coordinate the effective development of medical-related skills.

The Namibian government should increase the medical students' intake at the University of Namibia and other health training institutions around the country. It should also establish new medical schools to increase the annual intake of medical students. Switzerland implemented a similar strategy in 2010 and 2011 that increased the intake of medical students by 15% (Switzerland Federal Office of Public Health, 2011). Australia has addressed the challenge of the shortage of health workers dramatically by increasing the number of medical schools during the past decade, thus improving the domestic supply (Deakin, 2012; Griffith, Bond & Cook, 2012; McNeil & Stoelwinder, 2010), and, in addition, enrolments in existing medical schools have expanded and new schools being established in New South Wales.

Each department and directorate in the KISH should effectively and sufficiently budgeting for the development of health skills.

Supervisors should plan their workforce proactively and make sure that the development of health skills is realized. They should also recommend their subordinates for trainings and further study.

Health workers are encouraged further their studies and specialise in scarce medical fields.

5.7.1.3 Population density of the patients

This study established that the KISH serves approximately 500 000 patients because it is the only intermediate hospital in Namibia that treats patients from all regions before referring them to Windhoek Central Hospital. It is the only referral hospital in Namibia; the government/MoHSS should ensure that other regional state hospitals are also equipped with the necessary health care practitioners and facilities to reduce the number of patients sent to KISH in Windhoek.

Moreover, more intermediate hospitals should be built because according to all the study participants, the KISH was built 36 years ago and cannot properly accommodate its patient population. It will be beneficial for health workers to work in an environment that is not overpopulated with patients. Alternatively, the government/MoHSS should expand the KISH's organizational structure and physical facilities to ensure that it is responsive to the patient's demands.

5.7.1.4 Limited number of qualified Namibian health workers

The availability of more specialised health workers would help to address issues such as patients' long queues and the long waiting lists for those waiting to be attended by specialists.

National Health Committee should be responsible for health HR resource skills development and auditing. This committee should facilitate students' admission to higher learning institutions, monitor their progress, record the number of graduates, audit the availability of required skills and report on the supply and demand for health workers in public and private health facilities. It should keep a database of available health workers in Namibia. Students should also be motivated to study hard to be admitted to medical institutions locally and internationally.

5.7.1.5 Poor remuneration

The government/MoHSS should ensure attractive remuneration packages to attract health workers to work for the MoHSS and motivate students to pursue medical-related fields of specialisation. More allowances, such as fixed overtime across the board, a danger allowance, and rural area allowances, should be introduced. Non-monetary incentives such as rural accommodation should also be introduced to retain and attract health workers to the public service. More students would be encouraged to study medicine and work for public hospitals. All of these processes would enable Namibia to have sufficient medical personnel.

5.7.1.6 Staff loss

To combat staff attrition due to resignation, the government/MoHSS should research why the health workers are resigning. This study found that many workers leave the public for the private sector. Thus, the government/MoHSS should find out what the private sector offers to the workforce and then offer similar conditions. The government/MoHSS should be proactive in planning to replace retiring health personnel. It should also ensure the physical and emotional condition of health workers and offer them good medical insurance to minimise the high level of ill health among them.

5.7.1.7 Poor working conditions

The government/MoHSS should improve the working conditions of the health workers. Hospitals such as the KISH should be equipped with sufficient medicine, protective gear, equipment and functional machines to improve healthcare service delivery.

5.7.1.8 Poor promotion policy

Government/MoHSS policies for skills development, recruitment, promotion and staff retention should be strengthened and streamlined to retain public sector healthcare workers.

Conducive promotion policies will increase the efficiency of healthcare service delivery. A good promotion and retention policies would encourage health workers to remain longer with the government/MoHSS.

The current promotional policies be amended to provide flexible staff promotions to enable healthcare practitioners to handle the patients' demands.

5.7.1.9 Poor planning

The MoHSS should monitor and improve the implementation of its strategic health workers' development plans and ensure these are crafted and implemented timeously and effectively.

5.7.1.10 Burnout and overwork

Heath care practitioners' workloads should be standardised and re-designed to combat burnout amongst health workers and prevent acute stress and depression. Long working hours and nurse/doctor-to-patient ratios should also be reduced. Those suffering from burnout should be referred to social workers and psychologists for counselling and other therapies. All health workers should receive vacation leave.

5.7.1.11 Poor service

To improve the quality and efficiency of the service, the government/MoHSS should ensure that the currently available health workers are motivated to work to the best of their ability. They should not work excessively long hours; their shifts should be customised to ensure they have sufficient resting hours.

The health workers should be assured that the MoHSS is increasing the availability of specialist healthcare workers.

5.7.1.12 Absenteeism

The study findings indicated that most available health workers take sick and compassionate leave due to stress and exhaustion. The MoHSS should ensure that health workers have sufficient resting hours and that effective 'wellness' programmes are available to health workers.

5.8 Recommendations regarding further research

- The media informed the Office of the Auditor General's Report (2015) that Namibia faces a dire shortage of health workers. The MoHSS's Annual Report for 2016/2017 also confirmed this fact. However, the reviewed literature indicates that this gap still exists. Hence, more research on this issue should be conducted to establish the exact number of health workers in Namibia and the exact nurse/doctor-to-patient ratio. This practice would assist plans for developing human resources for health in Namibia.

- Scholars and national research institutions should be encouraged to research the shortage of health workers to avail sufficient useful literature on the Namibian healthcare context. Awareness should be created during academic workshops, forums and symposiums to encourage scholars to research the shortage of skills in the health sector to ensure future informed decisions and solutions. This study recommends further research covering the skills shortage in other sectors of the Namibian economy and the public service. This recommendation was necessitated because reviewed literature indicates that many Namibian Government ministries and private sectors face a similar challenge of a lack of skilled personnel. The skills shortage is an unveiled truth that the Namibian Government ministries and the private sector encounter daily (Haidula, 2015).

- The findings from this study recommend further research to ascertain suitable proposals and possible measures/models to curb the shortage of health workers in Namibia and make further appropriate recommendations to the government/MoHSS and other relevant institutions and stakeholders.

5.9 THE SUMMARY

This researcher summarises the problem that informed the research and present it in this section, highlights the literature review, the main research method applied, the significance of this study, and the main research findings and results that lead to recommendations.The problem informed this study of the shortage of public sector health workers, a case study of a selected hospital in Windhoek. The study was prompted by the high media publicity that the Ministry of Health and Social Services has encountered inefficient service delivery to the citizens at the state health facilities due to the shortage of health staff. The study proposed to investigate the problem in the Katutura Intermediate State Hospital, Windhoek. The study reviewed a reasonable amount of literature to find whether countries have experienced the same problem, the causes of the shortage of health workers in the countries under review, the effect of the shortage and how they overcome or managed health professionals.

The study focused on African countries, the United States of America, Australia, Jamaica, Switzerland and the United Kingdom. The literature revealed that the shortage of health workers is a worldwide phenomenon that obstructs service delivery in many developing countries. It was highlighted that it is very difficult to control health workers' relocation and brain drains from developing countries to developed countries because of the push and pull factors. It was outlined that developed countries such as Canada, the UK, USA are brain-draining health workers, especially in Sub-Sahara Africa. Health workers are leaving their countries because of corrupt health systems due to war, corruption, poor working conditions and poor conditions of employment. Health workers are migrated to industrialised countries because of competitive remuneration packages and improved working conditions. The literature revealed that some countries, such as Australia and Switzerland, have increased the intake of medical students per year and opened new medical schools to increase the number of graduates yearly.

The information used to answer the research questions was gathered from secondary and primary sources. The secondary sources were; the Ministry of Health and Social Services strategic plans, annual reports, organizational structure, statistics for health personnel, advertisement of vacant positions, Office of the Auditor Generals' annual audit reports on the Health Ministry, Statutes, Policies and Regulations and academic papers. The primary sources were the employees of the Katutura Intermediate Hospital from departments and directorates that render health care services and human resources staff. The study employed a qualitative approach to deduce the data to realise the study's findings. The study opted for a descriptive design to organise and arrange data into patterns and themes during data analysis. The purposive sampling technique was used with the consideration that the sample of participants that were chosen had sufficient knowledge of the phenomenon under study. The key determinant factors of the suitability of the participants were the level of education, position, division, and length of employment in the Health and Social Services Ministry. The main focus was to ensure that all divisions that render health care services are represented, and this objective was achieved. The technique was preferred because of the specific information required to be described and maximized rather than generalising the information to the study population. The Ethical Committee approved the data collection after the approval was sought from the Permanent Secretary of the Ministry of Health and Social Services to conduct an empirical study in the Katutura Intermediate State Hospital. Empirical data were collected through one on one and focus group interviews. A semi-structured interview guide was utilised to deduce the information from the participants to answer the research questions.

The thematic data analysis technic was utilised to analyse the data. The data was analysed by categorizing, tabulating, examining and recombining it. The data with similarities or patterns were grouped into categories and cascaded into themes. The themes were drawn from the participant's responses, where similar keywords and phrasesrepeatedly appeared. The data were analysed systematically by identifying the themes, organising them in categories, then analysing them and reporting the research findings.

Moreover, this study is very significant in that it was conducted in the only national intermediate state hospital where patients require highly specialised medical care service are sent from all the regions in Namibia before they are transferred, if deemed so, to the only referral hospital in the country, Windhoek Central Hospital. This study is very important because it contains the correct and up-to-date findings, especially the organisational structure of the Katutura Intermediate State Hospital, shows the current status of the filled and vacant positions and the number of expatriates in the structure. It has also indicated the specialists available in the hospital, which is a good indicator of the shortage of health workers. This study is very useful for the Ministry of Health and Social Welfare to make economically viable decisions and plans for skills development for human resources for health. Scholars and research institutions may also find it valuable to their future research. The study is helpful to the private sector and other institutions to render healthcare services to plan their health workforce. Public universities and private institutions of high learning may find the study vital to the design and introduction of their new health-related academic programs and courses. Moreover, students who intend to pursue a medical career may also use the findings of this study to decide on the medical field to specialise in. This study will contribute to all stakeholders' national skills development for the health personnel.

The study found that the shortage of health workers in the Katutura Intermediate Hospital is certain. The respondents have acknowledged that the hospital has struggled with the shortage of health workers for many decades. The study confirmed this statement because many positions are vacant, as per the statistics provided by the Human Resources Division. Furthermore, it was highlighted that the Health Ministry recruited non-Namibian health workers to stabilize the exorbitant shortage of health workers. The study has established that non-Namibians fill highly specialised positions. This effort did not impact combating the shortage of health workers. It was also found that the Ministry is struggling to fill the vacant positions, especially the highly specialised posts because the Namibian labour market cannot supply these skills. The Labour market does not have these skills because they are not produced locally, and a few specialists of Namibians studied medicine.

The participants described that the shortage of health workers contributes to poor service delivery. The poor ratio of a nurse or doctor to a patient delays the provision of health care services. The service is not rendered on time and is insufficient due to exhaustion and fatigue because patients' queues are too long. Patients can be waiting for more than six to eight hours. Patients who need special medical attention may wait for more than six to twelve months due to the unavailability of a specialist or on a long waiting list. These are the results and findings of these studies that lead to the recommendations.

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APPENDICES

Appendix A: Semi-structured interview guide

SEMI-STRUCTURED INTERVIEW GUIDE ON THE SHORTAGE OF PUBLIC HEALTH WORKERS: A CASE STUDY UNDERTAKEN AT A SELECTED HOSPITAL IN WINDHOEK

a) Consent of the participants

Your consent to participate in this research study is hereby sought. The researcher assures you that this research study will not violate any rules or procedures of the institution under study. All information gathered will be treated with confidentiality. Participants' names or identity will not be linked to any research materials, and that they will not be identified in any report(s) that result from the research. Data collected will be solely used for educational purposes. It will not be fabricated or falsified to achieve a particular outcome. This research is independent and impartial, and will neither tarnish the image of the Namibian Government nor any institution or person by publishing controversial information. As a participant, you have the right to withdraw from the research process at any time without an explanation, reasons or prejudice.

In this study "health workers" means people who provide health services such as doctors (general practitioners & specialists), nurses, pharmacists, laboratory technicians, physiotherapists, radiologists, occupational therapists, pathologists, speech therapists, audiologists, etc.

Signature ***Date***

Researcher……. ……

Participant…… ……

a) Demographical information

1. Please indicate your gender.

Male [ ] Female [ ]

2. Please indicate your age

18 - 25	
26 – 35	
36 - 45	
46 – 65	
66 & above	

3. What is the highest level of education you have attained?

Grade 10	
Grade 12	
National Certificate	
National Diploma	
Bachelor's Degree	
Master's Degree	
PhD	

4. What is your position in the Ministry of Health and Social Services?

.....

5. Which Department/Directorate/Division are you working in the Ministry of Health and Social Services?

.....

6. Please indicate the length of time you have been employed by the Ministry of Health and Social Services:

Less than a year	
1 Year – 5 Years	
6 Years – 10 Years	
11 Years – 15 Years	
16 Years – 20 Years	
More than 20 Years	

b) Interview questions

Please give your personal view regarding the specific questions in this section:

7. Does a shortage of health workers exist at Katutura Intermediate Hospital at any time?

……

……

8. Do you think that the medical skills of staff at Katutura Intermediate Hospital, are at the level necessary (sufficient health skills) to fulfil the expected medical duties of the hospital?

……

……

9. Are the numbers of medical/health related workers that Namibia's training centres produce, adequate for the modern demands?

……

……

10. What do you think are the factors that contribute to the shortage (if any) of public sector health workers at the Katutura Intermediate Hospital?

……

……

11. Do you think Namibia has enough capacity in terms of infrastructure & human resources to produce enough medical/health related workers?

……

……

12. Are you aware of any plans in place that will address the shortage of health workers in Namibia? If so, please give details of your knowledge.

……

……

13. How long do you think it will take for the Namibian Ministry of Health and Social Services to achieve its objective for developing sufficient health skills for the country? Please explain your answer.

……

……

14. Are you aware of any foreign health workers employed by Katutura Intermediate Hospital? If so, where are they working and what is their role?

……

……

15. Why does Katutura Intermediate Hospital employ these foreign health workers?

……

……

16. Which are the areas of specialisation of the foreign health workers who are recruited by Katutura Intermediate Hospital? Why are they employed specifically in these areas?

……

……

17. What do you think are possible contributing factors to the shortage of health workers if there are any, at Katutura Intermediate Hospital?

……

……

18. In your own opinion, what do you think are the remedies or strategies to curb the current shortage of public health workers in Namibia?

……

……

19. In terms of numbers, what is the ratio of a health worker (eg. doctor, nurse, etc.) to patients?

Doctors:……..

Nurses:……

20. How many Namibian and foreign health workers (as per their specialisation, e.g. doctors, specialists, nurses, pharmacists, etc.) are working at Katutura Intermediate Hospital.

Field of specialisation	**Foreigners**	**Namibians**
Other specialised fields		

Thank you for your time.

ooOOoo

Appendix B: Recommendation to conduct the research

DEPARTMENT OF HUMAN RESOURCES MANAGEMENT
M-TECH: HUMAN RESOURCES MANAGEMENT

17 November 2015
TO WHOM IT MAY CONCERN

I am pleased to testify that Ms. Foibe Ndapewa Shilinge, Student number: 215224329, is studying towards a Masters' of Technology in Human Resource Management with the Cape Peninsula University of Technology.
I would like to confirm that Ms Shilinge completed her course work and will be expected to conduct a research study in partial fulfilment of the requirements for the M-Tech in Human Resource Management. She will be required to write a thesis on a relevant topic of her interest. Her topic is **"Shortage of public health workers: a case study of a selected hospital in Windhoek, Namibia."**

Through this interaction, I have come to know Ms Shilinge as an enthusiastic and hard-working student. Therefore, I have no doubts in stating that if should she be given an opportunity to conduct a research study within your institution, she will make a meaningful contribution to the further advancement of the environment around her by striving for higher professional standards.

With this information as a background, I recommend Ms Shilinge for any academic opportunity that may arise. Feel free to contact me for any further information you may require.
Faithfully,

Dr Braam Rust (Assoc. Prof)
Senior Lecturer
Faculty of Business & Management Sciences
Cape Peninsula University of Technology
PO Box 652
Cape Town, 8000
(W) 021-4603301
rustb@cput.ac.za
http://www.cput.ac.za

Appendix C: Approval letter from the Ministry of Health & Social Services

REPUBLIC OF NAMIBIA

Ministry of Health and Social Services

Private Bag 13198
Windhoek
Namibia

Ministerial Building
Harvey Street
Windhoek

Tel: 061 – 203 2510
Fax: 061 – 222558
E-mail: Ester.Shaama@mhss.gov.na

OFFICE OF THE PERMANENT SECRETARY

Ref: 17/3/3
Enquiries: Ms. E.N. Shaama

Date: 03rd June 2016

Ms. Foibe Ndapewa Shilinge
P.O. Box 96086
Windhoek
Namibia

Dear Ms. Shilinge

Re: Shortage of public sector health workers: A case study of a selected hospital in Windhoek, Namibia.

1. Reference is made to your application to conduct the above-mentioned study.
2. The proposal has been evaluated and found to have merit.
3. **Kindly be informed that permission to conduct the study has been granted under the following conditions:**

3.1 The data to be collected must only be used for completion of your Master of Technology in Human Resources;
3.2 No other data should be collected other than the data stated in the proposal;
3.3 Stipulated ethical considerations in the protocol related to the protection of Human Subjects' information should be observed and adhered to, any violation thereof will lead to termination of the study at any stage;
3.4 A quarterly report to be submitted to the Ministry's Research Unit;
3.5 Preliminary findings to be submitted upon completion of the study;
3.6 Final report to be submitted upon completion of the study;

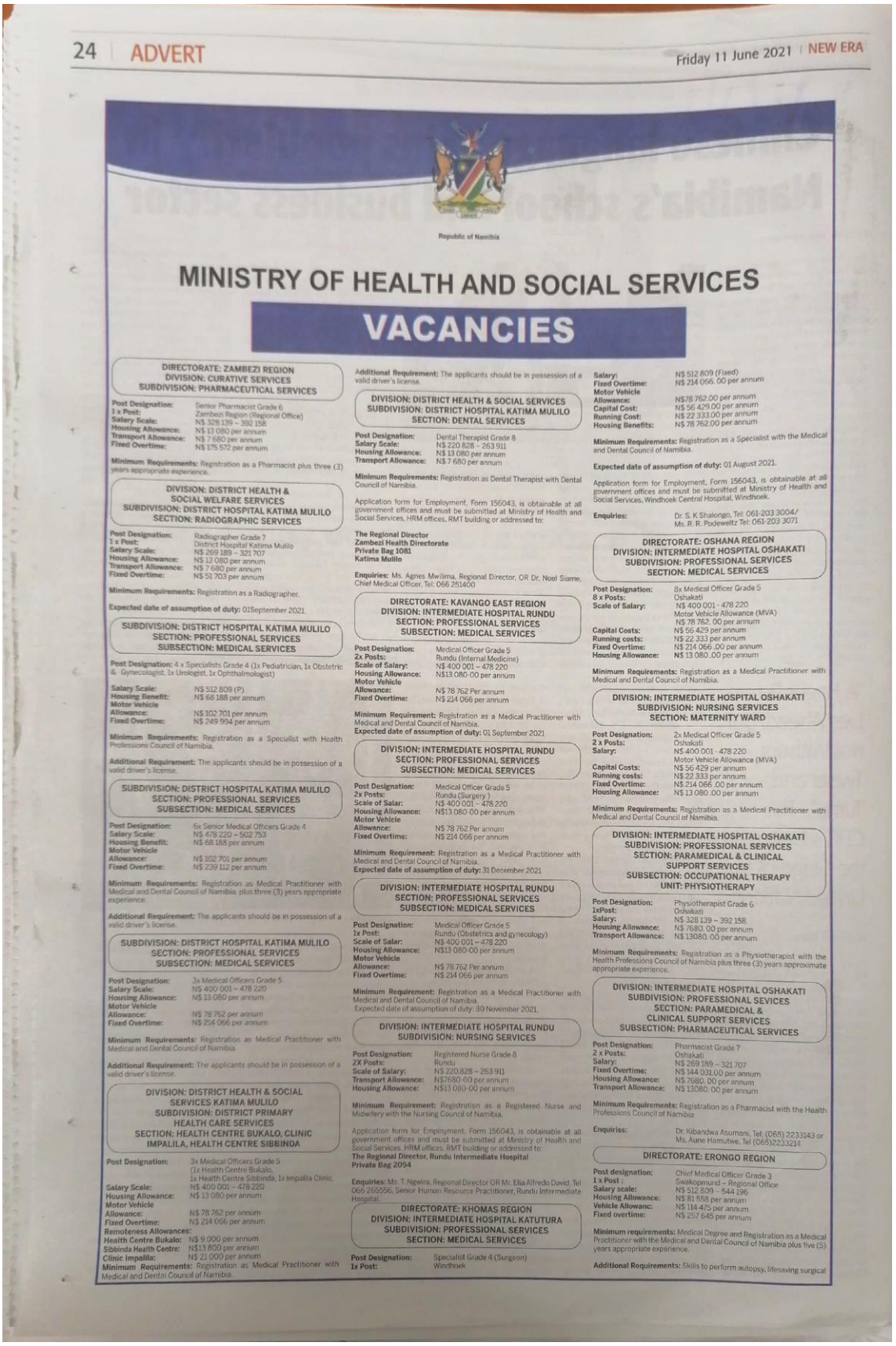
3.7 Separate permission should be sought from the Ministry of Health and Social Services for the publication of the findings.

Yours sincerely,

Andreas Mwoombola (Dr)
Permanent Secretary

"Health for All"

Appendix D: The advert for a vacancy in the Namibian Ministry of Health and Social Services



24 | ADVERT

Friday 11 June 2021 | NEW ERA

Republic of Namibia

MINISTRY OF HEALTH AND SOCIAL SERVICES

VACANCIES

DIRECTORATE: ZAMBEZI REGION
DIVISION: CURATIVE SERVICES
SUBDIVISION: PHARMACEUTICAL SERVICES

Post Designation: Senior Pharmacist Grade 6
1 x Post: Zambezi Region (Regional Office)
Salary Scale: N$ 328 139 – 392 158
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7 680 per annum
Fixed Overtime: N$ 175 572 per annum

Minimum Requirements: Registration as a Pharmacist plus three (3) years appropriate experience.

DIVISION: DISTRICT HEALTH & SOCIAL WELFARE SERVICES
SUBDIVISION: DISTRICT HOSPITAL KATIMA MULILO
SECTION: RADIOGRAPHIC SERVICES

Post Designation: Radiographer Grade 7
1 x Post: District Hospital Katima Mulilo
Salary Scale: N$ 269 189 – 321 707
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7 680 per annum
Fixed Overtime: N$ 51 703 per annum

Minimum Requirements: Registration as a Radiographer.

Expected date of assumption of duty: 01September 2021.

SUBDIVISION: DISTRICT HOSPITAL KATIMA MULILO
SECTION: PROFESSIONAL SERVICES
SUBSECTION: MEDICAL SERVICES

Post Designation: 4 x Specialists Grade 4 (1x Pediatrician, 1x Obstetric & Gynecologist, 1x Urologist, 1x Ophthalmologist)

Salary Scale: N$ 512 809 (P)
Housing Benefit: N$ 68 188 per annum
Motor Vehicle Allowance: N$ 102 701 per annum
Fixed Overtime: N$ 249 994 per annum

Minimum Requirements: Registration as a Specialist with Health Professions Council of Namibia.

Additional Requirement: The applicants should be in possession of a valid driver's license.

SUBDIVISION: DISTRICT HOSPITAL KATIMA MULILO
SECTION: PROFESSIONAL SERVICES
SUBSECTION: MEDICAL SERVICES

Post Designation: 6x Senior Medical Officers Grade 4
Salary Scale: N$ 478 220 – 502 753
Housing Benefit: N$ 68 188 per annum
Motor Vehicle Allowance: N$ 102 701 per annum
Fixed Overtime: N$ 239 112 per annum

Minimum Requirements: Registration as Medical Practitioner with Medical and Dental Council of Namibia. plus three (3) years appropriate experience.

Additional Requirement: The applicants should be in possession of a valid driver's license.

SUBDIVISION: DISTRICT HOSPITAL KATIMA MULILO
SECTION: PROFESSIONAL SERVICES
SUBSECTION: MEDICAL SERVICES

Post Designation: 3x Medical Officers Grade 5
Salary Scale: N$ 400 001 – 478 220
Housing Allowance: N$ 13 080 per annum
Motor Vehicle Allowance: N$ 78 762 per annum
Fixed Overtime: N$ 214 066 per annum

Minimum Requirements: Registration as Medical Practitioner with Medical and Dental Council of Namibia.

Additional Requirement: The applicants should be in possession of a valid driver's license.

DIVISION: DISTRICT HEALTH & SOCIAL SERVICES KATIMA MULILO
SUBDIVISION: DISTRICT PRIMARY HEALTH CARE SERVICES
SECTION: HEALTH CENTRE BUKALO, CLINIC IMPALILA, HEALTH CENTRE SIBBINDA

Post Designation: 3x Medical Officers Grade 5 (1x Health Centre Bukalo, 1x Health Centre Sibbinda, 1x Impalila Clinic)
Salary Scale: N$ 400 001 – 478 220
Housing Allowance: N$ 13 080 per annum
Motor Vehicle Allowance: N$ 78 762 per annum
Fixed Overtime: N$ 214 066 per annum
Remoteness Allowances:
Health Centre Bukalo: N$ 9 000 per annum
Sibbinda Health Centre: N$13 800 per annum
Clinic Impalila: N$ 21 000 per annum
Minimum Requirements: Registration as Medical Practitioner with Medical and Dental Council of Namibia.

Additional Requirement: The applicants should be in possession of a valid driver's license.

DIVISION: DISTRICT HEALTH & SOCIAL SERVICES
SUBDIVISION: DISTRICT HOSPITAL KATIMA MULILO
SECTION: DENTAL SERVICES

Post Designation: Dental Therapist Grade 8
Salary Scale: N$ 220 828 – 263 911
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7 680 per annum

Minimum Requirements: Registration as Dental Therapist with Dental Council of Namibia.

Application form for Employment, Form 156043, is obtainable at all government offices and must be submitted at Ministry of Health and Social Services, HRM offices, RMT building or addressed to:

The Regional Director
Zambezi Health Directorate
Private Bag 1081
Katima Mulilo

Enquiries: Ms. Agnes Mwilima, Regional Director, OR Dr. Noel Siame, Chief Medical Officer, Tel: 066 251400

DIRECTORATE: KAVANGO EAST REGION
DIVISION: INTERMEDIATE HOSPITAL RUNDU
SECTION: PROFESSIONAL SERVICES
SUBSECTION: MEDICAL SERVICES

Post Designation: Medical Officer Grade 5
2x Posts: Rundu (Internal Medicine)
Scale of Salary: N$ 400 001 – 478 220
Housing Allowance: N$13 080-00 per annum
Motor Vehicle Allowance: N$ 78 762 Per annum
Fixed Overtime: N$ 214 066 per annum

Minimum Requirement: Registration as a Medical Practitioner with Medical and Dental Council of Namibia.
Expected date of assumption of duty: 01 September 2021

DIVISION: INTERMEDIATE HOSPITAL RUNDU
SECTION: PROFESSIONAL SERVICES
SUBSECTION: MEDICAL SERVICES

Post Designation: Medical Officer Grade 5
2x Posts: Rundu (Surgery)
Scale of Salar: N$ 400 001 – 478 220
Housing Allowance: N$13 080-00 per annum
Motor Vehicle Allowance: N$ 78 762 Per annum
Fixed Overtime: N$ 214 066 per annum

Minimum Requirement: Registration as a Medical Practitioner with Medical and Dental Council of Namibia.
Expected date of assumption of duty: 31 December 2021

DIVISION: INTERMEDIATE HOSPITAL RUNDU
SECTION: PROFESSIONAL SERVICES
SUBSECTION: MEDICAL SERVICES

Post Designation: Medical Officer Grade 5
1x Post: Rundu (Obstetrics and gynecology)
Scale of Salar: N$ 400 001 – 478 220
Housing Allowance: N$13 080-00 per annum
Motor Vehicle Allowance: N$ 78 762 Per annum
Fixed Overtime: N$ 214 066 per annum

Minimum Requirement: Registration as a Medical Practitioner with Medical and Dental Council of Namibia.
Expected date of assumption of duty: 30 November 2021.

DIVISION: INTERMEDIATE HOSPITAL RUNDU
SUBDIVISION: NURSING SERVICES

Post Designation: Registered Nurse Grade 8
2X Posts: Rundu
Scale of Salary: N$ 220 828 – 263 911
Transport Allowance: N$7680-00 per annum
Housing Allowance: N$13 080-00 per annum

Minimum Requirement: Registration as a Registered Nurse and Midwifery with the Nursing Council of Namibia.

Application form for Employment, Form 156043, is obtainable at all government offices and must be submitted at Ministry of Health and Social Services, HRM offices, RMT building or addressed to:
The Regional Director, Rundu Intermediate Hospital
Private Bag 2094

Enquiries: Ms. T. Ngwira, Regional Director OR Mr. Elia Alfredo David, Tel 066 265556, Senior Human Resource Practitioner, Rundu Intermediate Hospital.

DIRECTORATE: KHOMAS REGION
DIVISION: INTERMEDIATE HOSPITAL KATUTURA
SUBDIVISION: PROFESSIONAL SERVICES
SECTION: MEDICAL SERVICES

Post Designation: Specialist Grade 4 (Surgeon)
1x Post: Windhoek
Salary: N$ 512 809 (Fixed)
Fixed Overtime: N$ 214 066. 00 per annum
Motor Vehicle Allowance: N$78 762.00 per annum
Capital Cost: N$ 56 429.00 per annum
Running Cost: N$ 22 333.00 per annum
Housing Benefits: N$ 78 762.00 per annum

Minimum Requirements: Registration as a Specialist with the Medical and Dental Council of Namibia.

Expected date of assumption of duty: 01 August 2021.

Application form for Employment, Form 156043, is obtainable at all government offices and must be submitted at Ministry of Health and Social Services, Windhoek Central Hospital, Windhoek.

Enquiries: Dr. S. K.Shalongo, Tel: 061-203 3004/
Ms. R. R. Podeweltz Tel: 061-203 3071

DIRECTORATE: OSHANA REGION
DIVISION: INTERMEDIATE HOSPITAL OSHAKATI
SUBDIVISION: PROFESSIONAL SERVICES
SECTION: MEDICAL SERVICES

Post Designation: 8x Medical Officer Grade 5
8 x Posts: Oshakati
Scale of Salary: N$ 400 001 - 478 220
Motor Vehicle Allowance (MVA)
N$ 78 762. 00 per annum
Capital Costs: N$ 56 429 per annum
Running costs: N$ 22 333 per annum
Fixed Overtime: N$ 214 066 .00 per annum
Housing Allowance: N$ 13 080 .00 per annum

Minimum Requirements: Registration as a Medical Practitioner with Medical and Dental Council of Namibia.

DIVISION: INTERMEDIATE HOSPITAL OSHAKATI
SUBDIVISION: NURSING SERVICES
SECTION: MATERNITY WARD

Post Designation: 2x Medical Officer Grade 5
2 x Posts: Oshakati
Salary: N$ 400 001 - 478 220
Motor Vehicle Allowance (MVA)
Capital Costs: N$ 56 429 per annum
Running costs: N$ 22 333 per annum
Fixed Overtime: N$ 214 066 .00 per annum
Housing Allowance: N$ 13 080 .00 per annum

Minimum Requirements: Registration as a Medical Practitioner with Medical and Dental Council of Namibia.

DIVISION: INTERMEDIATE HOSPITAL OSHAKATI
SUBDIVISION: PROFESSIONAL SERVICES
SECTION: PARAMEDICAL & CLINICAL SUPPORT SERVICES
SUBSECTION: OCCUPATIONAL THERAPY
UNIT: PHYSIOTHERAPY

Post Designation: Physiotherapist Grade 6
1xPost: Oshakati
Salary: N$ 328 139 – 392 158
Housing Allowance: N$ 7680. 00 per annum
Transport Allowance: N$ 13080. 00 per annum

Minimum Requirements: Registration as a Physiotherapist with the Health Professions Council of Namibia plus three (3) years approximate appropriate experience.

DIVISION: INTERMEDIATE HOSPITAL OSHAKATI
SUBDIVISION: PROFESSIONAL SEVICES
SECTION: PARAMEDICAL & CLINICAL SUPPORT SERVICES
SUBSECTION: PHARMACEUTICAL SERVICES

Post Designation: Pharmacist Grade 7
2 x Posts: Oshakati
Salary: N$ 269 189 – 321 707
Fixed Overtime: N$ 144 031.00 per annum
Housing Allowance: N$ 7680. 00 per annum
Transport Allowance: N$ 13080. 00 per annum

Minimum Requirements: Registration as a Pharmacist with the Health Professions Council of Namibia

Enquiries: Dr. Kibandwa Asumani, Tel: (065) 223314 3 or
Ms. Aune Hamutwe, Tel (065)223 3214

DIRECTORATE: ERONGO REGION

Post designation: Chief Medical Officer Grade 3
1 x Post : Swakopmund – Regional Office
Salary scale: N$ 512 809 – 544 196
Housing Allowance: N$ 81 558 per annum
Vehicle Allowanc: N$ 114 475 per annum
Fixed overtime: N$ 257 645 per annum

Minimum requirements: Medical Degree and Registration as a Medical Practitioner with the Medical and Dental Council of Namibia plus five (5) years appropriate experience.

Additional Requirements: Skills to perform autopsy, lifesaving surgical

procedures and/or anesthesia. Postgraduate qualification in Public Health, Management of Health Systems or Health related field.

DIRECTORATE: ERONGO REGION
DIVISION: DISTRICT HEALTH & SOCIAL SERVICES
SUBDIVISION: DISTRICT HOSPITAL
WALVIS BAY & OMARURU
SECTION: OCCUPATIONAL THERAPHY

Post Designation: Occupational Therapist Grade 7
2 X Posts: 1x Walvis Bay, 1x Omaruru
Scale Salary: N$269 189 – 321 707
Housing Allowance: N$13 080 per annum
Transport Allowance: N$7 680 per annum

Minimum Requirements: Registration as an Occupational Therapist with Health Professional Council of Namibia (HPCNA).

Application form for Employment, Form 156043, is obtainable at all government offices and must be submitted at Ministry of Health and Social Services, HRM offices, RMT building or addressed to: The Regional Director, Erongo Region, Private Bag 5004, Swakopmund.

Enquiries: Ms. Anna Jonas- Tel no. 064- 4106111 or Ms. Frieda Ilungu, Senior Human Resource Practitioner, Tel: 064- 410600

DIRECTORATE: KAVANGO EAST REGION

Post Designation: Chief Medical Officer, Grade 3
1 Post: Rundu – Regional Office
Scale of Salary: N$ 512 809 – 544 196
Fixed Overtime: N$ 257 645 per annum
Housing Benefit: N$ 81 554 per annum
Motor Vehicle Allowance: N$ 114 475 per annum

Minimum Requirement: Degree in Medicine and registration as a Medical Practitioner with the Medical and Dental Council of Namibia plus five (5) years appropriate Experience. Must have a driver's license and must be Computer literate.

Additional Requirement: Ability to perform basic Emergency surgeries including caesarean section, Anesthesia and carry out autopsies.

DIVISION: DISTRICT HEALTH AND SOCIAL WELFARE SERVICES
SUBDIVISION: DISTRICT HOSPITAL RUNDU
SECTION: PROFESSIONAL SERVICES
SUBSECTION: MEDICAL SERVICES

Post Designation: Senior Medical Officer Grade 4
1 Post: Rundu
Scale of Salary: N$ 478 220 – 502 753
Fixed Overtime: N$ 239 112 per annum
Housing Benefit: N$ 68 188 per annum
Motor Vehicle Allowance: N$ 102 701 per annum

Minimum Requirement: Degree in Medicine and registration as a Medical Practitioner with the Medical and Dental Council of Namibia plus three (3) years appropriate experience. Must have a driver's license and must be Computer literate.

DIVISION: CURATIVE SERVICES
SUBDIVISION: PHARMACEUTICALS SERVICES

Post Designation: Chief Pharmacist Grade 5
1 Post: RMT - Rundu
Scale of Salary: N$ 400 001 – 478 220
Fixed Overtime: N$ 214 066 per annum
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7 680 per anuum

Minimum Requirement: Bachelor in Pharmacy Degree and registration with the Allied Health Professions Council of Namibia plus five (5) years appropriate experience.

Additional Requirements: Certificate in supply Management and logistics. Must have the knowledge in Inventory Management and experience in using the National PMIS Dashboard as well as the Inventory Management software (SYSPRO). Must be computer literate
Expected date of assumption of duty: 01 January 2022

DIVISION: MULTI- REGIONAL MEDICAL DEPOT, RUNDU

Post Designation: Senior Pharmacist, Grade 6
1 Post: Medical Depot - Rundu
Scale of Salary: N$ 328 139 – 392 158
Fixed Overtime: N$ 175 572 per annum
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7 680 per annum

Minimum Requirement: Bachelor in Pharmacy Degree and registration with the Allied Health Professions Council of Namibia.

Additional requirements: Three (3) years appropriate experience. Must have experience in warehousing, Inventory Stock Management and SYSPRO. Must be Computer literate.
Expected date of assumption of duty: 10 November 2021.

DIRECTORATE: KAVANGO EAST REGION
DIVISION: MULTI- REGIONAL MEDICAL DEPOT, RUNDU

Post Designation: Pharmacist, Grade 7
1 Post: Medical Depot - Rundu
Scale of Salary: N$ 269 189 – 321 707
Fixed Overtime: N$ 144 031 per annum
Housing Allowance: N$ 13 080 per annum

Minimum Requirement: Bachelor in Pharmacy Degree and registration with the Allied Health Professions Council of Namibia.
Additional requirements: must be Computer literate.

Application form for Employment, Form 156043, is obtainable at all government offices and must be submitted at Ministry of Health and Social Services, HRM offices, RMT building or addressed to:

The Regional Director, Ministry of Health and Social Services
Kavango Region, Private Bag 2094, Rundu
Enquiries: Ms. Timea Ngwira, Regional Director, Tel: 066 – 265 504

DIRECTORATE: OSHIKOTO REGION

Post Designation: Chief Medical Officer Grade 3
1 x Post: Omuthiya – Regional Office
Salary Scale: N$512, 809– 544 196
Housing Benefit: N$81,558 per annum
Fixed Overtime: N$ 257 645 per annum
Motor Vehicle Allowance: N$114,475 per annum

Minimum Requirements: A Medical Degree and Registration as a Medical Practitioner with the Medical and Dental Council of Namibia plus six (6) years appropriate experience. Candidates should be in possession of a valid Driver's License.

Additional Requirements: Minimum two (2) years leadership and management experience of a District Health Service or similar institution. Skills in information technology and computers, especially word processing, spreadsheets and internet will be an added advantage.

DIVISION: CURATIVE SERVICES
SUBDIVISION: PHARMACEUTICAL SERVICES

Post Designation: Senior Pharmacist, Grade 6
1 Post: Omuthiya
Scale of Salary: N$ 328 139 – 392 158
Fixed Overtime: N$ 175 572 per annum
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7 680 per annum

Minimum Requirements: Registration as Pharmacist with the Namibian Health Professions Council of Namibia plus three (3) years of pharmacy practice after internship.

Additional requirements: Practice at the hospital/District will be an added advantage.

DIVISION: REHABILITATION & SOCIAL WELFARE SERVICES
SUBDIVISION: REHABILITATION

Post Designation: Senior Physiotherapist Grade 6
1x Post: Omuthiya
Salary scale: N$ 328 139 – 392 158
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7 680 per annum

Minimum requirements: A Degree in Physiotherapist. Registration as a Physiotherapist with the Health Professions Council of Namibia plus three (3) years of clinical experience.

Additional requirements: Must have worked in a clinical setting with clinical, supervisory and administrative skills. Must have excellent organizational skills and ability to work in a team, empathetic and firm. Stress management skills and emotional intelligent. Monitoring and evaluation skills.

Enquiries: Mr. Josua Nghipangelwa, Regional Director, Tel:0811497682 OR Ms. E. N.E. Negongo, Tel No: 0812135157

Application form for Employment, Form 156043, is obtainable at all government offices and must be submitted at Ministry of Health and Social Services, HRM offices, RMT building or addressed to: The Regional Director, Oshikoto Region, Private Bag 4005, Omuthiya.

DIRECTORATE: OTJOZONDJUPA REGION
DIVISION: CURATIVE SERVICES
SUBDIVISION: DENTAL SERVICES
SECTION: MULTI-REGIONAL DENTAL SERVICES

Post Designation: Dentist Grade 5
1 x Post: Otjiwarongo
Salary Scale: N$ 400 001 – 478 220
Fixed overtime: N$ 196 391 per annum
Motor Vehicle Allowance: N$ 75 070 per annum
Housing Allowance: N$ 13 080 per annum

Minimum Requirements: Registration as Dentist with the Medical and Dental Council of Namibia.
Expected date of assumption of duty: 30 September 2021

DIVISION: REHABILITATION & SOCIAL WELFARE SERVICES
SUBDIVISION: REHABILITATION

Post Designation: Senior Physiotherapist Grade 6
1 x Post: Otjiwarongo
Salary Scale: N$ 328 139 – 392 158
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7 680 per annum

Minimum Requirements: Registration as a Physiotherapist with the relevant Health Professions Council of Namibia.
Expected date of assumption of duty: 17 January 2022

DIVISION: CURATIVE SERVICES
SUBDIVISION: DENTAL SERVICES
SECTION: MULTI-REGIONAL DENTAL SERVICES

Post Designation: Dental Therapist Grade 8
1 x Post: Otjiwarongo
Salary Scale: N$ 220 828 – 263 911
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7 680 per annum

Minimum Requirements: Registration as Dental Therapist with the Medical and Dental Council of Namibia.
Expected date of assumption of duty: 17 February 2022

DIVISION: DISTRICT HEALTH & SOCIAL WELFARE SERVICES OKAKARARA

Post Designationn: Senior Medical Officer Grade 4
1 x Post: Okakarara
Salary Scale: N$ 478 220 – 502 753
Fixed overtime: N$ 239 112 per annum
Motor Vehicle Allowance: N$ 102 701 per annum
Housing Benefit: N$ 63 137 per annum

Minimum Requirements: Medical Degree and Registration as a Medical Practitioner with the Medical and Dental Council of Namibia plus three (3) years appropriate experience and a valid Driver's licence.

Additional Requirements: General Health Management post qualification and skills. Ability to perform intermediate emergency surgeries, Be able to administer General Anesthesia, Computer Literacy.
Expected date of assumption of duty: 08 January 2022

SECTION: PROFESSIONAL SERVICES
SUBSECTION PARAMEDIC &
CLINICAL SUPPORT SERVICES
COMPONENT: PHARMACEUTICAL SERVICES

Post Designation: Pharmacist Grade 7
1 x Post: Okakarara
Salary: N$ 269 189 – 321 707
Fixed Overtime: N$ 144 031.00 per annum
Housing Allowance: N$ 7680. 00 per annum
Transport Allowance: N$ 13080. 00 per annum

Minimum Requirements: Registration as a Pharmacist with the Health Professions Council of Namibia
Expected date of assumption of duty: 17 March 2022

SUBDIVISION: DISTRICT HOSPITAL OKAHANDJA
SECTION: PROFESSIONAL SERVICES
SUBSECTION: MEDICAL SERVICES

Post Designation: Medical Officer Grade 5
2 x Posts: Okahandja
Salary Scale: N$ 400 001 – 478 220
Fixed overtime: N$ 214 066 per annum
Motor Vehicle Allowance: N$ 78 762 per annum
Housing Allowance: N$ 13 080 per annum

Minimum Requirements: Medical Degree and Registration as a Medical Practitioner with the Medical and Dental Council of Namibia. Must have a valid Driver's licence

DIVISION: DISTRICT HEALTH & SOCIAL WELFARE SERVICES OKAHANDJA

Post Designation: Senior Medical Officer Grade 4
1 x Post: Okahandja
Salary Scale: N$ 478 220 – 502 753
Fixed overtime: N$ 239 112 per annum
Motor Vehicle Allowance: N$ 102 701 per annum
Housing Benefit: N$ 63 137 per annum

Minimum Requirements: Medical Degree and Registration as a Medical Practitioner with the Medical and Dental Council of Namibia plus three (3) years appropriate experience and a valid Driver's licence.

Additional Requirements: General Health Management post qualification and skills. Ability to perform intermediate emergency surgeries, Be able to administer General Anesthesia , Computer Literacy
Expected date of assumption of duty: 24 January 2022

DIVISION: DISTRICT HEALTH & SOCIAL WELFARE SERVICES GROOTFONTEIN

Post Designation: Senior Medical Officer Grade 4
1 x Post: Grootfontein
Salary Scale: N$ 478 220 – 502 753
Fixed overtime: N$ 239 112 per annum
Motor Vehicle Allowance: N$ 102 701 per annum
Housing Benefit: N$ 63 137 per annum

Minimum Requirements: Medical Degree and Registration as a Medical Practitioner with the Medical and Dental Council of Namibia plus three (3) years appropriate experience and a valid Driver's licence.

Additional Requirements: General Health Management post qualification and skills. Ability to perform intermediate emergency surgeries, Be able to administer General Anesthesia, Computer Literacy

SUBDIVISION: DISTRICT HOSPITAL OTJIWARONGO
SECTION: PROFESSIONAL SERVICES
SUBSECTION: MEDICAL SERVICES

Post Designation: Medical Officer Grade 5
1 x Post: Otjiwarongo
Salary Scale: N$ 400 001 – 478 220
Fixed overtime: N$ 214 066 per annum
Motor Vehicle Allowance: N$ 78 762 per annum
Housing Allowance: N$ 13 080 per annum

Minimum Requirements: Medical Degree and Registration as a Medical Practitioner with the Medical and Dental Council of Namibia. Must have a valid Driver's licence

Enquiries: Mr. Gebhardo S. Timotheus, Regional Director, Tel: 067- 300800 or Mr. Abraham Swartz, Chief Human Resource Practitioner, Tel: 067- 3009045

Applications should be addressed to: The Regional Director, Otjozondjupa Region, Private Bag 2612, Otjiwarongo

DIRECTORATE: OMUSATI REGION
DIVISION: DISTRICT HEALTH AND SOCIAL SERVICES: OUTAPI

POST DESIGNATION: Senior Medical Officer Grade 4
1 X POST: Outapi District Hospital
SALARY SCALE: N$ 478 220 – 502 753
MOTOR VEHICLE ALLOWANCE: N$ 102 701 per annum
HOUSING BENEFIT: N$ 68 188 per annum
FIXED OVERTIME: N$ 239 112 per annum

MINIMUM REQUIREMENTS: Registration as a Medical Practitioner with Medical and Dental Council of Namibia plus three (3) years appropriate experience as Medical Practitioner.

DIVISION: DISTRICT HEALTH AND SOCIAL SERVICES: OKAHAO, OUTAPI AND TSANDI
SUBDIVISION: DISTRICT HOSPITAL OKAHAO, OUTAPI AND TSANDI
SECTION: PROFESSIONAL SERVICES
SUBSECTION: MEDICAL SERVICES

Post designation: Medical Officer Grade 5
5 x Posts: 2x Outapi, 1x Okahao and 2xTsandi
Salary Scale: N$ 400 001 – 478 220
Housing allowance: N$ 13 080.00 per annum
Motor Vehicle Allowance: N$ 78 762 per annum
Fixed Overtime: N$ 214 066 per annum

Minimum requirements: Registration as Medical Practitioner with Medical and Dental Council of Namibia

DIVISION: DISTRICT HEALTH AND SOCIAL SERVICES: OKAHAO SUBDIVISION: DISTRICT HOSPITAL OKAHAO SECTION: PROFESSIONAL SERVICES SUBSECTION: MEDICAL SERVICES

Post designation: Medical Officer Grade 5
Post: Okahao
Salary Scale: N$ 400 001 – 478 220
Housing allowance: N$ 13 080.00 per annum
Motor Vehicle Allowance: N$ 78 762 per annum
Fixed Overtime: N$ 214 066 per annum

Minimum requirements: Registration as Medical Practitioner with Medical and Dental Council of Namibia

Expected date of assumption of duty: 01 September 2021

DIVISION: DISTRICT HEALTH AND SOCIAL SERVICES: OSHIKUKU SUBDIVISION: DISTRICT PRIMARY HEALTH CARE SECTION: HEALTH CENTRE OKALONGO

Post designation: Medical Officer Grade 5
1 x Post: Okalongo
Salary Scale: N$ 400 001 – 478 220
Housing allowance: N$ 13 080.00 per annum
Motor Vehicle Allowance: N$ 78 762 per annum
Fixed Overtime: N$ 214 066 per annum

Minimum requirements: Registration as Medical Practitioner with Medical and Dental Council of Namibia

DIVISION: DISTRICT HEALTH AND SOCIAL SERVICES: TSANDI SUBDIVISION: DISTRICT PRIMARY HEALTH CARE SECTION: HEALTH CENTRE ONESI

Post designation: Medical Officer Grade 5
1 x Post: Onesi
Salary Scale: N$ 400 001 – 478 220
Housing allowance: N$ 13 080.00 per annum
Motor Vehicle Allowance: N$ 78 762 per annum
Fixed Overtime: N$ 214 066 per annum

Minimum requirements: Registration as Medical Practitioner with Medical and Dental Council of Namibia

DIVISION: DISTRICT HEALTH AND SOCIAL SERVICES: OUTAPI, OKAHAO, OSHIKUKU AND TSANDI SUBDIVISION: DISTRICT PRIMARY HEALTH CARE

Post designation: Registered Nurse Grade 8
11 x Post: 1x Engolo, 1x Onamandongo, 1x Ilpandayamiti, 1x Amarika, 1x Omakange, 1x Odimbwa, 1x Okafhitu, 1x Oshaala, 1x Indira Gandhi, 1x Onesi and 1x Okalongo
Salary Scale: N$ 220 828 – 263 911
Housing allowance: N$ 13 080.00 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum requirements: Registration as Registered Nurse with Nursing Council of Namibia

DIRECTORATE: OMUSATI REGION DIVISION: DISTRICT HEALTH AND SOCIAL SERVICES: OUTAPI, OKAHAO, OSHIKUKU AND TSANDI SUBDIVISION: DISTRICT PRIMARY HEALTH CARE

Post designation: Enrolled Nurse Grade 10
10 x Posts: 1x Onamandongo, 1x Amarika, 1x Onamatanga, 1x Olutsiidhii, 1x Onheleiwa, 1x Oshaala, 1x Indira Gandhi, 1x Onesi, 1x Onheleiwa and 1x Okalongo
Salary Scale: N$ 147 485 – 176 895
Housing allowance: N$ 10 464.00 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum requirements: A Grade 12 (or equivalent) Certificate (NQF Level 3) plus enrolment as Enrolled Nurse at the Nursing Council of Namibia.

DIVISION: DISTRICT HEALTH AND SOCIAL SERVICES: OKAHAO, OSHIKUKU AND TSANDI SUBDIVISION: DISTRICT PRIMARY HEALTH CARE SERVICES SECTION: HEALTH CENTRE OKALONGO, ONESI AND INDIRA GANDHI

Post designation: Senior Registered Nurse Grade 7
3 x Posts: 1x Indira Gandhi, 1x Onesi and 1x Okalongo
Salary Scale: N$ 269 189 – 321 707
Housing allowance: N$ 13 080.00 per annum
Transport Allowance: N$ 7680.00 per annum
Remoteness Allowance: N$ 9000.00 per annum

Minimum requirements: Registration as Registered Nurse with Nursing Council of Namibia plus three (3) years working experience. Confirmation for probation as Registered Nurse must be attached for the Namibians and Public Servants.

DIVISION: DISTRICT HEALTH AND SOCIAL SERVICES: TSANDI SUBDIVISION: SOCIAL WELFARE SERVICES

Post designation: Senior Social Worker Grade 7
1 x Post: Tsandi
Salary Scale: N$ 269 189 – 321 707
Housing allowance: N$ 13 080.00 per annum
Transport Allowance: N$ 7680.00 per annum
Remoteness Allowance: N$ 9000.00 per anuum

Minimum requirements: A Bachelor of Arts in Social Work and registration as Social Worker with Social Worker and Psychology Council of Namibia plus five (5) years experience. Confirmation of probation as a Social Worker must be attached.

DIVISION: DISTRICT HEALTH AND SOCIAL SERVICES: TSANDI SUBDIVISION: DISTRICT HOSPITAL TSANDI, OUTAPI AND OKAHAO SECTION: PROFESSIONAL SERVICES SUBSECTION: PHARMACEUTICAL SERVICES

Post designation: Pharmacist Grade 7
7 x Posts: 2x Tsandi, 3x Okahao, 2x Outapi
Salary Scale: N$ 269 189 – 321 707
Housing allowance: N$ 13 080.00 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum requirements: Registration as Pharmacist with Health Professional Council of Namibia

Enquiries: Ms. Monika Shilunga or Ms. Paulina N. Amalovu at Tel 065- 251812/252810

Application for employment must be submitted to:
THE REGIONAL DIRECTOR,
MINISTRY OF HEALTH AND SOCIAL SERVICES
OMUSATI REGION, PRIVATE BAG 504, OUTAPI

DIRECTORATE: OSHANA REGION DIVISION: DISTRICT PRIMARY HEALTH CARE SECTION: HEALTH CENTRE: OU - NICK

Post Designation: Medical Officer Grade 5
1x Post: Health Centre: Ou - Nick
Salary Scale: N$ 400 001 – 478 220
Housing Allowance: N$ 130 80. 00 per annum
Fixed Overtime: N$ 214 066.00 per annum
Motor Vehicle Allowance:
Capital costs: N$ 56 429.00 per annum
Running costs: N$ 22 333.00 per annum

MINIMUM REQUIREMENTS: Registered as a Medical Practitioner with the Medical and Dental Council of Namibia.

DIRECTORATE: OSHANA REGION

POST DESIGNATION: Chief Medical Officer Grade 3
ONE POST: Oshakati
SALARY SCALE: N$ 512 809 – 544 196
HOUSING BENEFIT: N$ 81 558. 00 per annum
FIXED OVERTIME: N$ 257 645.00 per annum
MOTOR VEHICLE ALLOWANCE:
Capital costs: N$ 87 202.00 per annum
Running costs: N$ 27 273.00 per annum
Total allowance: N$ 114 475.00 per annum

MINIMUM REQUIREMENTS: Registration as a Medical Practitioner with the Medical and Dental Council of Namibia plus 4 years appropriate experience.

Address: The Regional Director, Private Bag 5538, Oshana Region, Oshakati

Enquiries: Ms. Serafina N. Mhinge / Ms. Kristofina Shingo Tel: 065 - 2233153

DIRECTORATE: OHANGWENA REGION

Post Designation: Chief Medical Officer Grade 3
1x Post: Eenhana - Regional Office
Salary Scale: N$ 512 809 – 544 196
Motor Vehicle Allowance: N$ 114 475.00 per annum
Housing Benefit: N$ 81 558.00 per annum
Fixed Overtime: N$ 257 645.00 per annum

Minimum Requirement: Degree in Medicine and Registration as Medical Practitioner with the Medical and Dental Council of Namibia.

Additional Requirement: Six (6) years appropriate experience in the area of Health on Management level.
Expected date of assumption of duty: 17 February 2022

DIVISION: DISTRICT HEALTH AND SOCIAL WELFARE SERVICES: OKONGO SUBDIVISION: DISTRICT HOSPITAL OKONGO SECTION: PROFESSIONAL SERVICES SUBSECTION: MEDICAL SERVICES

Post Designation: Senior Medical Officer Grade 4
1x Post: Okongo
SalaryScale: N$ 478 220 – 502 753
Motor Vehicle Allowance: N$ 102 701.00 pa
Housing Benefit: N$ 68 188. 00 per annum
Remoteness & Hardship: N$ 21 000.00 per annum
Fixed Overtime: N$ 239 112.00 per annum

Minimum Requirement: Degree in Medicine and Registration as Medical Practitioner with the Medical and Dental Council of Namibia.

Additional Requirement: Three (3) years experience in the area of Health: Surgical/Anesthesia skills and Health Management experience
Expected date of assumption of duty: 01 February 2022.

DIVISION: REHABILITATION AND SOCIAL WELFARE SERVICES SUBDIVISION: REHABILITATION

Post Designation: Senior Physiotherapist Grade 6
No of Post: Eenhana RMT
Salary Scale: N$ 328 139 – 392 158
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum Requirements: Registration as a Physiotherapist with the relevant Health Professions Council of Namibia.

Additional Requirement: Three (3) years appropriate experience.

Expected date of assumption of duty: 01 December 2021.

DIVISION: DISTRICT HEALTH AND SOCIAL WELFARE SERVICES: ENGELA SUBDIVISION: DISTRICT HOSPITAL ENGELA SECTION: PROFESSIONAL SERVICES SUBSECTION: PHARMACEAUTICAL SERVICES

Post Designation: Pharmacist Grade 7
3x Posts: Engela
Salary Scale: N$ 269 189 – 321 707
Transport Allowance: N$ 7 680.00 per annum
Housing Allowance: N$ 13 080.00 per annum
Fixed Overtime: N$ 144 031.00 per annum

Minimum Requirement: Registration as Pharmacist with the Medical and Dental Council of Namibia.
Expected date of assumption of duty: 01 February 2022.

Enquiries: Mr. Hango, Director, Tel: 065-266604/ Mr. Leevi Fannie Shapaka, Tel:065-263260/1

Addresses: The Regional Director, Ohangwena Region Private Bag 88006, Eenhana

DIRECTORATE: PHARMACEUTICAL SUPPLY CHAIN, HEAD OFFICE DIVISION: PHARMACEUTICAL SUPPORT SERVICES

Post Designation: Pharmacist Grade 7
1 x Post: Windhoek
Salary: N$ 269 189 – 321 707
Fixed Overtime: N$ 144 031.00 per annum
Housing Allowance: N$ 7680. 00 per annum
Transport Allowance: N$ 13080. 00 per annum

Minimum Requirements: Bachelor in Pharmacy Degree and Registration as a Pharmacist with the Allied Health Professions Council of Namibia.
Expected date of assumption of duty: 01 August 2021.

Enquiries: Mr. L. Indongo, Acting Director, Tel: (061) 2032350

DIRECTORATE: KAVANGO WEST REGION

Post Designation: Senior Medical Officer, Grade 4
1x Post: Nankudu District
Scale of Salary: N$ 478 220 – 502 753
Fixed Overtime: N$ 239 112 per annum
Housing Benefit: N$ 68 188 per annum
Capital Cost: N$ 76 950 per annum
Running Cost: N$ 25 751 per annum

Minimum Requirement: Degree in Medicine and registration as a Medical Practitioner with the Medical and Dental Council of Namibia.

Additional requirements: Three (3) years appropriate experience. Must have a driver's license and must be computer literate.

Enquiries: Ms. Fransiska Hamutenya Tel: 066 – 257 810/12

All the above application must address to: The Regional Director, Ministry of Health and Social Services, Kavango Region, Private Bag 2094, Rundu

DIRECTORATE: HEALTH INFORMATION & RESEARCH, HEAD OFFICE DIVISION: RESEARCH ETHICS & COORDINATION SUBDIVISION: RESEARCH & COORDINATION & MONITORING

Post Designation: Senior Health Programme Officer Grade 7
1 x Post: Windhoek
Salary Scale: N$ 269 189 – 321 707
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7 680 per annum

Minimum Requirements: An appropriate B-degree or equivalent qualification on NQF L7.

Additional requirements: Registration with Health Professions Council of Namibia. Three (3) years approximately, appropriate experience in health-care setting. Must have clinical experience in coordinating Infection Prevention Control and post graduate certificate or diploma in Infection Prevention Control.

DIRECTORATE: HEALTH INFORMATION & RESEARCH DIVISION: RESEARCH ETHICS & COORDINATION SUBDIVISION: RESEARCH & COORDINATION & MONITORING

Post Designation: Chief Health Programme Officer Grade 6
2 x Posts: Windhoek
Salary Scale: N$ 328 139 – 392 158
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum Requirements: An appropriate B-degree or equivalent qualification on NQF 7.

Additional requirements: Registration with Health Professions Council of Namibia. Three (3) years approximately, appropriate experience in health-care setting. Must have clinical experience in coordinating Infection Prevention Control and post graduate certificate or diploma in Infection Prevention Control.

DIVISION: RESEARCH ETHICS & COORDINATION SUBDIVISION: RESEARCH & COORDINATION & MONITORING

Post Designation: Control Health Programme Officer Grade 5
1 x Post: Windhoek
Salary Scale: N$ 400 001 – 478 220
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum Requirements: An appropriate B-degree or equivalent qualification on NQF 7.

Additional requirements: Registration with Health Professions Council of Namibia. Five (5) years approximately, appropriate experience in health-care setting. Must have clinical experience in coordinating Infection Prevention Control and post graduate certificate or diploma in Infection Prevention Control.

DIVISION: RESEARCH ETHICS & COORDINATION
SUBDIVISION: RESEARCH & COORDINATION & MONITORING

Post Designation: Chief Medical Officer Grade 3
1 x Post: Windhoek
Salary scale: N$ 512 809 – 544 196
Housing Allowance: N$ 81 558 per annum
Vehicle Allowance: N$ 114 475 per annum
Fixed overtime: N$ 257 645 per annum

Minimum Requirements: Degree in Medicine and registration as a Medical Practitioner with the Medical and Dental Council of Namibia.

Additional requirements: Five (5) years approximately, appropriate experience in health-care setting. Must have clinical experience in coordinating Infection Prevention Control. Must have post graduate certificate or diploma in Infection Prevention Control. Must have a driver's license.

Enquiries: Ms. P. Ochurus, Director, Tel. No. 061-309128
OR Mr. A. Kastnerody, 061-2032214.

DIRECTORATE: TERTIARY HEALTH CARE AND CLINICAL SUPPORT SERVICES
DIVISION: WINDHOEK CENTRAL HOSPITAL
SUBDIVISION: SECTION: EMERGENCY MEDICAL RESCUE SERVICES
SUBSECTION: TRANSPORT

Post Designation: Emergency Care Practitioner (Basic) Grade 11
1 Post: Windhoek
Salary Scale: N$ 122 965 – N$ 147 485
Housing Allowance: N$ 10 464 per annum
Transport Allowance: N$ 7 680 per annum

Minimum Requirements: Registration with the Allied Health Professions Council of Namibia as an Emergency Care Practitioner (Basic) Plus a Code C1 driving license.

Enquiries: Ms. S. Mutumbulwa, Tel.: (061) 2032284/
Ms. R.R Podeweltz, Tel.: (061) 2033071

DIVISION: WINDHOEK CENTRAL HOSPITAL SUBDIVISION: SECTION: EMERGENCY MEDICAL RESCUE SERVICES, SUBSECTION: TRANSPORT

Post Designation: Emergency Care Practitioner (Intermediate) Grade 10
1 Post: Windhoek
Salary Scale: N$ 147 485 – N$ 1176 895
Housing Allowance: N$ 10 464 per annum
Transport Allowance: N$ 7 680 per annum

Minimum Requirements: Registration with the Allied Health Professions Council of Namibia as an Emergency Care Practitioner (Intermediate) Plus a Code C1 driving license older than 1 year.

DIVISION: WINDHOEK CENTRAL HOSPITAL
SUBDIVISION: NURSING SERVICES, SECTION: GENERAL & SPECIALISED NURSING SERVICES, SUBSECTION: GENERAL WARD, OUTPATIENT, CLINICAL WARD, OPERATING THEATRE & ICU

Post Designation: Senior Registered Nurse Grade 7
6x Posts: Windhoek
Salary Scale: N$ 269 189 – N$ 321 707
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum Requirements: Registration as a Registered Nurse with the Health Professional Council of Namibia. Plus three (3) years relevant working experience in the specific department.

Enquiries: Mr. P. Shilunga Tel.: (061) 2033022/
Ms. R.R Podeweltz, Tel.: (061) 2033071

DIVISION: WINDHOEK CENTRAL HOSPITAL
SUBDIVISION: NURSING SERVICES, SECTION: SPECIALISED NURSING SERVICES, SUBSECTION: OPERATING THEATRE AND RECOVERY ROOM, MENTAL HEALTH UNIT, MATERNITY

Post Designation: Registered Nurse Grade 6
3x Posts: Windhoek
Salary Scale: N$ 328 139 – N$ 392 158
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum Requirements: Registration as a Registered Nurse with the Health Professional Council of Namibia. Plus at five (5) years relevant working experience in management.

Enquiries: Mr. P. Shilunga, Tel.: (061) 2033022/
Ms. R.R Podeweltz, Tel.: (061) 2033071

DIVISION: WINDHOEK CENTRAL HOSPITAL
SUBDIVISION: NURSING SERVICES, SECTION: GENERAL & SPECIALISED NURSING SERVICES, SUBSECTION: QUALITY CARE IMPROVEMENT, ICU, OPERATING THEATRE, MENTAL HEALTH UNITY, MATERNITY & CLINICAL WARD

Post Designation: Registered Nurse Grade 8
6x Posts: Windhoek
Salary Scale: N$ 220 828 – N$ 263 911
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum Requirements: Registration as a Registered Nurse with the Health Professional Council of Namibia.

Enquiries: Mr. P. Shilunga Tel.: (061) 2033022/
Ms. R.R Podeweltz, Tel.: (061) 2033071

DIVISION: WINDHOEK CENTRAL HOSPITAL
SUBDIVISION: NURSING SERVICES, SECTION: SPECIALISED NURSING SERVICES, SUBSECTION: MENTAL HEALTH UNIT: FORENSIC PSYCHIATRIC

Post Designation: Security Orderly Grade 10
1 Post: Windhoek
Salary Scale: N$ 147 485 – N$ 176 895
Housing Allowance: N$ 10 464 per annum
Transport Allowance: N$ 7 680 per annum

Minimum Requirements: A Grade 10 or equivalent Certificate on NQF L2 plus the completion of military-, police- or prison service training and successful completion of the prescribed in-service-training. Plus three (3) years relevant working experience in the specific department.

DIVISION: WINDHOEK CENTRAL HOSPITAL
SUBDIVISION: NURSING SERVICES, SECTION: SPECIALISED NURSING SERVICES, SUBSECTION: MENTAL HEALTH UNIT: FORENSIC PSYCHIATRIC

Post Designation: Security Orderly Grade 11
1 Post: Windhoek
Salary Scale: N$ 122 965 – N$ 147 485
Housing Allowance: N$ 10 464 per annum
Transport Allowance: N$ 7 680 per annum

Minimum Requirements: A Grade 10 or equivalent Certificate on NQF L2 plus the completion of military-, police- or prison service training. Plus successful completion of the prescribed in-service-training.

Enquiries: Ms. M.M Jacobs, Tel.: (061) 2033316/
Ms. R.R Podeweltz, Tel.: (061) 2033071

DIVISION: WINDHOEK CENTRAL HOSPITAL
SECTION: PARAMEDIC & CLINICAL SUPPORT SERVICES
SUBSECTION: OCCUPATIONAL THERAPY

Post Designation: Occupational Therapist Grade 7
1 Post: Windhoek
Salary Scale: N$ 269 189 – N$ 321 707
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum Requirements: Registration as Occupational Therapist.
Expected date of assumption of duty: 01 January 2022.

DIVISION: WINDHOEK CENTRAL HOSPITAL
SECTION: PARAMEDIC & CLINICAL SUPPORT SERVICES
SUBSECTION: OCCUPATIONAL THERAPY

Post Designation: Occupational Therapist Grade 5
1 Post: Windhoek
Salary Scale: N$ 400 001 – N$ 478 220
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum Requirements: Four (4) years Degree in Occupational Therapy. Registration as Occupational Therapist with the Health Professional Council of Namibia. Plus five (5) years' experience as clinical occupational therapist

DIVISION: WINDHOEK CENTRAL HOSPITAL
SECTION: PARAMEDIC & CLINICAL SUPPORT SERVICES
SUBSECTION: MEDICAL SOCIAL SERVICES

Post Designation: Social Worker Grade 6
1 Post: Windhoek
Salary Scale: N$ 328 139 – N$ 392 158
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum Requirements: Four (4) year Degree in Social Work. Registration as Medical Social Worker with the Health Professional Council of Namibia. Plus five (5) years' experience in social welfare management, supervision/education/training, administration and resource management.

DIVISION: WINDHOEK CENTRAL HOSPITAL
SECTION: PARAMEDIC & CLINICAL SUPPORT SERVICES
SUBSECTION: MEDICAL SOCIAL SERVICES

Post Designation: Social Worker Grade 7
2x Posts: Windhoek
Salary Scale: N$ 269 189 – N$ 321 707
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum Requirements: Four (4) year Degree in Social Work. Registration as Medical Social Worker with the Health Professional Council of Namibia. Plus at least three (3) years' experience in social welfare.

DIVISION: WINDHOEK CENTRAL HOSPITAL
SECTION: PARAMEDIC & CLINICAL SUPPORT SERVICES
SUBSECTION: RADIOGRAPH

Post Designation: Radiographer (Diagnostic) Grade 6
1 Post: Windhoek
Salary Scale: N$ 328 139 – N$ 392 158
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum Requirements: Registration as a Radiographer with the Health Professional Council of Namibia. Plus at least three (3) years' experience in diagnostic radiography.

DIVISION: WINDHOEK CENTRAL HOSPITAL
SECTION: PARAMEDIC & CLINICAL SUPPORT SERVICES
SUBSECTION: RADIOGRAPH

Post Designation: Radiographer (Radiation Therapist) Grade 6
1 Post: Windhoek
Salary Scale: N$ 328 139 – N$ 392 158
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum Requirements: Registration as a Radiographer with the Health Professional Council of Namibia. Plus at least three (3) years clinical experience. Recent clinical experience working with linear accelerators.

DIVISION: WINDHOEK CENTRAL HOSPITAL
SECTION: PARAMEDIC & CLINICAL SUPPORT SERVICES
SUBSECTION: NUTRITION SERVICES

Post Designation: Dietician Grade 6
1 Post: Windhoek
Salary Scale: N$ 328 139 – N$ 392 158
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum Requirements: Registration as Dietician with the Health Professional Council of Namibia. Plus approximately (5) years' experience in nutrition and dietary management.

Enquiries: Dr K.H Nakangombe, Tel.: (061) 2033027/
Ms. R.R Podeweltz, Tel.: (061) 2033071

DIVISION: WINDHOEK CENTRAL HOSPITAL
SECTION: HEALTH TECHNOLOGY
AND FACILITY MANAGEMENT
SUBSECTION: HEALTH TECHNOLOGY MANAGEMENT

Post Designation: Engineer Technician (Health Technology) Grade 7
1 Post: Windhoek
Salary Scale: N$ 269 189 – N$ 321 707
Housing Allowance: N$ 13 080 per annum
Transport Allowance: N$ 7680.00 per annum

Minimum Requirements: An appropriate National Diploma or equivalent qualification on NQF L6 OR Registration as Engineering Technician at the Engineering Council of Namibia.

Enquiries: Mr E.E Rieth, Tel.: (061) 2033015/
Ms. R.R Podeweltz, Tel.: (061) 2033071

DIVISION: WINDHOEK CENTRAL HOSPITAL
SECTION: PROFESSIONAL SERVICES
SUBSECTION: CARDIOTHORACIC

Post Designation: Specialist Grade 3
1 Post: Windhoek
Salary Scale: N$ 512 809 – N$ 544 196
Fixed Overtime: N$257 645 per annum
Motor Vehicle Allowance: N$114 475 per annum
Housing Benefit: N$ 81 558 per annum

Minimum Requirements: Registration as Specialist with the Health Professional Council of Namibia. Plus five (5) years' experience in cardiothoracic.
Expected date of assumption of duty: 01 October 2021.

DIVISION: WINDHOEK CENTRAL HOSPITAL
SECTION: PROFESSIONAL SERVICES
SUBSECTION: SPINAL, RADIOLOGY & ANAESTHESIA

Post Designation: Specialist Grade 4
3 Posts: Windhoek
Salary: N$512 809 (P)
Fixed Overtime: N$249 994 per annum
Motor Vehicle Allowance: N$102 701 per annum
Housing Benefit: N$ 68 188 per annum

Minimum Requirements: Registration as Specialist with the Health Professional Council of Namibia.
Expected dates of assumption of duty: 01 August 2021, 02 July 2021.

Enquiries: Dr S.K Shalongo, Tel.: (061) 2033063/
Ms. R.R Podeweltz, Tel.: (061) 2033071

DIVISION: WINDHOEK CENTRAL HOSPITAL
SECTION: PROFESSIONAL SERVICES
SUBSECTION: SURGERY, UROLOGY & ENT

Post Designation: Medical Officer Grade 5
4 Posts: Windhoek
Salary Scale: N$ 400 001 – N$ 478 220
Housing Allowance: N$ 13 080 per annum
Capital Cost: N$ 78 762 per annum
Fixed overtime: N$ 214 066 per annum

Minimum Requirements: Registration as Medical Practitioner with the Health Professional Council of Namibia.

Expected dates of assumption of duty:
01 November 2021, 02 July 2021, 01 November 2021.

DIVISION: WINDHOEK CENTRAL HOSPITAL
SECTION: PROFESSIONAL SERVICES
SUBSECTION: ONCOLOGY

Post Designation: Medical Officer Grade 4
1 Post: Windhoek
Salary Scale: N$ 478 220 – 502 753
Fixed overtime: N$ 239 112 per annum
Motor Vehicle Allowance: N$ 102 701 per annum
Housing Benefit: N$ 63 137 per annum

Minimum Requirements: Registration as Medical Practitioner with the Health Professional Council of Namibia. Plus approximately three (3) years in medical oncology.

DIVISION: WINDHOEK CENTRAL HOSPITAL
SUBDIVISION: NURSING SERVICES, SECTIONS: SPECIALISED NURSING SERVICES, OTHER SPECIALIZED AND MENTAL HEALTH UNIT GENERAL SERVICES NURSING AND ONCOLOGY SERVICES OPERATING THEATRE AND RECOVERY ROOM, CSSD AND CARDIAC SERVICES, MATERNITY

Post Designation: Chief Registered Nurse Grade 6
4 x Posts: Windhoek
Salary Scale: N$ 328 139 – N$ 392 158
Transport Allowance: N$ 7680 per annum
Housing Allowance: N$ 13 080 per annum

Minimum Requirements: Registration as a Registered Nurse with the Health Professional Council of Namibia. Plus five (5) years relevant working experience in nursing management.

Enquiries: Mr. P. Shilunga, Tel.: (061) 2033022/
Ms. R.R Podeweltz, Tel.: (061) 2033071.

NOTE: All foreign qualifications must be accompanied by NQA evaluation.

CLOSING DATE: 09 JULY 2021