

**PERSONNEL EXPERIENCES OF AIDS PATIENT MANAGEMENT: CLINIC IN  
NELSON MANDELA MUNICIPALITY, EASTERN CAPE**

by

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## DECLARATION

I, Ncediswa Caroline Mrwebo (Student Number: 41490606) declare that: **PERSONNEL EXPERIENCES OF AIDS PATIENT MANAGEMENT: CLINIC IN NELSON MANDELA MUNICIPALITY, EASTERN CAPE**, is my own original work, and that all the information and sources that I have referred to or quoted are duly indicated and acknowledged by means of complete bibliographic reference; and that this work has not been submitted previously for any degree or publication purposes at any other higher education institution.



**Signed:** \_\_\_\_\_  
Ncediswa Caroline Mrwebo

**Date:** 31 April 2023  
dd/mm/yyyy

## DEDICATION

I dedicate this research study posthumously to the memory of:

- My late grandmother, Nonceba Mrwebo, for believing in me from my earliest schooling years until her last day. Her unflinching support and encouragement has spurred me on to this very moment.

**Ndiyabulela kakhulu, Ntombi yakwa Jadezweni, Mamlabo!!**

- My late father, Mlulami Attwell Mrwebo, for his unwavering support, guidance, and courageous determination to shed light on the value of education in my life.

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**Ntombi yakwa Qwabe, Matshezi, Tenza!!**

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## ABSTRACT

Healthcare personnel are the first point of contact for ill people at adequately resourced healthcare facilities. Accordingly, the main purpose of this qualitative study was to explore, describe and analyse the role, experiences and capacity of health personnel in the prevention, treatment and management of HIV and AIDS patients at Laetitia Bam Community Health Centre in Kwa-Nobuhle Township, Nelson Mandela Metropolitan Municipality (Eastern Cape Province).

This qualitative study was conducted at Laetitia Bam Community Health Centre with ten healthcare personnel working at the same centre. They comprised two medical doctors; four professional nurses working in HIV patient management; one pharmacist; one dietician and two counsellors at Laetitia Bam healthcare professionals; all of whom were part of the final sample of ten.

Non-probability convenience sampling was opted for in the selection of the ten healthcare personnel, based on the researcher's knowledge of, and familiarity with the research environment, the variability of the participant category; as well as her own pre-determined criteria or requirements for cases or people/ individuals that may be involved in the study. In this qualitative study, the thematically oriented and interpretative phenomenological analysis (IPA) of data was utilised.

Five main themes and 17 sub-themes (categories) were generated as the study's critical evidential framework. These themes relate to HIV/AIDS management; activities to decrease the burden of HIV/AIDS management; HIV/ AIDS programme/ service implementation; and impact on performance, impact on human resources.

Based on both the main findings and conclusions, the study has proposed recommendations for improvements in the realm of human resource, infrastructure and financial resources development; as well as concomitant recommendations for future research.

**Key words:** personnel experience; patient management; HIV/AIDS; community health centre; impact, resources.

## LIST OF ABBREVIATIONS AND ACRONYMS USED IN THE STUDY

<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>APHRC</b>	African Population and Health Research Center
<b>ANC</b>	Ante-Natal Care
<b>ART</b>	Anti-Retroviral Treatment
<b>CBHC</b>	Community-Based Healthcare
<b>CBO</b>	Community Based Organisation
<b>CCUs</b>	Critical Care Units
<b>CDCP</b>	Centre for Disease Control and Prevention
<b>CHC</b>	Community Health Centre
<b>CHS</b>	Community Healthcare System
<b>CPD</b>	Continuous Professional Development
<b>DHS</b>	District Health System
<b>DHS</b>	Demographic and Health Surveys
<b>DOBE</b>	Department of Basic Education
<b>DOH</b>	Department of Health
<b>DoSD</b>	Department of Social Department
<b>ECAC</b>	Eastern Cape AIDS Council
<b>ECP</b>	Eastern Cape Province
<b>ECPHD</b>	Eastern Cape Provincial Health Department
<b>FDC</b>	Fixed Dose Combinations
<b>FGDs</b>	Focus Group Discussions
<b>HAART</b>	Highly Active Antiretroviral Therapy
<b>HIV</b>	Human Immune Virus
<b>HPCSA</b>	Health Professions Council of South Africa
<b>HSRC</b>	Human Sciences Research Council
<b>HST</b>	Health Systems Theory
<b>IDU</b>	Injecting Drug Use
<b>ILO</b>	International Labour Organisation
<b>IPA</b>	Interpretative Phenomenological Analysis
<b>IVF</b>	In-Vitro Fertilisation
<b>KZN</b>	KwaZulu-Natal Province
<b>LO</b>	Life Orientation
<b>MCC</b>	Medicine Control Council
<b>MDGs</b>	Millennium Development Goals
<b>MMC</b>	Medical Male Circumcision
<b>MSM</b>	Men Who Have Sex with Men
<b>MTCT</b>	Mother-to-Child Transmission of HIV
<b>NACOSA</b>	Networking HIV and AIDS Community of Southern Africa
<b>NDOH</b>	National Department of Health
<b>NGO</b>	Non-Governmental Organisation
<b>NHI</b>	National Health Insurance
<b>NIMART</b>	Nurse-Initiated Management of Antiretroviral Treatment
<b>NMMM</b>	Nelson Mandela Metropolitan Municipality
<b>NMMD</b>	Nelson Mandela Metropolitan District
<b>NPRC</b>	National Patients' Rights Charter
<b>NSP</b>	National Strategic Plan
<b>PACS</b>	Picture Archiving Communication System

<b>PCR</b>	Polymerase Chain Reaction
<b>PEP</b>	Post-Exposure Prophylaxis
<b>PGL</b>	Persistent Generalized Lymphadenopathy
<b>PHC</b>	Primary Health Care
<b>PHS</b>	Public Health Service
<b>PHSD</b>	Public Health Service Delivery
<b>PLWA</b>	People Living with HIV and AIDS
<b>PrEP</b>	Pre-Exposure Prophylaxis
<b>RNs</b>	Registered Nurses
<b>RCN</b>	Royal College of Nursing
<b>RPH</b>	Revitalisation of Primary Healthcare
<b>SAHCS</b>	Southern African HIV Clinicians Society
<b>SARS</b>	Severe Acute Respiratory Syndrome
<b>SHN</b>	School Health Nurse
<b>SSA</b>	Sub-Saharan Africa
<b>StatsSA</b>	Statistics South Africa
<b>STIs</b>	Sexually Transmitted Infections
<b>TB</b>	Tuberculosis
<b>TMC</b>	Traditional Male Circumcision
<b>UN</b>	United Nations
<b>UNAIDS</b>	United Nations Programme on HIV and AIDS
<b>UNISA</b>	University of South Africa
<b>UREC</b>	Unisa Research Ethics Committee
<b>VMMC</b>	Voluntary Medical Male Circumcision
<b>WEF</b>	World Economic Forum
<b>WHO</b>	World Health Organization

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# CHAPTER 1

## STUDY OVERVIEW

### 1.1 INTRODUCTION

The principal goal of this chapter is to present a general layout or overview of the most salient aspects of the research topic (i.e., healthcare professionals' contextual factors in the prevention, treatment and management of HIV/AIDS) in respect of its (research topic's) organisation and structure in the subsequent inter-related chapters of the entire study. Accordingly, these various aspects are necessarily and logically presented and discussed in varying degrees of detail in each relevant chapter. In this regard, the chapter first introduces the state of HIV/AIDS and the healthcare personnel environment, followed by both the context and research problem itself; the research aim, objectives and questions; as well as the value of the study and its research design and methods. The chapter also encapsulates the data collection and analysis domains, and the quality assurance and ethical issues, before concluding with the scope of the study and structure of ensuing chapters. As stated already, each of these aspects (units of analysis) is discussed more comprehensively in each of the following chapters.

Community Health Workers (CHWs) are mainly engaged in the care of HIV-positive patients, and play a major role in supporting the anti-retroviral treatment (ART) rollout, while professional nurses perform most of the tasks associated with patient consultations (Chammartin, Ostinelli, Anastos et al., 2020; Mottiar & Lodge, 2018). For instance, professional nurses do most of the HIV testing and dispensing as well as treatment for other infections contracted by HIV-positive patients, while CHWs are deployed in outreach teams directed by the nurses at the clinic and undertake indispensable support functions (Morse, 2015; Pettifor, Rees, Kleinschmidt et al., 2019). In the early stages of South Africa's provision of community-based ART, much of the work undertaken by community-based health workers was directed at pre-treatment counselling to prepare patients for the routine of daily medication as well as for detecting any side effects (McCracken, 2017; Mohanlal, Denasha & Reddy, 2020). In such instances, workers employed as counsellors would also conduct treatment readiness classes. With the inception in 2016 of treatment immediately following testing, pre-treatment preparation times have now become much shorter, and the counselling is cursory, a consequence of pressures to meet enrolment targets (Centers for Disease Control and Prevention/ CDC, 2019).

In 2018, South Africa had an estimated population size of 57.3 million people, with 38.0% of this population living in the five metropolitan areas of the Eastern Cape Province (ECP) (Statistics South Africa, 2018). In all these five metros, the adult male-to-female ratio was higher than in the rest of the country, with the ratios of dependants to working age adults lower than in the country as a whole (van Schalkwyk, Dorrington & Seatlhodi, 2021). In comparative terms, overall HIV prevalence among the reproductive age groups was lower in the City of Cape Town and City of Tshwane than in the country as a whole, but higher in eThekweni Metropolitan Municipality, Ekurhuleni Metropolitan Municipality, City of Johannesburg Metropolitan Municipality. When estimated adjustments match the age and gender distributions to those of the country, estimated prevalence was repeatedly lower than prior to the adjustments, which reflects that young adults were more concentrated in the metropolitan districts (van Schalkwyk et al., 2021).

## **1.2 THE HIV/AIDS SCENARIO**

The combined effects and magnitude of diseases such as sexually transmitted infections (STIs), HIV (the Human Immune Virus) and AIDS (the Acquired Immune Deficiency Syndrome) are overwhelming, such that concomitant and advanced measures and resources have become an extant requirement for governments and all stakeholders involved (Havlir, Lockman, Ayles, et al., 2020; Steketee, 2017). According to the United Nations Agency for AIDS (UNAIDS, 2019), 35.3 million people over the age of 15 years worldwide were infected with HIV and AIDS in 2012. Of these, more than 15.6 million were children under the age of 15 years who lost either one or both parents as a direct result of HIV and AIDS. In the same year (2012), North America accounted for 920,000 HIV-infected people, Western Europe accounted for 540 000 infections; and another 15,000 in Austria and New Zealand, whilst Sub-Saharan Africa accounted for 70% of the 35.3 million HIV infections in that same year. Despite a 48% decline of HIV- AIDS-related deaths during the period 2005-2016 globally, illnesses related to HIV/AIDS are still the foremost cause of the deaths of women in the reproductive age of 15 to 49 years; these illnesses are also the second main cause of the deaths of Africa's young women in the 15-24 age cohort (UNAIDS, 2019).

In the South African context, the successive five-yearly HIV/ AIDS and STI national strategic plans of the National Department of Health (NDOH) are emblematic of the government's commitment to the protracted fight against HIV and AIDS (South African National AIDS Council/ SANAC, 2019; Pettifor, Rees, Kleinschmidt et al., 2019).

Despite the decline in the HIV/ AIDS prevalence rates when compared to the 2012 trends, the NDOH still encounters systemic challenges to confront the scourge of HIV and AIDS (Human Sciences Research Council/ HSRC, 2018; SANAC, 2019). These challenges are premised mainly on the infrastructural wherewithal required to allocate an effective health systems approach as the holistic means to address a whole range of health issues and concerns (Bagnall, Radley, Jones et al., 2019).

The emerging picture of the impact and burden of HIV/AIDS on the South African healthcare system, including infrastructural needs and other resource constraints, is disconcerting (Department of Health/ DOH & SANAC, 2016; SANAC, 2019). Infrastructural needs and resources include the availability of conducive physical healthcare facilities (e.g. community healthcare facilities and critical care units (CCUs); human resources and an adequate skills mix; management capabilities for coping with the provision of comprehensive primary healthcare (PHC) services; care for the increasing number of people living with HIV and AIDS (PLWHA); as well as financial resources to ensure the sustainability of the facilities and their healthcare personnel (Mammbona, 2017; Steketee, 2017).

The shortage of skilled professional nurses at primary healthcare level is a long-standing challenge (Redwood, Brangan & Leach, 2016). Such shortages translate into the inability of healthcare facilities to address the consequent overcrowding of patients. Overcrowding of HIV and AIDS patients in healthcare facilities poses a burden on the shoulders of existing healthcare personnel, such as medical doctors, nurses, HIV counsellors, dieticians, pharmacists, and psychologists. Although they play an integral role in the management and delivery of health services, including management of HIV and AIDS in the healthcare facilities, these healthcare professionals continue to experience challenges in their respective workplaces (Chaghari, Saffari, Ebadi & Ameryoun, 2017; Bernadi, 2018).

### **1.2.1 HIV/AIDS Healthcare Facilities Management in a Global Context**

The burden of HIV/AIDS treatment and management is most prominent in either the financial or human resource domains (Steketee, 2017). The HIV/ AIDS epidemic has multiplied the burden of disease in many countries, with proportionately high demands for healthcare (Lohmann, Muula, Houfort et al., 2018). In those countries afflicted by migratory patterns of nursing, the nature of the HIV/AIDS pandemic raises salient concerns about the extent to which the health system is responding to the increasing demands for healthcare in the context of a severe shortages of healthcare personnel. However, the shortage of healthcare personnel in public institutions is not peculiar to

developing countries only, but a global phenomenon also affecting developed countries due to the fiscal and human resources burden of HIV and AIDS at the healthcare facilities (Bemelmans, van den Akker, Pasulani, et al., 2011; Valizadeh, Zamanzadeh & Dewar, 2018).

Shortages of healthcare personnel have been reported in countries such as the USA, Canada, Germany, Australia, New Zealand, and China, and these shortages are projected to grow to 30% by 2020 (Rouleau, Fournier, Philibert, Mbengue & Dumont, 2012). There are fewer younger nurses entering the profession, such that there will be an estimated shortage of 1.8 million nurses globally by 2020 (Esmaeili, Cheraghi, Salsali, 2014; Wani, Rashid, Nabi & Dar, 2019). Nurses are continuously migrating to countries such as Saudi Arabia, and the United Arab Emirates (UAE), where working conditions and salaries are more competitive than in their home countries (de Langen, 2015; Ramathuba & Davhana-Maselesele, 2013). The main reasons for healthcare personnel shortages in these developed countries are linked to the proliferation of high-tech healthcare and the diversification and expansion of medical services to a growing population with significant geriatric patterns (Breier, Wildchut & Mqgolozana, 2018; Manyisa & van Aswegen, 2017).

### **1.2.2 The Sub-Saharan African Context of HIV/AIDS Healthcare Facilities Management**

The regular availability of granular data from especially pregnant women attending HIV sentinel surveillance sites at antenatal clinics has shed more light on changing prevalence and nursing practice trends in Sub-Saharan Africa (UNAIDS, 2019; Mutabazi, Gray, Muhwava et al., 2020). It has been widely reported that the shortage of skilled professionals from Africa has also adversely affected the quality of care offered in Sub-Saharan African healthcare institutions due to increasing numbers of patients living with HIV and AIDS (Manyisa & van Aswegen, 2017; Ugochukwu, Uys, Karani et al., 2013). For instance, it is not uncommon in most African countries for newly qualified nurses, medical interns and nursing assistants to be left alone to perform tasks that are normally beyond their scope of training (Asare, Baafi, Asare & Adam, 2019; Muthelo, Nemagumoni, Mothiba, et al., 2020). In such cases, there is the implicit risk of misdiagnosis or prescribing inappropriate treatment, and for unqualified staff to perform specialised duties which are beyond their scope of practice (Mutabazi, Gray, Muhwava et al., 2020).



In Malawi, it has been reported that there was an average of only two (2) doctors and 36.8 nurses per population of 100,000 (Bemelmans, van den Akker, Pasulani et al., 2015; Nutor, Duah, Agbadi et al., 2020). This is an indication of the severity of the problem of staff shortages in developing countries. It was reported further that such shortages have caused countries such as Tanzania (Munga, Kilima, Mutalemwa et al., 2014), Zambia (Lohmann, Muula, Houfort et al., 2018; World Health Organization/WHO, 2022) and South Africa (BusinessTech, 2022; Naidoo, 2016) to resort to task-shifting as a strategy to mitigate the effects of shortages in public hospitals. Task-shifting is defined as the delegation of tasks from skilled to low or unskilled healthcare personnel such as community lay workers and medical assistants, including a model in which nurses initiate ART (BusinessTech, 2022; Munga et al., 2014).

Case and Paxson (2009, cited in Koto & Maharaj, 2016) report that the impact of the HIV/AIDS crisis on health services in 14 Sub-Saharan African countries has resulted in governments now redirecting funds meant for medical supplies and trained healthcare professionals to the care of HIV patients (Asare, Baaffi et al., 2019). As a consequence of such budgetary redirections, a guaranteed supply of trained personnel has suffered. In Senegal for instance, of the 87% patients who needed maternal care, only 52% were assisted by a qualified midwife (Rouleau, Fournier, Philibert et al., 2014). The latter state of affairs contributed to the high maternal mortality rate in Senegal, which was then estimated at 401 per 100 000 live births.

### **1.2.3 The South African Context of HIV/AIDS Healthcare Facilities Management**

The shortage of qualified healthcare professionals is one of the foremost issues facing South Africa, and is likely to be a critical impediment to the achievement of the millennium development goals (MDGS) (Hoskins, Grady & Ulrich, 2018; Koto & Maharaj, 2016). These shortages are compounded by a number of factors, such as poor working conditions; poor communication; poorly resourced workplaces; lack of workplace safety; low morale; inadequate salaries; lack of visible nursing leadership; limited career progression opportunities; as well as heavy workloads induced by skewed nurse-to-patient ratios (Manyisa & van Aswegen, 2017).

A study by Manyisa and van Aswegen (2017) on the work satisfaction of professional nurses in South Africa, found that 46% of patients in hospitals were AIDS patients, and that the majority of these patients were brought to hospitals when they were already critically ill. An additional burden on the healthcare workforce is occasioned by factors such as caring for terminally ill patients and limitations of the working environment (Khamisa, Peltzer, Illic & Oldenburg, 2017). These factors are of serious

concern to a healthcare human resources reservoir that was already overburdened, demotivated and emotionally overstretched (Manyisa & van Aswegen, 2017; SANAC, 2019). This implies that the HIV and AIDS contagion has added new labour-intensive tasks due to the need for the urgent roll-out of antiretroviral therapy. These tasks include antiretroviral projects such as the pre- and post-counselling of patients and their relatives, HIV testing, explaining, dispensing antiretroviral treatment, and monitoring and support which accompany treatment (Hoskins et al., 2018). It was also found that the burden of HIV and AIDS has been exacerbated by a lack of support from senior doctors and administrators and a lack of political leadership. Furthermore, the emergent HIV and AIDS projects (especially in the non-governmental sector) in South Africa has led to a diversion of human resources in an effort to increase ART roll out (Bortnowska & Seiler, 2019 Carelse, 2018).

### **1.3 THE RESEARCH PROBLEM IN CONTEXT**

The general picture of the impact of HIV and AIDS on the health sector in developing countries shows changing disease patterns, thus requiring greater skill levels and infrastructurally conducive diagnostic facilities (Bott & Obermeyer, 2013; Muller & Bester, 2017). These changing disease patterns are demonstrated by factors such as overcrowded hospitals for admissions and the rising demand for beds, increasing costs and a demoralised and overburdened healthcare workforce. In Sub-Saharan Africa (SSA), the spread of HIV infections has meant that many deaths and illnesses are attributable to HIV/ AIDS (Bott & Obermeyer, 2013; SANAC, 2019; UNAIDS, 2019).

In this study, the background of the research problem is centrally located within the professional and personal experiences, capacity and challenges of healthcare personnel (e.g., general practitioner, professional nurses, a psychologist, counsellors, and dieticians) concerning their management of HIV/AIDS patients at Laetitia Bam Community Health Centre (hereinafter referred to as CHC), Nelson Mandela District Municipality (NMDM) in the Eastern Cape Province (ECP). The province (with the third largest population in the country) had an HIV occurrence rate of 12.1% and an HIV population of approximately 772,491 (Eastern Cape AIDS Council/ ECAC, 2017: 7). During the period 2015/2016, the Eastern Cape Province contributed an estimated 16% of South Africa's new HIV infections. Notwithstanding these prevalence rates, the province was able to reduce the trend to 11% during the 2016/2017 period (ECAC, 2017).

The number of people infected and living with HIV in the area is approximately 40% of the population (Eastern Cape AIDS Council/ ECAC. 2017; van Dyk et al., 2017). The 40% includes men and women of various age groups, young girls, HIV-infected pregnant women, men having sex with men, mobile and migrant populations, serodiscordant couples; the clientele of tavern and shebeens, infants and children under the age of 15, offenders in correctional facilities, as well as TB/HIV co-infected patients. The escalation in the mortality rate and number of people infected with HIV in this community is not caused by insufficient HIV-related knowledge, but largely due to a lack of commitment to anti-retroviral (ARV) treatment and disclosure to partners (Milliken-Tull & McDonnell, 2017). Stigma and prejudice are rife, making HIV infection and AIDS an unspeakable disease, lest the sufferer be subjected to derisive remarks and isolation by the community (Fajnzyblber, Regan, Coxen et al., 2020). Ultimately, overcrowding of patients at the only relatively equipped healthcare facility in the area poses a larger infrastructural burden on the shoulders of the existing healthcare personnel and facilities in the management of HIV/AIDS patients. In the final analysis, the below-mentioned research problem encompasses not only patients overcrowding, but perennial staff shortages and shortages of medical supplies and equipment as well.

### **1.3.1 Research Problem**

The research problem is described as a particular phenomenon, situation, or state of affairs which the researcher has observed, acknowledged, and identified as presenting difficulties that need to be described and interpreted for research-specific purposes and objectives (Swart, Kramer, Ratale & Seedat, 2019; Tardy, 2019). While it builds on previous research, the current study is also specifically grounded on the health personnel's experiences regarding HIV and AIDS patient management at Laetitia Bam Community Health Centre. In this regard, the background of the study has highlighted that the broader problematic situation centred on healthcare services delivery challenges at Laetitia Bam CHC in Kwa-Nobuhle Township, Nelson Mandela District Municipality.

There are perennial staff shortages at this constantly overcrowded centre, which serves a population of more than 242,924 Kwa-Nobuhle residents. While all nurses provided all counselling and HIV-related services, only a single nurse facilitated the prevention-of-mother-to-child (PMTCT) of HIV programme. In such instances, it means that the absence of that particular nurse (e.g., due to illness or training imperatives) who single-handedly administers these wide-ranging services, renders

the particular healthcare unit or service unavailable, if not wholly dysfunctional for the duration of the 'in-charge' nurse's period of absence. Unfortunately, the shortage of healthcare personnel compromises the quality of care that these patients are currently receiving at this facility. Consequently, the patients are told to come the following day as they continue to wait in long queues without receiving the anticipated care from the healthcare personnel in time.

Shortages of medical supplies and equipment contributed to delays in the provision of HIV test kits. As a result, healthcare personnel at this healthcare facility often reported stock-outs of Nevirapine. In many instances, a significant number of HIV-positive pregnant women did not even receive an HIV test during their first ante-natal care (ANC) visit, mainly due to shortages in staff and supplies. At two Eastern Cape hospitals, it was also reported in other instances that there was no HIV testing and counselling provided for patients who were admitted in the afternoons, during weekends, or on public holidays. Affected services also include general consultations, wound treatments, gynaecological interventions, paediatric care and HIV counselling.

Based on their professional training and experience, all services require proper intervention from all staff members in any healthcare setting (Chaghari et al., 2017; Hoskins et al., 2018). Moreover, HIV patients require the interventions of a multidisciplinary team, which in the case of this study, consisted of general practitioners, professional nurses, psychologist, counsellors, social workers and dieticians. However, coupled with lack of space for maintaining privacy and confidentiality during HIV counselling, the shortage of this important healthcare personnel compromises the quality of care to which patients are entitled.

#### 1.3.1.1 The Research Problem within the District or Local Authority Service Delivery Level

In 2013, the Laetitia Bam CHC incurred the wrath of the Kwa-Nobuhle community for treating people living with HIV separately in corrugated iron containers located at the back of the main clinic building. Construed as a matter of stigmatisation and discrimination by the local community, the issue was widely reported in the local newspaper (Ndabeni, 2010). It is against this background of the research problem that the research study seeks to obtain and establish the perspectives and experiences the Laetitia Bam healthcare personnel concerning all of the human, financial, infrastructural and other challenges that are inimical to the prevention, treatment and management of HIV/AIDS at the Laetitia Bam CHC in Kwa-Nobuhle Township.

## **1.4 RESEARCH AIM AND OBJECTIVES**

The research aim is the general or broader intention or purpose of the study, while the research objectives focus mostly on the specific activities undertaken to give meaning to the very general study intentions (Brink, van der Walt & van Rensburg, 2018; Clark, Foster & Bryman, 2018). In both instances of the research aim and its objectives, the resolution of the identified research problem is of critical importance (Creswell, 2020; Saldana & Omasta, 2018).

### **1.4.1 Research Aim**

Healthcare personnel are the first point of contact for AIDS patients at the healthcare facilities. The services of these trained professionals are indispensable in the prevention, treatment and management of any disease, regardless of its nature and extent of prevalence (Naidoo, 2016; Patton, 2015). Accordingly, the main purpose of this study was: *To explore, describe and analyse the role, experiences and capacity of healthcare personnel in the prevention, treatment and management of HIV/AIDS patients at the Laetitia Bam Community Health Centre in Kwa-Nobuhle Township, Nelson Mandela District Metropolitan Municipality (Eastern Cape Province).*

In the above regard, the state of healthcare facilities is posited as an inextricable factor of the study's main purpose (Swart et al., 2019; Yin, 2018).

### **1.4.2 Research Objectives**

Whereas the research aim is the overall purpose of the study, the research objectives mainly premise on the specificity of the broader study intentions, as well as the measurable activities to be undertaken within a clearly stated timeframe to render the main aim fruitful or achievable (Brink et al., 2018; Swart et al., 2019). In this regard, the study's research objectives become the primary mechanism to 'dissect' the aim and purpose of the study to its most irreducible levels (Saunders, Lewis & Thornhill, 2019). Accordingly, the following statements constitute the research objectives in this study:

- To explore, describe and analyse the healthcare personnel's *roles, experiences, and capacity* in the prevention, treatment and management of HIV/AIDS at the selected healthcare facility (Laetitia Bam Community Health Centre);
- To explore and describe the nature and implications of the human, financial and infrastructural resource challenges experienced by healthcare personnel at the selected healthcare facility;

- To explore and describe the nature and extent of the healthcare personnel's challenges in HIV/AIDS patient management regarding the quality of healthcare services provided at the healthcare centre; and
- To propose recommendations for improving the current health facility treatment HIV/AIDS patient management and strengthening the supportive supervision for programmes at the healthcare centre under investigation.

## **1.5 RESEARCH QUESTIONS**

The research questions (which are the interrogative versions of the research objectives) serve as an interstitial link between the research problem and the aim and objectives of the study (Saldana & Omasta, 2018; Saunders et al., 2019). In that regard, the main question and its sub-research questions were articulated as indicated below.

### **1.5.1 Sub-research Questions**

In the same vein as the research objectives served the fundamental purpose of dissecting the study's aim to its most irreducible level, the sub-research questions below are intended to unbundle the main research question to its more specific details (Zikmund & Babin, 2010; Thomas, 2017). Most importantly, each of the below-stated sub-research questions correspondingly addresses a specific research objective, since the research questions are a version of the research objectives in interrogative form (Kumar, 2020):

- What are the healthcare personnel's roles, experiences, understanding and *knowledge in relation to HIV/AIDS prevention, treatment and management*?
- What is the nature and implications of the challenges experienced *by* healthcare personnel at the selected research site?
- Which are the service-related challenges faced by healthcare personnel at the selected research site?
- Which course of action is *recommended to ameliorate the challenges* experienced by the healthcare personnel and HIV/AIDS patients at the community health centre under investigation?

## **1.6 VALUE OF THE STUDY**

The value, worth or significance of the study relates to the extent to which it makes a contribution in three main areas, namely: epistemologically, institutionally/organisationally and socioeconomically (Saldana & Omasta, 2018; Yin, 2018). In the epistemological realm, the study is envisaged to contribute to the body of knowledge

pertaining to theory and practice in HIV/AIDS treatment and management at healthcare facilities and other primary healthcare centres. Understanding the difficulties and experiences of HIV/AIDS healthcare workers and their patients is of utmost importance in the improvement of quality of care; while also integrating the infrastructural, human and fiscal resource domains as a critical aspect of the health systems perspective (Muller & Bester, 2017; Nlooto, 2017).

There is a disproportionate allocation of human, financial, and infrastructural resources between HIV/AIDS coverage and personnel at the Laetitia Bam CHC. Given the continuous spread of HIV/ AIDS in a rural setting, there is a compelling need for well-resourced facilities and improvements in health personnel coverage, as well as the treatment and management of HIV/AIDS in the Laetitia Bam CHC. Nurses are rarely afforded platform to voice their concerns in this regard (Koto & Maharaj, 2016). Therefore, the study is expected to make a contribution driven by healthcare personnel in respect of the up-scaling of well-managed and sustainable healthcare facilities by the same community healthcare centre's management, the Nelson Mandela Municipality Health District, the Eastern Cape Provincial Health Department, as well as the National Departments of Health and Social Development.

Organisationally/ institutionally, the study proposes to make a contribution to stakeholder-driven policy formulation and execution in healthcare facilities management. Therefore, it was necessary to conduct a stakeholder-focused investigation of HIV/AIDS healthcare personnel (who included a general practitioner, professional nurses, a psychologist, counsellors, and dieticians) in a single study for purposes of obtaining and understanding their perspectives concerning the quality of services and the HIV/AIDS prevention, treatment and management at the community healthcare centre under investigation. Since it is the first study of its nature conducted at this particular healthcare centre, the management of similar facilities would benefit from the findings and recommendations accruing from this study (Korstjens & Moser, 2018; Lamont & Boduszyński, 2020).

From a practical socioeconomic point of view, both the findings and recommendations of the current study are envisaged to provide a cogent evidentiary framework for the proposition of relevant interventions and strategies for policymakers in respect of keeping the healthcare facility in a conducive state with the employment of local residents, rather than outsourcing all facility management responsibilities to providers from outside Kwa-Nobuhle Township and the broader Nelson Mandela District Municipality area (EAC, 2017; Jobson, 2015).

In the same vein, the involvement of both the district municipality's health services and Eastern Cape Provincial Health Department (ECPHD) in the training of potential community-based healthcare workers who would advance the case for the fight against HIV/AIDS at grassroots; while also improving the livelihoods of those absorbed into the community-based training regime and other care/clinical and management designations arising from a revamped fully functional facility servicing its satellite clinics with resource efficiency.

## **1.7 DEFINITION OF KEY CONCEPTS**

In terms of the affinity between a theory, its conceptual base, and philosophical assumptions, the definition of key concepts in this study provided thematically embedded logic, clarity and coherence to the research topic and its associated units of analysis (Babbie, 2020). Accordingly, the following concepts were viewed as critical to both the research topic and the theoretical framework as articulated above. It is worth noting that the below-mentioned definitions were allocated both denotative (actual) and connotative (implied) meanings, depending on the context in which they were used (Brink et al., 2018; Efron & Ravid, 2019).

### **1.7.1 Main Research Question**

The main research question was closely framed in accordance with the research aim as follows:

*What are the healthcare personnel's roles, experiences and capacity in the management of HIV/AIDS patients at the Laetitia Bam Community Health Centre?*

### **1.7.2 Community Health Centre**

A designated facility intended for the provision of basic or primary health-related services to members of the local population and/ or immediate environs (Manyisa & van Aswegen, 2017).

### **1.7.3 HIV Experiences**

The practical or actual knowledge, perceptions, observations accumulated over time from daily events regarding treatment and management of HIV and AIDS (Artz, Burton, Ward et al., 2016). In the context of this study, these are the healthcare personnel's experiences derived from the provision and management of HIV treatment to their patients.

### **1.7.4 Healthcare Personnel**

Professionally trained and experienced providers of healthcare services at designated facilities for this purpose (Kreedi, Brown, Marsh & Rogers, 2021). In the case of the



current study, the personnel include nurses, dieticians, psychologists, doctors and managers of healthcare facilities.

### **1.7.5 Patient Management**

The organisation and regulation of facilities, systems, processes and personnel for purposes of preparing and providing healthcare services in the interest of the recipients of healthcare services (Kreedi et al., 2021:12). It has to be noted that: “The ultimate goal of any national health-development process is to enable its people to reach a level of health that enables them to make meaningful participation in the social and economic life of the community in which they live”.

### **1.7.6 Resources**

The material means by which the purpose and objectives of a system are achieved or realised (Bryman & Bell, 2019). In this study, the means refer to the availability (or non-availability) of infrastructural resources (equipment and physical facilities/buildings), financial resources (funding), human resources (healthcare personnel) and medical supplies.

## **1.8 RESEARCH DESIGN AND METHODS**

The research design pertains to the broad management plan according to which the study processes were structured, and *how* the research instrumentation (data collection) was conducted and structured (Polit & Beck, 2020). Such a plan also involves the philosophical approaches or paradigms that informed the reasons for the adoption of the overall plan itself (De Vos, Strydom, Fouche & Deport, 2021). Creswell (2020) further posits that the fundamental aim of the research design is to articulate the structure of the investigation into a researchable problem in order to produce an argument that is valid and meaningful to the audience of the researcher within the available time and other resources. In addition, the research design guides the research purpose and questions (Silverman, 2020; Tarab, 2019).

A paradigm refers to the conceptual or philosophical parameters that underpin the scientific orientation of the research study in relation to the methodological approaches and interpretation of phenomena, reality or the nature of science (Rubin & Babbie, 2017). It is against the backdrop of their philosophical orientation or scientific inclinations that research paradigms prominently guide both the non-empirical and empirical aspects of research studies, as well as the research design and approaches that the researcher has adopted (Matua & Van Der Wal, 2015).

This proposed study has adopted the phenomenological-interpretivist or constructivist research paradigm in order to obtain data from the perspectives of the healthcare personnel in their familiar ecological (ethnographic) surroundings concerning the phenomenon of HIV and AIDS treatment, prevention and management in a healthcare setting (Rani, 2016; Saunders et al., 2019).

### **1.8.1 Research Approach**

Study approaches and designs are largely informed and described in tandem with their research paradigms or philosophical inclinations or perspectives (Locharoenrat, 2017; Ngulube, 2020). Emanating from its phenomenological-constructivist research paradigm, the proposed study has adopted a predominantly qualitative research design inspired and influenced by its orientation towards a participant perspective according to which the healthcare personnel and HIV/AIDS patients (rather than the researcher) are the primary source and authority on the subject matter or phenomenon being investigated (Donley & Graueholz, 2012).

The qualitative research approach was preferred due to its compatibility with the insider perspective (knowledge, experience, perception) of the information sought by the researcher in the actual words of the participants (Creswell, 2020). In this regard, the individual interviews with the sampled healthcare personnel were conducted on scheduled days and times following the proper ethical considerations and attendant informed consent of the selected participants.

### **1.8.2 Research Methods**

Research methods pertain to the nature and type of specific instrumentation, procedures, and tools used for collecting data; as well as the environment under which these were used (Cohen, Manion & Morrison, 2018; Moseholm & Fetters, 2017). In this principally qualitative study, the researcher opted for the individual semi-structured interview mode to collect data from the selected research participants (healthcare personnel). In the process, field notes were also relied on to complement the raw data generated from both the interview sessions for purposes of data saturation, which was reached after the 10<sup>th</sup> interviewed participant (Brink et al., 2018; Lamont & Boduszyński, 2020). (Due to the current environment induced by the Covid-19 pandemic (Anakpo & Mishi, 2021), the researcher abandoned the previously envisaged and scheduled focus group discussions with HIV/AIDS patients receiving their daily treatment services at the research site (Laetitia Bam CHC).

## **1.9 ETHICAL CONSIDERATIONS**

In research, ethical considerations are premised on the expected codes of conduct, norms and standards intended to regulate the nature of the association and relationship between the researcher and his/ her selected participants (in predominantly qualitative studies) or respondents (in predominantly quantitative studies) (Bryman & Bell, 2019; Hesse-Biber & Leavy, 2011). In terms of the researcher-specific ethical issues, the administrative requirements or protocols for the granting of permission were observed by the researcher. In this regard, the necessary application for ethical clearance or approval to commence with the study was submitted in writing to the University of South Africa's (UNISA's) Research Ethics Committee (UREC) (Unisa, 2016). The researcher was then granted the required approval in the form of an Ethical Clearance. Subsequent to obtaining written ethical clearance confirmation from UREC (see Appendix 1), the researcher wrote to both the Eastern Cape Province Department of Health (see Appendix 2), and the Laetitia Bam management for permission to conduct the study with the selected ten participants from the very same community healthcare centre (see Appendix 3).

### **1.9.1 Participant-focused Ethical Considerations**

The participant-focused ethical considerations directly regulated the nature of the researcher's relationship with the participants (Crusoe, 2019; Patton, 2015). In this regard, the researcher ensured that the following ethical considerations were applied, namely: full disclosure and informed consent; privacy, confidentiality and anonymity; as well as protecting participants from exposure to any harm/ risk.

#### **1.9.1.1 Full Disclosure and Informed Consent**

The letters of request (mentioned in Section 1.8) also fully disclosed the nature and purpose of the research, as well as the expected level and nature of participation from the selected healthcare personnel (Doyle, Brady & Byrne, 2016; Patton, 2015). Prior to the actual commencement of the interview sessions, the selected healthcare personnel were once again informed that their participation was voluntary (uncoerced), and that they were free to withdraw at any time or choose not to participate at all in the study (see Appendix 4, Appendix 5A and Appendix 5B). No financial inducements were made to lure the participants into the study's data collection processes (Siverman, 2020; Tarab, 2019).

### 1.9.1.2 Privacy, Confidentiality and Anonymity

The confidentiality, anonymity and confidentiality of the research participants was maintained with the usage of descriptors and pseudonyms such as “Participant A” (Bazeley, 2016). Furthermore, they were not asked to disclose either their names or places of residence to the researcher; and no video recording of the proceedings took place, other than the audio recording of their verbal responses. All participants were afforded an opportunity to ask questions regarding their participation (Epstein & Carlin, 2012). After the interviews, data was kept in a safe and secure place where access was not granted to others outside the research study.

### 1.9.1.3 Non-exposure to Harm/ Risk

In research, it is the researcher’s responsibility to ensure that participants are protected from any form of (physical, psychological or emotional) harm for the entire duration of the researcher’s engagement with them (Brinkmann & Kvale, 2015; Flick, 2020). The researcher further ensured that the interviews took place in safe and secure environs, such that none of the participants suffered any physical, emotional or psychological harm during the interview sessions. Despite that the participants were known to the researcher as her colleagues, the researcher also ensured that none of the questions were invasive to the personal domain of the participants (Crusoe, 2019).

## **1.10 SCOPE/ DELIMITATION OF THE STUDY**

The delimitation or scope of the study is premised on the reduction or narrowing of the conceptual boundaries or methodological depth in accordance with the core variables relating to both the problem being investigated and the context of the research topic (Rajasekar, Philominathan & Chinnathambi, 2013; Walliman, 2021). In this study, a number of inter-related variables established a framework of the scope or delimitations.

Firstly, the study was conducted in a geographic area (Kwa-Nobuhle, Nelson Mandela Municipality District) characterised by urban township dynamics. As the only 24-hour community healthcare facility serving a large population with scant human, fiscal, and other resource constraints, overcrowding by patients may affect the applicability of the study to other areas with less overcrowding and resource constraints. Secondly, the study was conducted in a predominantly low-income area, and patients and staff at a relatively higher-income population affording private healthcare were not involved.

Thirdly, the study focus area is confined to healthcare professionals' experiences in the prevention, treatment and management of HIV/ AIDS patients, rather than the generalities attendant to the field of nursing practice. Fourthly, the study participants are restricted to only the health care professionals as the primary source of the "experience" sought by the researcher. Accordingly, other prospective stakeholders/ participants were excluded; such as the HIV patients themselves and community members.

## **1.11 ORGANISATION OF CHAPTERS**

The study has six chapters, structured as follows:

### **Chapter 1: Study Overview**

The chapter provides a general highlight of the pertinent research aspects that are presented and discussed in more specific details in the subsequent chapters. These critical aspects refer to the statement of the research problem; the aim/ purpose and objectives of the study; the research questions; the feasibility/ significance of the study; the research design and methods, as well as the ethical aspects of the entire investigation.

### **Chapter 2: Literature Review**

The chapter presents both international and local (South African) contexts of HIV/AIDS treatment and management in the context of human, infrastructural, and fiscal resources availability or constraints.

### **Chapter 3: Theoretical Framework**

In this chapter, the health systems theory forms the most critical aspect of the study's theoretical grounding. The foundational principles of this theory were located in terms of their relevance and applicability to this study.

### **Chapter 4: Research Design and Methods**

The chapter presents and discusses the philosophical orientation guiding the choice and development of the study's data collection and analysis domain. In addition, the sampling framework and trustworthiness measures are discussed in this chapter.

### **Chapter 5: Data Presentation and Analysis**

In this chapter, the collected data is presented both diagrammatically and prosaically for purposes of allocating intelligible meanings derived from patterns and frequencies of recurring themes.

### **Chapter 6: Main Conclusions, Findings, and Recommendations**

In this chapter, the main conclusions and summary of findings are presented, together with the researcher's own recommendations derived from the evidence accruing from the collected and analysed. In addition, the study's limitations and recommendations for further research are presented and discussed.

## **1.12 CONCLUSION**

The chapter introduced the rest of the study by presenting an overview of the core research variables that are presented in more details in all the ensuing chapters of the study. In this regard, the chapter encompassed various discussions on a background to the HIV/ AIDS scenario in the form of healthcare facilities management; as well as the Sub-Saharan African and South African contexts of HIV and AIDS.

The chapter further outlined the research problem, aim, objectives, and questions; the value of the study; definition of key concepts; the research design and methods; the ethical consideration; scope/ delimitations of the study; as well as the organisation of chapters in the entire study.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

Literature review pertains to the systematic search, analysis and synthesis of mainly secondary sources of information and data relevant to a study (Clark et al., 2018; Denzin, & Lincoln, 2018). The literature review enabled the researcher's exposure to other scholars' and experts' contribution to the field of study and phenomena being investigated in this study (i.e., healthcare workers' experiences and working environment in the context of HIV/AIDS). A well conducted literature review should provide readers with an objective and organized synthesis of evidence on any given topic (Polit & Beck, 2020). The latter authors further mention that the most central tasks of literature review are to summarise and critically evaluate the overall evidence obtained, so as to reveal the current state of knowledge in the particular field being investigated. For this reason, the search for relevant sources of information should conclude with a concise summary of evidence on the topic and possible gaps in the literature induced by deficiencies and challenges encountered by researchers in previous studies with a similar or approximately similar research problem (Bazeley, 2016; Yin, 2018).

In the previous chapter (Chapter 1), an overview of the study was presented and discussed. The discussion was specifically premised on the study's critical units of analysis, such as its background; its research problem; its objectives and research questions; its data collection and data analysis processes; its ethical considerations; as well as the scope covered and the arrangement of chapters in the entire study (Ivankova, 2015; Ruel, Wagner & Gillespie, 2016). In logical concatenation with the previous chapter, the current chapter (Chapter 2) further presents relevant literature and concepts relating to the research topic; that is, the experiences of the healthcare workers and practitioners with regard to the management of people living with HIV and AIDS (PLWA) at the healthcare facility selected as the research site.

The theoretical and methodological background derived from the literature review afforded the researcher the opportunity to explore, understand and describe the experiences of the healthcare personnel in the management of HIV and AIDS patients in the Nelson Mandela Metropolitan District (NMMD). It is on the basis of this understanding that the research problem, the research aim and questions were articulated accordingly.

### 2.1.1 Addressing Gaps in the Reviewed Literature

In research, literature review enhances the researcher's ability to be conversant with the contributions made by other scholars, experts, and practitioners in respect of the theoretical, methodological, and practice realms of the subject or field of knowledge pursued by the study (Brinkmann & Kvale, 2015). It is against this backdrop that the researcher is enabled to locate and identify areas of the study or literature in which gaps still exist by observing *what* others have done, *how* they have done it, and *what* still needs to be done to advance the body of knowledge relating to the research topic (Babbie, 2020; Edmond & Kennedy, 2012).

Among the numerous studies that have already been conducted in this part of the country, there has been relatively limited focus on understanding the difficulties and experiences of HIV/AIDS healthcare workers and their patients. This gap has been addressed in this study by means of its empirical orientation, whose primary focus was on obtaining the first-hand experiences, perceptions, and knowledge of healthcare personnel in the management of HIV and AIDS patients at the afore-mentioned research site.

The literature review was beneficial for orientating the researcher and providing useful and relevant insights on *what* has already been studied and documented on the research topic; and *how* other scholars and researchers have investigated similar research problems (Grove, Burns & Gray, 2020). Such a literature-based background equipped the researcher with adequate knowledge and understanding of the dominant methodological processes and perspectives of previous research in the same field of knowledge being pursued by the researcher in the context of the current research topic. To this end, several sources from diverse scholarly paradigms were consulted prior to the study's undertaking (Doyle et al., 2016).

These local and international literature sources included research books, peer-reviewed articles appearing in accredited academic and scientific journals; official government policy documents; research papers presented at various conference proceedings; as well as published and unpublished dissertations/ theses at different and local institutions of higher learning (Creswell & Poth, 2018; Denzin & Lincoln, 2018). The reviewed literature then provided the critical interstitial link between the aetiological and epidemiological aspects of HIV/AIDS (including patient healthcare) on the one hand; as well as the healthcare systems aspect on the other (including the management of healthcare facilities and HIV/AIDS human resources). In this regard,



the global, African, and South African contexts were referred to in tandem with the research topic.

In the specific context of the research topic, the current chapter (in addition to its introduction) is structured in accordance with five fundamental inter-related areas of discussion, namely: an overview of the HIV/AIDS epidemic in South Africa; nature of healthcare systems in South Africa, with specific focus on HIV/AIDS; strategies to address HIV/AIDS in relation to levels of prevention; as well as the healthcare personnel and HIV/AIDS patients domains. All of these five areas of discussion are interstitial to the research topic insofar as they present a four-sided or 'rectangular' but unbroken/ linear dimension of professional healthcare workers' experiences, perceptions, and knowledge of their HIV/AIDS environment as both *workplace* and *healthcare service delivery centre*.

Given the latter state of affairs, it is the researcher's well-considered intention to highlight early in this study that the predominant emphasis of the literature-based discussion is more on healthcare workers' material and professional circumstances (e.g., the human resources management and healthcare systems domains); than on the aetiological and prevalence factors of HIV/AIDS *per se*.

## **2.2 AN OVERVIEW OF THE HIV/AIDS EPIDEMIC IN SOUTH AFRICA**

An overview of the HIV/AIDS pandemic constitutes an indispensable part of the literature review since it provides a context and framework against which the measurability or management of healthcare workers' productivity and viability of healthcare facilities could be ascertained (McCracken, 2017; Pettifor, Rees, Kleinschmidt et al., 2019). Furthermore, these four categories are in accord with the four fundamental principles of management (i.e., planning, controlling, organising, and leading (Havilir et al., 2020); thus, enabling a basis for comparing or determining the proportionality between the magnitude of HIV/AIDS and the levels of response to mitigate such magnitude in respect of the state of the healthcare workers' readiness and preparation (Mohanlal et al., 2020). In this regard, knowledge about the HIV/AIDS pandemic provides a clear response and direction for the manner in which its prevention and management could be strategically approached from the perspective of healthcare workers' readiness and preparation (e.g., training and support).

South Africa has the largest HIV epidemic in the world, with about 6.8 million people living with HIV and an estimated prevalence rate of 18.9% among adults aged 15 to 49 years (Nlooto, 2017). In their study, (Loeliger, Niccolai et al. 2016) contend that the figure was as high as 7 million people living with HIV/AIDS in South Africa, with a prevalence rate of 19.2% among the adult population; which was still the highest in the world. KwaZulu-Natal (KZN) province has the largest HIV prevalence rate of 16.9% (United Nations International Children's Emergency Fund/ UNICEF, 2022). In 2018, the HIV prevalence rate was approximately 12.75% of the total South African population (Statistics South Africa/ StatsSA, 2018).

The total number of people living with HIV in South Africa was then estimated at approximately 7.03 million. In Limpopo Province, there were 259 227 new infections, which was 17% of the entire population of the province (StatsSA, 2018). Of this number, approximately 52 408 were from Vhembe District, which is 10.87% of the population of the district. Due to antiretroviral coverage, the HIV-infected people in this district were now living longer and visiting their local hospital regularly.

Government's rapid scale-up of public sector HIV resources to make antiretroviral therapy (ART) widely available is credited with the decrease in HIV/AIDS-related deaths from 50.8% to 31.1% (UNAIDS, 2019). Despite these successes, only 42% of people living with HIV were on ART in South Africa as of 2013, and one third of all deaths were still attributable to HIV/AIDS (Loeliger, Niccolai et al., 2016). The latter authors cite further that delays in ART initiation and defaulting patients were the main causes of increasing HIV/AIDS deaths. Other contributory factors included denial, stigmatisation, insufficient patient education, poor social support, socio-economic limitations including transportation issues, fear of long-term therapy and its side effects, as well as lack of efficiency and accessibility within the healthcare system (Loeliger, Niccolai et al., 2016). The South African HIV/AIDS prevalence rates have since declined as compared to the 2010 prevalence figures. There were about 40 000 fewer new adult HIV infections in the region in 2015 than in 2010, a 4% decline (UNAIDS, 2019). Mother-to-child transmission of HIV has been reduced from 70 000 babies born to HIV-positive women in 2004, to less than 7,000 in 2015 (van Dyk et al., 2017).

In South Africa, health policy initiatives such as the National Health Insurance (NHI) and the Revitalisation of Primary Healthcare (RPH) programme are at the core of addressing system-wide weaknesses which are inimical to efficient and equitable healthcare services delivery (Toska & Natukunda, 2017). A three-pronged strategy

characterises the South African response to HIV/AIDS prevention and management. This three-tiered approach is mention-worthy, since every prong entails some implications on both the healthcare workers and facilities. In its entirety, the strategy entails the primary, secondary, and tertiary levels of prevention.

### **2.2.1 Responses to the HIV/AIDS Scenario in South Africa**

In South Africa, the initial response to the HIV/AIDS pandemic was very similar to the general worldwide responses, although there were significant element of denial and inaction for various ideological reasons (Sesanti, 2018). When the first democratically elected government took office in 1994, there was great hope for a dedicated and concerted response to the AIDS epidemic (Harvard School of Public Health, 2009). Such hope was inspired by the fact that the post-apartheid government had adopted the Networking HIV and AIDS Community of Southern Africa (NACOSA) strategic plan as its first credible response to the HIV/AIDS epidemic. Regrettably, the fledgling Mandela government was faced with a plethora of post-apartheid challenges that resulted in AIDS and its co-infectant, TB, not receiving the level of attention that was required (Sesanti, 2018; WHO, 2020).

For example, instead of coordinating efforts to manage the epidemic, the country was afflicted by controversies and scandals, such as ‘the Sarafina 2’ debacle in 1996 (concerning major mismanagement of funds) and the Virodene scandal in 1997 wherein the government supported a so-called cure for AIDS consisting of a toxic industrial solvent (Myburgh, 2007). The most regrettable oversight of the government then was its refusal in 1998 (four years following the drug’s successful trials in the USA), to provide AZT to pregnant South African women in order to prevent mother–to–child transmission of HIV (Myburgh, 2007; Sesanti, 2018). This refusal translated into the number of pregnant HIV-infected South African women increasing from 4.3% in 1994 to an estimated 17% in 1998 (van Dyk et al., 2017).

Following the regrettable AIDS denialism era, the South African government (through the NDoH) has since demonstrated and intensified efforts to provide combination and prevention options for both the general population and key HIV and AIDS populations, for example, just eight months after the World Health Organization (WHO) released the guidelines for HIV pre-exposure prophylaxis (PrEP). (DoH & SANAC, 2016a; Karim & Karim, 2010). In June 2016, South Africa became the first country to provide sex workers and other key populations with Oral PrEP as part of the country’s national HIV programme. Although the number of new HIV infection per annum decreased to 221,000 in 2018, the rate of decline is not sufficient to reach the intended target of

75% reduction between 2010 and 2020. Although interventions such as circumcision are prevalent, the country has consistently fallen short of the current national standard plan (NSP) target of medically circumcising 3 (three) million men from 2017 to 2022 regarding key populations (UNAIDS, 2019). These populations include sex workers, men who have sex with men (MSM), and people who inject drugs (PWID). Not only are current intervention initiatives inadequate, there is also a scarcity of comprehensive monitoring data to inform the progress (UNAIDS, 2019).

### **2.3 NATURE OF HEALTHCARE SYSTEMS IN SOUTH AFRICA WITH SPECIFIC FOCUS ON HIV/AIDS**

Despite various definitions attributed to 'healthcare systems', some points of convergence have been noted from different authors' perspectives. For instance, the African Population and Health Research Center/ APHRC (2021) and Rensburg (2021) refer to the concept of healthcare systems as a means to an end; a system which exists and evolves to serve societal needs with components that can be utilised as policy instruments to alter the outcomes. On the other hand, Dalglish, Khalid and McMahon (2021) refer to a healthcare system as the sum total of the *structures, people* and *processes* which act in tandem to provide a vehicle for the delivery of healthcare and the achievement of better health. Therefore, in its broader sense, the term 'healthcare system' refers to an organised plan of health services or programmes by which healthcare is made available to the broader population cost effectively as it is financed by government, private enterprise, or both (Pettifor, Rees, Kleinschmidt et al., 2019).

The ultimate goals of an effective health system are not only improved health, but also greater responsiveness to citizen and household protection from social and financial risk (Dalglish et al., 2021). It is against this backdrop that the World Health Organization's (WHO's) health systems framework stipulates that a viable healthcare system should necessarily embrace five critical elements: service delivery (including hospitals and clinics; various inputs (e.g., financing and human resources); systems of governance or leadership to ensure access to effective personal and non-personal health interventions; acceptable quality and safety; as well as maximising efficiency (WHO, 2017).

The World Economic Forum/ WEF (2020) is also in agreement with the perspective of healthcare systems as a service delivery-oriented means for providing basic healthcare to equitably to all communities (people). The WEF (2020) posits further that in the public sector, the healthcare system aims at addressing the skewed or

imbalanced proportion between socio-economic realities and professional expectations. Accordingly, for any healthcare system to be effective in organising and launching comprehensive responses to the HIV/AIDS epidemic, it is important to nurture cooperation among all relevant role players in the healthcare facilities, as well as with other stakeholders at the local, sectoral, provincial and national levels (APHRC, 2021).

Such a state of affairs in a healthcare system is conducive for the comprehensive integration and coordination of relevant processes, people, and structures in the effective delivery and provision of cost-effective quality HIV/AIDS prevention, treatment and management services by adequately skilled and trained healthcare workers and practitioners in highly organised and infrastructurally viable settings (Rensburg, 2021).

Ideally, the public sector should establish and participate in a multi-sector HIV and AIDS networks in which expertise and resources are shared (WHO, 2020). In this regard, private business organisations could, for example, save money and personnel by sharing resources such as marketing, advertising, information and communication technology, equipment, market research, employee volunteers and training (Carelse, 2018). In addition, public sector partnership programmes could also involve people living with HIV and make a positive impact on the communities' AIDS and HIV programmes by assisting non-governmental organisations (NGOs), community-based organisations (CBOs) and community projects involved in these programmes with funding, technical assistance and resources. Inherently, CBOs and NGOs participating in all aspects of HIV /AIDS service delivery, from prevention to treatment and advocacy, to reaching key populations (Sonti, Tyagi, Pande et al., 2022).

### **2.3.1 Healthcare Management**

Since healthcare systems are fundamentally premised on structures/ institutions, people, and effective systems/ processes these systems necessarily entail research and services which support the improvement of healthcare at the level of communities - who are the essential *people* in the service delivery value chain in addition to healthcare workers who themselves also constitute another segment of the self-same *people-centred* value chain (Chammartin, Ostinelli, Anastos et al., 2020). It is essential at this stage to provide a perspective of the notion and concept of *management*. The rationale is that such formalisation of 'management' in this chapter essentialises the seamlessness of the healthcare workers' expected levels of service provision or delivery on the one hand; as well as the broader systemic (socio-economic)

environment of the communities as recipients or consumers of these services. Hissom (2009: 4) asserts that:

"Management is the organizational process that includes strategic planning, setting objectives, managing resources, deploying the human and financial assets needed to achieve objectives, and measuring results. Management also includes recording and storing facts and information for later use or for others within the organization. Management functions are not limited to *managers* and *supervisors*. Every member of the organization has some management and reporting functions as part of their job."

In conjunction with the above excerpt, the management of healthcare entails that the structures, the people, and the processes involved should all be systematically directed and controlled such that the broader policy strategic objectives are achieved. From the researcher's point of view, the perspective by Sonti, Tyagi, Pande et al. (2022) on healthcare management is aptly resonant with both the research topic and its research objectives. This perspective upholds that healthcare management is possible, provided that a specific category of challenges has been addressed in order to reduce the burden and management of HIV/ AIDS prevalence. These global and local challenges include, but are not limited to: prioritisation of projects induced by fiscal, infrastructural, and human resource constraints; as well as inadequate collaborative or multidisciplinary planning, monitoring and evaluation approaches to maximise healthcare service delivery in the most cost-effective manner (Redwood et al., 2016).

For purposes that are in accord with the achievement of the study's stated research objectives, healthcare management (as a component of the health systems perspective) is posited within a framework of four salient categories, namely: an overview of the HIV/AIDS pandemic; healthcare management in the school environment; healthcare facilities management; as well as the management of healthcare workers (doctors, nurses, and other practitioners). All these four categories are interstitially linked to the effective delivery of quality healthcare services to communities by means of organised and controlled institution-wide systems and processes in the context of HIV/AIDS prevalence. Cast in this mould, these four categories simultaneously integrate the health systems perspectives proposed by Dalglish et al. (2021), Hwabamungu, Brown and Williams (2018); as well as WHO (2015).

## **2.4 STRATEGIES TO ADDRESS HIV/AIDS**

In South Africa, a coalition of factors have increasingly impacted on the growing demand for healthcare professionals and practitioners (i.e., nurses and doctors) (UNICEF, 2022; WHO, 2017). These factors include the high levels of HIV prevalence rates and sexually transmitted infections (STIs); poverty; homelessness; prostitution; child labour; uncontrolled migration patterns and rapid urbanisation; the occurrence of diseases such as syphilis and Tuberculosis (TB); as well as social and cultural transitions (WHO, 2018; WHO, 2020). In their cumulative effect, all of these socio-economically compounding factors account for an additional burden on both the healthcare facilities and the healthcare personnel who are expected to render optimum professional services and quality of care without compromising acceptable healthcare norms and standards (Department of Health, 2016b).

### **2.4.1 Levels of Prevention**

The utilisation of the various levels of HIV and AIDS prevention among various groups in communities was deemed as both a relevant and effective approach to alleviate the skewed imbalances that may prevail within the public health system (WEF, 2020; WHO, 2017). As such, the primary, secondary and tertiary forms and levels of prevention were found to be very instrumental in presenting a country's healthcare system as a vital mechanism in lessening the disease burden for all population groups and sectors.

#### **2.4.1.1 Primary Prevention**

Primary prevention involves the counselling of clients with a specific focus on health promoting behaviours related to lifestyle (Joubert & Elrich, 2014). At the primary prevention level, health practitioners working in any health establishments - whether in the community and/ or in primary care settings - are involved in general health promotion activities such as nutrition, education and counselling, sex education, and family planning services. An example of a primary prevention intervention relates to the provision of health education and training for day care workers on health and hygiene. Another example is that of teaching the clients to recognise and avoid exposure to HIV and assisting in implementing specific protection strategies (Joubert & Elrich, 2014).

#### **2.4.1.2 Secondary Prevention**

In the context of HIV/AIDS, secondary prevention involves the implementation of pre-emptive strategies to thwart off unintended pregnancies among the youth and other young couples prior to the occurrence of such an unintended or unplanned event

(Joubert & Elrich, 2014). As is the case in primary and tertiary prevention, secondary prevention services are freely offered by trained and professionally experienced healthcare workers at any community settings as well as at primary and secondary levels of healthcare. The prevention of mother-to-child-transmission (PMTCT) of HIV is of particular significance to pregnant mothers who have to attend pre-natal care services for treatment specifically aimed and protecting the unborn child from any likelihood of HIV infection. In the context of secondary prevention, the health practitioner usually initiates the process by checking the client's medical history, and then follows up with education concerning appropriate HIV screening procedures. Other examples of secondary prevention interventions include continued pre-natal screening of pregnant women to screen for HIV that might have been uncertain during the window period (DoH, 2016B; Khamisa, Peltzer, et al., 2017).

#### 2.4.1.3 Tertiary Prevention

Interventions aimed at tertiary prevention occur mostly at the secondary and tertiary levels of care. For instance, at a specialised clinic such as an HIV clinic, at a hospital or a rehabilitation centre. Tertiary prevention may also occur at community and primary care settings. In the context of this study, tertiary prevention may include interventions such as morbidity limitation and rehabilitation from HIV and AIDS complex; healthcare, treatment, physical and occupational therapy; rehabilitation; as well as an HIV and AIDS self-management programme aimed at reducing the need for hospitalisation (Cluver, Hodes, Toska et al., 2018; SANAC, 2016). As indicated earlier, the three levels of prevention necessitated mentioning in the literature review, as they have a bearing on three other corresponding and inter-related aspects, namely:

*Who offers the health service?*

*Where is the service offered?*

*How is the particular service offered?*

#### **2.4.2 Management of HIV and AIDS Among Different Target Groups**

No HIV and AIDS prevention programme can be successful without the necessary support, commitment and high-level advocacy by the country's leaders (Drury, Gleadow-Ware, Gilfillan et al., 2018; Jooste, 2017). Therefore, it is necessary to develop a comprehensive national AIDS plan that involves a wide spectrum of role players, ranging from government to the private sector and community-based role players. As such, successful programmes should provide critical knowledge, counteract stigma and discrimination, develop social consensus on safer behaviour,



and strengthen HIV prevention, management and care skills (Duran & Ergün, 2018; Fajnzylber et al., 2020).

These successful programmes and initiatives could be achieved in a cost-effective manner by ensuring that HIV counselling and HIV testing are widely available with the involvement of HIV positive people; mass media campaigns; workplace support programmes; peer support and outreach education; as well as life skills programmes in schools.

#### 2.4.2.1 Involving People Living with HIV

People living with HIV are often the best advocates and activities for social and behaviour change related to HIV (Shu, Justice & Zhang, 2020). This is because the personal story or testimony of a person living with HIV can present a powerful message to others, as well as mobilise people and resources intended to help initiate successful prevention programmes. Involving people living with HIV in prevention programmes in their own communities also helps to ensure that the programmes are relevant and meaningful to the community or population (Pettifor, Rees, Kleinschmidt et al., 2019).

#### 2.4.2.2 Children

All citizens and healthcare providers are responsible for encouraging parents to access treatment for prevention of mother-to-child transmission of HIV. As human beings, all HIV-infected children also have the right to relevant information and education concerning their human rights (Milliken-Tull & McDonnell, 2017). This includes the legal and ethical issues such as parental informed consent for HIV counselling and testing in children, disclosure of these children's HIV status in order to protect their best interests in the process (Jones, Jensen, Scherr et al., 2015). Concerns with stigmatisation presents a challenge for the parents/ guardians of HIV-positive children regarding the provision of consent for disclosing the HIV status of their children. According to the DoH (2015b; 2016b) guidelines, children's HIV testing and counselling ought to be performed by adequately trained healthcare personnel who understand children's development and communication.

#### 2.4.2.3 Marginalised Groups

All marginalised groups living with HIV and AIDS (e.g., prisoners, disabled people, men who have sex with men, lesbian women, sex workers and foreign nationals) should enjoy standards of care and treatment equal to those of the general population (Duran & Ergün, 2018). These groups or social categories should have the right of access to appropriate HIV/AIDS education, information and preventive measures in the most equitable and fairest manner, as pertains to the general population.

Although research on HIV related risks among men who have sex with men (MSM) has increased, this is still a group that does not receive enough attention in HIV education programmes (Granich, Gupta, Hall et al., 2017). The term 'men who have sex with men (MSM)' refers to men or males who have sex with men or males, regardless of whether they identify themselves as being gay (homosexual), 'straight', (heterosexual) or bisexual (having sex with both women and men) (Dzimiri et al., 2019). In a study undertaken in Cape Town, Durban and Pretoria, it was found that one third of the men who have sex with men (who also injected drugs) tested HIV positive (Khumalo, 2017). However, the HIV prevention programmes that only focus on gay men fail all those men who have sex with men, but who do not regard themselves as being gay (Abdullahi et al., 2016).

Based on social stereotypes and stigmatisation, it is evident that a major prevention, care and treatment programme is necessary for understanding men who have sex with men (WHO, 2019). Regrettably, this is still a highly criminalised group in many sub-Saharan Africa countries, which makes it difficult for these men to access amenities such as health education, treatment and care. Same-sex activity between consenting adults is prohibited by law in more than 30 countries in Sub-Saharan Africa, where such practice is viewed as a violation that should be punished by means of the death penalty (Bott & Obermeyer, 2013).

#### 2.4.2.4 Cultural and Tradition Role Players

Traditional and community leaders should play a major role in the provision of education on the promotion and protection of the rights of infected and affected persons (de Villiers, 2015). In the South African context, these leaders are even more compelled to work in conjunction with the DoH and DoBE authorities regarding 'taboo' issues such as traditional male circumcision (TMC), medical male circumcision (MMC), initiation, virginity testing, and a host of other tradition-steeped issues with the potential to increase HIV prevalence and perpetuate myths and ignorance regarding HIV and AIDS (DoH & SANAC, 2016).

#### 2.4.2.5 Health System Support and Peer Support

People living with HIV and AIDS have the right to equitable access to high quality HIV care, treatment and support. HIV and AIDS should not provide the basis for discrimination by medical aid funds and /or health service organisations (Jones et al., 2015). People living with HIV and AIDS have the right to be treated with respect and dignity within a healthcare setting, and be afforded all natural rights pertaining to all other citizens (Gorman, 2017). Therefore, it is in the best interest of any healthcare

system to be fundamentally instrumental in supporting various HIV-infected populations.

Behaviour change is more likely to occur when young people educate and support one another than when they are educated and supported by their teachers and parents or other adults (Department of Basic Education, 2018). Youth programmes involving groups such as street children and people who inject drugs are all very effective in fostering practices and behaviours that result in a lower risk of HIV transmission (DoH, 2015b). Risk behaviours including risky sexual practices and drug-taking are much more likely to be openly discussed, explored and understood within such group settings, provided the group members feel that they themselves are safe and accepted. As such, not only do peer education programmes empower people, but they also educate them.

A successful peer education programme transfers the control of knowledge from the hands of experts to ordinary community members, thereby rendering the education process more accessible and less intimidating (Adelman & Taylor, 2019). Peer education also enables messages and behaviours to be negotiated in the context of group debates. These peer education methods attempt to convince individuals to change their own behaviour on account of rational decision-making, leading to community members' development of new collective behavioural norms (Moses, 2017). The success rate of peer support and education programmes clearly demonstrates that AIDS educators, teachers and religious leaders should identify volunteers and train them as peer educators working in their own communities.

#### 2.4.2.6 HIV and AIDS Management in the School Environment

The school is the primary site for formal learning, healthcare education and training, and safety consciousness of the learners (Department of Basic Education/ DoBE & Department of Health, 2012). The HIV/AIDS pandemic affects not only the health of individuals, but the education system itself (Hoekstra, Young, Eley, Hawking & McNulty, 2016). Accordingly, healthcare management in the school environment is sacrosanct, as the environment itself provides a context and framework against which the extent of (in)efficacy of the school-level health system could be determined. The United Nations Population Fund (UNFPA, 2022) cites that the numerical (quantitative) and age cohort strengths of schools strategically positions them as appropriate sites for coordinated programmes which address a diverse range of health-related issues, such as HIV/AIDS prevention, alcohol and substance abuse, delinquency, pregnancy, and many more.

The *coordination* of such programmes is an absolute necessity, in order to prevent fragmentation of health education programmes which are then not cogently linked with the most fundamental and central mission or mandate of the school; as well as the core issues for which teachers are contractually, professionally, and ethically held responsible (Abedi, Abbaszadeh & Motaghi, 2016). Fragmented and uncoordinated school health programmes (*ergo*, poorly managed) result in their short-term lifespans, and are less likely to prevent risky behaviours on the part of learners.

It is within the school environment itself in South Africa where learners are sexually violated and molested, where child-headed families and HIV orphans are found, and where social grant dependants are found to supplement family income (if any) due to socio-economically induced poverty factors (Khumalo, 2017). Many live in overextended families which are under severe pressure to contribute to family incomes as poverty increases exponentially. Many, especially in rural areas, still have to walk or travel long distances between their homes and schools; while many more may not even have homes at all. Some leave their homes without food and will have nothing to eat for the entire day at school. As a result, many learners in both rural and urban areas are increasingly absent from school and/ or distracted (Department of Basic Education, 2018). They are daily confronted with the haunting spectre of losing parents, friends, siblings and teachers to the scourge of HIV/AIDS.

For learners, it is irrefutable that the devastating impact of diseases such as HIV/AIDS and Covid-19 necessitates a new regime of pedagogic and didactic arrangements or paradigms (Anakpo & Mishi, 2021). For instance, quality teaching time would have to be enhanced with the employment of specialised teaching in subjects such as Life Orientation (LO), as well as school health nurses (SHNs) in order to allow more time for teachers focusing strictly on their subject field without the burden of extra-curricular tasks involving psychological counselling and referrals; and issues of domestic violence on learners which require interventions by the criminal justice system (Department of Social Development/ DoSD, 2012; Duran & Ergün, 2018).

For educators/ teachers and school administrators, the impact of HIV/AIDS on society and human resource development has resulted in changes in skills requirements, the vulnerability of educators to the pandemic, staff attrition and mobility patterns, and changes in household expenditure patterns, shifts in rates of educators absenteeism, recruitment and ill-health retirement, benefit costs, contact time in classes and the extent to which government policies and practices assist in management of HIV/AIDS-related difficulties (Carelse, 2018). The work of HIV- positive educators and those who

have incurred full-blown AIDS is compromised by periods of illness. Knowledge of their HIV-positive status results in many educators losing interest in continuing professional development (in-service training).

As would be the case with learners, educators who do not believe they are infected or refuse to be tested, are also most likely to develop a significantly weakened and depleted morale as they are compelled to cope with the emotional and financial implications of an HIV/AIDS-related sickness and/ or death among colleagues, friends, colleagues, and relatives (Duran & Ergün, 2018; Dzimiri et al., 2019). The aftermaths of such situations compel educators to contend with uncertainty concerning theirs and the future of their dependents. As is the case with healthcare workers and practitioners, for the existing educators (not HIV-infected), they are confronted with the workload burden and have to contend with additional teaching and other work-related duties in order to fill-in for HIV/AIDS-related sickness or deaths of colleagues (Botma, Greeff, Mulaudzi & Wright, 2017).

Strong leadership at school level is required, and support from school administrators is even more of a requirement in order to develop programmes for staff development and HIV/AIDS policy prioritisation and implementation (Botma et al., 2017). A calibre of such leadership is essential, considering that some school principals may not regard the HIV/AIDS policy or programme as a priority; or as the responsibility of the school. On the other hand, principals who want to implement the programme may unduly be confronted with a conflict of interest from contending internal stakeholders within the school environment and also within some external (political) constituencies (Merriam & Grenier, 2019). In such situations, unless it is legally enforced and politically supported, schools are then confronted with multiple stakeholder interests and demands; while they also face the additional challenge of reforming practices, habits, and values concerning HIV/AIDS by means of effective health education programmes.

Notwithstanding the magnitude of healthcare management challenges at school level, some ameliorative interventions have also been noted at the macrocosmic/ systemic level in some countries (Esmaeili et al., 2014; Gorman, 2017). For instance, in 2004 in the United States, the Department of Education piloted HIV/AIDS peer educator workshops in some schools. These learners were trained and encouraged to educate their peers and be involved in community-based HIV/AIDS awareness and advocacy programmes. They attended an annual HIV and AIDS Youth Conference at which discussions centred on issues relating to the youth and HIV, as well as policies and latest developments in the struggle against the rapid spread of HIV and AIDS. This

programme was not included in the school curriculum, but was initiated to complement the extra-curricular classroom intervention programmes (Department of Basic Education, 2018).

The National Department of Basic Education has been involved in the initiation of Life Orientation and HIV/AIDS education and skills development. However, other processes in the education system were prioritised, such as the improvement of standards and pass rates, the introduction of the new curriculum (CAPS); as well as organisational and financial restructuring (Department of Basic Education, 2018). These prioritisations have tended to inadvertently obstruct the availability of resources to implement the programme in schools, due to the inefficiency and variability of implementing the Life Orientation skills curricula from province to province.

There is a need for the inclusion of issues such as violence against women and children and male bisexuality to improve HIV and AIDS teaching [researcher's own *bold italics for emphasis*]. The implementation of effective HIV/AIDS policies and strategies has been derailed further by factors such as inadequate funding for the introduction of HIV/AIDS and sexuality education in schools; advocacy initiatives for influencing political decisions to fund and improve the implementation of HIV/AIDS programmes in schools; and lack of research to shape public policy on health science and education and training (Health Professions Council of South Africa, 2016). The monitoring and evaluation of HIV/AIDS programmes should ensure that HIV/AIDS research is based on science and not on politics, myths, or false acclamations (AIDS Consortium, 2019; Caldwell, 2016; WHO, 2017; 2015a).

## **2.5 HEALTHCARE PERSONNEL MANAGEMENT**

All professional aspects pertaining to healthcare workers are of utmost importance in the delivery of health services to individuals and communities in the most cost-effective manner (Hoeve, Jansen & Roodbol, 2014; Williams, van Rooyen & Ricks, 2018). The roll-out of antiretroviral medications came with its own advantages and disadvantages. One of the advantages is that ARV increases the lifespan of people living with AIDS (PLWAs), which in turn also leads to an ever-increasing demand for health services (WHO, 2020). The disadvantage is that the high number of PLWA increases the need for receiving healthcare services and increases the burden on healthcare services, which is worsened by the shortage of materials and human resources. Such a situation is not conducive to meaningful provision of healthcare services by healthcare personnel (Jooste, 2017; Meintjes, Black, Conradie et al., 2015).

Providing lifelong AIDS treatment requires additional health workers, who are the first point of contact for ill people, regardless of the nature of disease. These professionally trained and qualified workers are essential in the prevention and management of HIV in all sections of the population (Naidoo, 2016). It is in this regard that the experiences, perceptions, and perspectives of healthcare personnel in HIV management are all factors of critical importance to the researcher. Such an orientation provides insights on understanding the difficulties facing this sector.

The healthcare workers and practitioners themselves are either infected or affected with AIDS due to factors such as workplace risks, sick family members, friends, neighbours or colleagues. It is often difficult for them to confront infected patients in their professional capacities at their respective workplaces, and may be faced with the similar situations at home (HSRC, 2018). More patients living with HIV/AIDS frequenting the healthcare facilities due to HIV/AIDS related infections, with the resultant increase on the nurses' and doctors' workload to nurses, especially in developing countries.

Absenteeism is another common problem among healthcare workers. Due to the increased number of patients seen daily, healthcare professionals find themselves increasingly under stress. This shortage relates to the inability of facilities to release clinicians to attend further retraining courses, especially those of longer duration. It was confirmed that lack of skills increased waiting times for the clients at health centres. In this regard, less competent clinicians had to repeatedly consult those who were more knowledgeable, but it is a time-consuming and interruptive process.

### **2.5.1 Healthcare Workers' Rights in the Context of HIV/AIDS**

It is the researcher's contention that the management of healthcare also requires an investigation of these healthcare workers' rights as employees. Such an investigation is useful for mitigating any perceived *legislative* tensions between the employees, their employer (Department of Health), and their clients/patients who are 'consumers' of health services and entitled uninterrupted quality of care.

The National Health Act (No. 61 of 2005, as amended) is in accord with the Nursing Personnel Recommendation of 1977 (R157) of the International Labour Organisation (ILO). Furthermore, the Occupational Health and Safety Act (No. 85 of 1993 as amended) provides for the on-the-job health and safety of all categories of workers in respect of work-related activities. The Act also acts as the protector of employees' labour rights. Accordingly, the ILO Recommendation prescribes that all possible steps

should be taken to ensure that nursing personnel are not exposed to hazardous risks. Where exposure to such risks is unavoidable, measures should be taken to minimise them.

The suggested measures include the provision and use of protective clothing, shorter hours, more frequent rest breaks. Protective clothing is a useful measure of caution against airborne diseases and needle pricks (Marek, Schaufeli & Maslach, 2017). In addition, temporary removal from the risk or longer annual holidays should be provided for in respect of nursing personnel regularly assigned to duties involving special risk so as to reduce their exposure to these risks. Health establishments ought to implement measures that minimise injury or damage to person or the property of healthcare workers (HCWs). This means that HCWs ought to be protected from physical harm, with their working environment made safe and free from any hazardous incidences.

It is further recommended that nursing personnel who are exposed to special risk should receive financial compensation. Nursing students and nursing personnel should not be assigned to work that is beyond their qualifications and competence (Gorde, Mendagudli, & Gaikwad, 2021). Where individuals are not qualified for work that they already do, they should be trained further in order to obtain necessary qualifications. Marek et al. (2017) intimate that the employer is obligated to the following in terms of the Occupational Health and Safety Act:

- Provide and maintain a safe workplace that is without risk to the health of its workers;
- HIV and AIDS should form an integral part of any workplace occupational health and safety strategy;
- The workplace should be conducive to the prevention of HIV and Tuberculosis (TB) transmission;
- Employers, workers and their organisations should comply with the regulations pertaining to hazardous biological agents and ensure that policies are in place to provide for appropriate training, awareness, and education on the use of universal infection control measures; in order to identify and reduce the risk of HIV transmission in the workplace; and
- All workers should be made aware of the universal precautions and procedures to be followed in reporting all occupational accidents, in the compensation for occupational infections, diseases, accidents, environmental control measures, as well as post-exposure prophylaxis.



## 2.5.2 Provision of HIV/AIDS Services at District Level

In the systemic management of healthcare provision, the management of healthcare *facilities* and healthcare workers or practitioners at the local or community level is of utmost attention, in order to obviate: “Limited knowledge of HIV/AIDS management [which] may lead to healthcare workers getting infected at work and/or carrying out medical interventions that are inappropriate (Evans & Abiteboul, 1999, cited in Koto & Maharaj, 2016). The cornucopia of challenges encountered by both healthcare workers and patients at the local facilities of healthcare clearly indicate that these warrant systemic interventions; for that reason, a health systems approach to resolving such difficulties of taking the healthcare system *to* the people needing it most.

A myriad of other facilities-related incidences and supply bottlenecks have been noted at different healthcare centres and facilities throughout the country. In such instances, supply challenges included delays in obtaining CD4 cell count results, which then hindered ART initiation in some peri-rural towns. As a result, many pregnant women attended their second or third ante-natal clinic visits but could not commence ART as their CD4 cell counts were still unavailable. In some other instances, supply-related challenges and system failures resulted in many HIV-infected women giving pre-term births prior to initiating ART or PMTCT prophylaxis, depriving these women of timeous interventions in counselling on infant feeding, for instance (Bott & Obermeyer, 2013).

Many countries, including South Africa, have implemented population-based household surveys to estimate HIV occurrences and the burden of HIV infection (Peltzer & Phaswana-Mafuya, 2018). Most household HIV surveys are designed to provide reliable estimates down to only the first sub-national geopolitical level which, in South Africa, is composed of nine provinces (Granich, Gupta, Hall et al., 2017). However, HIV prevalence estimates are needed down to at least the second subnational level in order to better target the delivery of HIV care, treatment and prevention services.

The second subnational level in South Africa is composed of 52 districts. Achieving adequate precision at the second subnational level therefore requires either a substantial increase in survey sample size or use of model-based estimation in order to incorporate other pre-existing data. According to the South African National HIV Prevalence, Incidence and Behavior Survey (2012), HIV prevalence estimates from the 52 districts show that testing of pregnant women who attended antenatal care (ANC) clinics in 2018 provided substantially improved precision in many district-level

estimates of HIV prevalence in the general population (Granich, Gupta, Hall et al., 2017).

Van Dyk et al. (2017) also emphasise that South Africa's new National Strategy Plan on HIV, TB and STIs covering the years 2017 to 2022, was instrumental in reducing new HIV infections per year at the health districts to under 100,000 people by 2022. It is currently estimated that 280 000 people are infected per year, most of whom were young women and girls (Van Dyk et al., 2017). Some of the NSP's other key targets include:

- Ensuring that 90% of all people living with HIV know their HIV status;
- Ensuring that 90% of all people with diagnosed HIV infection receive sustained antiretroviral therapy; and
- Ensuring that 90% of all people receiving antiretroviral therapy achieve sustained viral suppression.

### **2.5.3 Provision of HIV/AIDS Services at Community Health Care Level**

The Laetitia Bam Community Health Centre embodies the combined effects of the HIV/AIDS disease burden and the infrastructural management of healthcare facilities, personnel and systems. Providing healthcare services to a population of more than 242,924, the Laetitia Bam Community Health Centre comprises of a trauma unit and a maternity ward that provides 24-hour services in conjunction with the Uitenhage Provincial Hospital for terminally ill patient referrals. This healthcare centre also provides antenatal care to all first-time attendees and those on follow-up visits with routine information concerning HIV testing and PMTCT programmes. The Laetitia Bam CHC is the only facility in the district that has a trauma unit and a maternity ward operating daily, including weekends and public holidays.

All out-patients receive pre- and post-HIV test counselling irrespective of the negative, positive or inconclusive status of their HIV tests that are conducted by the counsellors at Laetitia Bam CHC. In addition, free condoms are provided during the HIV testing sessions, together with a demonstration on how to use them and information on where to get more of these condoms when needed. The National Department of Health (DoH) has compiled new policy guidelines in 2010 as part of the Primary Health Care re-engineering strategy to integrate community and home-based care (CHBC) programmes with National Primary Health Care strategies (Moses, 2017). According to these guidelines, the State pays for community health workers (CHWs) who are appointed by the DoH. These community health workers are deployed in outreach teams where they are allocated wards and supervised by nurses at the primary health

care at Laetitia Bam CHC. The roles of the CHWs include community profiling, risk identification, health promotion, health education and referral.

HIV counselling and testing is provided to all out-patients, including pregnant and breastfeeding women who test negative. They are considered part of the prevention of mother to child transmission (PMTCT) programme, and are offered routine HIV testing as well as TB screening throughout pregnancy, labour and breastfeeding as well as at the six-week immunisation visit. People in the general population as well as men who have sex with men and sex workers who test HIV negative, should repeat testing every six to 12 months, depending on their risk behaviour (WHO, 2022). Sexually active adolescents are also tested every six to 12 months, or more frequently should they have new sexual partners or in the event that they indulge in unprotected sexual intercourse. Adults and adolescents who were exposed to HIV are tested after six to 12 weeks in order to make provision for the window period. Families of HIV infected people are tested as soon as possible after the family member is diagnosed.

## **2.6 THE HIV/AIDS PATIENTS' DOMAIN**

The HIV/AIDS patient domain is considered here as a critical aspect of the entire health system's value chain. The management and administration of healthcare facilities is aimed at improving the quality of care to patients. Similarly, the betterment of healthcare workers' material conditions have had a direct impact on the performance of their professional duties (WHO, 2020).

In South Africa, patients living with HIV are free to choose their preferred type of healthcare (Anakpo & Mishi, 2021; Cluver, Hodes, Toska et al., 2018). This is also supported by the global HIV health policy, which spells out that for countries to improve on their health outcomes, aspects which prevent people from seeking their preferred type of service for HIV prevention, treatment and care should be removed (WHO, 2018). In terms of the Constitution of the Republic of South Africa (Act 108 of 1996), it is mandatory for the government to provide healthcare services to all citizens, which also includes people living with HIV and AIDS. Human, fiscal, and infrastructural resources are needed for the realisation of the above.

From the researcher's perspective, the centrality of the patient in healthcare management is sacrosanct, and also highlights the nature of tensions between human rights and health (Amalki, 2013). International and national organisations have increasingly realised the significance of incorporating the issue of rights as a factor in ethical and professional standards (American Nurses Association, 2015) Therefore, in

a rights-dominated environment, healthcare workers and providers are obliged to act in the interests of human rights, thus ensuring that they are not viewed as violators of the human rights culture.

### **2.6.1 The Basic Rights of People Living with HIV and AIDS**

People living with HIV and AIDS have the same basic human rights pertaining to all citizens (Amalki, 2013; Doyle, Mchunu, Koole et al., 2019). Accordingly, they have rights as healthcare consumers and as citizens; they are citizens first, and healthcare consumers later. The HIV and AIDS Charter stipulates basic human rights which should be enjoyed by all people and should not be denied to people infected with or affected by HIV and AIDS (AIDS Consortium, 2019). The AIDS Consortium is a human rights organisation committed to openness and non-discrimination on the basis of HIV and Aids. The mission of this organisation is to uplift communities by building AIDS competence within our national network, with a special focus on human rights (AIDS Consortium 2019). The Health Professions Council of South Africa (HPCSA, 2016) stipulates the following clearly articulated guidelines and principles:

#### **2.6.1.1 Employment, Equal Protection of the Law and Access to Public Benefits**

Persons living with HIV and AIDS should have equal access to public benefits and employment opportunities, and HIV testing should not be required as a precondition for eligibility for such advantages (HPCSA, 2016). Equally, no employer may require an employee or an applicant for employment to undergo an HIV test as a prerequisite for employment. It is the employer's duty to ensure privacy and confidentiality in all aspects of employee health-related matters; and no employee should be compelled to reveal his or her HIV status (Crusoe, 2019). Furthermore, public measures should be adapted to protect people living with HIV and AIDS from discrimination in employment, housing, education, childcare and custody, provision of medical, social, and welfare services.

#### **2.6.1.2 Media**

Persons living with HIV and AIDS have the right to fair and unbiased treatment by the media and to the observance of their rights to privacy and confidentiality. Journalistic disinformation regarding the *gender* and/ or sexual preferences of PLWAs should be objectively presented in non-sensational terms; such that they are protected from violence and abuse based on their HIV status or sexual orientation (Crusoe, 2019). Persons living with HIV and AIDS also have the right to receive appropriate social assistance to improve their quality of life. Insurance companies should not require HIV testing before agreeing to provide coverage.

### 2.6.1.3 Liberty, Autonomy, Security and Freedom of Movement

Persons living with HIV and AIDS have the same rights to liberty, autonomy security and freedom of movement as the rest of society (Doyle, Mchunu, Koole et al., 2019). The discrimination of person in prisons, schools, hospitals or anywhere else on the grounds of their HIV and AIDS status, is unacceptable. Persons living with HIV and AIDS are entitled to autonomy in all life decisions, including marriage and childbearing.

### 2.6.1.4 Confidentiality and Privacy

Persons living with HIV and AIDS have the right to confidentiality and privacy concerning their health and HIV status (Department of Health. 2016b). Information regarding their HIV status should not be disclosed without their consent. In the event of their death, the consent of their next of kin should still be obtained, except when required by law.

### 2.6.1.5 Testing

Knowledge of HIV status is essential, and access to an HIV test is a right. Free and confidential HIV testing with pre- and post-test counselling should be recommended to all people using health facilities (Department of Health. 2016a). People should be encouraged to undergo HIV testing, but also have a right to decline. Persons who test HIV-positive should have access to continuing support and health services. The State is called upon to ensure that HIV testing facilities are affordable and accessible to all persons. The State is also encouraged to expand its work with AIDS service organisations.

### 2.6.1.6 Education on HIV and AIDS

All persons have the right to proper education and full information concerning HIV and AIDS, as well as the right to full access to and information concerning prevention. Public institutions such as schools, colleges, and universities should be actively involved in this regard (Department of Basic Education, 2018; Department of Health. 2016b). The focus of public education should include HIV/AIDS prevention and management, de-stigmatisation and eliminating discrimination against persons with HIV and AIDS.

### 2.6.1.7 Duties of Persons Living with HIV and AIDS

Persons living with HIV and AIDS have a duty to respect the rights, health and physical integrity of others (SANAC, 2019). Persons living with HIV and AIDS are further obliged to take appropriate steps to ensure respect of these rights at all times.

### 2.6.1.8 Confidentiality

The South African Constitution and the law in general, recognises the importance of maintaining the confidentiality of the HIV status of a patient. The following principles apply:

- The test results of HIV-positive patients should be treated with the highest possible level of confidentiality;
- Confidentiality regarding a patient's HIV status extends to other healthcare and legal practitioners, who may not divulge a patient's HIV status without the particular patient's (or his/her next of kin's) consent unless the disclosure is clinically indicated. For the treatment and care to be in the best interests of the patient, the need for disclosure of clinical data (including HIV and related test results), to healthcare practitioners directly involved in the care of the patient, should first be discussed with the patient; and
- The HIV test results and their report by a laboratory, should be considered as confidential information to which unauthorised persons are not privy. A breach of confidentiality is more likely to occur in the ward, hospital or healthcare practitioner's reception area than in the laboratory. It is therefore essential that healthcare institutions, pathologies and healthcare practitioners formulate clear policies concerning confidentiality and communication of such laboratory results.

## **2.7 MAIN CHALLENGES IN HEALTHCARE MANAGEMENT**

This part of the literature review incorporates both systemic and operational aspects of managing a viable healthcare system in the context of HIV/AIDS. Therefore, the main challenges referred to below, focus on the inherently critical elements of people, structures/institutions and processes in the healthcare system.

### **2.7.1 Fiscal and Infrastructural Constraints**

The fiscal and infrastructural constraints are more facility-oriented in their nature, since these facilities are the primary sites at which quality of care is expected to take place. The general state of different kinds of shortages in healthcare facilities necessitate that serious steps be taken to reverse these trends (Harris, 2017). Lack of space in the waiting areas, especially during peak hours, was cited as a major challenge in many healthcare facilities (Koto & Maharaj, 2016).

Some of the consulting rooms are considered inadequate and poorly equipped, with no light bulbs, poor ventilation, no windows, poor infection control mechanisms, as well as inadequate storage space for medicine in the ART consulting rooms. There were also situations where counselling or examination rooms were shared by more

than one healthcare worker for one-to-one counselling sessions with clients. In other situations, counselling rooms were separated either by a curtain or thin board that is not sound proof. All these situations compromise the confidentiality and privacy of clients, and they are also prevalent at the site of the current study.

The shortage of personal protective material is indispensable. Shortages in this regard are a hindrance in the provision of quality patient care. Healthcare workers' aversion to contracting HIV/AIDS has often resulted in the provision of sub-standard medical care (Marranzano, Ragusa, Platania, et al., 2013; Nilsson & Berg, 2015). The shortages of clinical supplies such as protective equipment also puts healthcare professionals at risk of contracting HIV. in some instances. The suppliers themselves would be out of stock due to a variety of reasons, including late orders and deliveries. The shortage of supplies raises the concern about coming into contact with contaminated and recurrent infections (Ramathuba & Davhana-Maselesele, 2013). In addition to protective equipment, common shortages have also been widely reported in pharmaceuticals, medicines, and laboratory reagents (Peu, 2015; Nilsson & Berg, 2015).

### **2.7.2 Staff Shortages and the Resultant Emotional and Psychological Burden**

Staff shortages are the foremost challenge encountered by healthcare workers, whose workload is increased by the many vacant positions that are difficult to fill (Peu, 2015). HIV-related illness and deaths of HIV-infected and affected healthcare workers compound the absenteeism rate and additional tasks to be performed. The migratory patterns of healthcare workers in search of better and more attractive working conditions have further compounded the shortage of healthcare professionals. The working environment of healthcare workers at the healthcare facilities is not immune from work-related pressures, resulting in occupational stress and burnout (Mathibe & Chinyamurindi, 2021). In addition to acute staff shortages and the attendant work overloads, the overwhelming nature and severity of the disease has inadvertently resulted in a range of emotional and psychological challenges, including the high number of infections and mortality rates; the relative youth of the patients; the plight of orphans; and the fact that AIDS is not a disease of individuals but implicates whole families and communities.

Such a range of challenges are a great source of stress that often lead to intense feelings of helplessness in healthcare (Austin-Evelyn, 2017). Healthcare professionals often experience frustration, anger, inadequacy, and occupational stress resulting from numerous organisational factors, including a lack of emotional and practical

support, a lack of supervision and mentoring (Crisp & Alvarado-Young, 2018), role ambiguity because of role expansion, role discomfort inadequate training, and lack of staff, heavy patient-client workload, poor salary and isolation (Amoah, Anokye & Boakye, 2019; Harris, 2017).

#### 2.7.2.1 Emotional and Psychological Challenges

Experiences of stress and burnout are some of the manifestations of emotional and psychological challenges characterising occupational stress, which is broadly defined as the perception of being unable to cope with an internal or external expectation or demand in the workplace (Amoah et al., 2019). Some studies have found that an unsupportive work environment increases stress (De Langen, 2015; Mathibe & Chinyamurindi, 2021). Persistent high staff workload and lack of equipment predispose clinicians to exhaustion, burnout, stress-associated illnesses, and absenteeism (Austin-Evelyn, 2017). In the context of the healthcare profession, stress and burnout are characterised by the following factors:

- Coping resources are not well matched to the level of demands placed upon the healthcare professionals;
- Coping has constraints placed upon it, such as a lack of social and occupational support; and
- The healthcare professional has consequent negative emotions that diminish his or her wellbeing.

The accumulation of stress leads to a decline in productivity and loss of staff and patient morale (Suhariyanto & Ungsianik, 2018). The healthcare workers may begin to lose confidence in their ability to perform their duties as expected, due to stress and burnout levels (Hoeve et al., 2014). In addition to staff shortages, nurses experience emotional exhaustion and fatigue as they work under great pressure, meeting death and misery on daily basis; sometimes with little or no encouragement, compensation or on-going training and supervision (Ramathuba & Davhana-Maselesele, 2013). Seeing people dying of HIV/AIDS related illness on daily basis is a torture on its own for nurses. Nurses described that they have learnt to feel the inner pain of someone (empathy), to put themselves in someone's place and go beyond the call of duty when caring for their HIV patients (Nilsson & Berg, 2015). These experiences could lead them to terminate their services despite enjoying their work (Mathibe & Chinyamurindi, 2021). If not well managed by adequately trained personnel, the stress levels of nurses could even lead to personal resentment and strife against colleagues.



Many studies have found that healthcare professionals were often frustrated with patients who defaulted on caregivers' advice and kept on with their deviant cigarette smoking and alcohol consumption habits. This unbecoming conduct extended to non-adherence to their ARV treatment routines, being rude, and disrespectful to caregiver's role boundaries (Milliken-Tull & McDonnell, 2017). Healthcare professionals were also often frustrated with patients who visited traditional healers and used traditional medicine without first discussing it with the nurses. Furthermore, healthcare professionals often experienced frustration, anger, inadequacy and helplessness resulting from numerous organisational factors such as a lack of supervision and mentoring; role ambiguity due to role expansion; as well as role discomfort, inadequate training, and poor salaries (Bortnowska & Seiler, 2019; WHO, 2017).

Healthcare professionals often experienced grief and bereavement overload by constantly witnessing human suffering and patients' deaths (Dzimiri, Dzimiri & Batisai, 2019; Ramathuba & Davhana-Maselesele, 2013). The management of stress is therefore a real threat to the nurses' physical, mental, and psychological well-being. In the same vein as their patients, nurses' welfare should be a high priority for all HIV/AIDS programmes (Drury, Gleadow-Ware, Gilfillan & Ahrens, 2018). It is of the utmost importance for authorities to acknowledge the stressful circumstances in which nurses work and are subject to, and to do everything in their power to protect their employees against burnout and thus prevent resignations (Haoses-Gorases et al., 2013; WEF, 2020).

Harris (2017) recommends that peer mentoring for nurses during their early years of employment should be relied on to reduce stress and burnout during nurses' careers. In addition, the mentoring process should not be a once-off event, but should be applied intermittently during nurses' employment. World-wide, 35% to 60% of newly employed registered nurses relinquish their first work postings as a result of a multiplicity of factors, including stress and the fear of making mistakes (Mulaudzi, 2011; Botma et al., 2017). Untenable workloads have the potential to reduce a nurses' control over their work situations. In this regard, continuous peer mentoring programmes are helpful for instilling collegial support systems and fostering professional self-reliance among nurses. Successful peer mentoring programmes also contribute to the reduction of incumbent practitioners ultimately migrating from one organisation to another (Crisp & Alvarado-Young, 2018; Harrison-White & Simons, 2013).

### **2.7.3 Training on HIV/ AIDS Management**

Appropriate HIV/AIDS education and knowledge have been identified as the most important factors in the de-stigmatization and treatment of people infected with HIV (Koto & Maharaj, 2016; Sonti, Tyagi, Pande et al., 2022). Despite the inordinate research studies suggesting minimal chances of contracting HIV through needle stick, some healthcare professionals are still disconcerted by the possibility; which increase the fear of contracting HIV/AIDS during patient care (UNICEF, 2022). In addition, healthcare professionals are often deeply and intensely touched by the negative effects of stigmatisation, not only on their patients' lives (primary stigmatisation), but also on their lives (secondary stigmatisation). Healthcare workers further find family secrecy stressful when they have to care for a patient while his or her diagnosis has to be kept a secret from their families (Cluver, Hodes et al., 2018). Such negative factors are an indication of the need for concerted communication, awareness and education and training for both healthcare workers and the public (Trickey et al., 2017; Ramathuba & Davhana-Maselesele, 2013).

A study conducted by Nilsson and Berg (2015) revealed that negative attitudes from relatives and patients impacted negatively on the provision of care by HIV-infected nurses. The same study also found that it was difficult for patients living with HIV and AIDS too, as they were always stigmatised in the community and in the healthcare institutions; with the possibility of discontinuing their antiretroviral treatment (Nilsson & Berg, 2015; Toska & Natukunda, 2017). Lack of knowledge of HIV/AIDS management by nurses is disastrous, especially when they have limited knowledge and have to care for patients at risk of developing, or already have complications. Knowledge plays an important role for nurses as it enhances treatment and coping mechanisms (Harris, 2017).

In a study conducted by Suhariyanto and Ungsianik (2018), the student nurse research participants were of the view that formal and additional education and training were an important factor for improving communication between health professionals and patients. Enrolled nurses have no access to policy documents and guidelines for HIV/AIDS management. Some of the participants in that study did not understand the management of HIV/AIDS as they were not trained as adequately as professional nurses were (Mulaudzi, 2011).

A study conducted by Marranzano, Ragusa, Platania et al. (2013) revealed that some enrolled nurses did not use gloves routinely when handling biological specimens of potentially HIV-positive people due to lack of knowledge and training in the

management of HIV/AIDS. Lack of skills among healthcare professionals leads to delayed consultation time for clients when unskilled and incompetent clinicians perform on-the-job-training during working hours (Valizadeh et al., 2018). Professionally trained nurses who underwent HIV/AIDS management training were found to be knowledgeable in the universal precautions for preventing the risks of occupational HIV transmission (van Schalkwyk et al., 2021). It is in this regard that the training of nurses in HIV/AIDS management has led to an improvement in their diagnostic and management skills, which in turn contributed to boosting the morale and confidence among healthcare workers (Jones et al., 2015).

Aversion and consternation to treating people living with HIV and AIDS was related to a lack of clear understanding of HIV infection modes and methods of prevention, as well as to the social stigma attached to HIV/AIDS (Fadana & Vember, 2021). Research suggests the chances of contracting HIV through needle stick are minimal, but some healthcare professionals may probably still feel differently due to the large numbers of HIV-infected people being cared for at healthcare facilities. Therefore, the fear around contagion, unpredictable illness trajectories which brings about additional challenges in the workplace might be caused by the healthcare professionals who lack the knowledge to understand the mode of HIV infection (Nilsson & Berg, 2015).

#### **2.7.4 Supervision and Support**

High volumes of HIV/AIDS patients in healthcare facilities increased clinical and administrative activities such as counselling for new and follow-up clients, examination of routine investigations; the quantity of forms to be completed; management of side effects and complications; self-dispensing; as well as issuing treatment from consulting rooms (Mathibe et al., 2015). Healthcare workers commented on the difficulties in providing quality healthcare services such as full examination, excluding opportunistic infections, and obtaining proper information on patients' history. Such a situation produces poor patient care as the staff tries to rush and push the queues for quantitative purposes only (Austin-Evelyn, 2017).

The healthcare professionals also perceived the increased numbers of patients to be the result of illegal cross-border clients, referrals from hospitals, and the closing down of some crucial non-governmental organisations (Mathibe et al., 2015). Cumulatively, in some healthcare facilities, healthcare professionals are unable to serve all the patients waiting for services in a day. They are compelled to send many patients back and request them to return the following day (Koto & Maharaj, 2016).

As is the case in many organisations, healthcare workers also need support, which includes their educational advancement, organizational development skills, employee wellness programmes that address depression and work burnout, peer mentoring, as well as social support (Makhado & Davhana-Maselesele, 2015). Therefore, lack of management support in addressing all of the above-mentioned challenges contributes to the provision of sub-standard quality of care (Bortnowska & Seiler, 2019). The study conducted by (Marranzano, Ragusa, Platania et al., 2013) found that demotivated and unappreciated healthcare workers were less likely to strive for quality in the healthcare delivery system.

Another study also revealed that healthcare facilities in which staff exhaustion was ignored, could expect negative outcomes in staff morale, the working atmosphere, and in quality of care (Mathibe & Chinyamurindi, 2021). In such cases, social support, assistance with problem-solving and appropriate management style could reduce stress related to leadership and management (Marek, Schaufeli & Maslach, 2017). That nurses work under stressful conditions with little, or no encouragement, compensation or on-going training and supervision, was also agreed to by Ramathuba and Davhana-Maselesele (2013) and Hartley, Ridenour, et al. (2015). Furthermore, Drury et al. (2018) and Rahman (2017) decry the availability of HIV-related protocols to only those health care providers who were trained in HIV/AIDS programmes. In many cases, there were also no specific policies for people living with HIV and AIDS, such as stigmatisation and discrimination of mentally ill patients who are living with HIV/AIDS.

### **2.7.5 Conditions of Extreme Poverty**

Aids in Africa is often concentrated among the very poor, and caregivers are disheartened by the disempowering effects of poverty (UNFPA, 2022). In the public school system, conditions of extreme poverty manifest mainly among learners from socio-economically depressed family backgrounds (Khumalo, 2017). These conditions are observable by the social grant dependency syndrome, chronic absenteeism from school, child-headed families due to HIV/AIDS-related deaths, and teenage pregnancy, among others (Artz et al., 2016; Tosin & Tshitangano, 2016).

In both urban and rural socio-economically depressed communities, the infrastructural expectations at healthcare facilities pose a threat to the equitable delivery of services and quality care (Tosin & Tshitangano, 2016). In such cases, most of the issues and challenges already discussed in Sub-section 2.2.2.2 and Sub-section 2.4.2

respectively in the current study are worth being referred to. On the whole, conditions of extreme poverty call for a sustainable and transformed health system.

## **2.8 MILESTONE ACHIEVEMENTS IN HIV/AIDS TREATMENT AND MANAGEMENT**

The milestone achievements are indicative of the bio-medical, organisational, occupational, and clinical steps and advancements directed at ameliorating the tasks and duties of healthcare workers, practitioners, and service providers in the prevention and treatment of HIV/AIDS (Johnson et al., 2017). The Southern African HIV Clinicians Society/ SAHCS is one of the pioneering organisations rendering advisory milestone achievements in the treatment and management of HIV/AIDS by healthcare workers (Meintjes, Black, Conradie, 2014).

It is axiomatic that the requirements for HIV/AIDS treatment and management are inextricably linked to a cadre of highly trained and professionally experienced healthcare workers who are adequately knowledgeable in all the aetiological manifestations of HIV/AIDS (Artz et al., 2016; Rahman, 2017). Accordingly, the SAHCS recommends that HIV patients be given antiretroviral regimens that are maximally suppressive in order to prevent resistance and to achieve the best clinical results. Highly active antiretroviral (HAART) with three antiretroviral agents is recommended for optimal results.

A combination of three different antiretroviral drugs has been shown to produce the best effects in terms of both viral suppression and reducing the development of drug-resistant viruses (Velardo & Drummond, 2017). There are different fixed dose combinations (FDCs) of the antiretroviral drugs currently available in South Africa, which reduces the burden of taking multiple pills and help individuals to adhere to their medications. New treatments for clinical use become available regularly, and healthcare workers are advised to contact the Southern Africa HIV Clinicians Society for the most current version of the treatment guidelines. It has been confirmed that effective combination therapy attacks the virus at different levels. In this regard, FDCs are becoming increasingly available to all public healthcare facilities in South Africa. They are recommended as they are capable of reducing the pill burden, and have the potential to improve adherence (World Health Organization, 2018).

Based on the findings that early ART initiation could potentially reduce both HIV incidence and morbidity, the SAHCS decided to adjust the ART guidelines for adults as follows (World Health Organization, 2018):

- All patients diagnosed with HIV infection should be initiated on lifelong ART. The CD4+T cell count and clinical stage of the patient should no longer be a consideration in the decision to start ART;
- For patients who are asymptomatic with CD4+T cell counts >350 cells /mm<sup>3</sup>, additional time (weeks to a few months) could be spent on counselling and preparing the patient for lifelong ART with good adherence before administering ART. In those patients with CD4+T cell counts <350 cells/mm<sup>3</sup> (and especially <200 cells/mm<sup>3</sup>), or with clinical indication for starting, there should be no undue delay;
- Within ART programmes, it is important to factor in that the absolute benefit of ART is much greater at lower CD4+T cells counts (there is a mortality benefit at CD4+T counts <350 cells/mm<sup>3</sup> (Trickey, May, Schommers et al., 2017); and
- Therefore, planners and clinicians should prioritize and fast-track those with low CD4+T cell counts (especially <200 cells/mm<sup>3</sup>). This is particularly relevant where there are ART shortages or anticipated stock-outs (a situation when an item such as an essential drug is not available).

In addition to the SAHCS's regime of guidelines, the World Health Organization's guidelines on the commencement of ART among people living with HIV are of utmost importance. These guidelines have also been adopted by the Department of Health in South Africa, and are illustrated in Table 2.1 below.

**Table 2.1: World Health Organization guidelines on ART**

Target Population	Specific Recommendations
Adults (>19 years)	ART should be initiated in all adults living with HIV irrespective of CD4 +T cell count. As a priority, ART should be initiated in all adults with severe or advanced HIV clinical disease (WHO Clinical Stage 3 or 4) and individuals with CD4+Tcell count < 350 cells/mm <sup>3</sup>
Pregnant and breastfeeding women	ART should be initiated in all pregnant and breastfeeding women living with HIV irrespective of CD4+T cell count, and should be continued lifelong
Adolescent (10-19 years old)	ART should be initiated in all adolescents living with HIV irrespective of CD4+T cell count. As a priority, ART should be initiated in all adolescents (WHO Clinical Stage 3 or 4) and adolescents with CD4+T cell count < 350 cells/mm <sup>3</sup>
Children (1-10 years old)	ART should be initiated among all children to <10 years old living with HIV, irrespective of CD4+T cell count. As a priority, ART should be initiated in all HIV-infected children <2 years old and those with severe or advanced HIV clinical disease (WHO Clinical Stage 3 or 4) and children with CD4%<25% (if five years old) or with CD4+Tcell count < 350 cells/mm <sup>3</sup> (if five years and older)
Children (<1 year old)	ART should be initiated in all children living with HIV younger than one year old, irrespective of CD4+Tcell count

(Source: WHO, 2018: 13)

## 2.8.1 Government-level Milestones

The South African government has commenced work on implementing a new National Strategic Plan (NSP) on HIV, TB and STIs for the period 2017 to 2022. This ambitious plan aims to reduce the number of new HIV infections per year to under 100 000 people by 2022. It is currently estimated that 280 000 people are infected per year, most of them young women and girls (Adelman & Taylor, 2019). Some of the NSP's key targets include:

- Ensuring that 90% of all people living with HIV know their HIV status. There are 6.8 million people, including 195 000 children currently living with HIV;
- Making sure that 90% of all people with diagnosed HIV receive sustained antiretroviral therapy (that would be 6.1 million people, including 175 000 children); and
- Ensuring that 90% of all people receiving antiretroviral therapy achieve sustained viral suppression (which would be 5.5 million people, including 158 000 children measured by means of access to routine viral-load testing).

### 2.8.1.1 HIV Counselling and Testing for Adolescents and Adults

In terms of HIV counselling and testing for adolescents and adults, the Department of Health (2015) has recommended an algorithm for HIV counselling and testing (HCT) for adolescents and adults, including pregnant and breastfeeding women is as follows:

- Group information sessions should be offered to all clients to outline the benefits of HCT (HIV counselling and testing). If there are pregnant women in the group, the benefits for the baby should also be addressed;
- The group sessions should be followed up with an individual information session to address any additional questions and concerns, and to clarify any misunderstandings;
- When written or verbal consent has been obtained, a rapid HIV antibody test should be carried out with a finger prick using an approved testing kit;
- If the first test is negative (non-reactive), the patient is considered to be HIV uninfected. The patient should receive appropriate post-test counselling and should be encouraged to repeat the test three months after the negative result to exclude the possibility of the window period and HIV risk reduction behavior. The patient should be offered HIV prevention services, such as medical male circumcision or condoms;
- Pregnant and breastfeeding women who test negative should be considered part of the PMTCT (prevention of mother to child transmission) programme and be offered routine repeat HIV testing as well as TB screening throughout pregnancy, labour

and breastfeeding as well as at the six-week EPI (immunization) visit (WHO, 2020). They must also be counselled on correct and consistent use of condoms, recognition of TB symptoms, and on safe feeding for the baby. It was found that approximately 4% of pregnant women in South Africa who initially test HIV negative in early pregnancy later test HIV positive in the same pregnancy;

- People in the general population (as well as men who have sex with men and sex workers) who test HIV negative, should repeat testing every six to 12 months, depending on their risk behaviour. Sexually active adolescents should be tested every six to 12 months or more frequently if they have new sexual partners, or if they practice unprotected intercourse. Adults and adolescents who were exposed to HIV, should be tested after six to 12 weeks to make provision for the window period. Families of HIV infected people should be tested as soon as possible after the family member is diagnosed (WHO, 2022);
- If the first rapid HIV antibody test is positive (reactive), confirmatory test (second rapid test) should be performed immediately from a second finger prick and utilizing a different rapid test kit product. Results should not be given before confirmatory test, if it is to be performed. A person is considered to be HIV infected if the second rapid test is also positive;
- Give the results and provide post-test counselling in the patient's language of choice. TB screening should be performed on the same day (if not previously conducted) as well as HIV education, CD4+T cell count, clinical staging and other tests, as necessary (WHO, 2020);
- If a pregnant or breastfeeding women test HIV positive on the second rapid test, she should start with antiretroviral therapy on that same day. All other patients who test HIV positive, should start with ART (regardless of their CD4+Tcell counts) as soon they are ready to adhere to the medication;
- If the two rapid tests have indeterminate results (or discordant results), blood should be drawn from vein and sent to a laboratory for an ELISA antibody test. This should be explained to the patient. The results of the ELISA test should be considered confirmatory;
- If blood is sent to the laboratory for an ELISA test, the patient should be asked to return within five days for the results. The importance of coming back for the results should be emphasized; and
- Pregnant women who refuse to be tested after the individual information session must be offered post refusal counselling. HIV counselling and testing as well as TB symptom screening should be continuously offered at every visit in a non-coercive way (WHO, 2022). Unbooked women reporting in labour must be counselled and



tested for HIV at the earliest opportunity during labour and if possible, be provided with antiretroviral as emphasised by Williams et al. (2018).

#### 2.8.1.2 HIV/AIDS Knowledge Sharing and Expansion

In terms of the epistemological expansion on HIV/AIDS prevention and management is concerned, South Africa has benefitted tremendously from the annual international HIV/AIDS conferences that have been held continuously since 2006 in Durban. These international conferences are not mere 'talk shops'. They bring together a motley of HIV/AIDS researchers, activists, philanthropists, practitioners, experts, and scholars from the NGO, private, and government sectors (Erkki & Hedlund, 2013).

Since HIV/AIDS has to date defied any permanent cure, it is of utmost importance that high-level knowledge sharing and expansion forums and opportunities be institutionalised to discuss both scientific and bio-medical research-related developments in the field of HIV/AIDS prevention and management (Adelman & Taylor, 2019). Latest trends, world-best clinical practices, and topical issues are not peripheral to healthcare workers (UNFPA, 2016). As the 'foot soldiers' in the battle against HIV/AIDS, knowledge new (non-stagnant) knowledge and ideas of immeasurable value to them as well since they are at the forefront at all levels of the healthcare management value chain (Nilsson & Berg, 2015). For policymakers and managers of healthcare facilities, these annual international conferences also add value insofar as exposure to new healthcare systems management is concerned (Haoses-Gorases & Goraseb, 2013).

## 2.9 CONCLUSION

This chapter has reviewed some of the pertinent literature pertaining to HIV/AIDS prevention and management in the broader context and domain of healthcare systems. While it is utterly important that the aetiological manifestations of HIV/AIDS should be known and understood by all sectors of the population, it is even more compelling to know and understand both the professional and organisational circumstances under which healthcare workers are expected to render their services for which they have been trained. While bio-medical science and research is continuing to shed light on possibilities for the ultimate cure for HIV/AIDS, there are still many challenges facing nurses as both professionals and employees. These challenges do not warrant cosmetic responses, but fully intentional health systems development in its entirety (Hwabamungu et al., 2018).

In healthcare systems research, it is imperative that ways and means be explored for purposes of reducing the healthcare human resources burden. Such an orientation is instrumental for “decision regarding **which** health problems are important, **what** measures should be applied and **how** to obtain the greatest health benefit from existing tools and limited resources [researcher’s bold italics for emphasis]” (Degu & Yigzaw, 2006). Such decisions are of particular importance for the most profitable health reward of socio-economically disadvantaged countries, whose healthcare personnel could be further depleted by the absenteeism of HIV-infected workers through hospitalisation, or HIV-induced death (UNFPA, 2016).

As professionally trained and qualified nurses, healthcare workers need to be thoroughly equipped with a thorough understanding of HIV/AIDS treatment and management, as well as knowledge of physical and psychosocial skills to provide optimal care to people living with HIV and AIDS (Haoses-Gorases et al., 2013). It is no longer the task of the psychologist only to be conversant with the psychological counselling of HIV-infected and affected persons. The prevalence of HIV and AIDS compels all nursing professionals to be counsellors. When more and more HIV-related illnesses, deaths, and chronic absenteeism afflict healthcare workers, the human resources supply and demand equation of the healthcare system generally suffers, and new recruitments are not likely to substitute the experience, knowledge and institutional memory accumulated over the years (UNICEF, 2022). The affliction of healthcare workers presents an undesirable state of affairs, because attrition and the loss of a professionally skilled workforce impacts adversely on training and investment of resources.

The education of HIV/AIDS patients and sufferers is pivotal to the alleviation of the healthcare burden (Nilsson & Berg, 2015). By educating and counselling patients, nurses are at the same time contributing to the alleviation of more work for professional psychologists, who themselves are sometimes not able to cope with the demand, as many people in Africa do not have access to these usually costly professional services (Haoses-Gorases et al., 2013). To accommodate this need, all healthcare workers working in the HIV and AIDS field should be trained to provide and administer counselling. Healthcare workers should also be trained to recognise serious problems, and to refer patients accordingly to more knowledgeable and experienced counsellors when unsure of how to proceed (Shu et al., 2020).

The next chapter (Chapter 3) describes the research design and method that was used in this study.

## **CHAPTER 3**

### **THEORETICAL FRAMEWORK**

#### **3.1 INTRODUCTION**

The previous chapter presented a discussion on the review of existing literature pertaining to healthcare personnel's experiences in the treatment and management of people living with HIV and AIDS (PLWA). The consulted literature has provided different perspectives on the issues of HIV patient treatment and management. Most importantly, the literature review provided an integrative framework in terms of which the infrastructural, fiscal and human resources domains formed a critical aspect of the healthcare personnel's experiences, perceptions and perspectives.

Research-based studies are characteristically based on some specific theories, concepts, frameworks, paradigms, or perspectives that establish the scope or boundaries of scientific investigation (Ramenyi & Bannister, 2013). The current chapter presents and discusses the theoretical framework relevant to this study, as well as the inter-connectedness of various concepts and philosophically derived principles that support this theory. LoBiondo-Wood and Haber (2014: 118) confirm this interconnectedness of theory and concepts, stating: "A theory is a set of interrelated concepts that structure a systematic view of phenomena for the purpose of explaining or predicting".

That a theory is conceptually based is supported by authors such as Korstjens and Moser (2018), Ramenyi and Bannister (2013), and Saunders et al. (2019); who illuminate that a theory is basically a systematically organised depiction of philosophically derived paradigms or perspectives concerning the nature of ideas, reality, and phenomena. Furthermore, theories are instrumental in providing a framework within which data is collected and synthesised (Doyle, Brady & Byrne, 2016; Saldana & Omasta, 2018). Therefore, theoretical frameworks are themselves in their nature abstract, but also provide philosophical generalisations to describe or explain a phenomenon and its associated variables.

In the context of this study, the theoretical framework (paradigm or perspective) provided a context for the identification and definition of the foundational principles of the Health Systems Theory (HST), as well as the applicability or relevance of these principles to the present investigation. Such a context also facilitated the mechanism by which the research problem is allocated some degree of conceptual relevance to the pertinent and inherent philosophical assumptions of the study (Efron & Ravid, 2019).

Assumptions (applied with no need for proof or evidence) are not peripheral to the theoretical framework, as they guide the researcher's own views on, and approach (perspective or paradigm) concerning the reality of the phenomenon being investigated (Doyle et al., 2016). Accordingly, assumptions could be *epistemological* (based on the reality or nature of knowledge and its production); *ontological* (based on the nature of reality); *axiological* (based on the level of detail allocated to various aspects of research); *rhetorical* (based on the researcher's own oral or written persuasiveness); or *methodological* (based on the means of knowledge acquisition) (LoBiondo-Wood & Haber, 2014). In this study, the assumptions were applied in a hybrid manner in terms of their applicability to various aspects of the entire research process.

### **3.2 THE HEALTH SYSTEMS THEORY (HST)**

This chapter also presents factors that warrant attention for the purpose of addressing conceptually interdependent variables or units of analysis. In this regard, the Health Systems Theory (HST) was identified as relevant for this purpose. For purposes of this study, HST's main principles were thematically identified for their relevance and applicability to the current study on HIV/ AIDS treatment and management in the context of community healthcare centres. The entire system is centrally directed by the government through the Department of Health (DOH, 2012; DOH, 2017).

The Health Systems Theory - also known as "a science of wholeness" (Cordon, 2013: 13) – is an offshoot of a group of "systems" theories comprising the General Systems Theory, the Chaos Theory, the Complex-Adaptive Systems, as well as the Integral Theory (Damschroder, 2020). It is in the nature of systems theories to formulate general principles that apply to all "system" irrespective of the nature of their constitutive element (Bernardi, 2018). For purposes of this study, the Health Systems Theory is poignantly relevant insofar as healthcare is incorporated as an integral and core element of a broader "system" comprising people, institutions, and processes for the purpose of providing quality healthcare services.

For purposes of this study, the health system's theory is to be construed as providing a framework that holistically integrates the nature of humankind and the professional practice of healthcare. In this regard, it then becomes the responsibility of the healthcare providers to take the initiative to provide the required services to the patients – the recipients who need those services the most (Mathibe et al., 2015). Cordon (2013) corroborates that a system is corroborated by "a regularly interacting or interdependent group of items forming a unified whole". Such characterisation is

resonant with the following conceptual and functional attributes of a closed, open, simple or complex “system” (Cordon, 2013):

- systems exist and function as a group or groups;
- the group or groups are part of a larger superstructure or whole;
- in any particular environment, the group or groups of systems act inter-dependently; and
- the functions or purposes of the constitutive elements in the group also affect the functions or purposes of the superstructure or larger group as a whole”.

To the extent of its integrative effect on healthcare, the health systems theory was opted for, particularly for its incorporation of all the factors that shape and inform the nursing profession and linking them together into meaningful wholesomeness, as opposed to a singular or monolithic cause-and-effect theory.

### **3.2.1 Main Principles of the Health Systems Theory**

The core of the health systems theory is constituted by a quadruple helix of people, institutions, systems, and processes in order to “systematise” the different levels of healthcare provision from the *micro*, *meso*, *macro*, and *mundo* systems levels (Bernardi, 2018; Damschroder, 2020). In this regard, the healthcare system is characterised by different levels and degrees of complexities. The system involves a network of decision-makers, policy makers, and groups of people in organizations, institutions, and agencies which shape the manner in which healthcare services are delivered to patients and the community as a whole.

Bernardi (2018) and Damschroder (2020) assert that the healthcare system also involves the non-linear provision of healthcare at various levels; for example, from preventive to palliative care services. Non-linearity implies that healthcare service provision and allocation is not restricted, but an outcome of interconnected factors in the primary, secondary, and tertiary disease prevention value chain.

Additionally, healthcare is provided by multi-disciplinary healthcare professionals, such as nurses, physicians, dieticians, social workers, doctors, occupational therapists, psychologists, pharmacists, and many more. In complex health systems (e.g., Canada), a “patient navigator role” has been established “to meet the needs of the patients during their illness trajectory, aims to better connect patients with their healthcare providers in a timelier manner. It also enables better coordination of care, as it improves communication between healthcare professionals. The healthcare system has become so complex, and health care professionals have become so

specialized, that another health professional is needed to help patients, and healthcare providers to navigate the healthcare system” (Cordon, 2013: 20).

### **3.2.2 Applicability and Relevance of Main Principles to the Study**

At the conceptual level, the Health Systems Theory coheres and resonates with the broad parameters of public health service delivery (PHSD) as a comprehensive public healthcare delivery provided by trained health personnel to the communities they serve for purposes of improving their overall well-being (Gorde et al., 2021). In South Africa, about 80% of the population depends on accessible and affordable healthcare, a process which involves preventive, promotive, curative, and rehabilitative health services at various levels of healthcare service delivery (WHO, 2017).

The phenomenon of an accessible and affordable PSHD is evident at the community healthcare centre selected as the research site in this study. The socio-economic dynamics have induced that a population of the more than 242 924 residents overcrowds this facility, which in itself then becomes a disruptive factor in a normal and self-regulating healthcare system. Consequently, an imbalance or disequilibrium occurs between the inputs and outputs in the system. Inputs refer to resources within the system, and outputs refer to the end-products or achievement of objectives through organisational processes (Clemen-Stone, Eigsti & McGuire, 2019).

In a self-regulating and viable healthcare system, inputs are exemplified by the availability of patients, material, human and financial resources. Any anomaly in the healthcare system, such as overcrowding, has an adverse effect on other elements of the healthcare service delivery value chain. In the context of this study, if the Laetitia Bam Community Health Centre receives more patients than it has the capacity to process due to limited (human, fiscal, and infrastructural) resources; then undesirable effects such as disorganisation, complaints by the public and patients, long queues and waiting periods, and employee discontent are then most likely to occur.

#### **3.2.2.1 The “People” Component in the HST**

In this study, the people encompassed in respect of the HST are the registered nurses, the multi-disciplinary healthcare teams, the healthcare facility managers, and the communities - who are the beneficiaries of the accessible and affordable healthcare service provided at the community healthcare centre (Mabusela & Ramukumba, 2021).

### *3.2.2.1.1 Registered nurses (RNs)*

Registered nurses (RNs) are the bedrock of the healthcare service delivery framework, given the essential services they provide (Kreedi et al., 2021; Lennox, Jutel & Foureur, 2012). It is the essential nature of their services that is sometimes at the centre of the ethical/ professional and legal/ labour relations tensions in the event of labour actions during which unions steadfastly protect the labour rights above the ethical and professional obligations of nurses (Breier et al., 2018).

Unlike in other professions, registered nurses are functionally versatile, making them indispensable in the workplace since their responsibilities expose them to the physical, emotional, and psychological well-being of their patients (Mabusela & Ramukumba, 2021). In this study, nurses bear the brunt of patient overcrowding caused by anomalies in the healthcare system; either by insufficient human, infrastructural and fiscal resources availability, or other population dynamics. In the event of unsatisfactory working conditions, it is the patients and community who are likely to suffer most when the nurses' labour rights take precedence over their ethical and professional obligations. Their professional expertise exposes them to well-paying job opportunities abroad.

### *3.2.2.1.2 The multidisciplinary team, ancillary and other support services*

Multidisciplinary healthcare teams provide the primary activities in the health system. Examples of multidisciplinary healthcare teams include the nurses themselves, doctors, dieticians, psychologists, and others. The multidisciplinary nature of the healthcare teams is centrally premised on their collaboration, interdependence and knowledge and technology transfer in areas of research for the purpose of improving the quality of care and disease management; as well as database capabilities, computerised support and telecommunication systems development (Crisp & Alvarado-Young, 2018; Hwabamungu et al., 2018). At the Laetitia Bam CHC, the healthcare needs of the patients and population are such that HIV/AIDS treatment and management is not the only primary healthcare need. Multidisciplinary healthcare teams are necessary for catering for the majority of the population's health needs within the ambit of affordability and accessibility.

Support services and activities mainly provide the basic infrastructure or inputs that enable the continual processing of primary activities within the system (Fadana & Vember, 2021). General administration is an important example of the requisite support services of any healthcare facility (Mulaudzi, 2011; Ramathuba & Davhana-Maselesele, 2013). The extent of proficiency in general administration also determines

the extent of support provided to the primary activities of the multidisciplinary healthcare teams.

#### *3.2.2.1.3 Healthcare facility managers*

Management of an organisation entails assets, costs, and activities related to the general well-being of the particular organisation. In a functional health system, the management ensures that the workload, working conditions, interpersonal relationships and quality of care are resolved and delivered satisfactorily (Damschroder, 2020). It is the fiduciary responsibility of a healthcare facility to ensure that all resources are utilised prudently, and with no wastage or malfeasance (Clemens-Stone et al., 2019).

The poor management of healthcare facilities translates into poor healthcare service delivery. At Laetitia Bam CHC, some management-related challenges are systemic. For instance, shortages of staff and medical supplies are the mandates of the provincial healthcare authorities. However, issues such as the treatment of HIV and AIDS patients in steel containers at the back of the clinic is plainly a factor of stigmatisation and poor management foresight. Consequently, negative media attention and publicity reflected poorly on the general management of the facility.

#### *3.2.2.1.4 Communities*

Communities are an indispensable component of the healthcare system, which basically exists for, and because of the people served by this system (Adelman & Taylor, 2019). The community-centredness perspective of the healthcare system is emphasised by WHO in its Ottawa Charter of 1986, which described health promotion as "The process of enabling people to increase control over and improve their health" (Potvin & Jones, 2011). Following the post-apartheid democratic dispensation, the South African government has entrenched the rights of patients and PLWA in the Constitution (Act 108 of 1996). The National Patients' Rights Charter (NPRC) also exemplifies the indispensability of the patients as the core community of users of healthcare services (Department of Health/ DOH, 2002).

The Department of Health has since embraced community healthcare as an essential part of a comprehensive healthcare system "depend[ing] on strong partnerships between education and health sectors, teachers and health workers, schools and community groups and learners and persons responsible for school health programmes" (DOH & DOBE (Department of Basic Education), 2012). The aspects of



affordable and accessible National Health Insurance (NHI) to communities is a further reflection of the indispensability of communities to the healthcare system. In the context of this study, the community factor poses an anomaly to the health system. As much as they are supposed to be satisfactorily served by the only 24-hour community healthcare centre in their midst, the service is a disequilibrium when viewed against such disruptive factors as overcrowding, long queues, as well as shortages of staff and medical supplies.

### 3.2.2.2 The “Institutions” Component in the HST

The “systems” of healthcare exist at the micro, *meso*, *macro*, and *mun*do level (Bernardi, 2018; Damschroder, 2020). In the context of the present research study, the Laetitia Bam Community Health Centre is at the local or micro-level of healthcare service delivery. Similar to other fixed clinics, this facility is an example of “community-based supplementary health service centres which are components of a district health system (DHS) to deliver a comprehensive primary healthcare system in the RSA (Jobson, 2015). These are level one HCS [healthcare systems] which render PHC [primary healthcare] services from 0-24 hours. They form the first level of contact since they are community-based, and most are nurse-driven. Services offered in these areas are minor ailments, rehabilitative, maternity and mother and child healthcare services” (DOH, 2002: 3).

Although the micro-level community-based primary healthcare centre such as Laetitia Bam is of fundamental interest to this study, other levels are mainly mentioned to reflect hierarchical organisation of the HCS; notwithstanding the private healthcare variants. Above the micro-level of healthcare provision is the meso-level, which is depicted by the district healthcare system, which also supports the PHC services (Jobson, 2015). At the DHS level, generalist care is provided, which caters for both in-patients and out-patients referred from clinics. In accordance with the WHO prescripts, “it is expected of district hospitals to provide family medicine, rehabilitation, surgery and medicine, obstetric, geriatric, and paediatric services from 0-24 hours.

The 24-hour emergency and operating theatre services also form an integral part of district hospitals. They distinguish themselves by easing the workload on specialized health centres, which are regional and academic hospitals. Regional hospitals are macro-level healthcare systems catering “for basic treatment and surgeries beyond the scope of district hospitals, and offer secondary-level services from 0-24 hours. Regional hospitals also serve patients from curative PHC services in the residential areas surrounding them. Ambulances bring in patients from district hospitals, other

provinces and neighbouring African states for curative care. Conditions of patients beyond the scope of regional hospitals are then referred to tertiary level hospitals for sophisticated procedures” (Ndaki, 2004).

Academic or provincial hospitals are at the apex or mundo-level of the HCS, and offer very specialised services such as various types of scanners, surgical procedures, totally digital radiology, in-vitro fertilisation (IVF), picture archiving communication system (PACS) and other sophisticated procedures and services (Amoah et al., 2019). Together with medical universities in their proximity, these academic or tertiary hospitals provide practical training for medical students and other related fields.

### 3.2.2.3 The “Processes” Component in the HST

“Process” is an integral part of a “system”, and is defined as “the action needed to get the work done” (Clement-Stone et al., 2019). It is by means of processes that the system could be regarded as being either effective/ functional or disqualified as ineffective/ dysfunctional, based on the range and level of interaction of in the respective series of processes or transactions within the particular system. For purposes of this study, four interrelated types of transactions/ processes are deemed to be relevant for the healthcare centre’s capacity to render quality healthcare services to the community.

#### 3.2.2.3.1 *Planning and control processes*

Planning and control mechanisms are the foundational pillars and success of any organisation (Bryman & Bell, 2019; Clement-Stone et al., 2019). Planning stabilises an organisation to accomplish its strategic purpose and direction. Meanwhile, control ensures that the plans are properly implemented and supervised. Poor planning and control inevitably results in a disruptive effect on the environment; that is, the provision of services to the community. On the other hand, effective planning and control ensures that the organisation is predominantly focused on a day-to-day mode of functioning. In the context of this study, an investigation on planning and control at the Laetitia Bam CHC seeks to establish the extent of collaborative relationships and the degree of involvement of healthcare personnel’s in HIV patient management, as a way of dealing with the challenges in the primary healthcare system.

#### 3.2.2.3.2 *Quality processes*

Quality processes relate to transactions or activities that respond to the needs of the community in a cost-effective manner and continuous quality improvement within a system (Bryman & Bell, 2019; Crusoe, 2019). If left unattended to for considerable

periods of time, any form of challenge at any point in the healthcare system could render the entire system ineffective. For instance, human resources challenges among healthcare personnel could seriously compromise their morale, which then affects the delivery of quality services to the community, who then experience difficulties for the entire duration of the initial human resources affecting healthcare personnel at the community healthcare centre.

In the context of this study, the management of the healthcare centre is viewed as central to all the facets of the quality processes value chain, and would go a long way to avert disruptive factors in the system; such as labour action by the multi-disciplinary healthcare teams, negative media publicity, and community disgruntlement (Dzimiri et al., 2019).

#### 3.2.2.3.3 *Operational processes*

Operations relate to activities, costs and assets that are closely connected with converting inputs into outputs (Amakali, 2013; Haoses-Gorases et al., 2013). In this regard, the relevant departments apply their skills, expertise, and specialities towards efficient and effective patient care. The process of operations also involves the establishment and maintenance of equipment, quality assurance programmes, environmental protection and quality of the whole structure of the facility in general. In the context of this study, the community healthcare centre, by virtue of its micro-level location in the HCS, is expected to maintain the physical structure and ensure allocation and availability of medical supplies and healthcare personnel. It is also worth noting that the *micro-level* nature of the community healthcare centre under investigation implies that its effectiveness and efficiency is also dependent to a large part on the effectiveness and efficiency of other levels in the *meso*, *macro*, and *mundo* hierarchical organisation of the healthcare system.

#### 3.2.2.3.4 *Services*

Services relate to the activities, costs and assets pertaining to assistance offered by the suppliers (Amakali, 2013; Aneshensel, 2019). Services include the installation and delivery of spare parts, the procurement, purchase and proper use of medical equipment and supplies; as well as the maintenance, repairs, and handling of inquiries and complaints. All forms of services rendered are for the purpose of enabling an organisation achieve its strategic objectives and mandate to the community. In the context of the community healthcare centre under investigation, poor healthcare service delivery to the community has resulted in disruptive factors such as

overcrowding and attendant disgruntlement induced by ineffective service areas such as human and other infrastructural resource constraints.

### **3.3 CONCLUSION**

This chapter provided a broad outline of the logistics and dynamics of the health system's theory. The main principles of the HCS were highlighted, as well as their relevance/ applicability to the study. Such relevance or applicability was expressed in the form of the primary and supportive (input-output) activities whose hierarchical construction represent the different parts and their functions in the healthcare system. The hierarchical construction affords the allocation and control of tasks (Aneshensel, 2019; Bernardi, 2018).

The next chapter (Chapter 4) premises on the research design and methods opted for in this study.

## **CHAPTER 4**

### **RESEARCH DESIGN AND METHOD**

#### **4.1 INTRODUCTION**

The previous chapter presented the study's theoretical framework with the pivotal centralisation of the Health Systems Theory's (HST's) main philosophical principles and their applicability to the core tenets of the research topic (Bemelmans, et al., 2011; Damschroder, 2020). In the current chapter, the researcher mainly presents and discusses the research design and methodology opted for, by the researcher; the data collection methods; the research setting and its attendant sampling context; as well as the data management and analysis approaches that were adopted by the researcher.

In essence then, the current chapter is about the processes that were opted for, during the data gathering stages of the research. However, it needs mentioning that the data gathering is not the data *per se* (Aneshensel, 2013). The actual (collected) data is then presented and analysed in the following chapter (Chapter 5). Therefore, the focus on the research design and methodology of the current chapter is, in fact, an emphasis on the non-empirical or abstract parameters and trajectories in terms of which the researcher applied the most plausible and cogent strategies to acquire the indispensable empirical information necessary to construct and develop the evidential base of the study (Imenda 2014; Polit & Beck, 2020).

#### **4.2 RESEARCH DESIGN**

Section 1.7 of this research provided an incipient overview of the research design and research methods, in terms of their attendant definitions and purposes as encapsulated from the perspectives of multiple authors such as Brink et al. (2018); Imenda (2014), de Vos et al. (2021), and Polit and Beck (2020). A convergent review of these authors' perspectives posits 'research design' as a philosophically based research orientation which guided and informed the nature of research methods utilised to collect or gather both the study's empirical (participant-focused) and non-empirical theoretical/ abstract or literature-focused data and information. In the latter regard, research designs are construed as end-product oriented processes and activities for achieving the desired outcomes (Babbie, 2020; Creswell & Poth, 2018).

#### **4.2.1 Research Philosophy/ Paradigm**

This study has adopted the phenomenological-interpretivist or constructivist research paradigm in order to obtain data from the perspectives of both the healthcare personnel and HIV/AIDS patients in their familiar ecological (ethnographic) surroundings concerning the phenomenon of HIV and AIDS treatment, prevention, and management in a healthcare setting. According to authors such as Clark et al. (2018), Polit and Beck (2020), Vyncke (2012) and Rani (2016), the foremost concern of the phenomenological-interpretivist research perspective is to obtain pertinent information of the study through the 'authorial voice' of the participants themselves in their naturalistic/ecological environment and setting within which their (rather than externally or researcher imposed) knowledge, experiences and perceptions of reality (worldview) and the investigated phenomenon have been constructed. The latter view is resonant with the hermeneutic perspective emphasised by Cohen et al. (2018), according to which both the study participants and researcher are viewed as engaging in reciprocal conversations/ dialogues to describe and interpret experiences for purposes of uncovering fundamental meanings in those socio-culturally steeped experiences.

While the participants' 'authorial voice' could be subjective (based on the ideological positions, social and cultural contexts, and language of the individuals involved), it is incumbent on the researcher to exercise maximum objectivity throughout the empirical data acquisition stages in order to authenticate the consequent evidence or study findings, which are the final outcome of the data acquisition processes themselves (Brink et al., 2018; Valizadeh et al., 2018). In this regard, the researcher's exploration, description and interpretation/ analysis of the participants should not deviate or depart from their 'way of seeing things' (Brink et al., 2018; Roulston, 2016).

#### **4.2.2 Research Approach**

In this study, a predominantly qualitative research design approach was opted for, in order to optimally explore, describe and interpret/ analyse the views of the sampled research participants' own perspectives, knowledge and experiences concerning HIV/AIDS prevention, treatment and management at the Laetitia Bam CHC. Such a qualitative approach enabled the researcher to make on-going decisions based on the realities and viewpoints of participants realities and viewpoints that were not immediately known at the beginning (Valizadeh et al., 2018).

Lamont and Boduszyński (2020) illuminate that qualitative research approaches are advantageous for mitigating against the inability of *yes/no* answers to unravel difficult situations. In addition, such approaches are unconstrained by mathematical or statistical configurations; therefore, they are quicker and relatively easier to execute. Moreover, qualitative approaches address a broad scope of the phenomenon or phenomena being studied or investigated, which is enhanced by the researcher's probing questions until the point of data saturation has been reached satisfactorily (Brink et al., 2018). Contrariwise, the same qualitative research approaches are disadvantageous in that they may not be as time consuming as quantitative studies, but their analysis requires more procedural planning and analyses by the researcher (Lamont & Boduszyński, 2020). Additionally, unlike their quantitative variants, qualitative studies provide general trends based on themes, (subjective) judgements, observations and opinions, and not easy to replicate due to their context-specific nature (Babbie, 2020).

#### **4.2.4 Stages in the Qualitative Research Approach**

Consonant with both the non-statistical and hermeneutic predilections of the qualitative nature of this study, the data gathering processes concomitantly entailed both the non-empirical and empirical approaches. Among other considerations, these stages are outlined herein as part of the audit trail intended to ensure the reliability and credibility of this study's processes and its resultant findings (Ruel et al. 2017). In qualitative research, the researcher's foremost concern is based on a more insightful understanding of society's issues, rather than on transferability of a study's findings (Silverman, 2020). Therefore, the researcher's quest was to better understand individual and collective experiences and meanings (through in-depth interviews) of the healthcare personnel in the prevention, treatment and management of HIV/AIDS at Laetitia Bam CHC in Kwa-Nobuhle Township.

The researcher's afore-mentioned quest for better understanding of the research problem culminated in the empirically generated findings, which are undeniably, also the outcome of various non-empirical stages. In essence, then, the various interrelated data generation stages in the qualitative approach are a depiction of the researcher's attempt to triangulate the research processes as much as possible without any distortion in the end (Badenhorst, 2014; Creswell, 2014). The various inter-connected stages of qualitative data generation mentioned below are justifiable, considering the world of multiple realities and lived experiences and challenges within which the various stakeholder and participant categories co-exist (Brink et al., 2018; Olawoyin, 2021).

For the purpose of this study, the conceptual, exploratory, participatory/consultative, narrative, descriptive and interpretive stages all define the theoretical and empirical domains within which the research problem and the world of the selected participants co-exist. While some of these stages are interrelated, some also *precede* the actual empirical data acquisition phases of this study. It is also worth stating that the various qualitative data generation stages were not necessarily sequential or chronological in practice, but had an overlapping effect in their holistic interrelatedness. In this regard, it is the researcher's contention that these various stages are an embodiment of the syllogistic convergence representing the overall management plan of the study and its attendant processes (i.e., research design), the research methods, and the attendant data collection and analysis strategies.

#### 4.2.4.1 Conceptualisation and Exploratory Stages

The conceptualisation stage is the very elementary and embryonic phase when the research exists only 'in the head/ mind' of the researcher following an observation and identification of a particular problematic/ difficult state of affairs (research problem) to be resolved for the benefit of society and the affected individuals or groups of individuals (De Langen: 2015; Efron & Ravid, 2019).

During this *pre-investigative* stage, the broader 'idea' of the study was in an incubation mode, and the researcher explored multiple literature and scholarly perspectives and sources of information in order to be fully conversant with, among others, dominant ideas in the field of healthcare personnel's experiences and patients' challenges in the treatment, prevention and management of HIV/AIDS particularly in public healthcare facilities (Babbie & Mouton, 2018). Most importantly, the conceptual and exploratory phase/s enabled the researcher to explore the *feasibility* and *contribution* (i.e., relevance and significance) of the study, including its applicable research design and methodologies (Valizadeh et al., 2018). Additionally, these two inextricable stages were highly instrumental in providing the study's theoretical framework, enabling the researcher's identification of any gaps in the literature; as well as new insights/ ideas on whether the identified problem is researchable, and *how* it has been resolved in other contexts (Creswell, 2020).

#### 4.2.4.2 Participatory/ Consultative Stage

As indicated earlier, none of these qualitative research design approaches is peripheral from the others. For instance, the researcher consulted and reviewed various non-empirical data sources prior to the actual investigative phase with the



Laetitia Bam healthcare personnel and HIV/AIDS patients. In addition to the abstract (i.e. secondary) data sources, the researcher consulted widely by involving the participation of experts (including the academic supervisor), colleagues and professionals on aspects such as the study's feasibility and applicable research methods and design.

Furthermore, the participatory/ consultative mechanism was also operationalised during the actual data gathering stages with the researcher's prolonged engagement of the healthcare personnel to ensure their corroboration or rebuttal of the study's findings (or some its aspects) as reflective of their views from a hermeneutic point of view (Creswell, 2020; Donley & Graueholz, 2012; Polit & Beck, 2020).

#### 4.2.4.3 Narrative Stage

The narrative stage is entirely empirical, since the researcher could only involve the sampled participants as primary sources of their own lived or subjective experiences following all other non-empirical stages (Denzin & Lincoln, 2018 Grove et al., 2020). In this study, the narrative stage exemplifies the actual stages in which the participants 'tell their stories' in their own words to the researcher.

The participants' narrated 'stories' commenced from the very pre-testing of the individual interview questions with the 5 (five) Laetitia Bam healthcare professionals who were not part of the final sample of ten. This phase culminated in the final questions that are shown in the interview guide (see Appendix 6). The usefulness and value of the pre-test was underlined by the fact that the questions asked did not pose any response difficulties in any form to the pre-test participants. As such, these preliminary questions were asked verbatim in the final or actual in-depth face to face interviews as outlined in Section 4.3.1. The critical importance of the audio-recorded narrative statements of the participants is that, when subjected to meticulous analysis, they inevitably constitute a framework from which the evidence or results/ findings of the study are derived (Cohen et al., 2018; Polit & Beck, 2020).

#### 4.2.4.4 Descriptive and Analytic Stages

Although the researcher describes all the important qualitative research stages (for audit trailing purposes), the descriptive stage was even more prominent in providing extensive or comprehensive details proceeding from the participants narrated statements, as well as the context/ environment within which these statements were made and obtained (Babbie & Mouton, 2018; Ngulube, 2020). Emanating from the premise that a body of information is not necessarily synonymous with data or

knowledge until it is processed, converted or transformed (Aneshensel, 2013), it is then logical to construe the descriptive process (adequate provision of relevant and supporting details) and the analytic or interpretive process as symbiotically and complementarily helpful in making meaning of the audio-recorded statements, participant observations, field notes and memos.

Creswell (2020) asserts further that the *descriptive* aspect is emphasised by the extent to which the researcher provides abundant (as opposed to deficient) and extensive details and *characteristics* of a phenomenon, persons, situations, groups of individuals, and the relationships that exist among, and between variables. For the purpose of this study, the descriptive aspect was in fact, the detailed representation and account of the researcher's exploration and understanding of the experiences of HIV/AIDS patients' and healthcare personnel's experiences and challenges in HIV/AIDS prevention, treatment and management at the Laetitia Bam CHC.

Both the simultaneity and evidential effect of the descriptive and analytic effects of qualitative data generation are demonstrated in Chapter 5 of this study, where the details of the visually presented demographic details of the participants and their responses to specific interview-based questions are thematically interpreted in accordance with the study objectives (Badenhorst, 2014; Forester, 2012). For purposes of this study, the organisation and categorisation of data emanating from the narrative statements of the participants is quintessential of the analytic/interpretive process and its relevance or efficacy in the study.

#### **4.2.3 Research Methods**

Sub-section 1.7.2 of this study described the research methods in more detail. Congruent with the study objectives, as well as the research paradigm outlined in sub-section 4.2.1, the researcher used the interview guide for the sampled healthcare personnel to understand *how* they interpreted their *own* lived experiences concerning HIV/AIDS prevention, treatment and management and other work-related challenges at the healthcare facility (see Appendix 6).

#### **4.3 DATA COLLECTION METHODS AND PROCEDURES**

Data collection refers to a systematic process undertaken to acquire relevant information and data consistent with both the research problem and attendant study objectives (Bazeley, 2016; Flick, 2020). Generally, the collection of pertinent data focuses mainly on secondary (literature-based, non-empirical) and primary (empirical, participant-based) sources of information, depending on the nature of

the study undertaken. Creswell and Poth (2018) ascertain that qualitative researchers opt for multiple data sources than depend on only a single source or method in order to obtain greater information concerning the particularities and characteristics of a phenomenon, its context, and related variables for meaning-making. In this study, the reviewed literature, in conjunction with the individual interviews, provided a consolidated data collection framework.

Both the merits of the literature review and possible literature gaps were addressed in sub-section 2.1.1 of this study. For that reason, only the empirical data collection methods (individual semi-structured interviews) are outlined in this chapter. However, it is worth mentioning that the literature gap cited in the afore-mentioned sub-section for a study of this nature, is in tandem with the literature-based findings made by Mojapelo (2019) with reference to studies conducted locally, globally and in sub-Saharan Africa. During the empirical and participant-focused data collection phase, the views, perceptions, experiences and knowledge of the Laetitia Bam Health Centre's HIV/AIDS patients and healthcare personnel were explored, described and analysed into thematic categories presented in Chapter 5.

#### **4.3.1 In-depth Face-to-Face Interviews**

Qualitative data collection was conducted predominantly by means of in-depth interviews. A pre-testing of the interview questions was conducted with 5 (five) health care personnel members on 18<sup>th</sup> January 2021 at Laetitia Bam CHC prior to the actual interviews in order to determine the feasibility of the final interview guide and refinement of questions that may be problematic in the real-life situation (Brink et al., 2018). The full range of the interview questions is depicted in Annexure 6.

The actual interview sessions took place from 26<sup>th</sup> to 29<sup>th</sup> January 2021. A total of 10 in-depth individual interviews were conducted with the 10 sampled health personnel working at Laetitia Bam. The 5 (five) healthcare personnel members on whom the preliminary interview questions were pre-tested, were not involved in the actual interviews. The Interview Guide (Appendix 6) served as the core mechanism by which both the research problem and research objectives were addressed (Creswell & Poth, 2018). The researcher was confident in the efficacy of the interview mode and its capacity to generate saturated data because all interviewees were involved voluntarily, and at ease to answer questions and volunteer more information than in a group situation (Holloway & Wheeler, 2010).

The unstructured interview mode is standardised but less rigid, less formal, and more flexible; therefore, causing lesser restrictions on the participants (van Delen, 2011). In such situations, participants were inspired to speak openly, freely, and fully on any particular issue being addressed, while the interviewer mostly served the role of an observant and attentive listener (Rubin & Babbie, 2017). Additionally, the inherent degree of flexibility and openness provided an opportunity for the researcher to gain more insight into the participants' feelings, underlying motives, attitudes, and beliefs that were instrumental in shaping both their worldview in general, and responses to questions, in particular (Creswell, 2020).

Amongst other considerations, the researcher opted for the semi-structured in-depth individual interviews for purposes of constructing an exploratory, descriptive and participatory context for establishing coherent and conclusive lived experiences or social reality of the research participants. Compared to the focus group discussions, the in-depth individual interviews were advantageous regarding terms of the 'oversight' and control the interviewer had, including the quantity of information which each participant had the time to share (Rubin & Babbie, 2017).

#### 4.3.1.1 Administration of the In-depth Face-to-Face Interviews

The researcher first sought and obtained permission from both the Eastern Cape Provincial Health Department's HIV and AIDS Directorate and the Nelson Mandela Health District's HIV and AIDS Coordinator (see Appendix 2, Appendix 3A and Appendix 3B). Consequently, an introductory letter from UNISA, together with an information sheet and informed consent letters were presented to the Laetitia Bam CHC Facility Manager as part of seeking permission and approval (which was granted by the ECP HIV/AIDS Directorate and NMDM HIV/AIDS Coordinator) to carry out the study at the healthcare facility (see Appendix 4, Appendix 5A and Appendix 5B). Prior arrangements and appointments were made with the Laetitia Bam Facility Manager, whose assistance and direct involvement was requested in the actual selection of the participants on the basis of the selection criteria before conducting these interviews. Eventually, the in-depth semi-structured one-on-one interviews were conducted with 2 (two) medical doctors; 4 (four) professional nurses working in HIV patient management; 1 (one) pharmacist; 1 (one) dietician and 2 (two) counsellors. The availability of these participants was not problematic mainly because the researcher is an employee at the same healthcare facility, and fully acquainted with its management and professional staff dynamics.

The facility manager announced via the Laetitia Bam WhatsApp group that the researcher would conduct the study at the facility during lunch break, and asked voluntary participation to all healthcare personnel working with HIV/AIDS patient management for their cooperation. The researcher reassured the facility manager that the services will not be hampered, and adhered to the scheduled appointment times and days.

Each of the ten audio-recorded in-depth interview sessions took place during the healthcare personnel's one-hour lunch breaks in a pre-arranged office at Laetitia Bam CHC. At the very beginning of each interview session, the researcher first greeted the interviewee in order to establish a cordial atmosphere and proceeded to make a full disclosure of the purpose of the interviews and the usage of the resultant findings. Thereafter, each participant signed the informed consent form as a gesture of understanding and agreement with all the ethical issues entailed in each respective form; including consent to be audio-recorded, and not to be video-recorded (see Section 1.9 and Appendix 4, Appendix 5A and Appendix 5B).

The interview questions consisted of both close- and open-ended questions, each of which focused on a specific research objective. These types of questions were intended to elicit participants' spontaneous responses and unconstrained elaboration when probed further by the researcher (Olawoyin, 2021). However, close-ended questions could lead participants to provide responses that were not accurately representative of their views. The order of listed alternatives may also encourage the respondents to reply in accordance with the researcher's wish (Burns & Grove 2022). Following a participant's response to a question, probing questions were utilised in order to augment to the core questions until saturation was reached before proceeding to the next question and not necessarily in a chronological order (Saunders et al., 2019).

The Interview Guide (Appendix 6) was written in English, which was also the medium of conducting all the interviews. Given their level of professional training, none of the healthcare personnel experienced any difficulties of understanding the questions. The first section of the interview questions focused on the healthcare personnel's demographic information, while the rest of the questions focused entirely on work-related experiences and challenges within the realm of HIV/AIDS prevention, treatment and management at Laetitia Bam Community Health Centre.

In order to further explore and resolve complex issues from the perspective of the participants, the researcher introduced encouragers/ leading statements such as: “Please tell me ...” and “Please explain ...”. In addition to instilling a sense of self-worth among participants who would not be comfortable to ‘tell their stories’ in public or in a group, the leading statements also engendered a semblance of reciprocated and good communication skills (Roulston, 2016; Tarab, 2019).

In addition to the core interview questions (entailed in the Interview Guide), the researcher utilised follow-up or secondary questions to further probe for more and spontaneous responses. Field notes were also utilised, which helped the researcher to document information and other relevant details that could obviously not be audio-recorded as the direct ‘oral evidence’ of the interviewees (Saunders et al., 2019). Such information premised on what the researcher was hearing, seeing, thinking and experiencing during the interview sessions, until data saturation was reached after the 10<sup>th</sup> interviewed participant. In essence, the ‘non-oral evidence’ constituted the participant observation framework that was documented in the field notes (Polit & Beck, 2020; Rees, 2016).

#### 4.3.1.2 Adherence to Covid-19 Regulations During the In-depth Interviews

A total of 10 in-depth individual interviews; that is, one session with every selected healthcare professional working at Laetitia Bam CHC. Following adherence to all ethical protocols, these interviews were held at a pre-arranged office on the Laetitia Bam CHC’s premises. The researcher is also a professional healthcare personnel at the self-same healthcare centre, and there was no need to look elsewhere in search of research participants in the same category (see sampling criteria in sub-section 4.4.4).

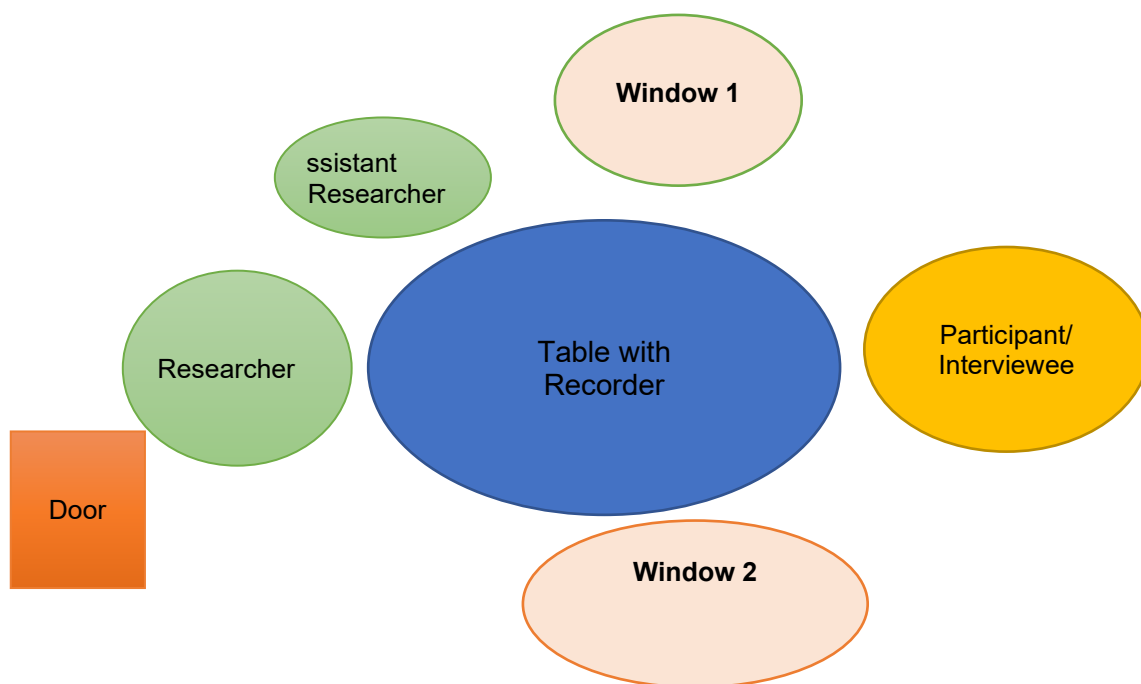
No focus group discussions with HIV patients were pursued as envisaged previously.

Data was collected during the COVID-19 pandemic, and there were stringent rules at the healthcare facility which required adherence to the non-physical contact between researchers and patients, whose normal clinic visits were also limited (Anakpo & Mishi, 2021). As such, all the HIV/AIDS patients were collecting their treatment at Shoprite, located nearby the clinic.

However, the 10 on-site individual interviews still occurred because all participants (healthcare personnel) are obliged to report daily for duty at the self-same healthcare centre together with the researcher who is also employed at the same

facility. Therefore, based on the **criticality** of the information of the healthcare professionals and management, the individual interviews occurred, albeit under changed COVID-19 compliant protocols. Prominent among these protocols is the wearing of masks, no handshakes, social distancing, hygienic sanitisation of hands and an ergonomically conducive environment. Only the experience of these 10 participants was asked during the individual interviews at the pre-arranged room on the premises of the healthcare facility. The size of the room is 52 square meters. The room was disinfected daily after each interview session.

Prior to the actual commencement of the individual interview sessions, the room was sanitised and its two windows kept open for cross-ventilation purposes. The door was closed to prevent possible external disruptions. Inside the interview room. There were three chairs and four tables each for the researcher, her assistant (who assisted with note taking), the audio recorder and the particular healthcare professional or management member being interviewed. Figure 4.1 below is a depiction of the overall seating arrangement being described here.



**Figure 4.1: Seating arrangement during individual interview sessions**

The table with the recorder was placed at the centre of the room, with the researcher and each interviewee facing each other on the opposite ends of the table. Both the researcher and her assistant were also two metres apart from each other. Another table was placed between the interviewee and the researcher and her assistant for the audio recorder. All three wore their face masks, and the researcher ensured that each interviewee's temperature was taken prior to the interviews, despite that every

healthcare professional undergoes the same procedure daily on the premises as it is a healthcare facility visited daily by patients. After each interview session, the chairs, tables, audio recorder and door handles were re-sanitised, despite that the procedure was undertaken earlier prior to the commencement of the preceding interview session.

It is the researcher's view that all of the above-stated sampling and data collection adjustments comply with UNISA's COVID-19 risk-adjusted strategies as prescribed (Unisa, 2020a; Unisa, 2020b).

#### **4.4 THE STUDY'S SAMPLING CONTEXT**

The study's sampling context premises on the pre-implementation or pre-investigative stage prior to the actual empirical data collection (Lamont & Boduszyński, 2020; Moseholm & Fetters, 2017). In this regard, the research setting, study population and sample size, sampling method, as well as the sampling criteria constituted the critical core of the sampling context as articulated by the researcher.

##### **4.4.1 Research Setting/ Study Site**

The individual in-depth interviews were conducted at the Laetitia Bam Community Health Centre, situated in the Kwa-Nobuhle Township of the Nelson Mandela District Municipality's industrial town of Uitenhage, Eastern Cape Province. The Laetitia Bam CHC was selected as a potential research site since it is the only facility in this district with a trauma unit and a maternity ward operating daily for all pregnant women throughout their labour and delivery, including weekends and on public holidays. Table 4.1 below illustrates the geographic location of Kwa-Nobuhle Township within the Nelson Mandela Metropolitan Municipality.

**Table 4.1: Map of Nelson Mandela Metropolitan Municipality showing Kwa-Nobuhle Township**



(Source: Nelson Mandela Bay Metropolitan Municipality, 2022: 1)



There are cluster (satellite) clinics around the Kwa-Nobuhle community, such as the Edameni Clinic, the Mabandla Clinic, the Silver Town Clinic, and the Nomangesi Jayiya Clinic. At the time of conducting this study, the number of people infected and living with HIV in the area was approximately 40% of the population (van Dyk et al., 2017). The 40% includes men and women of various age groups, young girls, HIV-infected pregnant women, men having sex with men, mobile and migrant populations, serodiscordant couples; the clientele of tavern and shebeens, infants and children under age 15, offenders in correctional facilities, as well as TB/HIV co-infected patients.

The escalation in the mortality rate and number of people infected with HIV in this community is not caused by insufficient HIV-related knowledge, but largely due to a lack of commitment to anti-retroviral (ARV) treatment and disclosure to partners (Toska & Natukunda, 2017; Velardo & Drummond, 2017). Stigma and prejudice are rife, making HIV infection and AIDS an unspeakable disease, lest the sufferer be subjected to derision. Ultimately, overcrowding of patients at the only relatively equipped healthcare facility in the area poses a larger infrastructural burden on the shoulders of the existing healthcare personnel and facilities in the management of HIV/AIDS patients.

#### **4.4.2 Study Population and Sample Size**

A study population (universe) relates to the larger group from which a representative sample was selected for participation in the study on account of the homogeneity (similarity) of qualities or traits it possesses (Dalglish et al., 2021; Haven & Van Grootel, 2019). In this investigation, the study population or universe consisted of the professional healthcare personnel and management working at the Laetitia Bam Community Health Centre.

##### **4.4.2.1 Study Population**

For the purpose of this research study, the population consisted of the **110** healthcare personnel and management at the Laetitia Bam Community Health Centre, including thirty-five professional nurses, sixteen of whom are trained in nurse-initiated management of antiretroviral treatment (NIMART). It is worth stating that the thirty-five professional nurses (who do not constitute the ultimate sample size) are not necessarily allocated to Laetitia Bam Community Health Centre alone, but are routinely rotated throughout the other four cluster clinics located in Kwa-Nobuhle Township and its environs. However, these sixteen NIMART-trained

professional nurses are part of the total number of the healthcare personnel working at Laetitia Bam Community Health Centre, whose overall total is 110 (N=110).

At the time of conducting this study, the total of eligible participants at Laetitia Bam CHC (i.e., HIV management personnel) comprised 4 (four) professional nurses working at the Out-Patients Department (OPD); 2 (two) professional nurses working at the Ante-Natal Clinic (ANC); 2 (two) professional nurses working at the Management of Childhood Illness (IMCI) UNIT; 10 (ten) Community Healthcare Workers; 2 (two) medical doctors; 1 (one) Psychologist; 1 (one) Pharmacist; 1 (one) Dietician, 1 (one) permanent medical doctor; 2 (two medical doctors allocated for community service); and 6 (six) lay counsellors. Therefore, the total number of eligible participants at Laetitia Bam CHC is 32.

#### 4.4.2.2 Sample Size

The sample size refers to the eventual number of research participants selected from the study population on account of their (sample size's) homogeneously representative characteristics or qualities when compared to those qualities or traits of the larger group from which they (sample size) were selected (Creswell, 2020; Redwood et al., 2016).

Following the pre-testing of the in-depth interview questions with the 5 (five) healthcare personnel (see sub-section 4.3.1) the researcher eventually targeted prospective participants working at the Laetitia Bam CHC, who consisted of 2 (two) medical doctors; 4 (four) professional nurses working in HIV patient management; 1 (one) pharmacist; 1 (one) dietician and 2 (two) counsellors. Therefore, the study's sample size was constituted by 10 healthcare professionals.

#### 4.4.3 Sampling Strategy

The sampling process itself relates to the recruitment or selection of a representative sub-group or sub-unit of individuals whose homogeneous traits could be generalisable in the context of the study population (Ruel et al., 2016). Therefore, a proper sampling of participants should necessarily be guided by the homogeneity (similarity) of traits exhibited by the sampled sub-group as a principal measure of their degree of representativity.

On the other hand, a sampling strategy relates to the specific method or technique that has been utilised to select or sample participants for their involvement in the empirical (in-depth interviews) phase of the study (Rani, 2016; Rees, 2016). Accordingly, non-probability convenience sampling was opted for in the selection of

the ten healthcare practitioners, based on the researcher's own predetermined criteria for inclusion in the study, as well as the variability of this participant category of healthcare personnel (Polit & Beck, 2020; Saunders et al., 2019). Meanwhile, Thomas (2017) assert that such a sampling strategy was not usually intended for the generalisability of the study's findings, but was mainly applicable to the specific population and research environment under investigation.

Convenience sampling is relevant in this case because all the participants are easily available at the Laetitia Bam CHC, without the need for the researcher to go to them at different locations. For that reason, smaller numbers of participants (such as the 10 healthcare personnel) may be involved than would be the case in probability sampling. Furthermore, the predominantly qualitative nature of the current study prioritises incidents or experiences as the primary units of analysis, and not individuals *per se* (Polit & Beck, 2020).

#### **4.4.4 Selection/Sampling Criteria**

Selection or sampling criteria premises on the researcher's range of considerations on whose basis participants were selected for involvement or eligibility in the study (Creswell & Poth, 2018; Walliman, 2021). For example, in terms of the non-probability convenience sampling strategy adopted in this study, the 10 healthcare professionals were considered because of some specific qualities that rendered them as indispensable living 'repositories' of rich data required to resolve the research problem, while also answering the research questions and achieving the stated objectives of the study (Polit & Beck, 2020).

##### **4.4.4.1 Inclusion/ Eligibility Criteria**

The inclusion or eligibility criteria relate specifically to the optimal similarity or homogeneity of the required characteristics, traits or qualities in the sample, relative to the study population (Tight, 2017). It is on the basis of the following required heterogeneous characteristics that participants were considered eligible:

- Both female and male healthcare personnel in various professional categories who have worked at the research site for more than 2 (two) years in HIV/AIDS prevention, treatment, and management responsibilities;
- Both male and female healthcare personnel who were not part of the pre-testing of the preliminary interview questions;
- Both male and female healthcare personnel who were in senior management designations at the research site for more than 2 (two) successive years; and

- Both male and female healthcare personnel and senior management team members aged 25 years and older.

Any potential participant who did not meet any of the above criteria was excluded from any involvement in the study's empirical data collection phase.

#### 4.4.4.2 Exclusion/ Ineligibility Criteria

Contrary to the inclusion or eligibility criteria, the exclusion or ineligibility criteria relate to those factors or characteristics that are not helpful to the advancement of both the research problem and study objectives (Allan, 2020; Brink et al., 2018). For that reason, the following factors rendered any potential participant not legible (excluded) for any participation in this study:

- Any healthcare professional of any category who is not based at Laetitia Bam Community Health Centre, not older than 25 years of age, and has not worked in an HIV/AIDS-related environment;
- Both male and female healthcare personnel who were part of the pre-testing of the preliminary interview questions; and
- Any HIV/AIDS patient, whether or not they received treatment and/or counselling services at Laetitia Bam Community Health Centre. (Any HIV/AIDS patient, whether they received or not received treatment and / or counselling services at Laetitia Bam Community Health Centre).

Any potential study participant who 'subscribed' to the two above-cited criteria was summarily considered ineligible.

## 4.5 DATA ANALYSIS

Data analysis follows data collection, and involves the systematic organisation, synthesis and categorisation of data into relevant themes derived from emerging patterns of frequency or occurrence (Cohen et al., 2018; Nylenna, Bjertnaes, Øyvind et al., 2015). Both data collection and analysis can occur concurrently (Badenhorst, 2014; Walliman, 2021). In this study, the thematically oriented and interpretative phenomenological analysis (IPA) of data was utilised. Amongst other factors and considerations, the IPA was most appropriate for this qualitative study due to its facilitation of the iterative and simultaneity of data collection and analysis, which enhances generation of new ideas and knowledge during the study, rather than only at its conclusion (Walliamn, 2021).

The raw (unprocessed) audio-recorded participant narratives obtained through the in-depth interviews with ten healthcare personnel were first transcribed on an Excel spreadsheet for the identification of common and recurring main ideas or central messages as individual (open/simple) or global or axial groups of themes (Efron & Ravid, 2019). As indicated in Section 1.9 of this study, the researcher had already obtained the participants' informed consent for audio-recording of the in-depth interview proceedings. The ten sampled healthcare personnel in HIV/AIDS treatment management participated in this study, as indicated in Section 4.4.2. In this regard, the focal point of the analysed data was on the participants' experiences, knowledge and perceptions regarding the prevention, treatment and management of HIV/AIDS among out-patients at the Laetitia Bam Community Healthcare Centre.

The data were saturated during the tenth interviewed participant. The transcripts of the ten audio-recorded face to face interviews were double checked for accuracy and authenticity in relation to the actual verbatim statements or responses of the interviewees (Efron & Ravid, 2019). Data was then analysed manually according to the individual thematic responses obtained from the narrative responses. The salient aspects of thematic relevance and categorisation or classification were established in the context of the recurring statements' association with the research problem, the research objectives, as well as the research questions (Nylenna, Bjertnaes, Øyvind et al., 2015).

The first data analysis step involved the reading and re-reading of each participant's transcribed statements. The next step focused on checking for the frequently appearing main ideas in the respective group of sentences or statements that were directly related to the experiences, knowledge and perceptions of the interviewed healthcare personnel. The next step involved the formulation of relevant meanings and correlation of the participant statements in conjunction with the research problem, research objectives and research questions (Denzin & Lincoln, 2018). All formulated individual meanings were then clustered into repetitive pattern or themes. Prior to finalisation of the clustered themes, the researcher continually referred back to the field notes to make sure that there was some degree of consistency between her notes and the participants' responses regarding HIV/AIDS patient management.

The clustered themes were subsequently interpreted in conjunction with the respective scholarship views accruing from the various literature sources consulted by the researcher. According to authors such as Maxfield and Babbie (2018), Silverman (2020) and Tight (2017), the analysis of data is both incomplete and inconsequential

until such data has been interpreted to test its veracity or otherwise against prevailing or dominant literature-based perspectives. As such, the researcher in this study presented Chapter 5 as a coherent reflection of the sampled healthcare personnel's responses and statements in conjunction with the relevant literature sources.

After the manually performed data analysis, the findings of the study were then established and documented first as a preliminary research report to the researcher's academic supervisor after corroboration and consultation with all participant representatives (Denzin & Lincoln, 2018). Mambona, 2017).

#### **4.6 ENSURING RIGOUR AND TRUSTWORTHINESS/ QUALITY ASSURANCE**

The scientific rigour (quality assurance) of the study enhances its trustworthiness to both the research community and the reading public (Kumar, 2020; Thomas, 2017). In this regard, the rigour and trustworthiness of both the research process and consequent findings in this research study was ensured and established by means of credibility, transferability, confirmability, and dependability.

##### **4.6.1 Credibility**

Credibility (internal validity in quantitative research) refers to the extent to which the findings of the study portray the authentic perspectives of the study participants as the truth, and not the researcher's own viewpoint (Clark et al., 2018). Credibility coheres with the ethnographic research design of this proposed study, which emphasises on an 'insider' or participant perspective of the collected data and its resultant findings. In this study, credibility was established by means of member checking and prolonged engagements with the participants. In this regard, the researcher engaged with the participants on extended periods beyond the regular data collection sessions in order to understand their views of reality and lived experiences (Mambona, 2017). In addition, the researcher continued engaging and consulting with the participants during, and after data analysis to ensure that the findings are a true reflection of their perspectives and input.

##### **4.6.2 Transferability**

Transferability (external validity in quantitative research) relates to the extent of the current proposed study's capacity to be replicated in, or generalised to other similar healthcare situations with different research participants (Burrell, 2017). It is the researcher's intention to generalise the study's findings beyond the Laetitia Bam Community Health Centre's confines to other healthcare facilities facing similar challenges in Kwa-Nobuhle Township, the Nelson Mandela Health District, the larger Eastern Cape Province, and South Africa as a whole.

Accordingly, comprehensive audit trailing of the study was detailed, from its conceptualisation leading to its final completion. All stages, decisions and processes undertaken, as well as the reasons thereof, were thoroughly documented as a record for anyone interested in undertaking a similar study to be fully informed as to *how* and *why* the study pursued its initial and final trajectory (Rees, 2016).

#### **4.6.3 Confirmability**

Confirmability (objectivity in quantitative studies) is premised on the extent of the study findings' accuracy (Haven & Van Grootel, 2019; Korstjens & Moser, 2018). The accuracy factor reflects that the study's ultimate findings are not a product of red-herring and/ or "non sequitur reasoning"; that is, findings and conclusions that are not logically connected to the prevailing collected data (Leavy, 2017). In order to prevent such possible distortions, the researcher ensured objective and confirmable research findings by involving the academic supervisor and an independent research methodology expert/ analyst to check whether or not the research findings and its processes were scientifically acceptable and believable (Haven & Van Grootel, 2019).

#### **4.6.4 Dependability**

The notion of dependability is similar to the notion of reliability in quantitative studies (Kumar, 2020). Dependability refers to the quality assurance measure in terms of which a particular research tool's stability, consistency, and consistency are assured (Burrell, 2017). It is by means of its consistency that the study's dependability is able to be tested or replicated in other research contexts under approximately similar conditions as those that prevailed at the original research site. The current study's dependability was ensured by means of the interview questions' strict adherence to only issues pertaining to the views and experiences of healthcare personnel concerning the prevention, treatment and management of HIV/AIDS patients in the context of prevailing human, fiscal and infrastructural resources at Laetitia Bam CHC (Denzin & Lincoln, 2018; Haven & Van Grootel, 2019).

### **4.7 CONCLUSION**

In essence, this chapter provided a framework on whose basis the study's requisite evidence was established. The current chapter then presented, discussed and elaborated on the research design and methodology chosen for the study, including the specific tools that were used in order to achieve the study's aim and objectives. The discussions also included the processes and procedures for data collection, data analysis, as well as the people involved and the methods for their selection. Measures of trustworthiness such as credibility, dependability, transferability, and

confirmability were respectively utilized to actualize the scientific rigour and qualitative assurance of the study. The next chapter presents the actual results/ findings that emerged from the thematically analysed data generated through the in-depth interviews.



## CHAPTER 5

### DATA PRESENTATION AND ANALYSIS

#### 5.1 INTRODUCTION

The previous chapter abstractly articulated the processes and methods that the researcher applied in the acquisition of the pertinent qualitative (interview-based) data from the ten sampled participants (Allan, 2020). On the other hand, the current chapter presents the *already* collected, analysed and interpreted data itself, whose relevance to the study is located within the five indispensable themes and related seventeen sub-themes (categories) generated by the researcher during the data analysis phase following the semi-structured interview sessions (Zikmund & Babin, 2010).

The development of themes is critical, considering that mere acquisition of information does not necessarily constitute data (Leedy & Ormrod, 2019). Therefore, the raw audio-recorded statements of the participants by themselves are not useful, until they have been *converted* or *translated* into tangible evidence of the study in the context of the problem being investigated, the research questions asked, and the objectives the researcher intends to achieve (Cameron, 2015; Leedy & Ormrod, 2019). Accordingly, then, this chapter presents the researcher's findings in the context of the sampled and interviewed healthcare personnel's experiences, knowledge and perceptions in managing patients with HIV/AIDS in the Laetitia Bam CHC at Kwa-Nobuhle Township in the Nelson Mandela Municipality, Eastern Cape Province.

It is worth noting that the element of interpretation looms large in the present chapter, especially that analysed data is not yet relevant or useful, until it 'speaks' to the broader context of the reviewed literature on the one hand; as well as the research problem, aim and objectives, on the other (Babbie & Mouton, 2018; Yin, 2018). It is in this regard that the researcher translated /contextualised the findings in relation to literature-based perspectives to test the veracity or otherwise of the participants' perspectives; or the correlation or otherwise between literature and practice (Allan, 2020; Yin, 2018). It is of further noting that all *participants* (healthcare personnel) are also *employees* at the very healthcare facility where the study was conducted, that is, Laetitia Bam CHC.

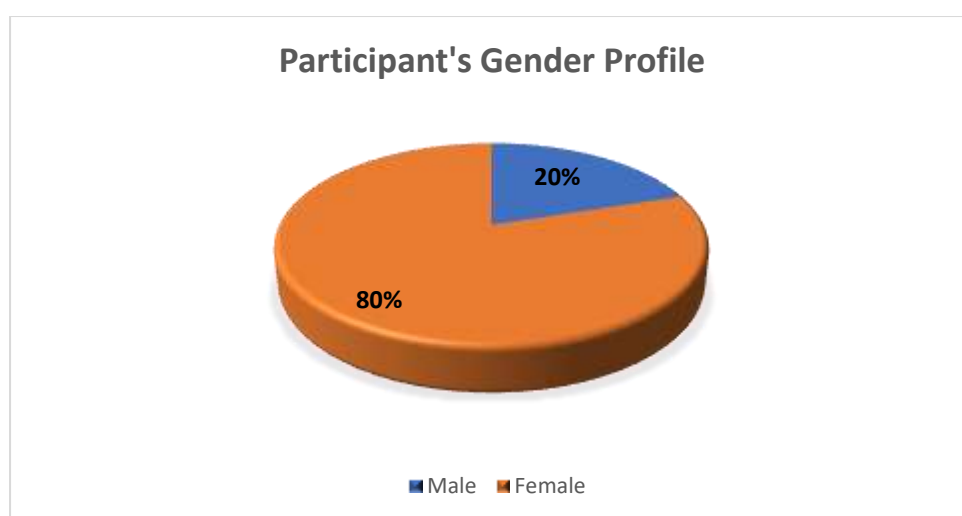
The current chapter is demarcated into three distinguishable facets, namely: the demographic characterisation of the ten sampled participants (healthcare professionals), the overall thematic responses developed from the narrative responses, as well as a summary of the findings derived from the five key themes and their related seventeen sub-themes themselves.

## 5.2 DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS

The participants' demographic characteristics or variables included their gender, age, race, marital status, professional background, work experience, years of work experience, as well as years of experience in managing AIDS patients. The researcher collected the demographic data and compared with the narrative responses to establish and degree of correlation or disagreement with both the literature and participants' narrated experiences (Badenhorst, 2014; Cameron, 2019).

### 5.2.1 Participants' Gender Profile

Figure 5.1 below is representative of the gender profile or distribution of the participants.



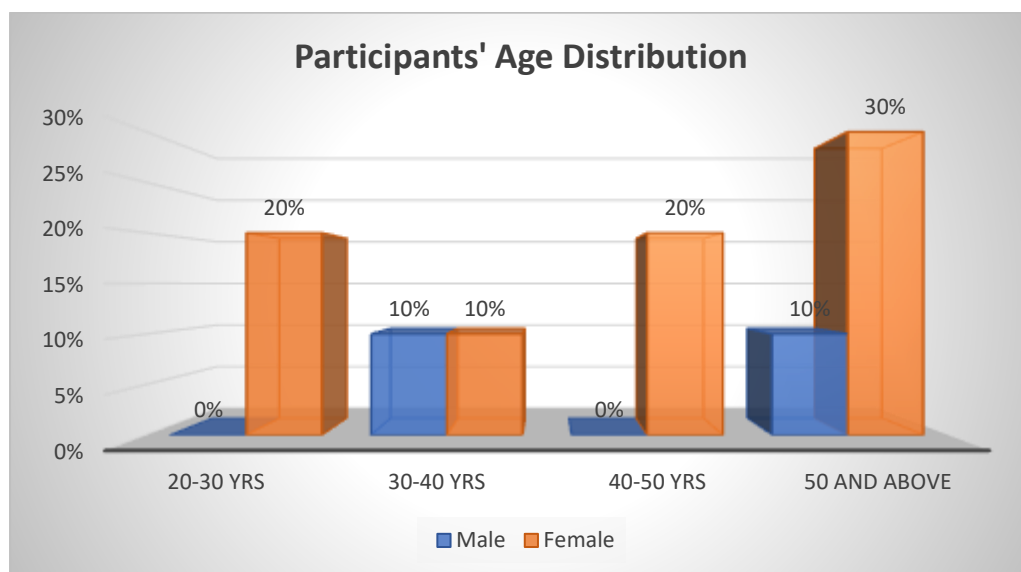
**Figure 5.1: Participants' gender profile**

Extrapolated from Figure 5.1 above is that females were in the majority (n=8, 80%), while males were only two (n=2, 20%). Such statistical distribution tends to lend credence to the view that the nursing profession is characteristically a female 'territory'. Such thinking further perpetuates culturally and patriarchally entrenched stereotypes, that the traditional dominance of men as heads of their families would not be completely expressed or well represented in a predominantly female 'territory' (Dzinavane, 2016; Ifechelobi, 2014).

On the other end of the thought spectrum, a view exists that, the fact that the nursing profession fundamentally involves *caring* for the sick, women are then well suited for such humane responsibility due to their feminism/ motherliness and tenderness (Nilsson & Berg, 2015; Koto & Maharaj, 2016); as opposed to the 'warrior' attributes of (most) men (Dzinavane, 2016; Mammbona, 2017). The institution needs to recruit more male nurses to diffuse and demystify the skewed gender ratios that entrench the *status quo*.

## 5.2.2 Age Distribution of Participants

Figure 5.2 below is a depiction of the age distribution of the ten healthcare personnel participants represented in the study.



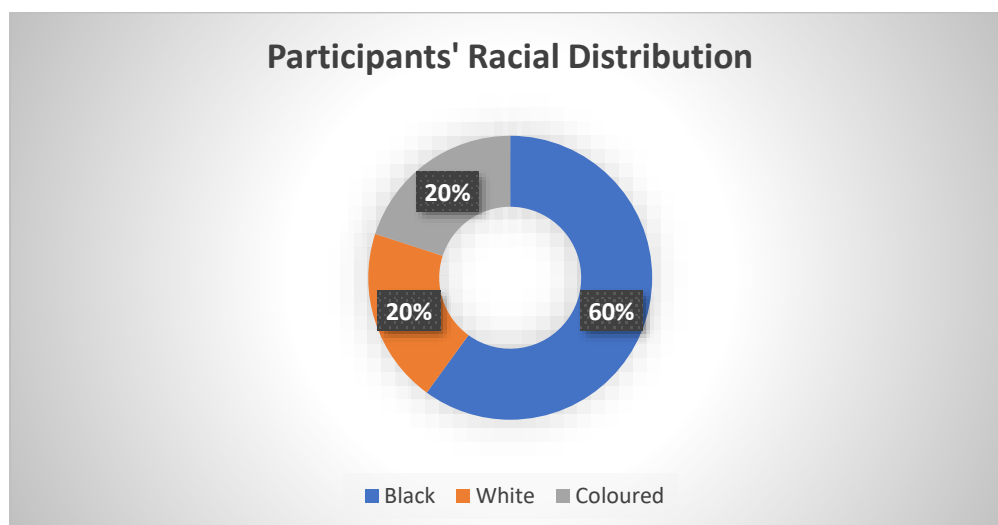
**Figure 5.2: Participants' age distribution**

In terms of Figure 5.2 above, the age classification or distribution of healthcare personnel in HIV/AIDS who are 50 years and above is predominantly high at Laetitia Bam CHC ( $n=3$ , 30%); followed by those aged 40-50 years of age ( $n=2$ , 20%), the 20-30 years cohort ( $n=2$ , 20%), and the 30–40-year age group ( $n=1$ , 10%). Furthermore, there is an equal number of females aged between 20-30 years, and females aged between 40-50 years ( $n=2$ , 20%) respectively. There is equal number of male and female participants aged between 40-50 years ( $n=1$ , 10%) respectively.

Based on the highest number of those aged 50 years and above, the human resources implications are that more financial resources will be spent by the clinic (or the Eastern Cape Provincial Health Department as employer) to defray for retirement salaries and packages of these experienced healthcare personnel at this clinic because they are nearing retirement age (Manyisa & Van Aswegen, 2017). Therefore, finding the replacement will cost the department more money whereas employing the cohort of 20-30 years old healthcare personnel will better ensure stability for the healthcare facility and the nursing profession in general. However, the younger (e.g., 20-30 years) age group still requires continuous professional development (CPD) or in-service training, which could potentially be disruptive to continuation of service delivery (Esmaeili et al., 2014; Wani et al., 2019).

### 5.2.3 Participants' Racial Distribution

Figure 5.3 below represents the racial distribution of the participants.

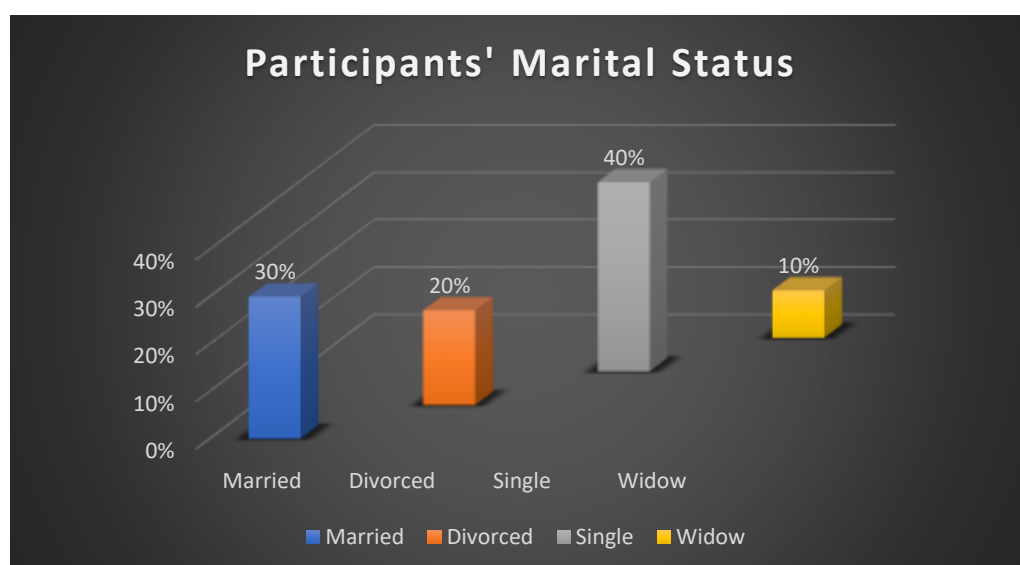


**Figure 5.3: Participants' racial distribution**

Based on Figure 5.3 there are more black African healthcare personnel (n=6, 60%), compared to White healthcare personnel and Coloured healthcare personnel in HIV/AIDS management, each of whom are (n=2, 10%). The researcher chose the racial demographic variable more as an employment equity factor than a reflection on the quality of services at the clinic. That there are more black African healthcare personnel at this particular clinic is unsurprising, given the location and clientele of the facility.

### 5.2.4 Participants' Marital Status

Figure 5.4 below is an illustration of the marital status of the participants.



**Figure 5.4: Participants' marital status**

Figure 5.4 depicts that most of the healthcare participants are single (n=4, 40%), followed by married participants (n=3, 30%), divorced (n=2, 20%), and the widowed

(n=1, 10%). Uwadiogwu (2015:99) declares harrowingly that, “marriage is a site of gender inequality ... women do not benefit from being married as men do”. On the other hand, Bossiere (2019:1-2) posits the (potential, real or perceived) conflictual nature of work and marriage thus:

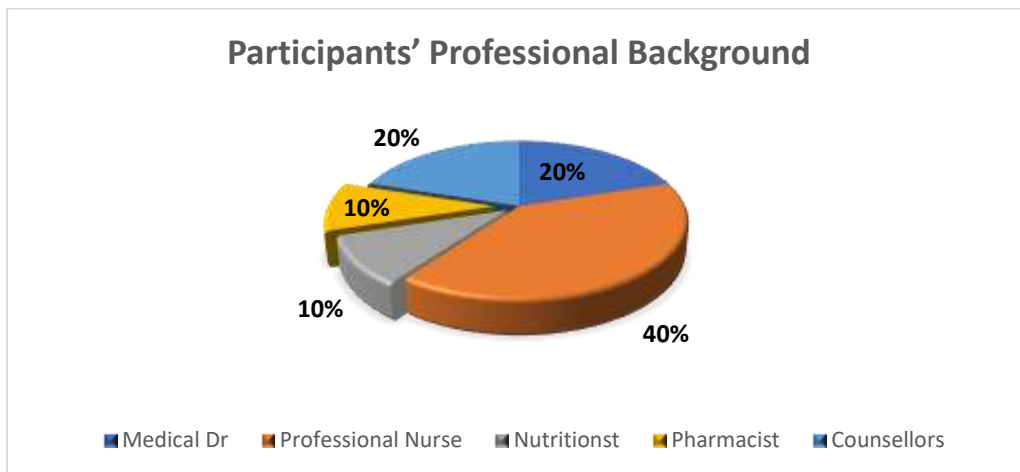
“There’s no getting around it: To preserve your marriage, you must prioritize it. If you have an intense work schedule, intentional, mindful nurturing of your relationship is essential”.

Given the above-cited two scenarios enacted by Uwadiogwu (2015) and Bossiere (2019) respectively, interest in the marital status of the participants (80% of whom are female) by the researcher (who is female herself) was provoked by her desire to determine whether or not a correlation could be established in respect of the influence of marital status on work, and vice versa; especially for professional women who are less likely to be dependent on men (spouses or husbands) for their livelihood and sustenance (Abdullahi et al., 2017; Mwilwane, 2017).

However, it should be stated that there was no direct question posed to the participants in respect of work and marriage, or work and family life. Nonetheless, the participants’ statements (reflected in various parts of Section 5.3) do reflect a generally conducive work ethic among participants. Other than the absenteeism induced by a variety of the healthcare staff’s personal reasons and circumstances (see sub-section 5.3.1.1, for instance), they are generally deflated by work-related factors such as the scarcity of upward mobility opportunities (see sub-section 5.3.5, for example). From a literature review perspective, the discussion in sub-section 2.4.2.1 constitutes one of the reasons for justification of the researcher’s inclusion of, and interest in the work-marital status dynamic.

### **5.2.5 Participants’ Professional Background/ Profile**

Figure 5.5 (overleaf) is an illustration of the professional background or profile of the participants. The study’s intention was to target diverse range of qualified healthcare personnel who were actively involved in HIV patient management. Such intention was motivated by the need on the part of the researcher to determine the extent of quality of HIV/AIDS services and care provided at the clinic in relation to the participants’ professional backgrounds or work-related experience.



**Figure 5.5: Participants' professional background**

Extrapolated from Figure 5.5 above is that the professional status represented in the sample ranges from professional nurses (n=4, 40%), medical doctors (n=2, 20%), counsellors (n=2, 20%), nutritionist, (n=1, 10%), and pharmacist (n=1, 10%). Evidently, the healthcare facility's personnel's composition is multidisciplinary, consistent with the diversity of requirements (e.g., nutritional, psychological, bio-medical) for treating and managing patients who are HIV-infected (Nkosi, 2016; Phakisi, 2018). Despite, the availability of such diverse personnel, the participants still lamented on the need for more staff to be employed in order to alleviate the work overload (see sub-section 5.3.5.2 and 5.3.5.3, for example).

### 5.2.6 Participants' Work Experience in Years

Figure 5.6 below depicts the participants' work experience in years.



**Figure 5.6: Participants' work experience**

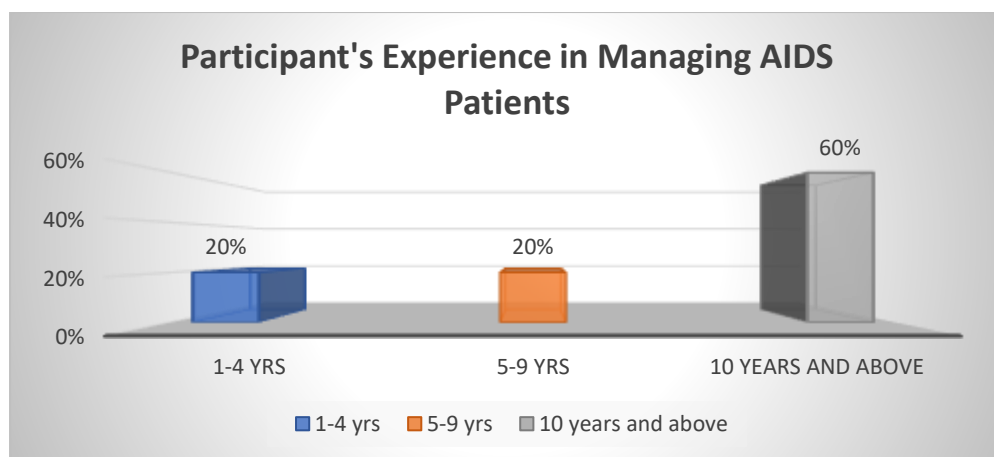
In addition to the participants' professional background shown in Figure 5.5 previously, the study further sought to establish their work experience. It should be noted that "work experience" in this instance, is premised on general nursing-related functions, as opposed to HIV-specific functions – which are addressed in the next sub-section

(i.e., 5.2.7). In terms of Figure 5.6, the researcher’s intention was to find out whether the staff were appropriately designated, as well as determining the quality of services rendered. Accordingly, the majority of participants (n=6, 60%) had working (general nursing-related) experience of 10 years or more in HIV treatment and management. Meanwhile, the number of participants with 1-4 years’ working experience (n=2, 20 years) is the same as for those (n=2, 20%) whose working experience is between 5 and 9 years.

Work-related experience is a relevant dynamic in this study, especially in the health profession and the demand placed on it to protect and defend the sanctity of life as humanly as possible (Hartle, Ridenour et al., 2015; Mohanlal et al., 2020). Linked to Figure 5.2 and its age distribution of participants, it does appear that a modicum of correlation could be reasonably established between the participants’ natural age and their work-related experience. For example, Figure 5.2 expressly demonstrates that those participants aged 50 years and above are in the majority (n=3, 30%). Similarly, Figure 5.6 demonstrates that the majority of the participants (n=6, 60%) were those with working experience of 10 years and above. Evidently, 3 (three) of the self-same 50 and above age group, and another 3 (three) from the 40-50 years old cohort, collectively constitute the total 6 (60%) with working experience of 10 years or more.

### 5.2.7 Participants’ Experience in Managing AIDS Patients

Figure 5.7 shows the experiences of the participants in years managing AIDS patients



**Figure 5.7: Participants’ experience in managing AIDS patients**

Whereas Figure 5.6 is reflective of overall nursing related experience, Figure 5.7 particularly relates to specific or expert knowledge in the treatment or management of HIV and AIDS among infected patients. Irrefutably, the findings in both Figures 5.6 and 5.7 are a replica of each other. In both instances, the majority is constituted by those who are the **oldest** in both chronological/ natural age and **highest** number of years in treating HIV patients. Conversely the **youngest** age group (aged 20-30 years)

is still the same group with the **lowest** number of years in the treatment and management of AIDS patients. That the majority of healthcare personnel were the oldest, could imply that professional continuity and skills retention is at risk at the facility because those with the experience will soon leave both the clinic and the profession due to retirement. The latter state of affairs (which portends professional discontinuity) was confirmed by some responses of the participants in which they lamented the threat of disappearing skills and knowledge (see sub-section 5.3.5.2 and 5.3.5.4, for example). In addition, Section 2.4 and Section 2.5 of this study eclectically provides challenges (and possible solutions) attendant to professional skills, knowledge and experience shortages in the healthcare professions, particular in the treatment and management of HIV/ AIDS infected patients.

### **5.3 OVERALL THEMATIC PERSPECTIVES OF PARTICIPANTS**

The overall thematic perspectives of the (ten) participants (whose demographic profiles are reflected in the preceding section) constitute a framework against which the participants' narrated statements or verbatim responses are thematically translated or converted into meaningful data and evidence relative to both the research problem and study objectives (Holloway & Wheeler, 2010; Yin, 2018). Five main themes and related seventeen sub-themes emerged during the thematic data analysis process as detailed in Section 4.5 of this study. In essence, these themes are seminal to the research topic and study objectives in equal measure (see sub-section 1.4.2), and also highlight the value or significance of the study (Denzin, & Lincoln, 2018; Tardy, 2019).

Table 5.1 (overleaf) depicts the five main themes, seventeen sub-themes (categories), and 52 sub-categories accruing from the analysed data of the statements, as well as the relevant sub-themes or categories associated with each of the themes. These main themes pertain to the interviewed ten healthcare personnel's knowledge, experiences and perceptions concerning: management of HIV /AIDS patients; activities to decrease (reduce) the burden of HIV/AIDS; HIV programme/ service implementation; impact on human resources; as well as challenges experienced. For ethical purposes, participants are labelled '**HP**' (healthcare personnel) 1-10.



**Table 5.1: Main themes and sub-themes/ categories**

Main Themes	Sub-themes/ Categories	Sub-categories
Management of HIV/AIDS Patients	Health personnel's HIV/AIDS management and appropriateness of purpose	Dispensation of ART scripts; HIV treatment & adherence counselling; Application of latest (2019) DoH guidelines; Multidisciplinary & holistic health approach
	Balanced HIV/AIDS management of basic regime	Patient tracing; Social club membership; Comprehensive treatment of HIV, TB & Covid-19; Chronic medicine dispensing and distribution' (CCMDD) programme
	Quality of HIV/AIDS service provision	Multi-level involvement of health teams; Call centres, posters & hotlines; Pre-testing; Involvement of Shoprite for collection of medicines
Activities to Decrease (Reduce) Burden of HIV/AIDS	Provision of HIV testing	Encourage HIV testing Providing ARV treatment to all patients tested positive Health education on condom use
	Measures of ARV access	Community visits; Follow—up on defaulters Available data capturers; Strict provision to only to resident patients, not outsiders; Stocked pharmacy & 6-month ART programme
	Impact/ Effect of HIV service provision on health of personnel	Physical, emotional, psychological stress; Stigmatisation and community isolation; Effect of patients' poverty & unemployment
	Health personnel's contribution to improvement of patients' health	Care-centred attachment to patients; Off-site community visits and condom distribution
	Health personnel's HIV service provision challenges.	Outdated filing system & loss of files; Lack of dedicated HIV monitoring and evaluation process; Patient queues; Short supply of foodstuffs and medicines; Lack of privacy for counselling; Food & security; Long queues; Poor nutrition of patients
HIV Programme/ Service Implementation	Implementation and coordination of HIV programmes/ services	No control over patient turnaround strategies Viral load monitoring
	Responses to confirmed cases of HIV-positive personnel	Regressive behaviours and attitudes; Secrecy, stigmatisation; Ostracisation
	Nature of Covid-19 related challenges	PEP shortages & associated corruption; Status disclosure; Secrecy; Misinformation (fear of the unknown)

Main Themes	Sub-themes/ Categories	Sub-categories
Impact on Performance	Impact of HIV care services on staff morale and performance	Stress & absenteeism; Emotionally & psychologically staff affected
	Infrastructural appropriateness for HIV care.	No proper HIV counselling room; Lack of proper buildings;
Impact on Human Resources	Frequency of health personnel's HIV training;	Infrequent to non-existent training
	Prevalence of HIV Human Resource Opportunities and Activities;	Unsupportive environment; Virtually non-existent opportunities
	HIV Human Resource Challenges;	Staff shortages & high workloads; Vacant post not been filled; Insufficient staff employed for HIV related issues; Poor support by management; Scarcity of continuous professional development; Not everyone gets the opportunity to attend training;
	Recommendations for Improvement of HIV Human Resource Activities	Sex education for patients; Monitoring & evaluation system;

### 5.3.1. Health Personnel Experiences in HIV/ AIDS Management

The healthcare experiences of HIV patient management were captured in the context of:

- health personnel's HIV/AIDS management and its appropriateness of purpose;
- balanced HIV/AIDS management of the basic regime; and
- quality of HIV/AIDS service provision.

#### 5.3.1.1 Health Personnel's HIV/AIDS Management and its Appropriateness of Purpose

The below-cited narrated statements of the participants were in response to the question:

***In what way do health personnel's management of HIV patients at this clinic relate to appropriateness of purpose?***

***HP1:*** ... I could answer by saying that you know in this area where Laetitia Bam is in Kwanobuhle it is an area that has got many patients who are HIV positive and obviously it is essential that we supply services to the max you know what the people are entitled to ... I am more just in the managerial part of it so I have not dispensed many ARV scripts and stuff but obviously I play an important role in ensuring that we have the necessary medication and stuff that we can handle any questions and things that patients might have or even the counselling we used to have adherence counselling right at the beginning where the pharmacist would actually do the adherence counselling from our perspectives. A lot of things have changed and are not being done anymore because of size numbers. It is not as if we have a lot of new initiates anymore. We sort of stabilised with what we have.

***HP2:*** At this facility Laetitia Bam it is a TB and HIV Clinic so we are following the latest guidelines. I think the Department of Health brought out new guidelines end of 2019. So we are following those guidelines and we also value confidentiality of the patients as well. Ja. So that is it.

***HP3:*** Okay so the facility is able to screen people. It is able to offer HIV counselling and testing. So in terms of purpose that is to kind of find people that are HIV positive and does help to limit spread. If people know their status then they are more likely to be aware and beyond treatment and then that can also need to limiting spread of the virus and then we have got like multi-disciplinary approach with involvement of nutritionist, dieticians or even psychologist ... So we can help them also manage HIV outside of just giving drugs for the virus but also to actually help the person be healthier ... Ja and then provision of drugs itself they are readily available. I have not experienced any kind of shortages in terms of supply so that helps in terms of the management of HIV itself.

Laetitia Bam Community Health Centre is a comprehensive municipality clinic whose personnel comprises doctors, professional nurses, psychologists, dieticians and healthcare counsellors, all of whom provide a holistic approach to the predominantly HIV patients' wellness, and not just their illness or condition (Gorde et al., 2021; Madolo, 2019). According to the above-stated participant responses, they are

generally able to manage the patients and address their physical, psychological and mental wellbeing.

However, the above-cited responses also reflect that the common concern is the influx of HIV/AIDS and TB patients as well as the shortage of healthcare staff. The participants are concerned further that they sometimes do not practise as per the latest guidelines of the Department of Health, such as the new HIV/AIDS Guidelines of 2019. Participants are unable to give quality care because they have to attend to many patients within a short period of time, as shown in their assertions below.

**HP4:** *In this clinic we manage our HIV according to our guidelines. We are always having guidelines we follow then to manage all the cases.*

**HP5:** *All patients that come to the facility irrespective of being HIV positive or coming for any other chronic medication they are treated alike. They are consulted first whatever and then they are given chance to take decision on their treatment and they are treated to dignity and whatever is being discussed between the nurse and the patients remain confidential.*

The two responses above indicate nurses' concerns with the high workload and unmanageable responsibility of the community healthcare workers to perform HIV testing and counselling without any supervision by skilled professional nurses. The reasons for high workloads are attributed to staff shortages, absenteeism, and increased activities such as HIV/AIDS counselling and testing. Long queues at the clinic also led to unhappy patients who have to wait longer for treatment. Mohanlal et al. (2020) and Amoah et al. (2019) also express the view that the shortage of qualified healthcare professionals is one of the disturbing issues facing healthcare workers. Such a situation also led to the 'brain drain' of qualified and skilled healthcare workers in public facilities who are attracted to the private sector and other opportunities abroad due to better working conditions.

#### 5.3.1.2 Balanced HIV/AIDS Management of Basic Regime

The below-cited narrated statements of the participants were in response to the question:

***How do health personnel balance HIV/AIDS management of the basic regime?***

**HP6:** *Because we are bigger facility, we have more staff which means we have more hands. So in the management of HIV we have different categories of this clinic doing different things which means we have a process of maybe tracing patients. We have a process where we can counsel patients. We have a process where we can, treatment wise because we have a pharmacy, and not just an assistant. So we have different levels of people or categories working here, which means the basic care or the regime is better.*

**HP7:** *Firstly, we give them information of the patient and we welcome everybody warmly at the clinic who is HIV positive so that they feel welcomed. We are trying to calm them down so that they co-operate with us. We gave them treatment ... and we also have social clubs for them ... there is also a programme that we called CCMDD. It is where they come and collect their treatment. Those are the few things that we are providing for them so far.*

**HP8:** *It depends on whether the patient only has HIV/AIDS or whether there are things that go with. Say for example diabetes, hypertension or COVID. So they will either manage the regime either together or separate. So we have comprehensive regime of treatment ... if there is more than one condition on the patient.*

**HP9:** *The health personnel address the issues of when there is no availability of medication. Then they tell the management that there is no ... fixed dose combination that combines three types of medication all in one. So if that we do not have, I mean by means of not knowing we are sitting in our rooms and then the patient will come and then we will go to the management and say okay we do not have this and that, and then what we normally deal with it, like ask from the other clinics.*

**HP10:** *In terms of the adherence of treatment here at the clinic, I would say that the patients do get treatment at the facility from the dispensary. No patient has been turned down without treatment. When there are days that are delays here at the clinic, we try by all means that they are all going to be attended. Sometimes we help when the patient comes to us and complain that they have been here for a long at the clinic and their files have been misplaced or disappeared, we step in and we do help so that each and every patient here at the facility must get their treatment without being turned down.*

During the interviews, the healthcare personnel were initially reluctant to voice their opinions regarding the balance of basic HIV/AIDS provision and management with the basic regime. One possible reason for such reluctance could be due to the mother-tongue 'interference' in understanding the question in English. Following the researcher's further clarification, the participants then indicated that the clinic was a fully integrated facility providing counselling on HIV treatment compliance. There was also a special programme called 'Chronic medicine dispensing and distribution' (CCMDD) designed for HIV patients at the clinic. In this regard, the clinic appears to have grown smaller due to the increasing number of patients from the surrounding areas. Therefore, it reflects that an imbalance was created between services, personnel and clients (Carelse, 2018; Muthelo et al., 2020).

#### 5.3.1.3 Quality of HIV/AIDS Service Provision

The below-cited narrated statements of the participants were in response to the question:

**Please describe the quality-of-service provision regarding HIV in this health facility.**

**HP6:** *We have different categories in our facility ... which means the patients start with proper counselling because we have counsellors. We have registered nurses that can emphasize what the counsellor said. We have doctors on site all the time, and we have pharmacists that can help us when we experience any problems, and we also have call centres or hotlines that*

*we can make use of that is readily available. Posters are up in all consultation rooms so I think we are more equipped than other clinics around us and we can be a quality service provider to patients.*

**HP7:** *The quality of service we provide for them is that CCMDD is designed for HIV patient here at the clinic. Now it has been changed now so they are no longer fetching their treatment here. They only come and drop their ID's so that they go and fetch their treatment from Shoprite because firstly we treat them as VIP they do not wait on the queues .. We take their ID's then we put them on file. So unfortunately for those starting HIV treatment they start it from scratch ... So we monitor their vital signs. They have to stand on the queue but once they finish taking treatment for two years it is when they get that privilege of getting their treatment via Shoprite.*

**HP8:** *The policies and things are there but there are challenges when it comes to the quality-of-service provision. It depends on the commitment of the healthcare worker or the healthcare professional and of the patient. I will say it is quite good if they are committed to stick to the dates and sticking to the treatment ... Other than that, the service providing the service is there at the clinic every day but it becomes a challenge where the patient sort of default or the patient stops coming. That is where the challenge is, providing the service counselling but they should have things in place like tracing the patients.*

**HP10:** *The quality-of-service provision we are providing for these patients, all the patients who are entering here at the facility we do a pre-testing for them irrespective whether they do know their status or not their status. By doing so we are preparing them to be ready or to anticipate whatever the result they are going to come ... They must not stay at home because once you receive those results it is when you start getting motivated and you become frustrated. So some of them becoming suicidal so we try by all means so that the patient must stay positive and stay upbeat. So we do not want them to think that they do not get support from us and with those who tested negative we encourage them to use condoms all the time and they must come at the clinic to repeat for their window period.*

The above responses respectively attest that HIV testing and counselling and related services are provided at this clinic. It was also mentioned by the healthcare personnel that CCMDD programme was largely influential in reducing the long waiting queues for the patients. Overall, the range of services [provided, coupled with the work ethic of the staff, shows general commitment to their work and patients, which is a positive factor to reduce work-related stress (Bruser, 2020; Mathibe et al., 2015).

### **5.3.2 Health Personnel Experiences and Activities to Decrease the Burden of HIV/AIDS**

The activities to decrease the burden of HIV/AIDS were captured in the context of:

- provision of HIV testing;
- measures of ARV access;
- impact of HIV service provision on health of personnel;
- healthcare personnel's contribution to improvement of patients' health; and
- healthcare personnel's HIV service provision challenges.

### 5.3.2.1 Provision of HIV Testing

The below-cited narrated statements of the participants were in response to the question:

#### ***How is HIV testing offered or encouraged at this healthcare facility?***

***HP1:*** Okay and it is not really so much a pharmacy related thing because we only respond on what the nursing staff does. So they are the ones that will evaluate the patient ... do the initial counselling, do the testing, and then speak to the patient about the relevance of their treatment. Ultimately once all the VAT is done and it is being prescribed then the pharmacy comes into it and then we do our dispensing and that is where the adherence counselling from our side with regard to our part of the treatment protocol or the treatment plan comes into it where we give advice on the medication. We also stress the importance of not skipping their things and what you could experience with using your drugs and stuff obviously but that is the only part that we play.

***HP3:*** So what I do is you ask the patient if they are willing to get tested. You explain the importance. Then they go to a room where they can have more extensive counselling if they are ... they can get more intensive counselling for testing to happen. So they get tested and then they get post-test counselling. It is only in emergency settings where it can happen in trauma because it is important to know ... there is a nice form at the back of the clinic books where they sign that they have given consent and then all the results are written there.

***HP5:*** All patients that come to the facility are encouraged to have voluntarily testing or voluntarily testing of HIV and it is the patient's decision if he wants to be tested. Then if he gives the consent that he wants to be tested, then pre-counselling is done and post-counselling. Even if he tested negative, he is told that he must come back because it might happen that he is in the window period. In six weeks' time, we repeat the test.

The participants highlighted that HIV counselling and testing is initiated and recommended by healthcare personnel working at Laetitia Bam Community Health Centre to all adults, youth and children attending healthcare at the facility as a standard component of medical care. However, the healthcare personnel found it very difficult for HIV patients to disclose their HIV status to others. Overall, the participants' responses are indicative of self-confidence and familiarity with ethical protocols relating to voluntary testing. Such a state of affairs augurs well for professionalism in nursing and healthcare (Mathibe & Chinyamurindi, 2021). Therefore, all relevant personal circumstances should be taken into account by the healthcare personnel in HIV management to prevent undue litigation (Mlambo & Adetiba, 2019; Peu, 2015).

### 5.3.2.2 Measures of ARV Access

The below-cited narrated statements of the participants were in response to the question:

#### ***What measures are in place to enable ARV access to people living with HIV/AIDS?***

***HP2:*** There are healthcare workers going to the community ... Patients have days that they come and collect ARV's here. We are quite strict about that and cannot just give treatment to

all the patients in the whole of Nelson Mandela Bay. So if you are in another area, Despatch Clinic then you must go to Despatch Clinic.

**HP4:** *As I told you before ... in this facility we are fortunate. We have got a pharmacist. We are always having ARV's here. We do not run out of ARV's. Our pharmacist makes sure that she orders the medication and if the doctor cannot get in other depot she will try and get it in the other facilities, otherwise each and every patient coming here with HIV do get treatment, he does not go out of this hospital, this clinic without medication. We make sure of that.*

**HP6:** *We have data capturers that help us a lot, especially with patients that are registered on our system. Which means we can now go online and we can check how many patients are defaulting ... The care worker goes out and comes with a referral. For the patient, we also do an HIV test, we obviously do counselling. The patient is always free to come back when they experience any problems on the ARV's. We are quite open when it comes to HIV.*

**HP10:** *Once the patient gets a result and the patient tested positive, the only thing that we do here at the clinic is to put that patient on medication, on treatment and then after six months we do a follow up with that patient. Once a patient comes back, we do a check-up of vital parts; if all the parts are functioning well and if that patient is not resistant to the treatment. We also do put those patients on adherence counselling. It is where we also continue with the counselling. Each and every time the patient comes, we do counselling on adherence counselling.*

The above participant statements show that measures were generally in place to enable ARV access to patients. These measures include: community visits by healthcare workers, controlled treatment access to the deserving and not anyone, a resourced pharmacy, checking defaulters through the clinic's database system, and a 6-month treatment programme to ensure adherence. Such measures were supported by Nlooto (2017) and the WHO (2017), confirming that sustained access to ARVs ensured quality treatment as much as it reflected either poorly or positively on the healthcare system of an institution.

#### 5.3.2.3 Impact/ Effect of HIV Service Provision on Health of Personnel

The below-cited narrated statements of the participants were in response to the question:

***How has your HIV service provision affected your health?***

**HP1:** *I think right at the beginning when we started, people were not sure what was going on but as time went by, we did not really understand maybe what is behind the HIV cases. I remember that patients used to be seen from the outside so they were like sort of isolated ... you know it is nearly like this COVID; we are not sure what is going on okay but since as time went by and the stigma, there is a lot of stigmatism. You can see from the numbers, as long as people take their medications, we have good results from those things; so I think people have learned from that also; but affecting our health, maybe a little bit of stress right at the beginning, but at the moment we do not have people anymore that might be emotional when you have to issue that first lot and then speak to them and counsel them about it, that type of thing and because that could sometimes be a bit traumatic.*



**HP7:** *It does affect us emotionally, spiritually and physically especially when you saw the patient is defaulting and you saw that the patient is suffering and you feel bad as if you did not do your job properly. I personally at times feel like I failed the patient. There are times that I felt I had sleepless nights because some of these patients, we are related to them. It does affect us psychologically; as a healthcare worker ... we cannot force them to take their treatment and even then if they refuse it is their right. It does affect us ... especially when you start that particular patient on treatment and all of a sudden you saw the patient is defaulting, it does affect us very, very, very bad because we treat them as our relatives and as part of our families.*

**HP8:** *For me, just basically seeing the patients when they come in, they usually look very wasted and very malnourished; so just seeing that mentally can take a toll especially if you see like three or four dead every day at the different facilities and then also ... that they might not get better. That could be their last time that you are seeing them, so in terms of my health it really does affect you mentally just seeing that picture. You go home with those pictures, but you have to find ways.*

**HP10:** *It does in terms of motivating me to always look for better options, always try to do better with the next patient or with the current patient there, seeing how we could change our care plan by management to make sure that the patient does get better. They look better when I see them the next time.*

Undoubtedly, the HIV service provision by the respective healthcare personnel does affect their health significantly (physically, psychologically and emotionally), especially that they appear to be very attached to their patients, whom they have grown to take as family members. Virtually all the healthcare personnel (participants) are particularly bothered by the socio-economic circumstances of the participants, such as the state of poverty and hunger causing treatment defaults. Mutabazi et al. (2020), Mohanlal et al. (2020) and the WHO (2018) are in agreement that factors such as illiteracy, poor nutrition, poverty and unemployment are a serious problem among indigent communities, especially for people living with HIV and AIDS who daily encounter the daily struggle to access basic and proper nutrition.

#### 5.3.2.4 Health Personnel's Contribution to Improvement of Patients' Health

The below-cited narrated statements of the participants were in response to the question:

***As a member of the health personnel team in this health facility, how have you contributed in improving health quality and eliminating HIV risks to patients?***

**HP2:** *I just emphasize to the patient it is important to know their status. I explain to them why it is important; So, I encourage the patients to be tested while I am here as well and if they should test positive, I counsel them ... that it is a condition you can live with, even have a better outcome than diabetes if you take your treatment and also try to tackle stigma*

**HP3:** *So, in terms of eliminating risks, the first thing is to always provide health education. The second is to offer HIV tests to people. Even if they are not like sick, sick but to entail that idea that you know they should get tested regularly, regardless of how they are feeling body wise; and then when doing testing. I tried ... to get the thing across that it is not the end of the world*

*and it is actually quite well managed with medication nowadays and how devastating it is when people get to a point where the first line management is not working; and then they had to be switched to second line or even third line because as much as the medication works it does not work if you do not take it properly; and then if it gets to a point where they cannot use it anymore then it gets really rough. My only issue is the food and security that is prevalent in our society, that is the part that I have not been able to really help with.*

**HP6:** *Okay so we have a problem at our facility which I am a part of, it is called YFS, Your Friendly Services. I do not know if you know about Your Friendly Services. We try to if we know children are already get education at school about HIV but we are just trying to emphasize it here. Especially children who are in high school and those who are at colleges or universities, so we have a programme here where we have sit-downs with them; we have discussions and topics, talk openly with them because there is only young people there in that session, no grown-ups and then I also do the prep where we also just try to involve young people so that we can try to eliminate or lessen or just give them the information. What they do with the information is up to themselves ... I am involved in with the youth basically.*

**HP9:** I made sure that the patients are traced and brought in here and make sure of that. Before this whole thing of the lockdown we were sending out healthcare workers to go even to the taverns and put the condoms and all that distribution of condoms to schools, to taverns and everywhere ... At least even if a person is under the influence, then at least there is a condom nearby because that time you do not carry condoms with. So that is how we do it.

The above-cited participant statements show that the healthcare workers were not detached or disinterested in their patients' wellbeing. As such, their contributions to improving health quality and eliminating HIV risks among their patients included (but not limited to): emphasising the importance of knowing their HIV status; counselling to address social stigmatisation; health education and friendly services, especially to the youth; tracing defaulters through community visits and checks; and condom distribution. These measures are reflective of the healthcare workers' commitment to their work, which could also translate as embracing the principle of *ubuntu* because of the off-site provision of relevant information and service to the community (Ngunyulu, Mulaudzi & Peu, 2015). Communication programmes, condom promotion programmes, information and education, as well as other initiatives aimed at behavioural change, were most likely to result in changes in patterns of high -risk sexual behaviour (Department of Health, 2016a; Shaibu & Phaladze, 2010).

#### 5.3.2.5 Health Personnel's HIV Service Provision Challenges

The below-cited narrated statements of the participants were in response to the question:

***What are the HIV service provision challenges that you experience in this health facility?***

**HP1:** *Well for us it is basically to be able to do our counselling. We do not have the necessary infrastructure for that which I still rate as a big thing. To prevent something is to inform, so you know you want to prevent something rather than treat it in the end so that is important and I*

do not know if it is only from our side, but I suppose when you know we have educational sections that they can do ... Even if I wanted to go and do a talk with the patients there in front in the waiting area, it is crowded, it is noisy; it just does not work but those are good things that one could be doing as a group. Now we try but the workload is too high, we have got too many patients that we have to deal with every day in our facility.

**HP4:** Now, since now there is this lockdown ... now we do not have a chance of grouping all these HIV patients because we used to group them. I used to tell them that we are having clubs here ... when you are in a club you do not want to wait in a clinic. Your medication is prepared a day before so that you do not even stay for 10 minutes. You come ... you get your medication and go. When collecting your medication, you will not even stay fifteen or twenty minutes ... You will only spend time when it is time for the blood test. So, we motivate them about the clubs. You know when you are taking your medication you are going to be in a club and when you are in a club you sit, your viral load must be less than twenty copies; but when it started it must be less than four hundred, not once, at least three times ... There is no need for them for observation ...

**HP5:** The challenges with this facility is the problem sometimes they become impatient, they do not want to wait very long and then some of them they are not compliant with the treatment. They will come with stories that to start with, when they start this treatment, you need to explain to them not everybody does get this thing. So there are doctors that are also helping us out and say if this patient presents with this signs or symptoms, we do not have to give efavirenz because efavirenz is going to exacerbate the condition. So that patient at that point will be given nevirapine.

**HP7:** Challenges that I face here at the facility as I mentioned it earlier is a shortage of staff. Yes we are under staffed and another thing is that the patient when they come here at the clinic they do not want to wait, they do not understand when they stand in the long queue that is a problem that we are facing here at the facility; and another challenge is that as a healthcare worker here at the clinic we are not informed about certain changes that are currently happening here at the facility. For example, one day when I came here at work I was told by my manager that I am not going to see this patient here at the facility. So I was not being informed that the programme has been stopped because the managers have decided that instead those patients who are fetching treatment here; they must stop fetching their treatment. Their treatment now they are going to fetch it there by the Shoprite.

**HP3:** Another thing here that we are facing we are not informed about the certain changes. Our manager does not inform because we use to monitor these patients here at the clinic and they get their treatment here at the clinic. Now now there is a change now to COVID. They must go and fetch their treatment directly to Shoprite ... their treatment because it is not going smoothly Shoprite because there is a lot of complaints which are coming to me. That is what I do.

In terms of the above-stated participant responses, shortage of qualified healthcare personnel appears to be the most perennial concerns facing this clinic, in addition to inadequate infrastructure, lack of resources, high workloads, absenteeism and other logistical problems. From the range of problems experiences, it is apparent that some are institutional, while some are systemic beyond the control of the facility management. Both institutional and systemic forms of challenges cohere with all the primary challenges identified in literature (see Section 2.4). These challenges range from:

- **fiscal and infrastructural constraints** (Dzimiri et al., 2019; Fadana & Vember, 2021; Ramathuba & Davhana-Maselesele, 2013);
- **emotional and psychological effects on healthcare personnel** (Nilsson & Berg, 2015; Mathibe & Chinyamurindi, 2021);
- **training on HIV/ AIDS management** (Marranzano, Ragusa, Platania et al., 2013; Suhariyanto & Ungsianik, 2018);
- **supervision and support** (Doornekamp et al., 2017; Mathibe et al., 2015); as well as **conditions of poverty** (Artz et al., 2016; Chorwe-Sungani, 2014; Kreedi et al., 2021).

### 5.3.3 Health Personnel Experiences in HIV Programme/ Service Implementation

The participants' experiences in HIV/AIDS programme or service implementation were captured in the context of:

- implementation and coordination of HIV programmes/ services;
- response to confirmed cases of HIV-positive personnel; and
- nature of Covid-19 related challenges experienced.

#### 5.3.3.1 Implementation and Coordination of HIV Programmes/ Services

The below-cited narrated statements of the participants were in response to the question:

##### **How are HIV activities coordinated at this health facility?**

**HP2:** *I am not sure. I am not directly involved with this but the HIV sisters they co-ordinated and they have to follow up dates with their patients. They know the patients and they do their baseline blood according to the kidney function. The hepatitis, the clad and all of that. Like they also emphasize testing patients specially if they have STD's or suspect TB we will emphasize the patients to be tested but we do not test all the patients if not necessary; but ja I am not really involved in the coordination ... sisters that is running the HIV planning they are more involved ... I just see patients they refer to me.*

**HP4:** *As I am telling you now we do HIV activities like the education we are doing to our clients. We do then there outside but we mix HIV with other patients because we are going to have a problem if we are going to divide HIV patients with other chronic cases. They do not like that. Before we did have that problem when we have those rooms outside, all the HIV patients were treated outside. They did not like that*

**HP5:** *We have got any care health workers and we have got also the patients of HIV. On a daily basis when the patient they are sitting waiting to be attended to they are given health education and the TAC treatment action. And then every December we have got those open days and then we got some of the people that are HIV positive and they talk out. Those are the patients of HIV that also give hope to those that are newly diagnosed ... There are also female condoms, there are people in the clinic that are trained to educate them to show them how to use the female condoms and all those things, that is how we evaluate our service.*

**HP7:** *The monitoring activities that are currently running here at the clinic we do, once we treat the patient; we encourage the patient to come after six months again. When they arrive here at the clinic what we do a blood test and then we send the blood to the lab. Once the blood test comes back with the results and that is where it is going to show us the results whether the viral load is suppressed or not. But there are instances if their viral load gets high, we make an intervention with the medical doctor who will still decide whether he or she will change that particular patient to other regimens of medication to assist the viral load to get low. And also, more over we do program what we call a pill count. So, we count all the pills that we gave them. If we can observe if they are taking their medication through that pill count. So those who do not drink their pills we can observe that this particular patient did not take the medication.*

According to Dzimiri et al. (2019) and Iyawa et al., (2016), three essential pillars are worth noting in the reviewal and coordination of HIV and AIDS activities and services. These are: their impact on behavioural change; their contribution to the sustainability of health institutions; as well as the viability of the socio-economic context in which the health-promoting behaviour occurs. Accordingly, a review derived from the above-cited responses of the participants shows, among others: lack of reducing waiting times for patients through a viable queue management system. The monitoring of waiting time is one of the national standards for quality patient care stated by the DoH guidelines (DoH & SANAC, 2016; Maphumulo & Bhengu, 2019).

The above-cited participants also reported that misfiling of patient folders was a major concern facing healthcare personnel at the clinic, rendering them to work haphazardly on monitoring and evaluation of HIV and AIDS activities because of missing files at the clinic.

Furthermore, there is a concerted effort, despite the apparent infrastructural and other resource challenges, to conduct pre- and post-HIV counselling, as well as ensuring that defaulting on treatment is does not occur regularly. Moreover, efforts to induce behavioural change are embarked on through health education on condom use, demonstrated by community visits that include taverns as well. In addition, the clinic has adequately considered and addressed the socio-economic context in which the health-promoting behaviour is expected to occur by institutionalising the nutrition programme in effort to reduce the devastation of poverty and unemployment (DoH & DoBE, 2012; DoSD, 2012).

#### 5.3.3.2 Responses to Confirmed Cases of HIV-positive Personnel

The below-cited narrated statements of the participants were in response to the question:

***How does the institution respond to all confirmed HIV-positive personnel?***

**HP2:** *I do not know. I think stigma among personnel is not there ... some of them are openly HIV positive but everyone is maar private about their own health. For example that one healthcare worker she will openly tell you she is positive and she is like use it and she grew from it and she uses to help patients; talks openly about it but I have not noticed any stigma around. I do not even know who is positive to be honest. I cannot even remember, but I think it is personal but like I have not noticed any stigma. Even with the COVI,D there was not any stigma regarding that. I think people are professional here.*

**HP6:** *It is something that is not really talked about in this facility. Something that is not really talked about. Especially when it comes to the positive personnel.*

**HP7:** *It is difficult for me to know who is tested positive here at the facility among each other as a healthcare personnel, but what I can say to you and attested to you if you tested positive it is only you who knows it; you keep it to yourself or you rather share or disclose your status to someone whom you trust here at the facility. Maybe the managers could answer that question better.*

**HP9:** *This is a kind of tricky question because as staff we do not disclose. Reason being you do not know whether what you just told a person is going to be kept there, so you are thinking okay I am telling Nomsa today and then Nomsa is going to tell Uzola, and Zola is going to tell whoever and therefore nobody wants to come and take treatment here because we are not sure if definitely the information is going to leak; so we decided to keep it amongst ourselves and we just go to a private doctor and do your thing there. So as far as the management and the others are concerned, nobody knows anyone's status here.*

Despite the gradual advances in HIV/AIDS prevention, management and treatment (e.g., antiretroviral therapy), regressive behaviours such as ostracisation, stigmatisation and stereotypes have tended to associate the disease with a death sentence (Bruser, 2020; Toska & Natukunda, 2017). In corroboration, the above-stated excerpts reveal that healthcare personnel often experienced ostracisation by their communities for working with people who have HIV-related illnesses or AIDS. In this regard, they further found family secrecy stressful when they have to care for a patient while his or her diagnosis has to be kept a secret from the family and friends. Because of the stigmatisation linked to their role as AIDS caregivers, healthcare personnel often find no social or emotional support from family members and friends (Olawoyin, 2021). The latter stress factors were noted by Nutor et al. (2020), who also affirmed the emotional and psychological effect of stigmatisation and ostracisation on healthcare workers' capacity to perform their duties optimally. It is for such reasons that the healthcare personnel reported their aversion to disclosing their HIV status because of fear of reprisals. They are particularly worried about being the subject of gossip at the clinic and outside as well.

### 5.3.3.3 Nature of COVID-19 Related Challenges Experienced

The below-cited narrated statements of the participants were in response to the question:

**What is the nature of COVID-19 related challenges that you have experienced as healthcare personnel at this healthcare facility?**

*HP1: Wow, right in the beginning just doing the PPE's was a major issue. I was not very popular because I would address people that are not wearing their masks or not doing the necessary. The whole sanitizing, the whole areas like trauma and that to sanitize and wash the whole place down has always been an issue right at the beginning... Personally, I do not agree with the trauma unit and these gates being opened on both sides of trauma because everybody is walking through there and that is where the positive patients are sitting ... The way it is now, as long as you can manage it, but the patients are suffering there in front, there is not enough space for them.*

*HP4: You know this COVID stressed us here because there was lot of staff members more than 60 staff members who are COVID positive in this facility. That makes us to have too much shortage of staff because after one diagnosed with COVID some are not fit for work after the isolation period. Others are very sick. They have to go to the doctors. It affects us also ... Then we had a problem of the files of the patients, we could not even find because they do not know, there was nobody to show them. Those who must work there and work there and work there. It is really affects us ... We are afraid. There are times we did not even want the patients to come inside the building, but who was going to help the patients, it is us. It is just the fear. We're having a fear because we did not know this COVID all of us ... that was frustrating us.*

*HP5: First, with the first wave I think it was not properly planned. There were no PPE's. We were told to use the plastics. There were no sanitizers and in this facility we have got a problem with the infrastructure. We were so congested and there was no way to control the inflow of the patients. All patients were coming in, no-one was screening the patients, so it was easy for one to get infected in this facility. Even now still they do not have a way to protect ... I am wearing this gown for the whole week. You are given a small bottle, they say if it is 500 ml it must last you two weeks which is not practical because they say in between as we are working you need to sanitise yourself. There are times that you go without soap to wash our hands, so I do not see we get protection from this COVID.*

*HP8: I think when it was that strict lockdown not all patients were seen, and especially the ones for example especially in terms of HIV and things like that; or something they just want to voluntarily come and do. So COVID 19 sort of restricted that, if someone wanted to come and test for HIV, they were not necessarily able to do that because of the COVID 19 regulations, so all of these voluntarily services were taken down a notch ... So they did not go to their normal spaces at the back where they would get their treatment.*

Evidently, the reaction to Covid-19 almost followed a similar reaction to HIV and AIDS infection in respect of stigmatisation and stereotyped thinking, for instance. As such, secrecy, privacy and confidentiality were the norm for self-preservation purposes among all the healthcare personnel. For example, they reported that managers were concealing the information of COVID related results among the staff working at the clinic. Even a COVID-19 related death at the clinic was never publicly disclosed. The

participants thought the secrecy could be due to the fact that managers did not want to scare them away from work. Insufficient personal protection equipment (PPE) was a major problem. It is common cause that corruption at the National and some Provincial Departments of Health (particularly in the Eastern Cape and Gauteng) has robbed both healthcare personnel and communities of their deserved protection against the COVID-19 pandemic (Corruption Watch, 2019; Maphumulo & Bhengu, 2019). Although people are not all wearing masks, social distancing, and sanitize frequently, there is a lot of difference in contracting other communicable and infectious diseases, which means there will be lesser patients with infectious disease coming to the healthcare facility.

#### **5.3.4 Programme Implementation: Health Personnel Experience and Performance**

The participants' experiences and performance in relation to programme implementation were captured in the context of:

- impact of HIV care services on staff morale and performance; and
- infrastructural appropriateness for HIV care

##### **5.3.4.1 Impact of HIV Care Services on Staff Morale and Performance**

The below-cited narrated statements of the participants were in response to the question:

***In your view, how do HIV care services affect staff morale and performance?***

***HP1:*** You know, I think HIV is probably something that is not really on our mind anymore. We have gotten into the systems and the routines and this operating procedures and stuff on how to manage; or how we care for HIV patients. So I do not think today it is a big issue. We have gone past that stage and I think they are handled like any chronic medication and the staff has relaxed about that. It is not an issue for them.

***HP2:*** I do not know. I think the morale is good and the performance is good and it is part of the people's bread and butter issues. They take care of HIV positive patients and it is like treating any other conditions.

***HP6:*** So, this goes back when I was saying that people tend to get treated and just exhausted from HIV care because it is something that we know can be so easily managed on proper treatment. So, staff morale can get affected in that way where you feel like you try and you try but eventually everything just ends up with TB, Meningitis, you know death. In terms of performance, I am not sure how it affects performance; but like if you got people that are kind of exhausted emotionally then that will negatively affect how they perform. Sometimes, you might find that it affects patient management if someone's response to a particular patient is based out of their past experiences.

***HP5:*** No, not at all ... It is not affecting the staff morale at that, not so bad here ... because the HIV is unlike the COVID. It is unlike the COVID. Everybody now knows also how the HIV



is spread to one another you know. I can say even those days the HIV was new like the COVID these days.

**HP9:** *The HIV care, I do not think there is anything that affects us more than that; we all want people that are HIV positive to take their treatment regularly in order to be able to live a quality life because to be HIV positive does not mean it is the end of the life. If you are taking your treatment regularly and the advice is to maintain the levels of your medication.*

The healthcare personnel reported that they felt sorry for some of their critically ill patients who had no one else to take care of them at their respective homes. Were attached to their patients as part of their families because they spend a great deal of their working lives interacting closely with HIV and AIDS patients. As such, it was difficult to detach themselves from their work, and were even unable to turn a blind eye to the problems that the HIV and AIDS patients experienced in their daily lives. In some instances, they offered some money to travel to the clinic for their treatment. Due to the increased number of patients visiting daily, healthcare personnel found themselves increasingly under stress. Absenteeism caused by their colleagues for various reasons also added to the burden of work. Ledikwe, Kleinman, Mpho, et al. (2018) have also commented that work-related stress was deleterious to staff morale at healthcare centres.

#### 5.3.4.2 Infrastructural Appropriateness for HIV Care

The below-cited narrated statements of the participants were in response to the question:

**To what extent is the facility infrastructurally equipped to provide HIV care in your work area?**

**HP6:** *Basically, we have HIV service every day, there is not just specific days that we are doing HIV care ... We even now have CCMDD where we take our care workers and they go and deliver treatment to people, especially if it is being a week and the patient's treatment is still here. We have care workers that go out and deliver patient's treatment to them because some of them just do not come to the facility and they are blaming it on COVID; but you can always send a relative and that is when they go out there. They give out the message that you can always send a relative, you do not have to come to the clinic yourself but at least just come and get your medicine.*

**HP7:** *To be honest, it is conducive to work here at Laetitia Bam. I will talk about myself as I am dealing with these patients where I do testing; it is where I have been or located at the back of this structure of the building there is containers. In those containers we have got different rooms, there are three rooms but we are using one entrance and there is a petition where I am consulting the patients ... Another thing that is a challenge here is the room temperature; it is overwhelming because we are not supposed to work in a room temperature that is exceeding 31°C. So on that note, this structure is not adequately suited for seeing these patient herein. Otherwise it is frustrating ... in my room where I work ... the testing kits that I am using with ... I do not have a fridge.*

**HP8:** *Infrastructure is the challenge here at the facility, but I think the way they have set it up now it works. Their own office or part of the office where only the club members are being seen ... is now on the outside building ... then on the inside all the nurses or the nursing professional have their room because so if they have to do an HIV test or things like that or counsel or give information then they can do that. So infrastructurally I think the facility is not good, but they are making it work for now in terms of space.*

**HP9:** *... we do not have a counselling room. Before these renovations and all that is already now two years. The year has passed so we are getting now to the second year, before this at least we had our TB room there ... Now we are having a problem now because our TB room is outside in those containers, so the patients had to walk from this side now to that other side. So due to this renovation thing everything is so difficult for us because the counselling is also done there in the observation room. Mind you in the observation room there are other people that are coming for your blood pressure and all that. Now when somebody is being counselled there you know, so it is not like confidential anymore. So we have those challenges.*

**HP10:** *I will say the facility is not equipped infrastructurally to accommodate HIV patients. The counselling room; when you counsel them you do not have a room to counsel those patients. We counsel them in an open space and it is not right because some people step in up and down whereas we are still listening to the patient, you get interrupted.*

According to Bruser (2020), and Carelse (2018), the problem of poor infrastructural resources, particularly at healthcare facilities, was a serious developmental challenge and reflected negatively on the healthcare system and its institutions as well. The above-cited healthcare personnel reported that the infrastructural challenges were an obstacle to the performance of their day-to-day duties. For instance, there are situations where one counselling or examination room was shared by more than one healthcare worker when rendering one-to-one counselling sessions to patients. In other instances, counselling rooms were separated by curtains or thin boards that were not sound-proof. From the researcher's personal experience, when compared to other facilities where infrastructural development is a rare occurrence, Laetitia Bam Community Health Centre was relatively in a better situation because some modicum of infrastructural 'facelift' was happening at the time of conducting the study – however minimal.

### **5.3.5 Health Personnel's Experiences Regarding Human Resources**

The participants' experiences and performance in relation to human resources were captured in the context of:

- frequency of health personnel's HIV training;
- prevalence of HIV human resource opportunities and activities;
- HIV human resources challenges; and
- Recommendations for improvement of HIV human resources activities.

### 5.3.5.1 Frequency of Health Personnel's HIV Training

The below-cited narrated statements of the participants were in response to the question:

***How often is HIV training provided to the healthcare personnel at this healthcare facility?***

***HP1:*** *There is a lot of HIV training, especially when new protocols come out. I do feel that my pharmacy staff has been a little bit let down by that because if I only have two people, I cannot send somebody for training. So there is nobody to dispense, you understand ... Hopefully in 2021 they will pick up on that again because the pharmacy staff has been left a little bit behind with that, so a lot of training is in-house self-study ... but it needs to improve, remember we are supposed to have five qualified pharmacy assistants here. So now you have one on leave, one is sick and suddenly there is three and those were in good days. It is difficult. Now you can imagine now I am down to actually having only three qualified in here at the moment.*

***HP4:*** *When last did we have? I think there was nothing last year, nè. I think its supposed to be yearly. It is only now last year there was nothing offered for HIV training. Ja, in 2019 okay it is only now the new drugs, new drugs, there was a training for this DTG dolutegravir, this new drug so there was a training in this new drug. So that is why now we are trying all the new ones we are putting now on teaching this Dolutegravir to all the new patients.*

***HP7:*** *Training here at the facility we do not get it. Back then the facility used to send us for sessions like debriefing and those session really help us because when we come back and you consult this patient, we knew what to do. Sometimes we are dealing with big problems, we do not know how we can help the patient to cope, and then if we have those sessions, it will better for us to do a better job; and I do not know whether I will say it is an in-service training because the only thing that we receive recently it was at the beginning of this year when they are changing this testing kit. The management did call us for one day and because I remember that it was a new company that was introducing this testing kit.*

***HP9:*** *Jo! Jo! Jo! Jo! Nothing was done last year, the whole year last year. You know it was sad, you know this COVID thing I think now it is a scapegoat because each and everything now it is because of the COVID. Meanwhile with the COVID you can be like ten in a room but sitting like far from each other. We are just going to be like sitting and waiting until when? There is nothing else ... because even the people that were supposed to go for studies. Nobody went for studies because it was said it is COVID. So it is COVID here it is COVID there, it is COVID everywhere. That is the song, that is the latest song now. COVID.*

The participants reported a general lack of continuous personnel development opportunities for healthcare staff as a significant barrier in collaborative HIV care. On the other hand, some of the nurses were complacent as they believed they were the only professionals trained to provide quality care. Other reported challenges included shortage of skills as a long-standing challenge, which translates in the inability of facilities to release clinicians to attend courses, especially those of longer duration.

They reported that they were expected to work harder and even perform overtime duties in a non-supportive environment characterised by a high rate of infectious diseases as well as high patient turnover rates. The workload may be very demanding

and the healthcare personnel may experience stress because of a lack of space and privacy in their work. This puts them at a higher risk of committing professional errors, because there is no time available for re-training or accessing educational programmes (Chaghari et al. 2017). The high level of stress, fear, frustration and depression among healthcare personnel contributed to their reluctance to provide care to HIV-positive patients, as reflected also by (Mammbona & Mavhandu-Mudzusi, 2019).

To ensure effective training of healthcare personnel, it is critical that pre-and in-service training be provided to equip them with updated knowledge and skills relative to HIV prevention. As such, they should be professionally and institutionally supported in recent developments about relevant drugs and health (World Health Organization, 2020). This includes ensuring that healthcare personnel are afforded the skills to promote and peer-based, cultural, gender and right's-based approaches to HIV and AIDS within the relevant developmental and socio-economic context

#### 5.3.5.2 Prevalence of HIV Human Resource Opportunities and Activities

The below-cited narrated statements of the participants were in response to the question:

***What are the existing HIV human resource opportunities and activities in the health facility?***

***HP1:*** Ag, you know, everything in this place is not dependant on the facility itself. It is managed by the HR people up there ... You know we have got to follow the chain of command. I cannot sommer go to the MEC straight away although I have got somebody that has contacts ... you have to follow the protocols, and you know everywhere there is a hiccup; there are just too many people in the chain before things get decided and done; or there is no funding, the post was funded before the guy went on pension, now suddenly it is not funded again. I cannot even sit on the interview for a person who is going to come to Laetitia Bam. I have got to accept HR and then they just send somebody that they have interviewed to the dispensary, which is also not really the right thing because sometimes you have people with different personalities, different cultures, different lots of things and you, in an interview you can pick up if you think somebody will fit in with your situation. But ja those are just things that we cannot control.

***HP4:*** It is just getting training for the drugs for these new drugs ... but now there is no training anymore, otherwise they do go for the training. It is the drugs, the introduction of these new drugs ... also for those who are working in ANC.

***HP7:*** I do not want to lie to you. Back then it was seven years ago we had. We established a support group for these HIV patients that we see here at the facility where we encouraged them to do small things like knitting and sewing, and then they demonstrate to others that they must learn to do things for themselves to better their lives. I do not know what happened, who stopped it, but it is not happening. Those programmes were used to boost their morality and their confidentiality. So, there is nothing is happening for them at the facility.

**HP8:** *I am not aware of any, any human resource, HIV human resource opportunities. I am not aware of any.*

The healthcare personnel reported that creativity was discouraged because innovative ideas and suggestions are not implemented at this clinic. They felt that they were working in isolation and did not have a voice in decisions that affect them at work. The finances for volunteer workers and important prevention projects are often drastically cut. The necessary supportive and infrastructures and supervision are not always in place. In other words, there is not enough time to do what needs to be done due to demanding work overload. They reported that they also did not feel comfortable in addressing issues of patient sexuality due to lack of support from their superiors. Consequently, some valuable and experienced members of staff resigned out of frustration, leaving those who stayed behind with an even heavier burden. The prevalence of such situations is confirmed by authors such as Chorwe-Sungani (2014) and Fadana et al. (2021).

Participatory decision-making among healthcare professionals is a very necessary workplace attribute or mechanism to improve their performance (Ghasi et al., 2020). Therefore, depriving such knowledgeable and experienced professionals of a meaningful contribution was counter-productive to the expected level of quality healthcare provision (de Villiers, 2015).

#### 5.3.5.3 HIV Human Resource Challenges

The below-cited narrated statements of the participants were in response to the question:

***Which are the HIV human resource challenges do you face at this health facility?***

**HP6:** *Defaulters not coming to get the treatment ... and at the end of the day we sit with ARV's that expired like last month. Operational manager had a whole bucket full of not just ARV's, but treatment that she had to throw away that expired ... Us probably not having a proper structure also ... There is no person that is in charge of ARV's or management of HIV and AIDS or something like that. The operational manager oversees everything and sometimes it becomes too much for her. So, I think we do not have structure, we do not have fixed proper structures at our facility.*

**HP7:** *We do not have a fridge in the consultation room to keep those testing kits. Another thing, we do not have adequate rooms to do counselling with these patients. So those are the things that need attention, that we must be assisted with in terms of the human resource challenges in HIV management.*

**HP8:** *Yes, I think they are adequate working in the area because there is a specific group that only does like the layout counselling and the testing and the AVR club and then there is also the nursing personnel that also have their own background of HIV. So I think it is quite good*

*the human resources challenges. It is too much, if I can say it like that or it is not severe. It is not severe like the human resource challenge they are facing. It is not that severe*

**HP9:** *... we had the soup kitchen here ... that soup was there for everyone. So the soup kitchen is no longer there and we do have our dietician with porridge ... We do not have pap anymore. So, we have got those challenges also. If only we can have those food, supplements that can be given to patients ... I am sorry I have to tell this because that is my opinion here. That lady that is dishing out these supplements there, to me, she is not doing it the correct way because I do not see why you cannot get it if I see you need it ... Somehow, she is just doing her own thing.*

The participants reported that the healthcare facility did not recruit more professional nurses and other categories even when other nurses have resigned, died or retired. This has led to a huge shortage as there was nobody to 'unburden' the existing healthcare personnel. Limited human resources affected HIV patient management and non-HIV duties. There were shortages of general workers, data capturers, administrative clerks, pharmacy assistants, as well as community healthcare workers. There are many vacant positions that are difficult to fill, which exacerbated the staff turnover and compromised provision of quality care to HIV patients (Khamisa et al., 2017). The latter perspective was corroborated in other studies by authors such as Kreedl et al. (2021) and Mabusela and Ramukumba (2021).

#### 5.3.5.4 Recommendations for Improvement of HIV Human Resource Activities

The below-cited narrated statements of the participants were in response to the question:

***What would you recommend for improvement of HIV human resource activities at this healthcare facility?***

**HP3:** *Okay I think everyone use to get those guidelines books. It should not be like just one copy in this office. I think everyone should have it and everyone should be comfortable with the contents in terms of what is new and then training sessions are a good idea. So, I as a doctor should know a little bit of what the nutritionist is doing and/or what they are going to do so that when there is no nutritionist for whatever reason I know what to prescribe ... you cannot send everyone to a psychologist. We should all be able to do a little bit of counselling in terms of using some of the principles a psychologist would use.*

**HP4:** *If they can improve on the training on because we have new staff who were employed. We never have the chance of going for the training of HIV. Yes, yes on the staff so that everybody ... the old staff and these young staff must be exposed ... must know everything about that.*

**HP7:** *What I will recommend here at the facility is to accommodate HIV patients. I personally think that if we can be assisted with a fridge so that we can keep our testing kit so that when you test the patient it must be in a good condition; because you mostly find that when you use that kit and it is not kept in a refrigerator you do not trust the results that the kit gives you. There are units that have a fridge and they are not utilizing it ... we do not know whom to cry to. Even the managers they do not take it as a serious consideration. That is all. Thank you.*

*HP9: Me personally I think doing celebrations just like kind of parties, not necessary something that is going make them enjoy being here. Fetching their treatment and then be proud of being HIV positive because they know okay if you are HIV positive it is not necessarily to be careless of yourself but to be so cautious; but then not be sorry because you are HIV positive because some of them are born with that. So there is no way you can just say okay I do not want this thing then because it is not just going to disappear.*

*HP10: Firstly ... I will highly appreciate if our managers can listen to our views and can treat us as professionals. We are not only professional, but we are staff working here at the clinic and we are the ones who work directly with these HIV patients ... Another thing that I will recommend is to have a proper establishment here at the clinic so that we can have consultation rooms for these patients, not to see these patient at the back of the structures, so I so wish that the renovation can be done so that we can be accommodated as community health workers to have our allocated space and the patients have their own rooms. Those are the things that need to be ironed out.*

The participants were unaware of any monitoring and evaluation of HIV and AIDS programmes at this clinic. The participants reported that they often had to send some of the patients back and request that they return the following day. This leads to the patients defaulting their treatment and deterioration of their condition and possible death. Hence, their recommendation for the establishment of a system of multidisciplinary healthcare teams in HIV and AIDS management in order to enhance effective and efficient rendering of services. Furthermore, such a system would also provide monitoring and evaluation capacity and quality assurance of any of the clinic's programmes (Granich, Gupta, Hall et al., 2017; Harrison-White, 2013).

The healthcare personnel also suggested implementation of electronic registration system for the patients, which would help reduce long waiting times for the patients as evinced by the personnel's inability to serve a uniform or standardised number of patients on any given day. Systematisation of both administrative and clinical processes contributes to high productivity and efficiency, as well as trust in an organisation's ability to fulfil its mandate (Madolo, 2019; Maphumulo & Bhengu, 2019).

## **5.4 CONCLUSION**

The fundamental thrust of the chapter was on the presentation of the collected data that served as the evidential framework of the study (Maxfield & Babbie, 2018; Saunders et al., 2019). In addition to the relevant demographic aspects of the participants, five main themes emerged as presented in Table 5.1. The most perennial aspect of the themes is the extent of their participant-centred perspectives on the Laetitia Bam healthcare workers' experiences in the treatment and management of AIDS patients receiving treatment at the clinic. It is worth noting that these experiences

ranged from the professional and personal, to the emotional and psychological aspects of their being as healthcare professionals.

Furthermore, it is worth noting that while thematic analysis enabled the generation, organisation and categorisation of important 'key messages' of the participants, these themes or 'main messages' were not entirely self-sufficient (stand-alone) by themselves. Each of these themes is realisable by the extent of its interdependence with one or more other themes. For example, infrastructural and human resource issues traverse the domains of HIV/AIDS management, activities to decrease the HIV/AIDS burden, programme implementation, as well as the performance of the very healthcare workers. Such interconnectedness is unsurprising, considering that **all** of the above variables encapsulate *processes*, *people* and the *place* as the space within which these variables materialise. As emphasised variously by the APHRC (2021), Bagnall, Radley, Jones et al. (2019), and WHO (2018), the absence of any of the three elements renders the healthcare system ineffectual.

The next chapter focuses on the summation of the study's main findings, conclusions and recommendations.



## CHAPTER 6

### MAIN FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 INTRODUCTION

The previous chapter essentially focused on a presentation of the study's findings as emanating from the analysed participant responses (data) concerning various facets pertaining to their experiences on HIV prevention, treatment and management in Laetitia Bam Community Health Centre. The current chapter, meanwhile, is premised entirely on the conclusion of the study in relation to the very findings in Chapter 5 and the recommendations accruing there from. Accordingly, the structure of the current chapter highlights three important aspects, namely: extent of the objectives' attainment or achievement; summary of the main findings; the recommendations; contributions of the study; as well as my own concluding remarks.

#### 6.2 ACCOMPLISHMENT OF STUDY OBJECTIVES

The functional value of the study objectives was to enable the researcher's determination of the processes and procedures that guided or facilitated the possible study efforts intended to resolve the research problem (Aneshensel, 2015; Brinkmann & Kvale, 2015; Doyle et al., 2016), as articulated in the entirety of Section 1.3. Evidently, the resolution of the research problem being referred to, also relied on the extent to which the study aim and objectives were accomplished (see Section 1.4 as a whole); that is, the extent to which the study also answered the research questions as articulated in the entirety of Section 1.5). It is against the latter context that the following sections present **both** the study aim and its attendant main research question as in order to contextualise the broader parameters of the extent of achieving the study objectives. Accordingly, the study objectives and related research questions are then viewed as complementary processes that enabled the researcher's approach to the problem being investigated (Patton, 2015; Swart et al., 2019).

**Aim of the study:** *To explore, describe and analyse the role, experiences and capacity of healthcare personnel in the treatment and management of HIV/AIDS patients at the Laetitia Bam Community Health Centre in Kwa-Nobuhle Township, Nelson Mandela District Metropolitan Municipality (Eastern Cape Province).*

**Main research question:** *What are the experiences of HIV patients and capacity of healthcare personnel in the treatment and management of HIV/AIDS patients at the Laetitia Bam Community Health Centre?*

The **first** objective of the study was: To explore, describe and analyse the healthcare personnel's *roles, experiences, perceptions and knowledge of HIV/AIDS prevention, treatment and management* at the selected healthcare facility (Laetitia Bam Community Health Centre);

**Research question:** What are the healthcare personnel's experiences, understanding and *knowledge in relation to HIV/AIDS prevention, treatment and management?*

The above-stated objective was sufficiently achieved in terms of the reviewed literature as shown mainly in Sub-section 2.2.2, as well as the empirical data provided in Section 5.3.1 and Section 5.3.2.

### **6.2.1 Accomplishment of Objective 2**

The **second** objective of the study was: To explore and describe the nature and implications of *the human, financial and infrastructural resource challenges experienced by healthcare personnel* at the selected healthcare facility;

**Research question:** What is the nature and implications of the challenges experienced *by healthcare personnel* at the selected research site?

The above-stated objective was also sufficiently achieved in terms of the reviewed literature as shown mainly in Sub-section 2.2.2.2, Sub-section 2.2.2.3 and Section 2.4; as well as the empirical evidence provided in Sub-section 5.3.2.5, Sub-section 5.3.3.3, and Sub-section 5.3.5.3.

### **6.2.2 Accomplishment of Objective 3**

The **third** objective of the study was: To explore and describe the nature and extent of HIV/AIDS *healthcare personnel challenges* regarding the quality of healthcare services they receive at the healthcare centre;

**Research question:** Which are the *service-related challenges facing healthcare personnel* at the selected research site?

The above-stated objective was also sufficiently achieved in terms of the reviewed literature as shown mainly in Section 2.3 and Sub-section 2.4.5; as well as the empirical evidence provided in Section 5.3.2, Section 5.3.4, and Sub-section 5.3.5.1.

### **6.2.3 Accomplishment of Objective 4**

The *fourth* objective of the study was: To make *recommendations* regarding the *challenges* experienced by the healthcare personnel and HIV/AIDS patients at the healthcare centre under investigation

**Research question:** Which course of action is *recommended to ameliorate the challenges* experienced by the healthcare personnel and HIV/AIDS patients at the community health centre under investigation?

While the literature review provided a theoretical perspective of the challenges experienced in HIV treatment and management, it was mostly in its empirical context that the above-stated study was sufficiently achieved. Sub-section 5.3.5.4 of Chapter 5 aptly exemplifies the recommendations of the study themselves as the authentic outcome of the participants themselves, rather than a subjectively preferred product of the researcher's own wishes or prejudiced intentions (Efron & Ravid, 2019; Haven & Van Grootel, 2019; Rees, 2017). As such, the recommendations attest to the degree of the study's trustworthiness.

While the accomplishment of the study's objectives is fundamentally demonstrated in its empirical domain (Rani, 2016; Rajasekar et al., 2013), it is worth stating further (as mentioned in the preceding paragraphs) that the reviewed literature was also crucial and influential in shaping the researcher's approach to the entire data collection and analysis processes (Locharoenrat, 2017; Saunders et al., 2019). Equally important, the Health Systems Theory (HST) was profoundly valuable insofar as its fundamental tenets (see Section 3.3.2) were valuable in broadening the researcher's understanding of healthcare as a system in the real-life context of HIV patients' treatment and management (Ramenyi & Bannister, 2013; Shaibu & Phaladze, 2010; World Health Organization. 2018).

### **6.3 MAIN CONCLUSIONS**

The following section provides a summary of the main findings or key results based on the five main themes and seventeen sub-themes that emerged from my detailed analysis of the participants' narrated statements, the subsequent interview transcripts, as well as the field notes gathered to gain better understanding of the experiences of healthcare personnel in HIV and AIDS patient management at Laetitia Bam Community Health Centre, Kwa-Nobuhle Township (Nelson Mandela District Municipality, Eastern Cape Province). These thematically captured main findings were shown in Table 5.1 (Chapter 5) and summarised below in respect of their relevant themes.

### **6.3.1 Management of HIV/AIDS Patients**

The extent of managing and treating HIV infected patients successfully is fundamentally linked to the adequate availability of human, infrastructural, and financial resources at both the institutional and systemic levels of healthcare service provision (Jooste, 2017; Mathibe & Chinyamurindi, 2021).

In the context of the findings in this study, the participants (interviewed healthcare personnel) were generally enthusiastic and willing to render their professional services in treating and managing their patients' physical, emotional, and psychological need. Participants' high workload was reported to have a negative effect on the quality of care for HIV/AIDS patients receiving treatment at Laetitia Bam Community Health Centre, leading to low staff morale and unhappy patients who had to wait in long queues for treatment. The reasons for high workload included staff shortages, increased labour turnover through, resignations, death or retirement.

These factors caused increased training costs, low staff morale with employees' resentment to take on additional responsibility for colleagues who were usually absent for different reasons. Consequently, a decrease in work performance occurred due to loss of skilled colleagues who were difficult and expensive to replace. The private sector has experienced many organisational changes, some of which are relevant for the public health sector as well - such as technologically driven file management systems. Such organisational innovation could also improve the performance of healthcare personnel (De Langen, 2015; DoBE & DoH, 2012).

### **6.3.2 Activities Regarding Decrease of the Burden of HIV/AIDS**

Pre- and post-HIV-testing and counselling was initiated and recommended by healthcare personnel to all adults, youth and children attending healthcare facility as a standard component of medical care. Generally, there is evidence of activities and measures intended to decrease the burden of HIV/AIDS. HIV counselling and testing is offered to all patients visiting the clinic despite the patients' privacy and confidentiality being compromised by limited space and some infrastructural improvements taking place on the clinic's premises. Unsurprisingly, it is noteworthy that the healthcare personnel staff, despite the apparent staff shortages, continue to demonstrate a familial attachment to the patients because they are also members of the community. As such, initiatives such as condom distributions and health education in the community and taverns demonstrates well-intended attempts to contribute to decreasing the HIV/AIDS burden. In fact, such attempts to take healthcare **to** the

patients and the community could be viewed as mitigating the immanent poverty cycle manifesting in transport problems to the clinic and insufficient food to eat.

Collectively, the above-cited range of problems coalesced against the patients and caused continuous episodes of defaulting on treatment. Based on its respective studies, the Centre for Disease Control and Prevention/ CDCP (2015; 2019) reported that defaulting on ARVs by patients presents difficulties of advance planning to ensure uninterrupted ARV and other medical supplies.

### **6.3.3 HIV Programme/ Service Implementation**

At the beginning of COVID-19, the participants (healthcare personnel) reported a range of challenges regarding the virus itself, about which very little was known scientifically at the time. There was initial fear about this epidemic that caused them to consult patients at the clinic due to the high number of healthcare personnel contracting the virus at the clinic. The foremost issue was the shortage of PPEs, such as hand sanitizers, gloves, and lack of decontamination of the building in the event patients died of COVID related symptoms. In addition to staff absenteeism and the fear engendered by the COVID 19 contagion among the healthcare personnel and patients in equal measure, other non-COVID 19 issues posed threats to effective implementation of HIV programmes and services (Anakpo, & Mishi, 2021). For instance, many missing patient files demonstrated the need for skilled and qualified personnel who were conversant with technology-driven data capturing and filing systems.

From the viewpoint of the study, infrastructure related challenges were more systemic, but with institution-specific ramifications. For instance, funding for infrastructural development at healthcare facilities was more of a provincial and national healthcare departments' responsibility. However, any lack of funding in this regard, directly affects healthcare facilities such as Laetitia Bam CHC and its comprehensive services expected to be rendered to a significantly high number of patients in the community. The clinic was facing this due to shortage of staff performing the duties. At the time of conducting the study, patients were still standing outside the building even during rainy days due to lack of space. Therefore, failure to address both HIV- and COVID-19 and non-HIV and non-COVID challenges significantly threaten effective provision and implementation services and initiatives, thus rendering institutional healthcare delivery ineffective (Mathibe-Neke; Sushma, Kaiwar, Selvarajan et al., 2020).

### **6.3.4 Challenges in HIV Programme Implementation and Impact on Performance**

While infrastructural issues appear to be all-encompassing, they also engender service-related challenges. Some participants considered the improvised space expansion of the facility as commendable, while others held contrary views. For example, some participants considered the consulting rooms as adequate and fairly equipped, whereas others considered them as poorly equipped, poorly ventilated, separated by a curtain, fraught with poor infection control and inadequate storage for testing kit in the counselling rooms. This situation was incredibly stressful for the healthcare personnel as the level of HIV infections and Covid 19 rises, the demand for healthcare also increases. The participants mentioned that the patients are defaulting their treatment because of long queues due to COVID 19 screening, discrimination and stigma attached to the service (Fajnzylber et al., 2020). On the whole, extant degeneration of staff morale poses a threat to quality of HIV services and programmes in this regard (Anakpo & Mishi, 2021).

### **6.3.5 Impact on Human Resources**

The healthcare personnel were unhappy with the scarcity of training and re-training opportunities, which engendered their view that the clinic's management was not unsupportive. Continuous personnel development was integral to the upliftment of the staff's knowledge, skills and performance (De Langen, 2015; Phakisi, 2018). The staff development trainings had occurred so long ago that the clinic staff even held the view that "the COVID thing" was then used as a scapegoat by the clinic's management. The continuous retraining and reskilling of the healthcare personnel is beneficial to the clinic itself, the patients and the community (de Villiers, 2015). From the study's perspective, the absence of improvement opportunities is in itself a health risk to HIV patients, considering advancements that are continuously taking place in the sphere of pharmacology and HIV treatment drugs in the absence of a permanent cure as emphasised by the AIDS Consortium (2019) and Babaei and Taleghani (2019).

## **6.4 RECOMMENDATIONS**

In essence, research-related recommendations are reflective of the researcher's own evidence-based views, interpretation or decisions intended to contribute towards both the implementation of the findings, as well as improvement in some areas of research in the field of study within which the research problem is/ was located (Allan, 2020). Consonant with the findings of the study, the recommendations below relate to the human, infrastructural and financial resources.

#### **6.4.1 Recommendations for Human Resources Improvement**

As demonstrated in the various thematically constructed findings, the participants registered a plethora of challenges relating to the human resources domain of their work. Accordingly, the study recommends the following:

- The facility manager should write an emphatic motivation letter to the highest authorities of the Eastern Cape Provincial Health Department for the employment of more multi-sectoral healthcare personnel to ameliorate the congested service delivery of the facility.
- Continuous staff development and training initiatives should be resumed. Coupled with reinforcement of the healthcare workforce, such initiatives will empower all healthcare personnel to do their work efficiently and effectivity in respect of recent developments and guidelines relating to HIV patient management.
- Installation and implementation of a fully functional Persal system within the healthcare facility, which will lessen the facility's reliance on the sub-district hospital for HR-related matters.
- Establishment of multidisciplinary teams within the facility to enable regular and effective discussions on HIV patient management and update with the new HIV policies and protocols.

#### **6.4.2 Recommendations for Infrastructure Development and Improvement**

Based on the increasing healthcare service demands by the patients and community, the following are recommended:

- Extensions to the existing physical structure to accommodate all the services under one roof, including a fully functional feeding scheme facility to cope with the growing numbers of poverty-stricken patients who daily visit the healthcare facility to fetch their HIV treatment on empty stomachs.
- Integration of a patient registration system into modernised technology-driven (computerised) system, which will reduce patients' waiting time and missing files of the self-same patients.
- Introduction and implementation of a reliable fleet management system for the transportation of goods and patients to expedite service delivery most effectively and efficiently. This will help patients in the delivery of medicines and patients who default on their treatment due to transport-related challenges.
- Purchasing of more medical equipment, fridges, and medicine to address the current disproportionate allocations between staff, patients and supplies.

- Installation of CCTV cameras in order to reduce theft and ensure the safety and security of both the healthcare personnel and the facility itself.

#### **6.4.3 Recommendations for Financial Resource Improvement**

The following recommendations are proposed in the interest of improving the facility's financial resources:

- The health care facility needs an appropriate funding policy to cater for the pharmacy and nutrition programme.
- De-centralisation of the current health budget to enable the facility's direct access to immediate institutional needs such as stockpiling the pharmacy and the nutrition scheme.
- Establishment of a procurement and cost-containment committee within the facility to address corruption, wastage and duplication of services.

#### **6.4.4 Recommendations for Future Research**

The study focused mostly on a single healthcare facility. It is recommended that further research should be conducted on other healthcare facilities in the broader Nelson Mandela Metropolitan Municipality to determine the scale and scope of HIV patient management in the area.

### **6.5 STUDY LIMITATIONS**

The study focused mostly on HIV patient treatment and management with the selection or sampling of a single healthcare facility and only healthcare professionals as providers of the required information. The inclusion of other relevant stakeholders such as the HIV patients themselves would have had the effect of enhancing a broader range of views and experiences to enable more detailed and better understanding of the investigated problem (Cameron, 2015; Erkki & Hedlund, 2013; Ivankova, 2015). In that regard, future studies would be highly beneficial by including more relevant stakeholders involved in the prevention, treatment and management of HIV/AIDS patients within the wider range of facilities beyond the Laetitia Bam CHC context; which includes the Nelson Mandela Metropolitan Municipality, the district, Eastern Cape Province and beyond.

### **6.6 CONCLUDING REMARKS**

The study mainly sought to explore, describe and analyse the experiences of healthcare personnel in relation to the treatment and management of HIV among patients. It is the study's view that such experiences from the participants themselves were necessary and relevant because it is popular practice in this



regard to focus attention on the systemic domain to the exclusion of the institutional domain and voices of the healthcare workers themselves. Furthermore, it is the study's view that the convergence of theories and empirical data in this study provided relevant integration of HIV management and nursing practice in a single study.

It is also worth mentioning that the study illuminated on the plight of nurses and communities in dire need of effective healthcare service delivery. In that regard, the study concurs to the principle that access to healthcare is an inviolable human right that is guaranteed and protected in the Constitution of the Republic of South Africa (Act No. 108 of 1996). As such, HIV patients are also entitled to the same level and quality of treatment afforded to other healthcare seekers. Equally, all healthcare-providing facilities and institutions, regardless of their clientele or geographic location.

## REFERENCES

- Abedi, H., Abbaszadeh, A. & Motaghi, M. 2016. Factors influencing school health in elementary schools in Isfahan, Iran: A qualitative study. *International Journal of Community Based Nursing Midwifery*.
- Abdullahi, U., Cusairi, R.M. & Abdullah, S.F. 2017. The influence of culture in domestic violence against women in Nigeria. *Journal of Islamic, Social, Economics and Development JISED*, 2 (6): 273-286.
- Adelman, H. & Taylor, L. 2019. Moving prevention from the fringes into the fabric of school improvement. *Journal of Educational and Psychological Consultation* 11(1): 7-36.
- Retrieved from:  
[https://primo.rowan.edu/discovery/openurl?institution=01ROWU\\_INST&rfr\\_id=info:sid%2Fprimo.exlibrisgroup.com-bX-](https://primo.rowan.edu/discovery/openurl?institution=01ROWU_INST&rfr_id=info:sid%2Fprimo.exlibrisgroup.com-bX-) (Accessed 20 February 2022).
- African Population and Health Research Center/ APHRC. 2021. *Health and systems for health*. Retrieved from:  
[https://aphrc.org/publication/health-policy-mapping-and-system-gaps-impeding-the-implementation-of-reproductive-maternal-neonatal-childprograms-/](https://aphrc.org/publication/health-policy-mapping-and-system-gaps-impeding-the-implementation-of-reproductive-maternal-neonatal-childprograms/) (Accessed 11 December 2021).
- AIDS Consortium. 2019. Timing of initiation of antiretroviral therapy in AIDS-free HIV-1-infected patients: A collaborative analysis of 18 HIV cohort studies. *The Lancet* 373(9672): 1352-1363.
- Allan, G. 2020. Qualitative research. In: *Handbook for research students in the social sciences* (pp. 177-189). London: Routledge.
- Amakali, L. 2019. Situational analysis on human resources capacity for health in Namibia. Namibia: Ministry of Health and Social Services. Retrieved from:  
[https://pdf.usaid.gov/pdf\\_docs/PA00X19R.pdf](https://pdf.usaid.gov/pdf_docs/PA00X19R.pdf) (Accessed 30 June 2022).
- American Nurses Association (ANA). 2015. *Code of ethics for nurses with interpretive statements*. Silver Springs, MD. Retrieved from:  
<https://www.nursingworld.org/practice-policy/nursing-excellence/ethics/code-of-ethics-for-nurses/> (Accessed 13 June 2020).
- Amoah, V.M.K., Anokye, R., Boakye, D.S. 2019. A qualitative assessment of perceived barriers to effective therapeutic communication among nurses and patients. *BMC Nurs*, 18(1):4.
- Anakpo, G. & Mishi, S. 2021. Business response to COVID-19 impact: Effectiveness analysis in South Africa. *The Southern African Journal of Entrepreneurship and Small Business Management*, 13(1):7.

- Aneshensel, C.S. 2019. *Theory-based data analysis for the social sciences*. 2<sup>nd</sup> edition. Thousand Oaks, CA: Sage. <https://dx.doi.org/10.4135/9781506335094>.
- Artz, L., Burton, P., Ward, C.L., Leoschut, L., Phyfer, J., Lloyd, S. Kassanje, R. & Mottee, C.L. 2018. The prevalence of child sexual abuse in South Africa: The Optimus Study South Africa. *SAMJ, S. Afr. Med.* 108: 10, Pretoria Oct. 2018 <http://doi.org/10.7196/samj.2018.v108i10.13533>.
- Asare, B.Y., Baafi, D., Asare, B.D. & Adam, A.R. 2019. Factors associated with adolescent pregnancy in the Sunyani Municipality of Ghana. *International Journal of Africa Nursing Sciences*, 10: 87-91. Retrieved from: <https://www.elsevier.com/locate/ijans> (Accessed on 14 June 2021).
- Austin-Evelyn, K.S. 2017. Community health worker perspectives on a new primary health care initiative in the Eastern Cape of South Africa. *Plos One*, 12(3).
- Babaei, S. & Taleghani, F. 2019. Compassionate care challenges and barriers in clinical nurses: A qualitative study. *Iranian J Nursing Midwifery Res* 2019; 24:213-9.
- Babbie, E. 2020. *The basics of social research*. 14<sup>th</sup> edition. Australia: Wadworth Cengage learning.
- Babbie, E. & Mouton, J. 2018. *The practice of social research*. 15<sup>th</sup> edition. Cape Town: Oxford University Press.
- Badenhorst, C. 2014. *Research writing. Breaking the barriers*. Pretoria: Van Schaik.
- Bagnall, A.M., Radley, D., Jones, R., Gately, P., Nobles, J., Van Dijk, M., Blackshaw, J., Montel, S. & Sahota, P. 2019. Whole systems approaches to obesity and other complex public health challenges: A systematic review. *BMC Public Health*, 19(1): 1-14.
- Bazeley, P. 2016. Mixed or merged? Integration as the real challenge for mixed methods. qualitative research in organizations and management. *An International Journal*, 11(3): 189-194. <https://doi.10.1108/QR0M-04-2016-1373>
- Bemelmans, M., van den Akker, T., Pasulani, O., Tayub, N.S., Hermann, K. & Mwangomba, B. 2011. Keeping health staff healthy: Evaluation of a workplace initiative to reduce morbidity and mortality from HIV/AIDS in Malawi. *Journal of the International AIDS Society*, 14(1): 1.
- Bernardi, R. 2018. Health information systems and accountability in Kenya: A structuration theory perspective. *Journal of the Association for Information Systems*, 18(12): 931–958. <https://doi.org/10.17705/1jais.00475>
- Boissierie, E. 2019. *Your marriage or your job? How to balance your career and your relationship*. Retrieved from:

<https://www.forbes.com/sites/erikaboissiere/2019/10/24/your-marriage-or-your-job-how-to-balance-your-career-and-your-relationship/?sh=53caf7014aa1>

(accessed 15 January 2021).

- Bortnowska, H. & Seiler, B. 2019. Formal mentoring in non-profit organizations. Model proposition. *Management*, 23(1).
- Botma, Y., Greeff, M., Mulaudzi, F.M. & Wright, S.C.D. 2017. *Research in health sciences*. Cape Town: Pearson Holdings.
- Bott, S. & Obermeyer, C.M. 2013. The social and gender context of HIV disclosure in Sub-Saharan Africa: A review of policies and practices. *SAHARA-J: Journal of Social Aspects of HIV/AIDS*, 10(1): S5–S16.
- Breier, M., Wildchut, T. & Mqgolozana, T. 2018. *Nursing in a new era: The profession and education of nurses in South Africa*. 3rd edition. Cape Town: HSRC Press. Retrieved from: <https://www.hsrcpress.ac.za/books/nursing-in-a-new-era> (Accessed on 28 March, 2021).
- Brink, H., van der Walt, C. & van Rensburg, G. 2018. *Fundamentals of research methodology for healthcare professionals*. 5<sup>th</sup> edition. Pretoria: Juta. Retrieved from: [https://juta.co.za/catalogue/fundamentals-of-research-methodology-for-health-care-professionals-4e\\_24738](https://juta.co.za/catalogue/fundamentals-of-research-methodology-for-health-care-professionals-4e_24738) (Accessed on 25 April 2021).
- Brinkmann, S. & Kvale, S. 2015. *Interviews: Learning the craft of qualitative research interviewing*. 3<sup>rd</sup> edition. Thousand Oaks, California: SAGE Publications.
- Bruser, G., 2020. 'Examining geographic and social barriers to HIV treatment adherence in Kampala, Uganda'. Doctoral dissertation, The University of Western Ontario: Canada.
- Bryman, A. & Bell, E. 2019. *Business research methods*. 3<sup>rd</sup> edition. Oxford, United Kingdom. Oxford University Press.
- Burns, N. & Grove, S.K. 2022. *Understanding nursing research: Building an evidence-based practice*. 8<sup>th</sup> edition. Missouri: Elsevier Saunders.
- Burrell, G. 2017. *Sociological paradigms and organisational analysis*. USA: Routledge.
- BusinessTech. 2022. *Massive skills shortage in South Africa affecting hospitals*. Retrieved from: <https://businesstech.co.za/news/government/613361/massive-skills-shortage-in-south-africa-affecting-hospitals/> (Accessed 18 August 2022).
- Caldwell, K.L. 2018. Black feminism and HIV/AIDS in Brazil: Intersections and ruptures: Special Issue on Afro-descendant feminisms in the Americas. *Meridians*, 14(1): 121-147. <https://doi.org/10.2979/meridians>

- Cameron, R. 2019. *Mixed methods research: Mixed methods research workshop*. 3<sup>rd</sup> edition. Melbourne: Curtin University.
- Carelse, S.Z. 2018. 'Social work services provided by non-profit organisations to adult methamphetamine users: An ecological perspective'. Doctoral thesis. Stellenbosch University.
- Centers for Disease Control and Prevention/ CDC. 2019. Moving towards the UNAIDS 90-90-90 targets. Retrieved from:
- Centre for Disease Control and Prevention/ CDCP. 2015. *HIV/AIDS basics*. Retrieved from: [www.cdc.gov/hiv/basics/index.html#](http://www.cdc.gov/hiv/basics/index.html#) (accessed 19 September 2020).
- Chaghari, M., Saffari, M., Ebadi, A. & Ameryoun, A. 2017. Empowering education: A new model for in-service training of nursing staff. *Journal of Advances in Medical Education & Professionalism*, 5(1): 26-32.
- Chammartin, F., Ostinelli, C.H.D., Anastos, K., Jaquet, A., Brazier, E., Brown, S., Dabis, F., Davies, M.A., Duda, S.N., Malateste, K. & Nash, D. 2020. International epidemiology databases to evaluate AIDS (IeDEA) in Sub-Saharan Africa, 2012-2019. *BMJ Open*, 10(5): e035246.
- Chorwe-Sungani, G. 2014. Care of patients in Malawi who have HIV/AIDS and mental health problems. *Mental Health Practice*, 17(7).
- Clark, T., Foster, L. & Bryman, A. 2018. *How to do your social research project or dissertation*. Oxford, United Kingdom: Oxford University Press.
- Clemen-Stone, S. Eigsti, D.G. & McGuire, S.L. 2019. *Comprehensive community nursing*. 8<sup>th</sup> edition. New York: Mosby.
- Cluver, L.D., Hodes, R.J., Toska, E., Kidia, F., Khameer, K., Orkin, M., Sherr, L. & Meinck, F. 2018. 'HIV is like a tsotsi. ARVs are your guns': Associations between HIV-disclosure and adherence to antiretroviral treatment among adolescents in South Africa. *National Library of Medicine*. Retrieved from: <https://pubmed.ncbi.nlm.nih.gov/26049539/> (Accessed 12 June 2020).
- Cohen, L., Manion, L. & Morrison, K. 2018. *Research methods in education*. 8<sup>th</sup> edition. New York: Routledge.
- Cordon, C.P. 2013. System theories: An overview of various system theories and its application in healthcare. *American Journal of Systems Science*, 2(1): 13-22.  
DOI: [10.5923/j.ajss.20130201.03](https://doi.org/10.5923/j.ajss.20130201.03).
- Corruption Watch. 2019. *Corruption: The fatal cost of a sick healthcare system*. Retrieved from: [corruptionwatch.org.za/corruption-the-fatal-cost/](http://corruptionwatch.org.za/corruption-the-fatal-cost/) (Accessed 13 March 2021).
- Creswell, J.W. 2020. *Research design: Qualitative, quantitative, and mixed methods approaches*. 6<sup>th</sup> edition. Thousands, CA: SAGE.

- Creswell, J.W. & Poth, C.N. 2018. *Qualitative inquiry and research design choosing among five approaches*. 4<sup>th</sup> edition. Thousand Oaks, CA: SAGE Publications, Inc.
- Crisp, G. & Alvarado-Young, K. 2018. The role of mentoring in leadership development. *New Directions for Student Leadership*, 2018(158): 37-47.
- Crusoe, J. 2019. *Why is it so challenging to cultivate open government data? Understanding impediments from an ecosystem perspective*. Sweden: Linkoping.
- DalGLISH, S.L., Khalid, H. & McMahon, S.A. 2021. Document analysis in health policy research: The READ approach. *Health Policy and Planning*, 35(10): 1424–1431. <https://doi.org/10.1093/heapol/czaa064>
- Damschroder, L.J. 2020. Clarity out of chaos: Use of theory in implementation research. *Psychiatry Research*, 283: 112461. <https://doi.org/10.1016/j.psychres.2019.06.036>
- De Langen, N.A. 2015. 'The clinical resource nurse's role in peer mentoring'. Published D Litt et Phil thesis. Pretoria: University of South Africa.
- Degu, G. & Yigzaw, T. 2006. *Research methodology: Lecture notes for health science students*. Addis Ababa: University of Gondar, EPHTI/ Ethiopia Public Health Training Initiative & United States Agency for International Development/ USAID.
- Denzin, N.K. & Lincoln, Y.S. 2018. *Qualitative research*. 5<sup>th</sup> edition. Los Angeles: SAGE.
- Department of Basic Education & Department of Health. 2012. *Integrated school health policy*. Pretoria: Department of Basic Education & Department of Health.
- Department of Basic Education. 2018. National guidelines for resourcing an inclusive education system. Pretoria: Government Printer.
- Department of Health. 2015a. National consolidated guidelines for the prevention of mother-to-child-transmission of HIV (PMTCT) and the management of HIV in children, adolescents and adults. Pretoria: Department of Health.
- Department of Health. 2015b. National HIV counselling and testing (HCT) policy guidelines. Pretoria: Government Printers.
- Department of Health. 2016a. Health sector HIV prevention. Pretoria: Department of Health.
- Department of Health. 2016b. HIV testing services policy guidelines. Pretoria: Government Printers.
- Department of Health & South African National Aids Council/ SANAC. 2016. *HIV and AIDS and STI strategic plan for South Africa: 2007-2011*. Pretoria: Department of Health.
- Department of Social Development/ DOSD. 2012. *National drug master plan*. Pretoria: Department of Social Development.

- de Villiers, J.E. 2015. 'Nursing ethics education in undergraduate nursing programs in South Africa and Namibia: A critical appraisal'. Published Doctor of Philosophy thesis, University of Stellenbosch. Retrieved from: [http://scholar.sun.ac.za/bitstream/handle/10019.1/96810/devilliers\\_nursing\\_2015.pdf?sequence=2](http://scholar.sun.ac.za/bitstream/handle/10019.1/96810/devilliers_nursing_2015.pdf?sequence=2) (Accessed 18 September 2021).
- De Vos, A.S., Strydom, H., Fouche, C.B. & Deport, C.S.L. 2021. *Research at grass roots: For the social sciences and human service professions*. Pretoria: Van Schaik.
- Donley, A. & Graueholz, L. 2012. *Student handbook to sociology: Research methods*. New York: Facts on File Inc.
- Doornekamp, L., Stegers-Jager, K.M., Vlek, O.M., Klop, T., Goeijenbier, M. & van Gorp, E.C.M. 2017. Experience with a multinational, secondary school education module with a focus on prevention of virus infections. *American Journal of Tropical Medicine and Hygiene*, 97(1), 2017: 97–108.
- Doyle, I., Brady, A. & Byrne, G. 2016. An overview of mixed methods research-revisited. *Journal of Research in Nursing*, 21(8): 623-635.
- Doyle, A.M., Mchunu, L., Koole, O., Mthembu, S., Dlamini, Ngwenya, Ferguson, J & Seely. 2019. Primary healthcare and school health service utilisation by adolescents and young adults in Kwazulu-Natal, South Africa. *Doyle et al BMC Health Service Research*, 19:905. <https://doi.org/10.1186/s112913-019-4559-2> (Accessed 17 April 2022).
- Drury, A., Gleadow-Ware, S., Gilfillan, S., & Ahrens, J. 2018. HIV and mental illness in Malawi and the neuropsychiatric sequelae of efavirenz. *Malawi Medical Journal*, 30(1): 40-45. <https://doi.org/10.4314/mmj.v30i1.9>
- Duran, S. & Ergün, S. 2018. The stigma perceived by parents of intellectual disability children: an interpretative phenomenological analysis study. *Anatolian Journal of Psychiatry* 19(4):390-396.
- Dzimiri, C.T., Dzimiri, P., Batisai, K. 2019. Fighting against HIV and AIDS within a resource constrained rural setting: A case study of the Ruvheneko Programme in Chirumhanzu, Zimbabwe. *SAHARA J.* 2019 Dec;16(1): 25-34. doi: 10.1080/17290376.
- Dzinavane, T.M. 2016. 'Saying no to gender-based violence: A study of Musasa, a non-governmental organisation based in Zimbabwe'. Published Master's Dissertation. Pretoria: University of South Africa.
- Eastern Cape AIDS Council/ ECAC. 2017. *Annual progress report 2015/16: Provincial strategic plan 2012-2016*. Bisho, Eastern Cape. ECAC.

- Edmonds, W.A. & Kennedy, T.M. 2012. *An applied reference guide to research designs: Quantitative, qualitative, and mixed methods*. Los Angeles: SAGE.
- Efron, S.E. & Ravid, R. 2019. *Writing literature review. A practical guide*. New York: Guilford Publication Incl.
- Epstein, I. & Carlin, K. 2012. Ethical concerns in the student/ preceptor relationship: A need for change. *Nurse Education Today*, 32(8): 897-902.
- Erkki, L. & Hedlund. 2013.. Nurses' experiences and perceptions of caring for patients with HIV/AIDS in Uganda.
- Esmaeili, M., Cheraghi, M, Salsali, M. 2014. Barriers to patient-centered care: A thematic analysis study. *Int J Nurs Knowl* 2014; 25:2-8.
- Fadana, F.P. & Vember, H.F. 2021. Experiences of undergraduate nursing students during clinical practice at health facilities in Western Cape, South Africa. *Curationis*, 44(1): e1–e10. <https://doi.org/10.4102/curationis.v44i1.2127>
- Fajnzylber, J., Regan, J., Coxen, K., Corry, H., Wong, C., Rosenthal, A., Worrall, D., Giguél, F., Piechocka-Trocha, A., Atyeo, C. & Fischinger, S., 2020. SARS-CoV-2 viral load is associated with increased disease severity and mortality. *Nature Communications*, 11(1): 5493
- Flannery, R.B., Wyshak, G. & Flannery, G.J. 2014. Characteristics of international staff victims of psychiatric patients assaults: A review of published findings, 2000-2012. *Journal of Psychiatry*, 85(4):397-404.
- Flick, U. 2020. *Introducing research methodology*. 3<sup>rd</sup> edition. London: Sage.
- Forester, J. 2012. On the theory and practice of critical pragmatism: Deliberative practice and creative negotiations. *Planning Theory*. 12(1): 5-22. Retrieved from: <https://journals.sagepub.com/doi/epub/10.1177/1473095212448750> (Accessed 18 August 2019).
- Ghasi, N.C., Ogbuabor, D.C. & Onodugo, V.A., 2020. Perceptions and predictors of organizational justice among healthcare professionals in academic hospitals in South-Eastern Nigeria. *BMC health services research*, 20(1):1-12.
- Gorde, S.P., Mendagudli, V.G. & Gaikwad, S.A. 2021. A comparative study on effective practice of bag technique through lecture cum demonstration and video assisted methods of teaching among nursing students in selected nursing college. *Turkish Online Journal of Qualitative Inquiry*, 12(8).
- Gorman, M. 2017. *Development and the rights of older people: The ageing and development report*. London: Routledge.



- Granich, R., Gupta, S., Hall, I., Aberle-Grasse, J., Hader, S. and Mermin, J., 2017. Status and methodology of publicly available national HIV care continua and 90-90-90 targets: A systematic review. *PLoS Medicine*, 14(4).
- Grove, S., Burns, N. & Gray J. 2020. *The practice of nursing research: Appraisal, synthesis, and generation of evidence*. 8<sup>th</sup> edition. St Louis, Missouri: Saunders.
- Haoses-Gorases, I., Kartjire, M. & Goraseb, M. 2013. HIV/AIDS related workplace stress and fear among nurses: Experiences in Windhoek. Faculty of Health Sciences. University of Namibia. Windhoek. *Journal of Medicine and Medical Science Research*, 2(8): 90-96.
- Harrison-White, K. & Simons, J. 2013. Preceptorship: Ensuring the best possible start for new nurses. *Journal of Nursing Children and Young People*, 25(1):24-27.
- Hartley, D., Ridenour, M., Craine, J. & Morrill, A. 2015. Workplace violence prevention for nurses' on-line course: Program development. *Work (Reading, Mass.)*, 51(1):79–89.
- Harris, C. 2017. Sustainability in health care by allocating resources effectively (SHARE) 3: Examining how resource allocation decisions are made, implemented and evaluated in a local healthcare setting. *BMC Health Services Research*, 17(1): 340.
- Harvard School of Public Health. 2009. The cost of South Africa's misguided AIDS policies. Retrieved from: <https://www.hsph.harvard.edu/news/magazine/spr09aids/> (Accessed 16 April 2021).
- Haven, T.L. & Van Grootel, L. 2019. *Preregistering qualitative research: Accountability in research: Policies and quality assurance*, 32(26): 229–244.
- Havlir, D., Lockman, S., Ayles, H., Larmarange, J., Chamie, G., Gaolathe, T., Iwuji, C., Fidler, S., Kanya, M., Floyd, S. & Moore, J. 2020. What do the universal test and treat trials tell us about the path to HIV epidemic control? *Journal of the International AIDS Society*, 23(2): e25455.
- Health Professions Council of South Africa. (HPCSA). 2016. Guidelines for good practice in the health care professions. Retrieved from: <https://www.hpcsa.co.za/> (Accessed 13 March 2020).
- Hesse-Biber, S.N. & Leavy, P. 2011. *The practice of qualitative research*. 2nd edition. California: SAGE Publications, Inc.
- Hissom, A. 2009. *Introduction to management technology*. Ohio, USA: Kent State University.

- Hoekstra, B.A., Young, V.L., Eley, C.V., Hawking, M.K.D. & Mc Nulty, C.A.M. 2016. School nurses' perspectives on the role of the school nurse in health education and health promotion in England: A qualitative study. *BioMed Central*.
- Hoeve, Y., Jansen, G. & Roodbol, P. 2014. The nursing profession: Public image, self-concept and professional identity. *Journal of Advanced Nursing*, 70(2): 295-309.
- Holloway, I. & Wheeler, S. 2010. Qualitative research in healthcare. 3<sup>rd</sup> edition. West Sussex: Wiley-Blackwell.
- Hoskins, K., Grady, C. & Ulrich, C.M. 2018. Ethics education in nursing: Instruction for future generations of nurses. *The Online Journal of Issues in Nursing*, 23(1): 3. Retrieved from: <https://ojin.nursingworld.org/MainMenuCategories/> (Accessed on 13 February 2021).
- Human Sciences Research Council (HSRC). 2018. *First South African study looking at HIV prevalence in transgender women contributes to global 90-90-90 target*. Pretoria: HSRC.
- Hwabamungu, B., Brown, I. & Williams, Q. 2018. Stakeholder influence in public sector information systems strategy implementation: The case of public hospitals in South Africa. *International Journal of Medical Informatics*, 109: 39-48. <https://doi.org/10.1016/j.ijmedinf.2017.11.002>
- Ifechelobi, J.N. 2014. Feminism: Silence and voicelessness as tools of patriarchy in Chamamanda Adichie's purple hibiscus. *African Research Review*, 35(4): 17-27.
- Imenda, S. 2014. Is there a conceptual difference between theoretical and conceptual frameworks? *Journal of Social Sciences*, 38(2): 185-195.
- Ivankova, N.V. 2015. *Mixed methods application in research: From methods to community action*. Los Angeles: SAGE.
- Iyawa, G.E., Herselman, M. & Botha, A. 2016. Digital health innovation ecosystems: From systematic literature review to conceptual framework. *Procedia Computer Science*, 2016; 100, 244–252. <https://doi.org/10.1016/j.procs.2016.09.149>
- Jobson, M. 2015. *Structure of the health system in South Africa*. Johannesburg: Khulumani Support Group.
- Johnson, L.F., Dorrington, R.E. & Moolla, H. 2017. Progress towards the 2020 targets for HIV diagnosis and antiretroviral treatment in South Africa. *South African Journal of HIV Medicine*, 8(1): 2078-6751.
- Jones, C.L., Jensen, J.D., Scherr, C.L., Brown, N.R., Christy, K. & Weaver, J. 2015. The health belief model as an explanatory framework in communication research: Exploring parallel, serial and moderated mediation. *Health Communication*, 30(6): 566-576. Doi:10.1080/10410236.2013.873363

- Jooste, K. 2017. Leadership in health services management. 3<sup>rd</sup> edition. Cape Town: Juta.
- Joubert, E. & Elrich, F. 2014. *Epidemiology: A research manual for South Africa*. 3<sup>rd</sup> edition. Oxford University Press: South Africa.
- Karim, S.S.A. & Karim, Q.A. 2010. *HIV/AIDS in South Africa*. Cape Town: Cambridge University Press.
- Khamisa, N., Peltzer, K., Ilic, D. & Oldenburg, B. 2017. Effect of personal and work stress on burnout, job satisfaction and general health of hospital nurses in South Africa. *Health SA Gesondheid*, 22:252-258.
- Khumalo, Z. 2017. Drugs, alcohol and sex fuel teenage pregnancy. *Kathorus Mail*, 14 March 2017. Retrieved from: <https://www.kathorusmail.co.za> (Accessed 17 May 2021).
- Korstjens, I. & Moser, A. 2018. Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *The European Journal of General Practice*, 24(1): 120–124. <https://doi.org/10.1080/13814788.2017.1375092>
- Koto, M.V. & Maharaj, P. 2016. Difficulties facing healthcare workers in the era of AIDS treatment in Lesotho. *SAHARA-J: Journal of Social Aspects of HIV/AIDS*, 13(1), 53-59. DOI: 10.1080/17290376.2016.1179588
- Kumar, R. 2020. *Research methodology: A step-by-step guide for beginners*. 6<sup>th</sup> edition. California: Sage Publications.
- Kreedi, F., Brown, M., Marsh, L. & Rogers, K. 2021. Newly graduate registered nurses' experiences of transition to clinical practice: A systematic review. *American Journal of Nursing Research*. 2021; 9(3): 94-105. <https://doi.org/10.12691/ajnr-9-3-4>.
- Lamont, C. & Boduszyński, M.P. 2020. *Research methods in politics & international relations*. London: Sage.
- Leavy, P. 2017. *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. New York: The Guilford Press.
- Ledikwe, J.H., Kleinman, N.J., Mpho, M., Mothibedi, H., Mawandia, S., Semo, B.W. & O'Malley, G., 2018. Associations between healthcare worker participation in workplace wellness activities and job satisfaction, occupational stress and burnout: a cross-sectional study in Botswana. *BMJ Open*, 8(3).
- Leedy, P.D. & Ormrod, J.E. 2019. *Practical research: Planning and design*. 12<sup>th</sup> edition. New Jersey: Pearson Education International
- Lennox, S, Jutel, A. & Foureur, M. 2012. The concerns of competent novices during a mentoring year. *Nursing Research and Practice*.

- LoBiondo-Wood, G & Haber, J. 2014. *Nursing research: Methods, critical appraisal and utilization*. 7<sup>th</sup> edition. St Louis: A Mosby.
- Locharoenrat, K. 2017. *Research methodologies for beginners*. CRC Press.
- Loeliger, K. B., et al. (2016). Antiretroviral therapy initiation and adherence in rural South Africa: community health workers' perspectives on barriers and facilitators. *AIDS Care*, 28(8): 982-993.
- Lohmann, J., Muula, A.S., Houfort, N. & De Allegri, M. 2018. How does performance-based financing affect health workers' intrinsic motivation? A self-determination theory-based mixed-methods study in Malawi. *Social Science & Medicine*, 208: 1-8.
- Mabusela, P.D. & Ramukumba, T.S. 2021. The experience of professional nurses working with newly qualified nurses placed for community service in public health facilities in the City of Tshwane, South Africa. *Curationis*, 44(1): e1–e6.
- Madolo, A.N., 2019. A comprehensive support programme for professional nurses performing HIV counselling and testing at primary health care clinics in the rural Eastern Cape.
- Mammbona, A.A. 2017. *Experiences of enrolled nurses towards caring for people living with HIV and AIDS*. Unpublished Master of Public Health Dissertation. Pretoria: University of South Africa.
- Manyisa, Z.M. & van Aswegen, E.J. 2017. Factors affecting working conditions in public hospitals: A literature review. *International Journal of Africa Nursing Sciences*, 6(2017): 28-38. Retrieved from: [www.elsevier.com/locate/ijans](http://www.elsevier.com/locate/ijans) (Accessed 17 October 2017).
- Maphumulo, W.T. & Bhengu, B.R., 2019. Challenges of quality improvement in the healthcare of South Africa post-apartheid: A critical review. *Curationis*, 42(1): 1-9.
- Marranzano, M., Ragusa, R., Platania, M., Faro, G. & Coniglio, M.A. 2013. Knowledge, attitudes and practices towards patients with HIV/AIDS in staff nurses in one university hospital in Sicily. *Epidemiology, Biostatistics and Public Health*, 10(1): e8731-1 – e8371-6.
- Marek, T, Schaufeli, W.B. & Maslach, C. 2017. Professional burnout: Recent developments in theory and research. London: Routledge.
- Mathibe, M.D., Hendricks, S.J.H. & Berg, A. 2015. *Clinical perceptions and patient experiences of antiretroviral treatment integration in primary health care clinics*. Tshwane, South Africa.
- Mathibe-Neke J. 2020. Ethical practice in the nursing profession: A normative analysis. *South African Journal of Bioethics and Law*, 13(1): 52-56.

- Mathibe, M.S. & Chinyamurindi, W.T. 2021. Determinants of employee mental health in the South African public service: The role of organizational citizenship behaviours and workplace social support. *JOUR.* 1(11): 1838-7357.
- Matua, G.A. & Van Der Wal, D.M. 2015. Differentiating between descriptive and interpretive phenomenological research approaches. *Journal of Nursing Research*, 22(6): 22-27.
- Maxfield, M.G & Babbie, E.R. 2018. Research methods for criminal justice and criminology. 8<sup>th</sup> edn. Boston, MA: Cengage Learning.
- McCracken, K. 2017. Global health: An introduction to current and future trends. Taylor & Francis.
- Mcilwane, C. 2013. Urbanization and gender-based violence: Exploring the paradoxes in the global South. *International Institute for Environment and Development (IIED)*, 25(1): 65–79.
- Meintjes, G., Black, J., Conradie, F., Dlamini, S. Maartens, G., Manzini, T.C., Matehe, M., Moorhouse, M., Moosa, Y., Nash, J., Orrell, C., Venter, F. & Wilson, D. 2015. Southern African HIV Clinicians Society adult antiretroviral therapy guidelines: Update on when to initiate antiretroviral therapy. *Southern African Journal of HIV Medicine*, 16(1): 1-4. [doi:10.4102/sajhivmed.v16i1.428](https://doi.org/10.4102/sajhivmed.v16i1.428)
- Merriam, S.B. & Grenier, R.S. eds. 2019. *Qualitative research in practice: Examples for discussion and analysis*. London: John Wiley & Sons.
- Milliken-Tull, A. & McDonnell, R. 2017. Alcohol and drug education in schools. London: Centre for Analysis of Youth Transitions.
- Mlambo, V.H. & Adetiba, T.C. 2019. Brain drain and South Africa's socioeconomic development: The waves and its effects. *Journal of Public Affairs*, 19(4): e1942.
- Mohanlal, R., Denasha, C. & Reddy, L. 2020. Spectrum of HIV-associated infectious diseases: A case series through the eyes of the histopathologist. *Southern African Journal of HIV Medicine*, 21(1): 1087. <https://doi.org/10.4102/sajhivmed.v21i1.1087>
- Mojapelo, N. 2019. 'Integrated school health programme implementation constraints: An inquiry into the Ekurhuleni Health and Education system'. Unpublished Master's Dissertation. Pretoria: University of South Africa.
- Morse, L. & Allensworth, D.D. 2015. Placing students at the center: The whole school, whole community, whole child model. *Journal of School Health*, November 2015, 85(11): 785-94.
- Moseholm, E. & Fetters, M.D. 2017. *Methodological Innovations*, 10(2): 1–11.

- Moses, K.S. 2017. The perceptions of clinical nurse practitioners on service delivery in primary health care facilities in Eden District, Western Cape. Stellenbosch: Stellenbosch University.
- Mottiar, S. & Lodge, T., 2018. The role of community health workers in supporting South Africa's HIV/AIDS treatment programme. *African Journal of AIDS Research*, 17(1): 54-61.
- Muller, M. & Bester, P. 2017. Nursing dynamics. 4<sup>th</sup> edition. Cape Town: Pearson.
- Mulaudzi, M. V. 2011. Nurses' knowledge, attitudes, and coping related to HIV and AIDS in a rural hospital in South Africa. *Studies on Ethno-Medicine*, 5(1): 25-32.
- Munga, M.A., Mutalemwa, P.P., Kisoka, W.J.& Malecela, M.N. 2014. Experiences, opportunities and challenges of implementing task shifting in underserved remote settings: The case of Kongwa District, Central Tanzania. *BMC International Health and Human Rights*, 12(1): 27.
- Mutabazi, J., Gray, C., Muhwava, L., Trottier., Ware, L.J., Norris, S., Murphy, K., Levitt, N. & Zarowsky, C. 2020. Integrating the prevention of mother-to-child transmission of HIV into primary healthcare services after AIDS denialism in South Africa: Perspectives of experts and health care workers - a qualitative study. *BMC Health Serv Res*, 20: 582 <https://doi.org/10.1186/s12913-020-05381-5>.
- Muthelo, L., Nemaumoni, T., Mothiba, T.M., Phukubje, A.T. & Mabila, L.N., 2020. Experiences of professional nurses regarding the implementation of a central chronic medicine dispensing and distribution program at primary health care facilities in South Africa. *The Open Public Health Journal*, 13(1).
- Myburgh, J. 2007. The Virodene affair. *Politicsweb*, 17 September 2007. Retrieved from: <https://www.politicsweb.co.za/news-and-analysis/the-virodene-affair-#:~:text=Between%20October%201998%20and%20March,contractingfrom%20theirmothers> (Accessed 17 June 2022).
- Naidoo S. 2016. Professionalism. *South African Dental Journal*, 71(4): 160-180.
- Ndabeni, K. 2010. HIV patients no longer stigmatised. *The Herald*, July 26, 2010: 5.
- Ndaki, K. 2004. "Risky business: SA youth and HIV/AIDS." *AIDS Bulletin* 13(2): 52-53.
- Nelson Mandela Metropolitan Municipality. 2022. Municipalities of South Africa. Retrieved from: <https://municipalities.co.za/map/1/nelson-mandela-bay-metropolitan-municipality> (Accessed 11 September 2022).
- Ngulube, P. 2020. *Handbook of research on connecting research methods for information science research*. Vol. 1. Hershey, PA: IGI Global.

- Ngunyulu, R.N., Mulaudzi, F.M. & Peu, M.D. 2015. Comparison between indigenous and Western postnatal care practices in Mopani District, Limpopo Province, South Africa. *Curationis*, 38(1):1-9.
- Nilsson, L. & Berg, M. 2015. Nurses' experiences of caring for patients with HIV/AIDS in Dar es Salaam: A qualitative study at Muhimbili National Hospital and Buguruni Healthcare Center, Tanzania.
- Nkosi, S.F. 2016. 'Assessment of the quality of healthcare services rendered to patients in public health facilities in Gert Sibande District, Mpumalanga Province at South Africa'. Published Master's Dissertation. Thohoyandou: University of Venda.
- Nloto, M. 2017. Comorbidities of HIV infection and health care seeking behaviour among HIV infected patients attending public sector healthcare facilities in KwaZulu-Natal: A cross-sectional study. *PLoS ONE*, 12(2): [e0170983](https://doi.org/10.1371/journal.pone.0170983).doi:10.1371/ journal. pone.0170983.
- Nutor, J.J., Duah, H.O., Agbadi, P., Duodu, P.A. & Gondwe, K.W. 2020. Spatial analysis of factors associated with HIV infection in Malawi: indicators for effective prevention. *BMC Public Health*, 20(1167). <https://doi.org/10.1186/s12889-020-09278-0>
- Nylenna, M., Bjertnaes, I., Øyvind A., Saunes, I.S. & Lindahl, A.K. 2015. What is good quality of health care? *Professions and Professionalism*, 5(1): 1-15.
- Olawoyin, B.O. 2021. 'Perceived stigmatisation related experiences perpetrated by health workers towards persons living with HIV/aids in three selected hospitals in Ibadan'. (Doctoral dissertation).
- Patton, M.Q. 2015. *Qualitative research and evaluation methods: Integrating theory and practice*. 4<sup>th</sup> edition. Los Angeles: SAGE.
- Peltzer, K. & Phaswana-Mafuya, N. 2018. Drug use among youth and adults in a population-based survey in South Africa. *South African Journal of Psychiatry*, 24(1).
- Pettifor, A.E., Rees, V.H., Kleinschmidt, I., Steffenson, A.E., MacPhail, C., Hlongwa-Madikizela, L., Vermaak, K. & Padian, N.S. 2019. Young people's sexual health in South Africa: HIV prevalence and sexual behaviors from a nationally representative household survey. *AIDS* 19(14): 1525–1534. Retrieved from: <https://pubmed.ncbi.nlm.nih.gov/16135907/> (Accessed 27 September 2022).
- Peu, M.P. 2015. Challenges experienced by healthcare providers with regard to the provision of school healthcare services in Tshwane sub-district, Gauteng province. *Africa Journal of Nursing and Midwifery* 17: 209-221.

- Phakisi, S. 2018. 'Contributory factors for HIV upsurge among children aged three to eighteen months in Mangaung, Free State Province'. Published PhD Dissertation. Pretoria: University of South Africa.
- Polit, D.F. & Beck, C.T. 2020. *Nursing research: Generating and assessing evidence for nursing practice*. 10<sup>th</sup> edition. Australia: Wolters Kluwer/Lippincott Williams & Wilkins.
- Potvin, L. & Jones, MC. 2011. Twenty-five years after the Ottawa Charter: The critical role of health promotion for public health. *Canadian Journal of Public Health*, 102(4): 244-248.
- Rahman, F.A. 2017. Emotional, behavioural and social development: modality of hierarchy of needs in supporting parents with special needs. *International Journal of Psychological and Behavioural Sciences* 11(7):1735-1739.
- Rajasekar, S, Philominathan, P & Chinnathambi, C. 2013. *Research methodology*. Retrieved from: <https://arxiv.org/pdf/physics/0601009> (accessed 11 December 2017).
- Ramathuba, D.U. & Davhana-Maselesele, M. 2018. Nurses' perceptions of support in caring for people living with HIV and AIDS (PLHWA) in Vhembe District, Limpopo Province. *International Journal of Research in Medical and Health Sciences*, 3(2): 7-17.
- Ramenyi, D. & Bannister, F. 2013. *Writing up your research: The quick guide series*. United Kingdom: Academic Conferences and Publishing International, Ridgeway Press.
- Rani, V.J. 2016. Methodologies of translation. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 1-2. From: <https://www.iosrjournal.org> (Accessed 16 May 2018).
- Redwood, S., Brangan, E. & Leach, V. 2016. Integration of research and practice to improve public health and healthcare delivery through a collaborative 'health integration team' model: A qualitative investigation. *BMC Health Services Research*, 16(1): 201.
- Rees, C. 2016. *Rapid research methods for nurses: Midwives and health professionals*. United Kingdom: Wiley Blackwell.
- Rensburg, E. 2021. Healthcare in South Africa: How inequity is contributing to inefficiency. Johannesburg: University of the *Witwatersrand* Health Systems and Policy. Retrieved from: <https://www.wits.ac.za/news/latest-news/opinion/2021/2021-07/healthcare-in-south-africa-how-inequity-is-contributing-to-inefficiency.html> (Accessed 22 March 2022).



- Rouleau, D., Fournier, P., Philibert, A., Mbengue, B. & Dumont, A. 2012. The effects of midwives' job satisfaction on burnout, intention to quit and turnover: A longitudinal study in Senegal. *Human Resource Health*, 10(1): 9.
- Roulston, K. 2016. Research ethics and qualitative research. In Silverman, D. *Qualitative research* (pp. 31-45). 4<sup>th</sup> edition. London: Sage.
- Rubin, A. & Babbie, E.R. 2017. *Research methods for social work*. Boston, MA: Cengage Learning.
- Ruel, E.E., Wagner, W.E. & Gillespie, B.J. 2016. *The practice of survey research: Theory and applications*. London: Sage.
- Saldana, J. & Omasta, M. 2018. *Qualitative research: Analyzing life*. Thousand Oaks, CA. Sage.
- Saunders, M., Lewis, P. & Thornhill, A. 2019. *Research methods for business students*. 8<sup>th</sup> edition. Essex: Pearson Education Limited.
- Sesanti, S. 2018. Thabo Mbeki's 'AIDS denialism'. *Theoria*, 65(156):27-51 DOI:[10.3167/th.2018.6515602](https://doi.org/10.3167/th.2018.6515602)
- Shaibu, S. & Phaladze, N.A. 2010. School health: the challenges to service delivery in Botswana. University of Botswana: Gaborone. *Primary Health Care Research and Development*, 11: 197-202.
- Shu, C., Justice, A.C. & Zhang, X. 2020. DNA methylation mediates the effect of cocaine use on HIV severity. *Clin Epigenet* 12, 140 <https://doi.org/10.1186/s13148-020-00934-1>
- Silverman, D. 2020. *Interpreting qualitative data*. 6<sup>th</sup> ed. London: Sage.
- Sonti, S., Tyagi, K., Pande, A., Daniel, R., Sharma, A.L. & Tyagi, M. 2022. Crossroads of drug abuse and HIV infection: Neurotoxicity and CNS reservoir. *Vaccines*, 10(2): 202. <https://doi.org/10.3390/vaccines10020202>
- South African National AIDS Council/ SANAC. 2019. Mid-term review of the national strategic plan for HIV, TB and STIs 2017 – 2022. Retrieved from: <https://sanac.org.za/wp-content/uploads/2021/05/NSP-MTR-Full-Report-2017-2022-FINAL.pdf> (Accessed 11 February 2021).
- Statistics South Africa. 2018. Mid-year population estimates, 2018. Retrieved from: <https://www.slideshare.net/StatsSA/midyear-population-estimates-2018> (Accessed 11 February 2021).
- Steketee, G. 2017. Health outcomes and costs of social work services: A systematic review. *American Journal of Public Health*, 107(53): 5256-5266.
- Suhariyanto, H. & Ungsianik, T. 2018. Improving the interpersonal competencies of head nurses through Peplau's theoretical active learning approach. *Enferm Clin*. 2018; 28 (Suppl 1):149–153. doi:[10.1016/S1130-8621\(18\)30056-1](https://doi.org/10.1016/S1130-8621(18)30056-1)

- Sushma, K., Kaiwar, S., Selvarajan, C., Mascrenhas, A.A., Flynn, A., Yadav, R.K., Kaphle, H.P., Yadav, D.K., Gurung, S.C., Khatri, E. & Baral, S. 2020. Diagnostic challenges and clinical profile of spine tuberculosis – An experience from medium sized health care center, South India. SAARC. *Journal of Tuberculosis, Lung Diseases and HIV/AIDS*.
- Swart, L., Kramer, S., Ratale, K. & Seedat, M. 2019. Transforming research methods in the social science case studies from South Africa. Johannesburg: Wits University Press.
- Tarab, S. 2019. Becoming familiar with qualitative research. In Gupta, M., Shaheen, M & Reddy, K.P. 2019. *Qualitative techniques for workplace data analysis*. (pp. 1-24). USA: IGI Global.
- Tardy, S. 2019. Case study: Defining and differentiating among types of case studies (Pp. 1-19). In Baron, A & McNeal, K. 2019. *Case study methodology in higher education*. USA: IGI Global.
- Thomas, G. 2017. *How to do your research project: A guide for students*, 3<sup>rd</sup> ed. London: Sage.
- Tight, M. 2017. Understanding case study research: Small-scale research with meaning. London: Sage.
- Tosin, O.H. & Tshitangano, T.G. 2016. Assessment of learners' exposure to health education and promotion at schools in the Limpopo Province of South Africa. *African Journal of Primary Health Care & Family Medicine*, 8(2): a932. <http://dx.doi.org/10.4102/phcfm.v8i2.932>
- Toska, E. & Natukunda, P.M.H. 2017. Beyond clinical trials: Cross-sectional associations of combination antiretroviral therapy with reports of multiple symptoms and non-adherence among adolescents in South Africa. Available from: <https://pubmed.ncbi.nlm.nih.gov/26049539/> (Accessed 12 June 2022).
- Trickey, A., May, M.T., Schommers, P., Tate, J., Ingle, S.M., Guest, J.L., Gill, M.J., Zangerle, R., Saag, M., Reiss, P. & Monforte, A.D.A. 2017. CD4: CD8 ratio and CD8 count as prognostic markers for mortality in human immunodeficiency virus–infected patients on antiretroviral therapy: the Antiretroviral Therapy Cohort Collaboration (ART-CC). *Clinical Infectious Diseases*, 65(6): 959-966.
- Ugochukwu, C.G., Uys, L.R., Karani, A.K., Okoronkwo, I.L. & Diop, B.N. 2013. Roles of nurses in the Sub-Saharan African region. *International Journal of Nursing and Midwifery*, 5(7): 117-131.
- UNAIDS. 2019. *Global report: Report on the global AIDS epidemic*. Geneva: UNAIDS.

- United Nations International Children's Emergency Fund (UNICEF). 2022. *Investing in a safe, healthy and productive transition from childhood to adulthood is critical*. Retrieved from: <https://data.unicef.org/topic/adolescents/overview/#:~:20population> (Accessed 11 September 2022).
- United Nations Population Fund (UNFPA). 2016. *Ground-breaking regional strategy on sexual and reproductive health gets ministerial approval for Southern Africa Annual Report 2016*. Retrieved June 4, 2019, from <https://www.unfpa.org/annual-report-2016>
- United Nations Population Fund. 2022. *Sexual and reproductive health*. Geneva: United Nations.
- University of South Africa/ UNISA. 2016. *UNISA policy on research ethics*. Florida: UNISA.
- UNISA. 2020a. Covid-19 Guidelines: *Implication of alert levels for researchers and postgraduates' students*. Pretoria. University of South Africa.
- UNISA. 2020b. University of South Africa COVID-19 position statement on research ethics.
- Valizadeh, L., Zamanzadeh, V., Dewar, B. 2018. Nurse's perceptions of organizational barriers to delivering compassionate care: A qualitative study. *Nurs Ethics* 2018; 25:580-90.
- Van Dyk, A., Tlou, E. & van Dyk, P. 2017. *HIV and AIDS education, care and counseling's multicultural approach*. 6<sup>th</sup> edition. South Africa: Pearson.
- van Schalkwyk, C., Dorrington, R.E., Seatlhodi, T. 2021. Modelling of HIV prevention and treatment progress in five South African metropolitan districts. *Sci Rep*, 11: 5652. <https://doi.org/10.1038/s41598-021-85154-0>
- Velardo, S. & Drummond, M. 2017. Emphasizing the child in child health literacy research. *Journal of Child Health Care*, 21(1): 5-13. [sagepub.co.uk/journalsPermissions.nav](https://sagepub.co.uk/journalsPermissions.nav) DOI: [10.1177/1367493516643423](https://doi.org/10.1177/1367493516643423).
- Vyncke, M. 2012. 'The concept and practice of critical thinking in academic writing: An investigation of international students' perceptions and writing experiences'. MA Dissertation. King's College, London.
- Walliman, N. 2021. *Research methods. The basics*. New York: Taylor & Francis Group.
- Wani, R.T., Rashid, I., Nabi, S.S. & Dar, H. 2019. Knowledge, attitude, and practice of family planning services among healthcare workers in Kashmir: A cross-sectional

- study. *Journal of Family Medicine and Primary Care*, 8(4): 1319–1325.  
[https://doi.org/10.4103/jfmipc.jfmipc\\_96\\_19](https://doi.org/10.4103/jfmipc.jfmipc_96_19)
- Williams, M., van Rooyen, D.R.M. & Ricks, J.E. 2018. Provision of antiretroviral therapy for children in Nelson Mandela Bay: Health care professionals' challenges. *African Journal of Primary Health Care & Family Medicine*, 10(1): 1490.
- World Economic Forum/ WEF. 2020. 'The world has 4 key types of health service – this is how they work'. Retrieved from:  
<https://www.weforum.org/agenda/2020/10/covid-19-healthcare-health-service-vaccine-health-insurance-pandemic/> (Accessed 27 January 2021).
- World Health Organization (WHO). 2017. *Year in review: Key health issues*. Retrieved from: <http://www.who.int/features/2017/year-review/en/> (Accessed 23 November 2019).
- World Health Organization. 2018. *Multisectoral and intersectoral action for improved health and well-being for all: A situational analysis*. Geneva: WHO Publications.
- World Health Organization 2019. *Sexual and reproductive health and rights at the sixty-first session of the commission on the status of women*. Retrieved from: <http://www.who.int/reproductivehealth/news-events/csw-2017/en/>. (Accessed 23 November 2019).
- World Health Organization. 2020. *Health policy and system support to optimize community health worker programmes for HIV, TB and malaria services: An evidence guide*. Geneva: WHO.
- World Health Organization. 2022. Chronic staff shortfalls stifle Africa's health systems: WHO study. Retrieved from:  
<https://www.afro.who.int/news/chronic-staff-shortfalls-stifle-africas-health-systems-who-study> (Accessed 17 July 2022).
- Yin, R.K. 2018. *Case study research: Design and methods*. 6<sup>th</sup> edition. New Delhi: SAGE Publications, Inc.
- Zikmund, W.G. & Babin, B.J. 2010. *Exploring marketing research*. London: South-Western, Cengage Learning.

## APPENDIX 1: UNISA ETHICAL CLEARANCE



### COLLEGE OF HUMAN SCIENCES RESEARCH ETHICS REVIEW COMMITTEE

01 December 2020

Dear N.C. Mrwebo-Qunta

NHREC Registration # :  
Rec-240816-052  
CREC Reference # :  
41490606\_CREC\_CHS\_2020

**Decision:**  
Ethics Approval from 01 December  
2020 to 31 November 2023

Principal Researcher(s) N.C. Mrwebo-Qunta: (email: 41490606@mylife.unisa.ac.za)

Supervisor: Prof ON Makhubela-Nkondo (email: naome.on@gmail.com)

**Title: Personal Personnel Experiences of AIDS Patient Management:  
Clinic in Nelson Mandela, Municipality Eastern Cape**

Degree Purpose: Research Masters of Public Health

Thank you for the application for research ethics clearance by the Unisa College of Human Science Ethics Committee. Ethics approval is granted for three years.

The *medium-risk application* was reviewed by College of Human Sciences Research Ethics Committee, on 24 November 2020 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the College Ethics Review Committee.
3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.



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www.unisa.ac.za

4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013, Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.
7. No fieldwork activities may continue after the expiry date (31 November 2023). Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

*Note:*

The reference number **41490606\_CREC\_CHS\_2020** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Yours Sincerely,

Signature :



Dr. K.J. Malesa  
CHS Ethics Chairperson  
Email: [maleskj@unisa.ac.za](mailto:maleskj@unisa.ac.za)  
Tel: (012) 429 4780

Signature : PP



Prof K. Masemola  
Executive Dean : CHS  
E-mail: [masemk@unisa.ac.za](mailto:masemk@unisa.ac.za)  
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## APPENDIX 2: REQUEST FOR PERMISSION TO CONDUCT THE STUDY

### <Request to Eastern Cape Provincial Department of Health for Permission to Conduct Research at Laetitia Bam Community Health Centre>

<Personnel Experiences of AIDS Patient Management: Clinic in Nelson Mandela Municipality, Eastern Cape>

<20 September 2020 >

<Camilla Dolley>

<Research Administrator: Eastern Cape Provincial Department of Health>

< Room No. E8: Walton Building>

<BISHO>

<083-9753727/ Dolley@echealth.gov.za>

Dear <Camilla Dolley: Researcher Administrator>

I, <Ncediswa Mrwebo-Qunta am doing research with <Professor O.N. Makhubela-Nkondo > in the Department of <Health studies > towards a <Master of Public Health degree> at the University of South Africa. We have funding from <insert name of Funding Body if applicable> for <insert why you have funding>. We cordially make a request for your permission to conduct the study entitled < Personnel Experiences of AIDS Patient Management: Clinic in Nelson Mandela Municipality, Eastern Cape>.

<The aim of the study is to explore, describe and analyse the role, experiences and challenges of health personnel in the treatment and management of HIV and AIDS patients at an Eastern Cape clinic, and to make recommendations on how to improve or address the identified challenges.>

Your institution has been selected because: <The researcher is a professional employee working at Laetitia Bam Community Health Centre which is the proposed primary research site. Also, all the prospective participants work at this research site in various health care service provision categories.

The researcher identified ten health care professionals as participants who are also full-time employees at this clinic. Their involvement is in the form of responding to semi-structured individual interview questions at a pre-arranged room on the premises of the clinic. All ethical protocols are outlined in an informed consent form and information sheet that will be sent to the interviewees prior to their participation in the

interviews. The 1-hour long interviews will take place during scheduled lunch hour breaks and after working hours in order to prevent any disruption to the normal clinical and non-clinical routines of the clinic. The individual interviews will be audio recorded with the permission of the selected health care professionals>

<COVID-19 compliant protocols will be fully complied with by means of sanitising the interview room after every interview session. Each interviewee will be seated two metres apart from the researcher and her assistant, who will also be the same distance apart from the researcher. No handshakes will occur, despite the professional and collegial relationship between the researcher and the interviewees, who will not have to touch any physical objects with their hands during the interviews. The prospective participants are fully conversant with health risks as they work with AIDS patients daily. As such, personal protective equipment is an essential work requirement that will also be applied during the interviews.>

<The benefit of this study is expected to make a nurse-driven contribution in respect of upscaling of well managed and sustainable health care facilities by the same community health care centre's management, the Nelson Mandela Municipality Health District, the Eastern Cape Provincial Health Department, as well as the National Departments of Health and Social Development>

Potential risks are: <The proposed study entails low risk because direct human participant involvement will not cause any disruption of the normal functioning at the selected research site. Although the research participants are colleagues of the researcher, the interview questions solely focus on professional and work related issues, with no reference to any matter with the potential to evoke unpleasant past experiences beyond everyday interpersonal and expected staff management relations. In addition, in their capacity as health care professionals, the participants are advantaged by their familiarity with AIDS and COVID-19 related risks. >

Feedback procedure will entail: <During and after the data collection and analysis stages, the researcher will continuously have prolonged engagements with the participants to understand the rationale for their inputs. Prior to the finalisation of the research report, the researcher will consult with the participants for their verification, correction or refutation of the findings in part or as a whole. Therefore, recommendation regarding the challenges experienced by healthcare personnel and HIV/AIDS patients will be made available to the healthcare authorities in the Eastern Cape Province

Yours sincerely

<C.N. Mrwebo>

<Researcher>



## APPENDIX 3A: APPROVAL TO CONDUCT STUDY



Enquiries: Yvonne Gxela  
Email: [Yvonne.Gxela@echealth.gov.za](mailto:Yvonne.Gxela@echealth.gov.za) / [YvonneG@ymail.com](mailto:YvonneG@ymail.com)

Tel no: 079 074 0859

Date: 12 December 2020

RE: Personal Personnel Experiences of AIDS Patient Management: Clinic in Nelson Mandela, Municipality Eastern Cape Degree Purpose: Research Masters of Public Health. (EC\_202012\_006)

Dear Mrs N.C. Mrwebo-Qunta

The department would like to inform you that your application for the abovementioned research topic has been approved based on the following conditions:

1. During your study, you will follow the submitted protocol with ethical approval and can only deviate from it after having a written approval from the Department of Health in writing.
2. You are advised to ensure, observe and respect the rights and culture of your research participants and maintain confidentiality of their identities and shall remove or not collect any information which can be used to link the participants.
3. The Department of Health expects you to provide a progress update on your study every 3 months (from date you received this letter) in writing.
4. At the end of your study, you will be expected to send a full written report with your findings and implementable recommendations to the Eastern Cape Health Research Committee secretariat. You may also be invited to the department to come and present your research findings with your implementable recommendations.
5. Your results on the Eastern Cape will not be presented anywhere unless you have shared them with the Department of Health as indicated above.


Your compliance in this regard will be highly appreciated.

SECRETARIAT: EASTERN CAPE HEALTH RESEARCH COMMITTEE

TOGETHER, MOVING THE HEALTH SYSTEM FORWARD



## APPENDIX 3B: PERMISSION TO CONDUCT THE STUDY

 <b>Province of the EASTERN CAPE HEALTH</b>	Office of the Clinical Governance Manager Nelson Mandela Bay Health District Private Bag X 28000, Greenacres, Port Elizabeth, 6057. REPUBLIC OF SOUTH AFRICA
	Enquiries : Dr L P MANDISO Telephone : 041-391-8020 Facsimile : 041-391-8133 E-mail : mhass.makubalo@gmail.com

Mrs N C Qunta – Mrwebo  
nqunta@webmail.co.za

### REQUEST FOR PERMISSION TO CONDUCT RESEARCH ON PERSONNEL EXPERIENCES OF AIDS PATIENT MANAGEMENT: CLINIC IN NELSON MANDELA MUNICIPALITY, EASTERN CAPE

In response to your application for permission to conduct the above research, permission is hereby granted with the following proviso:

- Health service delivery should not be disrupted under any circumstances.
- Timeous appointments must be made with the relevant persons prior to commencement of interviews/visits.
- All required data should be collected by the Researcher or a designated fieldworker (whose name should be forwarded to the relevant Sub District Coordinator prior to data collection). The Sub District Coordinator Mrs. Reuters – 060 557 9732 should be contacted **before** your visit and this letter is to be presented when visiting the facility.
- Strict health and safety measures must be adhered to during the COVID-19 pandemic i.e. wearing of masks at all times, regular sanitizing, frequent hand washing and screening of interviewees and interviewers.

The Nelson Mandela Bay Health District, as the research site, will expect a copy of the final research report when the study is completed. If the duration of the research period is required to be extended, the District Office (District Manager) should be informed accordingly.

This Office would like to wish you well in your research study.

Yours faithfully

  
DR N.P. MAKUBALO  
ACTING CLINICAL GOVERNANCE MANAGER – NIMBHD

#### APPENDIX 4: PARTICIPANTS' INFORMATION LEAFLET

I, Ncediswa Caroline Mrwebo am a registered Master's student in the Department of Health Studies at the University of South Africa (UNISA). I cordially request your participation in my research study entitled, **HEALTHCARE PERSONNEL'S EXPERIENCES IN HIV/AIDS TREATMENT AND MANAGEMENT AT A HEALTHCARE FACILITY IN EASTERN CAPE PROVINCE**

The main purpose of this proposed research is to explore and describe the experiences and capacity of healthcare personnel in the management of HIV/AIDS patients at an Eastern Cape community healthcare centre. All the information obtained is strictly for research-related purposes only, and will not be used for any other purpose that is unrelated to this research project. Neither will any unauthorised third parties be privy to any aspect of the information obtained by means of semi-structured interviews personally administered by the researcher to the sampled research participants.

The expected nature of your involvement is by means of oral responses to questions posed to you by the researcher, as well as follow-up questions arising from your responses. You have the right to ask any further questions during the one-hour interviews, which will be held at a scheduled venue and time convenient to your availability. You are also at liberty to withdraw from the interview session as soon as you feel that the researcher has violated any of your human rights. Should that happen, you also have the right to legal recourse, or to immediately report the researcher to her academic supervisor, whose contact details are indicated below.

Please note that your involvement in the interviews is voluntary and uncoerced, and no financial incentives will be provided as a result of your participation. I will ensure that your participation is anonymous and confidential. You will not be required to disclose your name, place of residence or work, or names of your family/relatives. Prior to the commencement of the interviews, I will ask for your permission to record the proceedings by means of either audio, video, or both as part of the data collection process. You still have the right to refuse any of these forms of obtaining your views.

After the data collection process, a preliminary report of the findings will be prepared and shown to you in order to approve of, or dispute its contents before a final report is written by the researcher. The findings of this research study will be compiled into a dissertation, part of which will also be published in a peer-reviewed scientific journal as part of disseminating knowledge within the community of researchers.

Your agreement to participate in the interviews of the above-mentioned research study is highly appreciated.

Sincerely.

**N.C. Mrwebo (Researcher)**

**Student Number: 41490606**

**Signature:**



**Tel:**  
**Cell:** 073 253 1516  
**Email:** carolinequnta@gmail.com

**Name of Participant:** \_\_\_\_\_ **Signature:** \_\_\_\_\_

**Signed at:** Gqebera **Date:** 31/04/2023

**Student's Academic Supervisor)**

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

**Professor ON Makhubela-Nkondo**

**Cell:**

**Email:**

## **APPENDIX 5A: PARTICIPANTS' INFORMED CONSENT**

I, Ncediswa Caroline Mrwebo am a registered Master's student in the Department of Health Studies at the University of South Africa (UNISA). I cordially request your participation in my research study entitled, **HEALTHCARE PERSONNEL EXPERIENCES OF AIDS PATIENT MANAGEMENT: CLINIC IN NELSON MANDELA MUNICIPALITY, EASTERN CAPE PROVINCE**

The main purpose of this proposed study is to examine/ explore and describe the role and experiences of health personnel in the treatment and management of HIV and AIDS patients at Laetitia Bam Community Health Care Centre, and make recommendations on how to improve or address the identified challenges. All the information obtained is strictly for research-related purposes only, and will not be used for any other purpose that is unrelated to this research project. Neither will any unauthorised third parties be privy to any aspect of the information obtained by means of semi-structured interviews personally administered by the researcher to the sampled research participants.

The expected nature of your involvement is by means of oral responses to questions posed to you by the researcher, as well as follow-up questions arising from your responses. You have the right to ask any further questions during the one-hour interviews, which will be held at a scheduled venue and time convenient to your availability. You are also at liberty to withdraw from the interview session as soon as you feel that the researcher has violated any of your human rights. Should that happen, you also have the right to legal recourse, or to immediately report the researcher to her academic supervisor, whose contact details are indicated below.

**Please note the following in relation to the COVID-19 regulations for the selected interviews at the research site:**

The individual interviews will still occur, albeit under changed COVID-19 compliant protocols. Prominent among these protocols is the wearing of masks, no handshakes, social distancing, hygienic sanitisation of hands and an ergonomically conducive environment. Only the experience of these 10 participants will be asked during the individual interviews at a pre-arranged room at the healthcare facility. The size of the room is 52 square meters. This room will be disinfected daily after the end of each interview session.

Prior to the actual commencement of the individual interview session, the room will be sanitised and its two windows kept open for cross-ventilation purposes. The door will be closed to prevent possible external disruptions. Inside the interview room, there will be three chairs and three tables; for the researcher, her assistant (who will assist with note taking) and healthcare professional or management member being interviewed. The interviewee will be seated at the centre of the room, with the researcher and her assistant next to him/her two metres apart. Both the researcher and assistant will also be two metres apart from each other. Another table will be placed between the interviewee and the researcher and her assistant for the audio recorder. All three will be wearing face masks, and the researcher will ensure that each interviewee's temperature is observed again, despite that every healthcare professional undergoes the same procedure daily on the premises as it is a healthcare facility visited daily by patients. After each interview session, the chairs, tables, audio recorder and door handles will be re-sanitised, despite that the procedure was undertaken prior to the commencement of the preceding interview session.

**Please note the following in relation to the COVID-19 regulations for the patients selected for the telephonic and virtual interviews:**

The Whatsapp platform will be used to send pre-recorded questions in the researcher's voice, and participants will respond individually at their respective homes and send their responses

back to the researcher by the same platform within a specified period of time. The researcher will buy data bundles for the selected patients due to their dire financial and socio-economic situations. Where necessary, telephonic follow-up will be done for unclear responses.

Please note that your involvement in the interviews is voluntary and uncoerced, and no financial incentives will be provided as a result of your participation. I will ensure that your participation is anonymous and confidential. You will not be required to disclose your name, place of residence or work, or names of your family/relatives. Prior to the commencement of the interviews, I will ask for your permission to record the proceedings by means of either audio, video, or both as part of the data collection process. You still have the right to refuse any of these forms of obtaining your views. You also have the right to withdraw **at any time** during the interviews.

After the data collection process, a preliminary report of the findings will be prepared and shown to you in order to approve of, or dispute its contents before a final report is written by the researcher. The findings of this research study will be compiled into a dissertation, part of which will also be published in a peer-reviewed scientific journal as part of disseminating knowledge within the community of researchers.

Your agreement to participate in the interviews of the above-mentioned research study is highly appreciated.

Sincerely,

**NC Mrwebo (Researcher)**

Student Number: 41490606

Cell: 073 253 1516

E-mail: [carolinequnta@gmail.com](mailto:carolinequnta@gmail.com)

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

**Name of Participant:** \_\_\_\_\_

Signature of Participant: \_\_\_\_\_

Signed at: \_\_\_\_\_

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

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

**Professor O.N. Makhubela-Nkondo (Student's Academic Supervisor)**

Cell:

Email:

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

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

**Professor E. Janse van Rensburg**

Chair: College Research Ethics Committee (CREC)

Tel: 012 429 6545

Email: [jvrenes@unisa.ac.za](mailto:jvrenes@unisa.ac.za)

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

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

## APPENDIX 5B: INFORMED CONSENT TO PARTICIPATE IN THE STUDY



### APPENDIX 5B: INFORMED CONSENT TO PARTICIPATE IN THE STUDY

I (participant name) confirm that the person asking for my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the <insert specific data collection method>.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname: ..... (please print)

Participant Signature: ..... Date: .....

Researcher's Name & Surname: Caroline Noediswa Mwebe (please print)

Researcher's Signature: ..... Date: 03-08-2020



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## APPENDIX 6: INTERVIEW GUIDE FOR HEALTHCARE PERSONNEL

### Personnel Experiences of AIDS Patient Management: Clinic in Nelson

#### Mandela Municipality, Eastern Cape

*'Grand tour' question: What is the nature and impact of challenges you experience regarding HIV/AIDS prevention, treatment and management at this health care centre/ facility?*

<b>A: Demographic Characteristics of Participants</b>			
No.	Questions	Responses	Code
1.	What is your age?	Write in full	
2.	What is your gender?	1. Male; 2. Female	
3.	Marital status	1. Single; 2. Married; 3. Divorced; 4. Widowed; 5. Separated	
4.	Nursing/ Educational background	1. Enrolled nurse; 2. Registered nurse 3. Auxiliary nurse	
5.	Work experience in years	1. 1-4 years; 2. 5-9 years 3. 10 years and above	
6.	Current position/ designation	1. Allied; 2. Nurse; 3. Doctor 4. Other (e.g. management)	
7.	Number of years in current position	1. 1-4 years; 2. 5-9 years 3. 10 years and above	
8.	Experience in Managing AIDS Patient	1. Preliminary; 2. Moderate 3. Advanced; 4. Adequate	
<b>B: Health Personnel Experience in the management of HIV/AIDS patients in the Clinic</b>			
9.	In what way do health personnel's management of HIV at this clinic relate to appropriateness of purpose?		
10.	How do health personnel balance HIV/AIDS management of basic regime		
11.	Please describe for me the quality of service provision regarding HIV in this health facility		
<b>C: Health Personnel Experience and Activities to Decrease the Burden of HIV/AIDS</b>			
12.	How is HIV testing offered or encouraged at this health care facility?		
13.	What measures are in place to enable ARV access to people living with HIV/ AIDS?		
14.	How has your HIV service provision affected your health?		
15.	As a member of the health personnel team in this health facility, how have you contributed in improving health quality & eliminating HIV risks to patients?		
16.	What are the HIV service provision challenges you experience in this health facility?		
<b>D: Health Personnel Experience and Programme Implementation of HIV Services</b>			
17.	How are HIV activities coordinated at this health facility? For example, prompt surveillance of HIV prevalence and monitoring and evaluation of related activities?		
18.	How does the institution respond to all confirmed HIV-positive personnel?		
19.	What is the nature of COVID-19 related challenges you have experienced as healthcare personnel at this health care facility?		
<b>E: Programme Implementation: Health Personnel Experience and Performance</b>			
20.	In your view, how do HIV care services affect staff morale and performance?		
21.	To what extent is the facility infrastructurally equipped to provide HIV care in your work area?		
<b>F: Personnel Experience Regarding Human Resources</b>			
22.	How often is HIV training provided to the health care personnel at this health care facility?		
23.	What are the existing HIV human resource opportunities and activities in the health facility?		



24.	Which are the HIV human resource challenges do you face at this health facility?
25.	What would you recommend for improvement of HIV human resource activities at this health care facility?

**THANK YOU FOR YOUR TIME AND PARTICIPATION!!**