

**The integration of previously hospital based  
Antiretroviral sites into Primary Health Care clinics in  
Lukhanji sub-district of Chris Hani District Municipality**

by

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## **ABSTRACT**

In 1981 the first country to take note of HIV/AIDS was United States of America in the report published by Atlanta based Centers for Disease Control (CDC) and Prevention (Barnett & Whiteside, 2006). In the past years ARV program was largely hospital-based where clients were assessed by doctors, discussed with multidisciplinary team which involved social workers, dieticians and pharmacists before initiated on treatment. The integration of ARV services into PHC was one of the strategies proposed to increase access to treatment for people living with HIV/AIDS (WHO, 2010).

The study sought to describe the integration of previously hospital based ARV sites into PHC clinics in Lukhanji sub-district of Chris Hani Health District in Eastern Cape. A qualitative research design was followed and a phenomenological approach was used to examine the experiences of clients who previously took ARV treatment at Frontier hospital and were transferred to take treatment at Ezibeleni, Ilinge, Philani and Sada clinics. An interview guide was used for data collection. Participants were sampled through purposive sampling. The study was composed of four focus groups for clients with a total of forty (18 males and 22 females) and 10 professional nurses for semi structured individual interviews.

In the analysis of data, the collected data from voice recordings were transcribed verbatim and translated from *isiXhosa* to English. The researcher immersed herself into the data, re read, and themes and sub-themes emerged. Related topics to each other were grouped together in order to reduce the number of categories and to create themes. The similar categories were grouped and analyzed. Findings indicated that integration of ART sites into PHC clinics was a strategy put in place to increase accessibility and availability of ARV treatment to all communities.

Both participants stated that integration brought services nearer to people and caused much relief from spending more money for travelling long distances. Ambulance delays were reported by both participants as the major challenge in the referral system between clinics and the hospital. Other challenges facing integration of ART services into PHC clinics included long waiting times caused by shortage of staff in the clinics, lack of consulting rooms for nurses and waiting areas for clients. Also lack of other health care professionals including social workers, dieticians, and psychologists was mentioned. The recommendations made by the researcher on the conclusion of this study addressed all the challenges mentioned by participants. The aim was to increase accessibility and availability of ART services to all the communities.

## **DECLARATION**

I, Nonkoliso Pakade, Student Number 213240785, solemnly declare that this thesis entitled "The integration of previously hospital based Antiretroviral sites into Primary Health Care clinics in Lukhanji sub-district of Chris Hani Health District Municipality" is my original work. All sources used or quoted in the study have been indicated and acknowledged by way of references.

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## **DEDICATION**

This study is dedicated to PHC clinics of Lukhanji sub-district and Frontier Regional hospital ARV staff for their support and encouragement, without their endless support it would not have been possible for me to complete this study. Also to all health care professionals who are managing HIV/AIDS infected and affected people. They are the source of my motivation and inspiration.

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## **Definition and operationalization of terms**

### **Acquired Immune Deficiency Syndrome (AIDS)**

AIDS is a severe immunological disorder caused by the human immune virus, resulting in a defect in cell-mediated immune response that is manifested by increased susceptibility to opportunistic infections. It is transmitted by exposure to contaminated body fluids, especially blood and semen (Abdool Karim, 2010). AIDS is the late stage of infection with the human immune virus which destroys CD4 T-cells that are crucial in fighting diseases. People can be infected when they come in contact with the virus through unprotected sexual activity, intravenous drug use, or exposure to the blood of an infected person. 20 years after the discovery of HIV, AIDS became the world's leading infectious cause of adult deaths (McKenzie, Pinger & Kotecki, 2012). In this study AIDS refers to an incurable disease that can be managed by introduction of Anti-Retroviral Treatment that have been integrated to PHC from previously hospitalized based ARV sites.

### **Antiretroviral therapy (ART)**

ART refers to the lifelong treatment used to reduce HIV related mortality by providing maximal and durable suppression of viral load, restore immune system by increasing CD4 cell count in order to improve the quality of life and delay the onset of AIDS. ART is highly active in reducing the multiplication of HIV and causes the reduction in the level of HIV in the blood and other organs, thus suppresses viral load to lower than detectable level and boost CD4 cell count (Clinical guidelines for management of HIV/AIDS in adults & adolescents, 2010). In this study ART refers to a combination of drugs that are prescribed by a trained nurse in PHC to eligible clients to suppress viral load and reduce progress of HIV infection.

## **Human Immune Virus (HIV)**

HIV is a retrovirus that attacks the body's immune system which multiplies rapidly over a million times a day. There are two types of HIV, HIV type1 which is more common, aggressive and spreads more easily and can progress to AIDS quickly, HIV type11 is found mainly in West Africa. HIV continues to devastate population of people who do not have access to life-long medical care and treatment (Evian, 2011). In this study HIV is the human immunodeficiency virus that attacks immune system and can be prevented.

## **Integration**

Integration is defined as a variety of operational changes to health systems to bring together inputs, delivery, management and organization of particular service function. The goal of integrating ARV sites into PHC was to achieve equity and improve accessibility, availability, affordability effectiveness and efficiency of services through decentralized management services and localized service provision (WHO, 2010). In this study integration refers to incorporation of previously hospital based ART services into existing PHC services

## **Primary Health Care (PHC)**

The World Health Organization (1978) identified PHC as an essential health care based on practical, scientifically sound and socially acceptable methods and technology, made universally accessible to individuals and families in the community, through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development, in the spirit of self-reliance and self-determination (Stanhope & Lancaster, 2008). The Primary Health Care is an approach to produce health care resources that focuses on provision of essential health care using socially acceptable and affordable methods and technology, accessibility, public participation in policy development and intersectoral collaboration (Clark, 2008). In this study PHC refers to improving accessibility of ART to individuals through integration of previously hospital based ARV sites into PHC in Chris Hani health district.

## **ABBREVIATIONS**

<b>AIDS</b>	Acquired Immunodeficiency syndrome
<b>ARV</b>	Antiretroviral
<b>ART</b>	Antiretroviral therapy
<b>ATICS</b>	AIDS Training and Information Centre
<b>CDC</b>	Centre for Disease Control
<b>CD4</b>	Cluster of Differentiation four
<b>DOH</b>	Department of Health
<b>FDC</b>	Fixed Dose Combination
<b>CAGS</b>	Community ART Group
<b>HAART</b>	Highly Active Antiretroviral Therapy
<b>HCT</b>	HIV Counseling and Testing
<b>HIV</b>	Human Immunodeficiency Virus
<b>HST</b>	Health Systems Trust
<b>IPHC</b>	Integrated Primary Health Care Project
<b>MDG</b>	Millennium Development Goals
<b>MSH</b>	Management Sciences for Health
<b>MDR</b>	Multi Drug Resistant
<b>NDOH</b>	National Department of Health
<b>NGO</b>	Non-Governmental Organization
<b>NHI</b>	National Health Insurance
<b>NIMART</b>	Nurse initiated and managed ART
<b>NSDA</b>	Negotiated Service Delivery Agreement
<b>NSP</b>	National Strategic Plan
<b>PCR</b>	Polymerase Chain Reaction
<b>PEPFAR</b>	Presidents Emergency Plan for AIDS
<b>PHC</b>	Primary Health Care

<b>PMTCT</b>	Prevention of Mother to Child Transmission
<b>RDP</b>	reconstruction and Development Program
<b>SA</b>	South Africa
<b>SAJHIVMED</b>	Southern African Journal of HIV Medicine
<b>SAMJ</b>	South African Medicine Journal
<b>SANAC</b>	South African National AIDS Council
<b>STI</b>	Sexual Transmitted Infection
<b>TB</b>	Tuberculosis
<b>UNAIDS</b>	United Nations Program of HIV/AIDS
<b>UNICEF</b>	United Nations Children’s Fund
<b>URC</b>	University Research Council
<b>WHO</b>	World Health Organization
<b>XDR TB</b>	Extensively Drug Resistant Tuberculosis

# **CHAPTER 1**

## **ORIENTATION AND OVERVIEW OF THE STUDY**

### **1.1 Introduction**

In 1981 the first country to take note of Human Immune Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) was United States of America in the report published by Atlanta based Centers for Disease Control (CDC) and Prevention (Barnett & Whiteside, 2006). In 2007 United Nations Program of HIV/AIDS (UNAIDS) estimated that, 33 million people were living with HIV globally. In the same year 2.7 million people became infected with HIV and two million people died of HIV related causes. Of the 2.7 million new infections, it was estimated that 1.9 million occurred in sub-Sahara Africa (UNAIDS, 2008).

The estimated 2011 South Africa (SA) national HIV prevalence was 29.5% showing a drop of 0.7% from the 2010 national HIV prevalence of 30.2%. In 2011 an estimated 5, 6 million people living with HIV resided in South Africa. In 2012 South Africa had the world's highest number of 6.1 million people living with HIV, all of whom will require antiretroviral (ARV) treatment in the next decade (UNAIDS, 2013). The HIV prevalence estimates across provinces vary from year to year. In 2010 provinces that recorded the highest HIV prevalence were Kwazulu-Natal with 39.5%, but there was a notable drop to 37.4% in 2011. Mpumalanga increased from 34.7% to 36.7%. In 2011 Free State increased from 30.6% to 32.5%. Eastern Cape had 29.9% HIV prevalence and the new Buffalo city district had the highest HIV prevalence of 34.1% (Department of Health, 2011).

The accelerated roll-out of ARV therapy at the clinic level was accompanied by strengthening of HIV counseling and testing (HCT) services and prevention of mother-to-child transmission (PMTCT) programs (Department of health, 2010). However the HIV World Global fund made billions of dollars available to treat people with HIV, and ensured the availability of ARV treatment to stop HIV multiplication in the body which gave hope to people with HIV (Evian, 2011).

In the past ARV program initiation had been largely hospital-based where clients were assessed by a doctor, discussed with multidisciplinary team which involved social worker, dietician and pharmacist before initiation on treatment. The availability of radiology and laboratory services within the hospitals also made it easy for the doctors to make a quick and clear diagnosis to the client and be able to initiate on correct treatment. The integration of ARV services into Primary Health Care (PHC) was proposed to increase access to treatment for people living with HIV/AIDS (WHO, 2010).

In December 2012, on the World AIDS Day, the Health Minister Dr Aaron Motsoaledi announced that South Africa have made a great progress towards reaching the treatment target goal of 80% coverage, classified by WHO as being universal access. Following the launch of HCT campaign in 2010, the number of people on ART had increased to 1.4 million in 2011 and in 2012 the target of universal access was reached as the total number of people receiving ARV treatment was two million (Van Dyk, 2012).

## **1.2 Background of the study**

In 2003, the South African National Department of Health launched the national ARV roll-out with its Comprehensive Plan for the Care, Management and Treatment of HIV and AIDS Operational Plan. Its aim was to achieve universal ARV access to an estimated 1.4 million people in need of ARVs at that stage within five years (Clinical guidelines for management of HIV/AIDS in adults & adolescents, 2004).

In 2010 International debate continued on the merits of horizontal versus vertical programs for delivering HIV care in developing countries. The advantage of vertical stand-alone program was their ability to deliver rapid roll-out of the type of complex health intervention needed to tackle HIV. However, it is thought that such vertical programs will not be able to achieve universal access and that they need to be broadened using the new so-called diagonal approach (Cameron, Gerber, Mbata, Mutwabule & Swaart, 2012).

Effectively managing the demands of the nationwide scale-up of ARV delivery will require a far more robust PHC system and committed leadership at all levels. It will also necessitate substantial investment in the recruitment, training and support of thousands of new lay counselors and nurses to manage the demands of the roll-out on local health services and personnel. The Nurse-initiated management of antiretroviral (NIMART) course was developed as a response to action by the South African government to strengthen the response to HIV and TB epidemics. It was specifically developed for and aimed at nurses working in the field of HIV and TB. Although it was a significant challenge, this was achievable and efforts were promising (Evian, 2011).

Development of ARV services at community and district level had resulted primarily from the efforts of motivated individuals, non-governmental organizations (NGOS) and the private sector working in defiance of official policies. Under the direction of the National Department of Health (NDOH), a team of officials from each of the nine newly-established provinces drafted a detailed implementation strategy for the development of the decentralized, district-based health system (Kautzky & Tollman, 2008). The integration of ARV services into PHC was one of the strategies proposed to increase access to treatment for people living with HIV/AIDS.

Task shifting and the integration of HIV Care into PHC services have been identified as possible strategies for improving access to antiretroviral treatment. A paradigm shift in health care was undergone whereby responsibilities that used to belong to doctors have been shifted to nurses, among others initiation of antiretroviral treatment is now carried out by nurses at PHC level. Only clients with complications are referred to doctors at hospitals for further management (Clarke, 2014).

There are few recommendations on effective strategies to integrate HIV care into PHC because there is little evidence that integration of health care programs does improve patient outcomes. Despite the concept of integration, there is little evaluative literature available in the Chris Hani health district on integration of previously hospital based ARV sites into PHC clinics of Lukhanji sub-district. Therefore research studies on integration of ARV services into PHC clinics are needed (Uebel, Timmerman, Ingle, Van Rensberg & Mollentze, 2010).

### **1.3 Problem statement**

Problem statement is described as an area of concern in which there is a gap or a situation in need of a solution, improvement or alteration. A situation whereby there is a discrepancy between the way things are and the way they ought to be and these problematic situations stimulate interest and prompt investigation (Burns & Grove, 2009). The problem statement articulates the problem and describes the need for a study through development of an argument (Polit & Beck, 2012).

However, in the previously hospital based ARV sites clients were holistically treated by multidisciplinary team consisting of doctors, nurses, pharmacists, social workers, dieticians and radiologists as opposed to the situation at PHC clinics whereby patients are seen and initiated on ART by Nimart trained registered nurses only. There are no full time doctors, social workers, pharmacists and dieticians as they used to care for clients on ART whilst these services were hospital based (Conradie, 2013).

In 2012, 62% of Nimart trained nurses started initiating adult clients on ART in SA and they experienced barriers including shortage of staff, inadequate consulting rooms, lack of clinical mentoring, question of confidentiality and privacy (Cameron, Gerber, Mbata, Mutyabule & Swaart, 2012). Therefore, it appears that the integration of ART in PHC clinics has more challenges such as dissatisfied and complaining clients that are on ART.

### **1.4 Purpose of the study**

The purpose of the study is generated from the problem and it identifies the specific goal of the study, it often indicates the type of the study to be conducted (Burns & Grove, 2009). The purpose of this study was to describe the experiences of clients taking ARV treatment and professional nurses managing clients on ART regarding the integration of previously hospital based ARV sites into PHC clinics in Lukhanji sub-district of Chris Hani District Municipality in Eastern Cape.

### **1.5 Research question**

Research questions are the specific queries researchers want to answer in addressing the problem and these guide the type of data to collect in a study (Polit & Beck, 2012). The research question for this study was:

- What were the experiences of clients taking ARV treatment and registered nurses managing clients on ART regarding the integration of previously hospital based ARV sites into PHC clinics in Lukhanji sub-district of Chris Hani District Municipality?

### **1.6 Research Objectives**

Research objectives are clear, concise declarative statements that are expressed in the present tense. Objective usually focuses on one or two variables and indicates whether the variables are to be identified or described (Brink, 2008). The objectives of this study were:

- To describe the lived experiences of clients taking ARV treatment regarding the integration of previously hospital based ARV sites into PHC clinics of Lukhanji sub-district
- To explore the live experiences of professional nurses regarding the integration of previously hospital based ARV sites into PHC clinics of Lukhanji sub-district

### **1.7 Significance of the study**

The practical significance of the study is associated with its importance to nursing body of knowledge resulting in nurse's ability to make alternate decisions to improve integration of ART services into PHC clinics (Burns & Grove, 2009). The study will be of value to the Department of Health as it is introducing a number of innovative strategies to enhance adherence to ART and management of HIV. The results of the study were made available to Chris Hani health district and could be transferable to improve the integration of ARV services in other clinics in the same district.

## **1.8 Summary**

Strategies to improve access to ART in developing countries with health system constraints included task shifting, community mobilization as well as integration of HIV care and provision of ART into PHC services. Therefore clinic factors, nurses and clients preferences in relation to care delivery should be taken into account in programs to integrate HIV care into PHC services. The integration of medical records, monitoring and reporting systems would support efforts to integrate previously hospital based ARV sites into PHC clinics at Lukhanji sub-district in Chris Hani health district (Uebel et al, 2010).

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The literature review is an organized written presentation of what has been published on a topic by other researchers and includes a presentation of research conducted in the field of study. The review should be organized into sections that present themes or identify trends. It provides the current theoretical and scientific knowledge about a particular problem, and resulting in a synthesis of what is known and not known, and it also produces a background for conducting the study and interpreting the findings (Burns & Grove, 2009). The time required to review the literature is influenced by the problem studied, sources available and goals of the reviewer. This chapter focused on the literature review undertaken to describe the experiences of clients regarding the integration of previously hospital based ARV sites into PHC clinics in Lukhanji sub-district

#### **2.2 History of HIV/AIDS in United States of America**

The history of HIV/AIDS began in 1979 and 1980 when doctors in the United States observed clusters of previously extremely rare diseases. These included a type of pneumocystis carinii and a previously rare cancer called Kaposi's sarcoma (Barnett & Whiteside, 2006). Epidemiology and transmission of HIV was not known and initially it was thought that only homosexuals were affected by HIV. The disease was also occurring in hemophiliacs and Haitian immigrants in USA (Abdool Karim, 2010). In 1982 the disease was named Acquired Immune Deficiency Syndrome. The mode of spread was detected after a 20 month old child who received blood transfusion died from infections related to AIDS. Later it was reported that the disease could be transmitted heterosexually (Naidoo & Wills, 2011).

Politicians, policy makers, community leaders and academics all denied that the epidemic of HIV/AIDS would affect not only the health of individuals but also the welfare and well-being of households, communities and the entire societies. HIV/AIDS has changed the lives of individuals, ruined their health, caused deaths and left survivors to mourn.

AIDS has altered the history of many of the world's poorest societies. In the absence of the effective and available vaccines and effective treatments, AIDS was expected to wipe out half a century of development gains as measured by life expectancy at birth (Van Dyk, 2012). The most dramatic demographic impact of AIDS will be not on the size of the population but on its age structure. As young and middle aged adults were affected by AIDS the most, there will be disproportionate numbers of old people and children in the population thus the population age pyramid will be skewed (Allender, Rector & Warner, 2010).

### **2.3 HIV/AIDS in South Africa**

In 1982 the first case of AIDS was reported in South Africa and by the end of 1989, a number of surveillance studies confirmed the entry of HIV into the heterosexual population in South Africa. Since the mid-1990s the AIDS epidemic has risen steadily in S.A and by end 2007 an estimated 5.3 million South Africans were HIV positive where 2.8 million women and 2.3 million men between the ages of 15-49 years were infected (Naidoo & Wills, 2011).

The initial response to HIV/AIDS in SA was similar to the worldwide one, which was denialism, blaming, moralizing and it was seen as a gay disease that would sort itself out and disappear in time. In 2005 The SA National Department of Health and Population Development focused on the need for information dissemination, counseling and HIV testing by establishing a number of AIDS Training and Information Centers in. The SA government declined to fund the provision of antiretroviral zidovudine for pregnant women to prevent mother-to child transmission of HIV and this resulted to community action for AIDS treatment and the Treatment Action Campaign led by Zakie Achmat was formed in 1998 (Van dyk, 2012).

One of the positive decisions of SA government in 2003 was to provide antiretroviral therapy free to all South Africans in the public health services. In 2006 at the International AIDS Conference in Toronto, Minister Tshabalala-Msimang announced her support of vitamin supplements as cure for AIDS and her promotion of vegetables e.g. garlic, beetroot and lemon as an alternative for antiretroviral treatment (Abdool Karim, 2010).

In 2009 the newly elected government in SA, under President Jacob Zuma and Minister of Health Doctor Aaron Motsoaledi responded positively with enthusiasm to antiretroviral therapy rollout. On the World AIDS Day in December 2009 President Zuma announced new key interventions to improve antiretroviral therapy access to special group such as pregnant women and patients with TB/HIV co-infection, to decrease burden, to address maternal and child mortality, and to improve life expectancy (National Strategic Plan, 2012-2016).

In 2010 the new clinical guidelines for the management of HIV/AIDS in adults, adolescents and children as well as guidelines to prevent mother to child transmission of HIV were implemented. The SA Department of Health also launched an HIV counseling testing campaign with the aim to increase the uptake of testing and provide an integrated service to all South Africans. From 2010 to 2011, the SA National HIV Counseling and Testing Campaign, which supported the ART program, was conducted over a 15 month period and managed to reach close to 20 million people (Department of health, 2010).

## **2.4 History of PHC in USA**

In 1970 the Primary Health Care concept emerged, when ideas about health care began to change generally and specifically in relation to developing world (ANC National Health Plan, 1994). In 1978 the role of PHC was historically based on the worldwide conference that was held at Alma Ata. WHO actively promoted primary health care and maintained that the training of health care workers must be based on current primary health care practices.

They advocated for community members to be involved in all aspects of the planning and implementation of health services that were delivered to their communities. Because of differences among countries with respect to implementation of primary health care, it was anticipated that several major components should be included in health service plans (WHO, 1978).

In 1978 the Alma Ata Conference participants emphasized universal access and participation and encouraged a re-allocation of resources, to reduce the inequality of health care that existed among the nations in the world. They encouraged community participation in all aspects of health care planning and implementation and the delivery of health care that was scientifically sound, technically effective, socially relevant and acceptable. These aims continue to be reinforced and modified and were updated to Incorporate Millennium Development Goals (Stanhope & Lancaster, 2008).

PHC shifts emphasis of health care to the people themselves and their needs reinforcing and strengthening their own capacity to shape their lives, it also focuses on the individual and community strengths and opportunities for change, maximizes the involvement of the community, includes all relevant sectors and uses health technologies that are accessible, acceptable, affordable and appropriate (Clark, 2008).

PHC needs to be delivered close to the people, thus should rely on maximum use of both lay and professional health care practitioners and it consists the following eight essential components: Education for the identification and prevention/control of prevailing health challenges, Proper food supplies and nutrition, adequate supply of safe water and basic sanitation, Maternal and child care, including family planning, Immunization against the major infectious diseases, Prevention and control of locally endemic diseases, Appropriate treatment of common diseases using appropriate technology, Promotion of mental, emotional and spiritual health, Provision of essential drugs (McKenzie, Pinger & Kotecki, 2012).

## **2.5 PHC in South Africa**

In the twentieth century, South Africa was a global leader in the conceptualization and development of the Primary Health Care approach. Despite the genuine commitment to achieving "Health for All", a series of obstacles continued to limit the full implementation of Primary Health Care. These include the HIV/AIDS pandemic, health worker shortage and inequities in resource distribution. In 1994, immediately after installation of Nelson Mandela as country's president, primary health care services available at public sector clinics throughout South Africa were declared 'free' at the point of delivery (Schaay & Sanders, 2008).

The legacy of apartheid policies in South Africa created large disparities between racial groups in terms of socio-economic status, occupation, education, housing and health. The policies have created a fragmented health system, which resulted in inequitable access to health care. Before 1994, South Africa had a highly fragmented and bureaucratic health care system. Vertical fragmentation was through service differentiation amongst the national government, provinces and local authorities. Public health services for whites were better than those for blacks and those in rural areas. This was evident in the health indicators where infant mortality, maternal mortality and incidence of infectious disease like TB, HIV, and measles were higher among black people (Stanhope & Lancaster, 2008).

In 1994 the African National Congress had developed a National Health Plan based on PHC approach for South Africa in preparation for democracy. The goal was the creation of a comprehensive, equitable, unitary and integrated national health system. The challenge facing South Africans was to design a comprehensive program to redress social and economic injustices, eradicate poverty, reduce waist, and increase efficiency and to promote greater control by communities and individual over all aspects of their lives (ANC National Health Plan, 1994).

A basic rights approach within the public health system has ensured access to health care for all South Africans, especially the poor. The initial hopes were characterized by one statement of “a better life for all”. For health sector, the government included eradication of racially based services, free health care for pregnant women and children, later extended to people with disabilities, nutrition support in primary schools and a massive clinic building program to improve access to health services (Kautzky & Tollman, 2008). The Primary Health Care approach was the underlying philosophy for the restructuring of health system and it aimed to reduce inequalities in access to health services, especially in deprived communities from rural areas. The health sector activism was lacking except in the HIV/AIDS arena where the Treatment Action Campaign was extremely successful in influencing the political discourse and the policy process (Van Dyk, 2012).

## **2.6 Legal and policy framework on integration of HIV services into PHC**

As the apartheid regime’s control eroded and prospect of a new political dispensation became evident, the opposition movement sought to enunciate its vision and policy for a new democratic South Africa, marked by development of the African National Congress National Health plan. In 1994 the National Health Plan presented to the public drew much of its inspiration from the country’s early community-oriented primary care experience. Framed by Alma ata Declaration, the National Health Plan was designed in close consultation with technical experts from the WHO’s Division for strengthening health services (ANC National Health Plan, 1994).

The National Health Plan sought to eliminate the fragmentation and duplication of services by integrating all health services under a single Ministry of Health, to decentralize the organization and management of health services through a well-coordinated district health system, and to make comprehensive community based health care accessible to all South Africans by establishing PHC centers as foundation of the national health system (WHO, 2008).

In 2012 the Minister of Health, Doctor Aaron Motsoaledi alluded that “As we approach the 2015 milestone of the Millennium Development Goals we need to fully understand the cause of maternal mortality and do everything to avert all avoidable maternal deaths”. The SA Department of health had taken into account the recommendations arising from the Saving Mothers Reports and in addition to strengthen health systems it took the bold step to re-engineer Primary Health Care by establishing district clinical specialist teams, ward-based community nursing and strengthening school health services. These three streams will assist in improving the quality of health care to mothers, newborns, children and adolescents. Care of the pregnant HIV infected women had focused on preventing transmission of HIV to the baby and PMTCT program has been successful (National Committee on Confidential Enquiries into Maternal Deaths, 2010).

## **2.7 Types of integration of health services in South Africa**

There are three types of integration that are currently being addressed in South Africa. These are programme integration, functional integration and structural/organizational integration (Van Rensburg, 2008).

### **2.7.1 Health care Programme integration**

Traditionally, health care programmes have been implemented vertically. With the escalation of health care costs as well as the introduction of the DHS, there was a need to reduce the number of vertical programmes implemented by specialized staff. The DHS model has been adopted internationally in a move towards civil service reform. In the South African context, programme integration is viewed as a subset of functional integration rather than as a separate entity (WHO, 2008).

### **2.7.2 Health care functional integration**

Functional integration refers to service delivery and it is further explained as the integration of provincial and local government health services for the purpose of decreasing fragmentation and duplication. It requires that the multiple health services and programmes rendered under multiple health authorities in the same district be brought into a seamless service (Van Rensburg, 2008).

Functional integration is not only an important step in preparing for working together, it is also a vital step in securing the delivery of integrated comprehensive PHC services.

### **2.7.3 Health care structural or organizational integration**

This entails that the different health service rendering authorities within a district be collapsed and integrated into one unified authority and administrative structure (WHO, 2008). Therefore structural integration involves change in policy framework. Legislative framework is required to ensure stability and sustainability of the new arrangement. However, functional integration is a transitional measure or a first step that needs to take place before structural integration can be accomplished.

## **2.8 Integration of HIV/AIDS and ARV services into PHC**

Antiretroviral treatment had been widely available in the developed world in the past decade but the possibility of getting treated for HIV in developing countries was far beyond the reach of the majority of people living in the developing world, despite their burden of disease. People who became infected with HIV do not need treatment with ARVs immediately. There is an asymptomatic period during which the body's immune system controls the HIV infection. After some time the rapid replication of the virus overwhelms the immune system and the patient is in need of ARVs (Schaay & Sanders, 2008).

Previous studies by the United States Agency for International Development (USAID) funded Health Systems project and studies by the World Health Organization indicated that HIV/AIDS care was delivered in such a way that it contributed to primary health care system of Ukraine health system to address their most basic clinical needs. The Government of Ukraine realized that in order to make its response to HIV/AIDS more cost-efficient, it must include PHC more fully as part of the response. The need for integrating HIV/AIDS services more fully into PHC was immediate since many innovative tools for making integration possible were tested in PHC health reform sites. Lessons learned were shared from health reform sites to sites where health managers were moving towards better integration of HIV/AIDS services into PHC, thus leading to the HIV/AIDS response less stigmatizing and more effective and more cost-efficient (WHO, 2008).

The Reconstruction and Development Program which built on the work of the ANC health desk, called for complete transformation of the entire delivery system and introduction of district health authorities and further suggested that the whole National Health System to be driven by the PHC approach with the emphasis on community participation and empowerment, inter-sectoral collaboration and cost-effective care as well as integration of preventive, promotive, curative and rehabilitation services (Lehman, 2008).

There was now a shift for caring for the terminally ill community members due to AIDS and TB from hospital based care to the family and community centered care, hence the re-engineering of PHC strategy emphasized the importance of caring individuals in the community. However, this strengthened the idea of integrating HIV/AIDS, TB, ART services into PHC, which were initially rendered at the hospitals. South Africa was committed in improving the health status of the citizens and reducing morbidity and mortality due to HIV/AIDS. This was done by providing HIV Counseling and Testing (HCT) program; Provider Initiated Counseling and Testing, Voluntary Medical Male Circumcision and ARV'S for PMTCT (Conradie, 2013).

The SA NDOH guidelines on treatment and care stipulated that all health facilities should have referral systems in place for home based care. Integration of services became a reality in the service delivery at integrated Primary Health Care project supported facilities. The project focused on strengthening the district health system , building a cadre of health care workers who are competent in planning, implementing and evaluating comprehensive high quality PHC services (IPHC, 2010). Accreditation of PHC's as ARV sites means that clients can collect their ARV's at the same facilities, instead of visiting different facilities. Client's treatment need to be monitored by home based carers in order to ensure adherence. As a result of these initiatives, stigma was gradually reduced and HIV clients finding more acceptances in their communities (Department of health, 2010).

In 2005 in the Eastern Cape Province, various districts were supported by the Integrated Primary Health Care Project (IPHC) which was established through funding from USAID and PEPFAR. Management Services for Health (MSH) played the role of the leading partner in the IPHC project with the Health Systems Trust (HST) as collaborating partners up until end September in 2008. The project was extended to run until 2010 under MSH without partnership of HST. IPHC focused on strengthening District health care facilities at the primary level of support through ensuring planning, implementing and evaluating comprehensive, high quality PHC in a sustainable manner. This includes the roll out of ARV drugs, the introduction of new approaches to performance based management in the public sector, the establishment of a monthly PHC review system and the creation of facility to facility mentoring. These are support systems to ensure improved data management and quality care (Management Sciences for Health, 2005-2009).

## **2.9 ART implementation plans**

In 2007, the SA Department of Health published its National Strategic Plan (NSP) with detailed annual goals, aiming to achieve access to ARVs for 80% of the people who would need them by 2011, and defining the need for ARVs the number of new AIDS clients, estimated at about 520 000 annually, from 2007 to 2011. SA Department of Health has adopted a 10 point plan for 2009-2014, which consists of 10 priorities. Priority- seven refers to the accelerated implementation of HIV/AIDS plan and the reduction of mortality due to TB and other associated diseases (NSP, 2007-2011).

In the Free State Province, the ARV roll-out began in mid-2004 as a vertical program with plans to establish ARV sites in each of its 20 local areas. Two types of ARV were established. Treatment sites were led by doctors, where patients were referred for initiation and monitoring of ARVs. These were linked to nurse-led assessment sites (Uebel, et al., 2010).

New policies and strategies were implemented during 2010/11- 2012/13 to combat the scourges of HIV/AIDS and TB, where all children less than one year of age who tested positive for HIV were initiated on treatment, irrespective of their CD4 count. Antiretroviral Treatment (ART) was provided to pregnant women at CD4 count of 350 or less, to enhance maternal survival. ART was also provided to people co-infected with TB and HIV at a CD4 count of 350 or less (Department of health, 2010).

Pregnant women who do not qualify for full HAART received dual therapy for PMTCT from 14 weeks of pregnancy until post-delivery. This contributed significantly to reducing morbidity and mortality associated with TB and HIV/AIDS. Most importantly, HIV/AIDS and TB were being treated under one roof. This integration of services was also extended to the delivery of Antenatal Care and the PMTCT. The key objective was to improve the quality of life and life expectancy of people living with AIDS (National Committee for Confidential Enquiry into Maternal Deaths, 2008-2010).

Successful implementation of three strategic plans, that is, NSP for HIV/AIDS and STI 2007-2011, NSP for TB management 2007-2011 and five year NSP for Maternal Child and Women's Health, provided an important vehicle to steer the public health sector in South Africa towards attainment of the following outcomes: Reduction of childhood mortality by two-thirds by 2015, which is consistent with Millennium Development Goal (MDG) four, reduction of maternal mortality by three-quarters (75%) which is consistent with MDG five and reducing the incidence of HIV and managing HIV prevalence, which is consistent with MDG six (National Strategic Plan, 2007-2011).

The NSP (2012-2016) was a single integrated strategy for HIV, STI and TB developed due to the high co-infection rate between HIV and TB. This strategy was developed around a bold twenty year vision for South Africa, which focused on zero new HIV and TB infections, zero deaths associated with HIV and TB and zero discrimination related to HIV and TB. The strategic objectives, and interventions described in the NSP were aimed at achieving this twenty-year vision through a focus on the following five goals for the period 2012-2016: Reduce new HIV infections by at least 50% using combination prevention approaches, initiate at least 80% of eligible patients on

antiretroviral treatment, with 70% alive and on treatment five years after initiation, reduce the number of new TB infections as well as deaths from TB by 50%, ensure an enabling and accessible legal framework that protects and promotes human rights in order to support implementation of the NSP and reduce self-reported stigma related to HIV and TB by at least 50%. The NSP focused at a high level on the strategic interventions required from all sectors of society to reserve the HIV and TB epidemics and was launched on 01 December 2012 (NSP, 2012-2016).

## **2.10 Scaling up of antiretroviral treatment in South Africa**

By the end of 2008, five years after the public sector ART program was launched an estimated 700.500 people were accessing ART and this constituted only 40% of those estimated to be in need of ART. This was a result of vertical stand-alone ART program rollout in South Africa. Vertical approaches use planning, staffing, management and financial systems that are separate from other services, whereas horizontal approaches work through existing system structures (Walley, Lawn, Tinker, Francisco, Chopra, Rudan, Bhutta & Black, 2008). Approaches to incorporate ART into general health systems included the referral of patients stabilized on ART from ART clinics in hospitals to primary health care clinics where they could receive monthly supplies of treatment, that is, down referral system (Lehman, 2008).

In order to strengthen the idea of integration of ARV services into Primary Health Care, A Community ART Group was formed to assist with access, adherence and retention in care and to reduce the workload of saturated service in Tete Province in Mozambique, and should showed preliminary outcomes. About one in five patients were loss to follow-up and at least half of the losses were estimated to be deaths. In order to improve the situation, consultations took place between patients and counselors at provincial health facilities, where the patients identified the main barriers to ART access as transport costs, perceived stigma from being seen attending the clinics and long waiting times at clinics. In Mozambique, ART guidelines only recommend six monthly monitoring for stable patients, but drugs must be collected monthly. A Community ART Group (CAG) Model was proposed in order to use existing social network to take resources closer to people so that each person did not have to travel and queue every month for their medicine (Decroo, 2011).

SA Government had adopted a new outcome based approach to accelerate attainment of the objectives outlined in the Medium Term Strategic Framework 2009-2014, one of the objectives being to improve the health profile of all South Africans. The ten point plan of the Health Sector aimed at creating a well-functioning health system capable of producing improved health outcomes. Priority seven of the ten point plan alluded to accelerated implementation of the HIV/AIDS plan and the reduction of mortality due to Tuberculosis (TB) and associated diseases (NSP, 2012-2016).

In the South African HIV Clinicians Society Conference, held in November 2012 in Cape Town, Dr Aaron Motsoaledi, South African Minister of Health announced two very important strides for the national antiretroviral therapy (ART) program. Firstly for the first time, fixed dose combination (FDC's) were introduced, meaning that most patients who receive first line therapy had to take a combination of three drugs, which are Tenofovir, Lamivudine/Emtricitabine and Efaviranz into one drug a day which has a low cost compared to the three drugs. The Society has to train and educate health care workers and patients on how and when to change to FDC's. Secondly, all HIV- infected pregnant women were given triple therapy- usually the single dose FDC- irrespective of their CD4 cell count, to eradicate mother to child transmission of HIV (Conradie, 2013).

### **2.11 Guidelines and protocols for ART implementation**

Internationally there was no agreement as to which antiretroviral drug regimen is best. The choice of regimen depends on many factors such as availability of drugs and the clinical history of the patient. National antiretroviral guidelines in each country should be followed. It was an ongoing research challenge to find new categories of drugs and the most suitable combination of drugs for various groups of clients with their distinct needs.

In the scientific community it was widely accepted that an adherence level of at least 90% was necessary to suppress the virus sufficiently, to avoid the risk of mutation, and to prevent the development of drug resistant strains and drug failure. Despite the mass health education and the roll out of ARV medication, the mortality and prevalence rate of HIV/AIDS continued to increase. Provision of ARV treatment to people living with HIV/AIDS encounters many challenges associated with adherence (Department of health, 2007-2011).

In 2003 the lives of thousands of HIV- infected South Africans changed for the better when the South African Government made ARV's publicly available. The South African HIV Clinicians Society (2008) recommended that maximally suppressive antiretroviral regimens should be used to obtain the best clinical results and to prevent resistance. Highly active antiretroviral therapy with three antiretroviral agents was recommended for optimal results. Dual therapy (treatment with two drugs) was currently used in the prevention of mother-to-child transmission of HIV (Kautzky & Tollman, 2008). Antiretroviral therapy should be delayed until patients are prepared to commit themselves to long- term treatment and to maintaining good adherence to the therapy. The treatment guidelines of the Department of Health recommended that antiretroviral therapy be initiated within two months of qualifying for ARV's and within two weeks if fast- tracking is required (Department of health, 2010).

In 2013, one of the achievements was the publication of the 2013 South Africa Antiretroviral Treatment Guidelines for implementation. The guidelines highlighted various strategies that the NDOH was committed to improve HIV management and to move to more efficacious regimens. The goals of the programs included saving lives and improving the quality of life of people living with HIV/AIDS, implementing nurse initiated ART treatment, decentralizing service delivery to PHC facilities, integrating services for HIV, TB, Sexual and Reproductive Health and retains patients on lifelong therapy. Availability of FDC in public health institutions was a major achievement (Department of health, 2013).

### **2.12 Adherence to ARV treatment**

Adherence is defined by WHO as the extent to which a person's behavior, which includes taking of medication, following a specific diet, executing lifestyle changes corresponds to the recommendations from a health care provider. It is not limited to medical interventions only, but includes a range of solutions that are used in treating chronic diseases (WHO, 2010).

Poor adherence can vary from occasional missed dose to chronic defaulting on medication. Good adherence to medication, clinic and pharmacy visits are among the key determinants of successful HIV treatment outcome and essentials in minimizing the emergence of drug resistance. HIV treatment adherence rate has to be greater than 95%. When the adherence rate falls to below 80%, detectable viral loads begin to emerge. If patient adherence on ART has been documented to vary between 37% and 83%, any proposed solution should be discussed with the patient, the regimen negotiated and a clear follow up plan agreed by both parties. This is especially important for permanent chronic conditions such as HIV/AIDS that require long term supervision. Therefore, retention in care should go hand in hand with suppressed viral loads for those on ART within a period of six month after the initiation of the treatment (Department of health, 2008).

### **2.13 ARV Down referral system**

Funding for ARV roll out is provided by the SA Department of Health, with an annual allocation to the provinces of a conditional grant for comprehensive HIV and AIDS management. The public sector ARV program in the Free State achieved steadily rising numbers of monthly new enrolments on ARVs and decreasing waiting times for those eligible for ARVs. Although the public sector ARV program in the Free State was increasing the access to ARVs for people who need them, human and financial resources appear insufficient to achieve universal coverage, particularly if the vertical approach is continued.

Several models of broadening an initial vertical approach to achieve universal ARV access include: down-referral, where ARV sites refer stable clients to obtain their continuing ARV supply at PHC clinics (Lehnman, 2008). This approach was mostly used as a method to solve the problem of a saturated vertical service, but others saw it as a gateway to integrate the provision of ARV treatment into PHC services; task shifting, a strategy supported by WHO (2010) the essence of which is to equip and utilize lower cadres of health care workers to deliver comprehensive HIV care as a strategy to overcome shortages of highly skilled health care workers; and integration of HIV and ARV care into PHC services (WHO, 2010).

The IPHC project aimed to increase access to Comprehensive HIV/AIDS services in accordance with the national HIV/AIDS Comprehensive plan. In the Eastern Cape at Chris Hani District, this became a reality with the ARV down referral system slowly being entrenched in the way the PHC facilities viewed their role in client care and ARV roll out. The IPHC mentoring program ensured not only that systems are followed but also that staff do not feel that they are alone in dealing with problems, they had support and identification of problems and gaps in performance in HCT, PMTCT and treatment care, trainings to enhance capacity, strengthening systems that support service delivery and management of data for improved administration of health service (MSH, 2010).

#### **2.14 Mentoring and support of nurses initiating ART in PHC**

In the 2006 ARV roll out accreditation process, the PHC was evaluated and supported to bridge the service delivery gaps. A paradigm shift in health care was undergone therefore responsibilities that used to belong to doctors have been shifted to nurses, among others initiation of Antiretroviral treatment is now done by nurses in non-complicated cases at PHC level. Only clients with complications referred to doctors at hospitals for further management. The problems were identified as poor coordination between local, provincial and national government (Cameron, Gerber, Mbata, Mutyabule & Swaart, 2012).

Process of initiating clients on ART by nurses, needs continuous mentoring of the NIMART trained nurses by those experienced in this approach. Mentorship is used in nursing to facilitate the professional development of nurses, as it is the process

whereby professional nurses who are mentors pass their wisdom of caring and technical skills to the mentees (Conradie, 2013).

Although the HIV infection was higher in the rural integrated clinics, the integration of hospital services into PHC made it possible for many people to enter care. Africare SA which is the NGO supported 170 health facilities across five sub districts at Chris Hani district responding to the president's call of "every citizen should be able to move into any health center and get counseling, testing and treatment"; Africare did baseline assessment, gap analysis and interventions at these health facilities.

In 2012 at least five professional nurses per clinic were trained on nurse initiated and managed ART (NIMART). Trainings on HCT, PMTCT, TB/HIV and ART management continued. Mentorship of health care workers including doctors, nurses, pharmacists and lays counselors continued and upgrading of infrastructure including physical renovations continued. As a result at the end of July 2012, 168 out of 170 health facilities supported by Africare were initiating ART on site (Maharaj, 2012).

## **2.15 Summary**

The review of literature was conducted on history of HIV/AIDS in USA and South Africa, history of PHC in USA and South Africa, types of integration of health services in South Africa and integration of HIV/AIDS and ARV services into PHC. The methodology followed for the research is discussed in the next chapter.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This section described the research paradigm, design and approach that was used to describe the experiences of clients taking ARV treatment and professional nurses managing clients on ART regarding the integration of previously hospital based ARV sites into PHC clinics in Lukhanji sub-district of Chris Hani District Municipality.

#### **3.2 Research paradigm**

A paradigm is the fundamental model or frame of reference used by researchers to organize their observations and reasoning. Each paradigm offers a different way of looking at human social life, makes its own assumptions about the nature of social reality and can open up new understandings (De Vos, Strydom, Fouché & Delpont, 2011). Interpretivists believe that the subject matter of the social sciences is fundamentally different from that of the natural sciences (Denzil & Lincoln, 2011).

In this study the interpretivist paradigm was used as it is characterized by a concern for the individual and to understand the subject world of human experiences.

#### **3.3 Research approach**

In this study a qualitative approach was used to answer questions about the complex nature of phenomena, with the purpose of describing and understanding the phenomena from the participants' point of view. The qualitative research relies primarily on the collection of qualitative data which is non-numeric such as words and pictures and it looks closely at people's words, actions and records to gather information (Devos, et al., 2011).

### **3.4 Research design**

Research design is defined as the overall plan for addressing a research question, including specifications for enhancing the study's integrity (Polit & Beck, 2012). Qualitative research design is a form of inquiry in which researchers make an interpretation of what they see, hear and understand and is usually chosen when the researcher aims to understand lived experiences for several individuals about a concept or phenomenon (Creswell, 2009). In this study phenomenological design was used because the study focused on the essence of lived experiences. Phenomenology is a school of thought that emphasizes a focus on people's subjective experiences and interpretations (Denzil & Lincoln, 2011).

It is used to examine human experiences through the descriptions they provide, refers to a person's perception of the meaning of an event, and it attempts to understand people's perspectives and understandings of a particular situation (Burns & Grove 2009). The phenomenological approach was used in examining the experiences of clients who took ARV treatment from Frontier hospital and were transferred to take treatment from Ezibeleni, Ilinge, Philani and Sada clinics regarding the integration of previously hospital based ART sites into PHC clinics of Lukhanji sub-district and also experiences of professional nurses who were initiating and managing patients on ARV treatment.

### **3.5 Research setting**

Research setting is the environment within which the study is conducted. The ideal research setting is one that is easily accessible, where cooperation with participants can easily be achieved and where the required information can be obtained easily (Brink, 2008). The study was conducted at Ezibeleni clinic (which is in township at Ezibeleni), Ilinge clinic (which is in a rural area at Ilinge), Philani clinic (which is in Queenstown) and Sada clinic in Whittlesea which is in a rural township in Lukhanji sub-district at Chris Hani Municipality. Opening hours for all these clinics are from 08h00 to 16h00 five days a week.

The reason for using these clinics was that, firstly, the majority of clients that took ARV treatment from these clinics used to take it from Frontier hospital ARV site. Secondly, these sites were rich in data collection because there were high numbers of clients that were transferred from Frontier hospital to these clinics (Refer to table 1 below).

**Table 1: Transferred clients from Hospital based ARV Clinic to PHC Clinics (Lukhanji sub-district DHIS, 2012).**

<b>Name of clinic</b>	<b>No. of transferred clients</b>	<b>No. of trained nurses on ART initiation and management</b>
<b>Ezibeleni</b>	120	06
<b>Ilinge</b>	150	08
<b>Philani</b>	300	10
<b>Sada</b>	175	05
<b>TOTAL</b>	<b>745</b>	<b>29</b>

### **3.6 Study population**

Population is the set of objects or people that possesses some common characteristics and are of interest to the researcher (Burns & Grove, 2009). Study population were the clients who took ARV treatment while it was still at hospital based ARV sites and were transferred to PHC clinics, and professional nurses who were trained on initiating ARV treatment and were managing down referred patients from Frontier ARV site to the PHC clinics. Target population were male and female adult clients who previously took ARV treatment from Frontier hospital ARV site and were transferred and were taking ARV treatment from Ezibeleni, Ilinge, Philani and Sada clinics and professional nurses who were initiating and managing clients on ART. The total number of transferred clients who were on ART was 745 and the total number of NIMART trained professional nurses was 29.

### **3.7 Sampling**

Sampling is the process of **selecting a portion of the population** to represent the entire population (Polit & Beck, 2008). The key principles that can be applied in sampling decisions include **generalizability** which refers to the group represented by a sample; **practicality** refers to the practically possible size of the sample and **credibility** which refers to what is credible in the eyes of the decision makers (De Vos, et al., 2011). In qualitative study purposive sampling is used because it involves the researcher in consciously selecting certain participants from whom she can learn about the issue which is the central focus of the study (Burns, Grove & Gray, 2013).

In purposive sampling the researcher selects particular individuals because they will be informative about the topic and based on the researchers knowledge of the population, a judgment is made to include those individuals that will be information – rich (Creswell, 2009). In this study purposive sampling was used to select the clients for interviews and registered nurses trained on ART initiation in the clinics.

#### **3.7.1 Sampling technique for clients**

The researcher asked permission from the Operational Manager of the clinic to conduct the interviews from both clients and professional nurses. The ART register was used to draw the list of clients. Clients who took ARV treatment from Frontier hospital ARV site for more than two years, who came for treatment at the clinic during the time of the research were selected. Out of the total number of clients that were due for treatment, only those that meet the inclusion criteria were selected from the patients register. Both male and female clients were included in the study. The clients with less than a year on ARV treatment from both hospital and clinics were excluded in this study. The researcher requested the participants to wait voluntarily until the minimum number of 5-12 participants was reached. The same process was followed in all the clinics that participated (Polit & Beck, 2012).

### **3.7.2 Sampling technique for professional nurses**

Professional nurses who were initiating clients on ARV treatment in Ezibeleni, Ilinge, Philani and Sada clinics were selected to participate on individual basis. Only those registered nurses who were trained on initiating and management of ARV treatment for more than a year were included in the study. Registered nurses who were not trained on ARV initiation and management were excluded.

### **3.8 Sample size**

Polit and Beck (2012) describe sample size as a number of subjects in a sample. In qualitative research the sample size required is determined by the depth of information needed to gain insight into a phenomenon (Burns, Grove & Gray, 2013). There are no rules for sample size, the guiding principle in sampling is data saturation which refers to sampling until the point at which no new information is obtained and redundancy is achieved. If participants are good informants who reflect easily on their experiences and communicate effectively, saturation can be achieved with a relatively small sample (Polit & Beck, 2012).

#### **3.8.1 Sample size for clients**

Not all clients taking ARV treatment at the clinics were selected but those clients, with more than two years taking ARV treatment from Frontier hospital ARV site, and transferred to take ARV treatment from Ezibeleni, Ilinge, Philani and Sada clinics because of their experience in previously hospital based ARV site. Four focus groups were conducted to avoid repetition of themes with a total number of 40 participants. Ilinge had 10 participants, Ezibeleni eight participants, Philani had 12 participants and Sada had 10 participants, which were manageable (Polit & Beck, 2012).

#### **3.8.2 Sample size for professional nurses**

For this study 10 professional nurses were selected to participate in semi-structured individual interviews. Not all the nurses working at the clinic were selected, but only professional nurses who were trained on initiating ARV treatment participated in this study because they have experience and were initiating and managing clients on ARV treatment for more than a year at PHC clinics during the time of research.

### 3.9 Ethical considerations

Ethics in research have been developed against the background of professional codes of conduct and the laws governing a particular country (De Vos, et al., 2011). The following principles were adhered to: beneficence, respect for human dignity and justice. These principles were based on the protection of human rights in this research, such as the right to self-determination, to privacy, to anonymity and confidentiality and to fair treatment (Burns & Grove, 2009). The study was approved by the Research Ethics Committee of WSU. **Permission** to conduct the study was sought from the Eastern Cape Department of Health, Chris Hani health district management, Lukhanji sub district manager and heads of participating clinics (See Appendices C & E).

Participants were informed about the purpose and objectives of the study before being asked to give their consent. The **consent** was sought by means of a letter and the participants were informed of their right to withdraw from the study at any time without penalty to themselves. The letter was written in the participants' own language, at his/her level of understanding and in her vocabulary. In this study participants were given consent forms to sign voluntarily to confirm their participation (Brink, 2008).

The principle of **beneficence** encompasses a duty to researchers to minimize harm and maximize benefits. Participants have an opportunity to share their experiences about integration of previously hospital based ARV services into PHC clinics. The researcher was available to provide emotional support for those who had experienced emotional discomfort (Polit & Beck, 2008).

The principle of **justice** included participants' right to fair selection and treatment whereby participants were selected because they were directly related to the study and not because they were readily available or could be easily manipulated. In this study ARV patients were selected because they were directly related to integration of ARV services into PHC clinics. The participants' right to privacy was respected through the process of ensuring anonymity and confidentiality before engaging in research (Brink, 2008).

**Confidentiality** was ensured by not publishing the participant's names and their personal information. Invasion of privacy occurs when the researcher shares private information without the subjects' knowledge or against his/ her will (Creswell, 2009).

**Privacy** was ensured by avoiding divulging the private information to others and maintaining a private space for conducting interviews and **anonymity** was maintained because no names were written in the forms; participants were given code numbers by the researcher (Burns, Grove & Gray, 2013).

### **3.10 Trustworthiness in qualitative designs**

The most important criterion for judging a qualitative study is its credibility or trustworthiness. Trustworthiness is a measure of the extent to which the results are similar over different forms of the same instrument of data collection. It also refers to the extent to which others are convinced that the findings are to be trusted. Validity in qualitative research is concerned with the accuracy and truthfulness of the scientific findings (Brink, 2009).

To collect trustworthy data the researcher must have a meaningful relationship with the participants and participants will share their information so that they can communicate their experiences and perceptions honestly and openly. In this study the researcher maintained privacy using the consulting room in a study setting and also maintained and built the trusting relationship by spending time with participants. The four criteria for trustworthiness are truth value through the strategy of credibility, applicability through the strategy of transferability, consistency through the strategy of dependability and neutrality through the strategy of confirmability (De Vos, et al., 2011).

### **3.10.1 Credibility**

Credibility refers to confidence in the truth of the data and in researchers' interpretation of the data (Polit & Beck, 2012). In this study credibility was ensured through continuous engagement of the participants, member checking in which the researcher would return the transcript to the participant and ask him/her to comment on the content, allowing him to correct any statement that he/she considered as misinterpreted by the researcher regarding his experience about integration of ARV sites into PHC clinics.

### **3.10.2 Transferability**

Transferability refers essentially to the generalizability of the data, that is, the extent to which the findings can be transferred to other setting or groups. It is used in qualitative research to demonstrate the probability that the research findings have meaning to others in the similar situation. To enhance transferability, a researcher had to provide a dense description of demographics of participants and a rich description of the results with supporting direct quotations from participants (Creswell, 2009).

### **3.10.3 Dependability**

Polit & Beck (2012) define dependability as the stability of data over time and over conditions. In this study the detailed description of the data collection and documented method of data coding was described, to form part of the audit trail. In this study dependability was achieved by describing the research method fully and a voice recorder was used to increase reliability when doing the interviews.

#### **3.10.4 Confirmability**

Confirmability refers to the potential for congruence between two or more independent people about the data's accuracy, relevancy and meaning (Burns, Grove & Gray, 2013). An independent coder was involved to assist with data analysis and ensure accuracy of the data. This process included an explanation of the research process, with discussion about the sampling method of the participants, from which data was collected. The coding method and themes identified were described in details.

#### **3.10.5 Authenticity**

Authenticity is the extent to which the researcher fairly and faithfully shows a range of different realities (Polit & Beck, 2012). In this study the researcher represented multiple realities of participants by conveying their life experiences in their natural context.

### **3.11 Data collection methods**

Process of data collection started from the period of requesting permission to enter the research sites until the end of data collection process. The data collection method is a technique used to structure a study and to gather and analyze data in a systemic way (Burns & Grove, 2009). In this study interviews were used to collect data. Two methods of collecting data were used, that is, semi structured individual interviews for professional nurses and semi structured focus groups interviews for clients using an interview guide in both methods.

#### **3.11.1 Focus groups interviews for clients**

Focus group interviews consist of a group of about five to ten people whose opinions and experiences are requested simultaneously (Polit & Beck, 2012). These interviews are formed to explore attitudes and perceptions, feelings and ideas about a topic and are useful in allowing participants to share their thoughts with each other. The only disadvantage of focus group interviews is that some people are uncomfortable talking in groups (Remler & Ryzin, 2011).

In this study data were collected from clients who used to take ARV treatment from Frontier hospital and were now taking ARV treatment from Ezibeleni, Ilinge, Philani and Sada clinics.

There were four focus groups with a total of 40 participants. Ilinge had 10 participants, Ezibeleni eight participants, Philani had 12 participants and Sada had 10 participants, which were manageable (Polit & Beck, 2012). The interviews took place in quiet nurses' consulting rooms in the clinic to maintain privacy and avoid interruptions, for an average of 20 to 30 minutes. The participants in focus group interviews engaged in a group discussion, with an interviewer asking questions using the interview guide, and allowed them time to respond freely (Remler & Van Ryzin, 2011). A voice recorder was used to capture all data as well as note taking was also used to prevent loss of information in case of failure in a voice recorder.

### **3.11.2 Semi structured interviews for professional nurses**

In this study semi structured individual interviews were conducted in order to produce in depth information on the participant's perceptions and feelings about the topic (Polit & Beck, 2012). Semi structured interviews were conducted more like a normal conversation but with a purpose. The interviewer asked questions and the interviewee was allowed to respond freely, with the interviewer simply responding to points that seem worthy of being followed up (Creswell, 2009). Probes were used to encourage the participant to elaborate on the topic, and they gave the interviewer an opportunity to clarify and expand responses and explicate meaning (Terre Blanche, Durrheim & Painter 2011).

Data were collected from total of 10 professional nurses who were trained on ART initiation and managing patients on ARV treatment at Ezibeleni, Ilinge, Philani and Sada clinics on individual basis. An interview guide was used to collect data from the participants. The interviews took place in a quiet nurses' consulting room in the clinic to maintain privacy and avoid interruptions, for an average of 20 to 30 minutes. A voice recorder was used to capture all data as well as note taking was used to prevent loss of information in case the voice recorder failed.

### **3.12 Data analysis**

Data analysis is a process of organizing, providing structure and elicits meaning from research data (Polit & Beck, 2012). The aim of data analysis is to reduce the volume of information gathered, thereby identifying and organizing the data into important patterns and themes in order to construct framework for presenting the key findings of the research study. Data analysis in qualitative research occurs concurrently with data collection and it involves an examination of words rather than the numbers that are used in quantitative research. A thorough analysis requires the following steps: organize and prepare data for analysis, read and look at all the data, summarizing and interpreting the data (Burns, Groove & Gray, 2013).

In this study, the collected data from voice recordings were transcribed verbatim and translated from *isiXhosa* to English. The researcher immersed herself into the data, re read, and themes and sub-themes emerged. Related topics to each other were grouped together in order to reduce the number of categories and to create themes. The similar categories were grouped and analyzed.

### **3.13 Summary**

Phenomenological design which focused on the essence of lived experiences was chosen for this study. It attempted to understand people's perceptions, perspectives and understandings. Purposive sampling was used to select participants. Ethical consideration for participants to be free in participating in the study was considered.

## CHAPTER FOUR

### RESULTS OF THE STUDY

#### 4.1 Introduction

In this study a series of steps for analyzing data which began at the start of data collection phase was followed. The amount of data gathered from the semi structured individual interviews for professional nurses and semi structured focus group interviews for clients was summarized. The steps involved coding for themes and sub-themes, verified the selected themes, and refined the subthemes.

**Table 2: Age and gender distribution of the focus groups participants**

Clinic names	Ages in years				Gender			Duration on ART in years		
	26-35	36-45	46-55	Total	male	Female	Total	1-3	4-6	Total
<b>Ilinge</b>	5	4	1	<b>10</b>	5	5	<b>10</b>	5	5	<b>10</b>
<b>Ezibeleni</b>	4	3	1	<b>8</b>	4	4	<b>8</b>	5	3	<b>8</b>
<b>Philani</b>	4	2	6	<b>12</b>	5	7	<b>12</b>	7	5	<b>12</b>
<b>Sada</b>	5	3	2	<b>10</b>	4	6	<b>10</b>	7	3	<b>10</b>
<b>Total</b>	<b>18</b>	<b>12</b>	<b>10</b>	<b>40</b>	<b>18</b>	<b>22</b>	<b>40</b>	24	16	<b>40</b>

#### 4.2 Demographic profile of clients

There were four focus groups interviews with the total of 40 participants. The sample was diverse in age group as illustrated in table 2. The oldest participants on ART were 46 to 55 years which were found in all clinics. 18 participants were in the ages between 26-35 years. There were 22 females and 18 males. The participants had experience of one to six years on ART which meet the inclusion criteria.

**Table 3: Gender distribution of professional nurses**

Name of clinic	Gender		Total	Experience of PN in initiating ART		Total
	Males	Females		1 year	2 years and above	
<b>Ilinge</b>	1	2	<b>3</b>	1	2	<b>3</b>
<b>Ezibeleni</b>	0	2	<b>2</b>	0	2	<b>2</b>
<b>Philani</b>	1	2	<b>3</b>	1	2	<b>3</b>
<b>Sada</b>	1	1	<b>2</b>	1	1	<b>2</b>
<b>Total</b>	<b>3</b>	<b>7</b>	<b>10</b>	<b>3</b>	<b>7</b>	<b>10</b>

#### 4.3 Demographic profile for professional nurses

Semi structured interviews conducted to a total of 10 professional nurses trained on ART initiation. In most clinics there were more females, seven compared to three males as illustrated in table 3. The participants had experience of one to two years initiating ART which meet the inclusion criteria.

Clients who took ARV treatment in the clinics described different experiences related to integration of previously hospital based ART sites into PHC clinics. The written field notes were used in the interpretation of data and themes and subthemes were identified. The results were structured around identified themes and were supported by direct quotations from the data (Creswell, 2009). The themes developed during the analysis of data collected by each tool yielded the following themes:

- Views of participants regarding integration of ART sites into PHC clinics of Lukhanji sub-district
- Challenges facing integration of ART sites into PHC clinics.
- Delay in ambulance services
- Availability of multidisciplinary team consisting of doctors, psychologists, social workers and dieticians in the PHC clinics
- Attitudes of health care professionals in the clinics

**Table 4: Themes and sub-themes**

<b>Themes</b>	<b>Sub-themes</b>
<b>Theme 1: Views of participants regarding integration of ART sites into PHC clinics</b>	1.1 Accessibility and availability of ART services to all communities 1.2 Relieved from spending more money for travelling long distances to hospital 1.3 Availability of drugs in the clinics
<b>Theme 2: Challenges facing integration of ART sites into PHC clinics</b>	2.1 Long waiting times due to shortage of staff 2.2 Inadequate consulting rooms for nurses 2.3 Lack of proper waiting areas for clients 2.4 Stigma and lack of confidentiality
<b>Theme 3: Delay in ambulance services</b>	3.1 Ambulance delays during referrals to hospital 3.2 Poor communication due to lack of telephones
<b>Theme 4: Availability of multi-disciplinary team consisting of doctors, psychologists, social workers and dieticians in PHC clinics</b>	4.1 Reviewing of complications by doctors. 4.2 Doctors' visits reduced nurses' workload 4.3 Lack of other health care professionals
<b>Theme 5: Attitudes of healthcare professionals in the clinics</b>	5.1 Positive and caring staff attitudes 5.2 Commitment in rendering quality patient care

#### **4.4 THEME 1: VIEWS OF PARTICIPANTS REGARDING INTEGRATION OF ART SITES INTO PHC CLINICS**

Participants from both groups alluded that integration of ART sites into PHC clinics was put in place to transform vertical ART services into comprehensive health care services. This had increased accessibility and availability of services to all clients and was a good decision taken by the government as it brought services nearer to people and caused much relief from spending more money for travelling long distances. The following subthemes emerged: Accessibility and availability of ART services to all communities, relieved from spending more money for travelling long distances to hospital.

##### **4.4.1 Sub-theme 1: Accessibility and availability of ART services to all communities**

The participant from the semi structured registered nurses' interviews stated that integration of vertical ART sites into comprehensive primary health care services was a strategy to increase accessibility and availability of ART services to the community.

*"Integration of vertical ART sites into PHC clinics was done to address all the needs of the community in relation with accessibility of ARV treatment as stated in the comprehensive PHC package, therefore all the clinics must provide comprehensive health care services to the community including ART services."*

(Individual participant)

Participants from the semi structured registered nurses' interviews and FG 4 also supported the view of comprehensive ART services through integration.

*"Through integration all the services became accessible and interrelated, for an example those clients who were treated for HIV were also screened for tuberculosis and be put on treatment immediately. Those clients with sexually transmitted infections were counseled for HIV testing and pap smears, treatment given immediately in order to render comprehensive health care services to the community."*

(Individual participant)

*"Integration was a good idea because now we got all the treatment at our clinics on the same day, unlike before where we used to get only TB treatment at the clinics, then have to go to the hospital for ARV treatment on the following day and ended up spending more time and money as we are staying in the rural area far from the hospital."*

(FG 4)

The majority of participants in both interviews acknowledged the integration of ART sites into PHC clinics as a strategy put in place to increase accessibility and availability of ARV treatment to all communities, and further mentioned that services become interrelated whereby clients are treated comprehensively in the local clinic unlike before when they used to be referred to hospital for ARV services.

#### **4.4.2 Sub-theme 2: Relieved from spending money on travelling to hospital**

Integration of ARV'S to PHC brought a relief to clients from travelling long distances and spending money on transport to the hospital. Therefore the integration of ARV'S to PHC clinics brought ARV services closer to people. Majority of participants from FG 1, FG 3 and registered nurses' interviews stated that integration brought much relief in terms of saving money for travelling long distances by bringing ARV services closer to their communities.

*"Integration brought much relief to us as we use to travel long distances and spent more money to get treatment from the hospital."*

(FG 1)

*"Integration was a good idea because we got treatment nearer and we don't have money to go to the hospital because we are not working and there is no grant provided to ARV patients".*

(FG 3)

*"Majority of patients benefitted from integration because ARV treatment is in their local clinics as they used to complain of travelling costs to the hospital and ended up defaulting treatment".*

(Individual participant)

Therefore the idea of bringing ARV services closer to people through integration was supported by all participants from both interviews, as they stated that there was much benefit in saving money by cutting travelling costs to clients who used to travel long distances and spent a lot of money to hospitals especially those from rural areas.

#### **4.4.3 Sub-theme 3: Availability of ART drugs**

Participants from both groups showed satisfaction about the availability of ART drugs in the clinics.

*"There are no stock outs on ARV drugs because orders were made on time to avoid any delays which can result in non-adherence of clients to treatment".*

(Individual participant)

*"We always get ARV drugs in our clinics on the same date of appointment".*

(FG 2)

### **4.5 THEME 2: CHALLENGES FACING INTEGRATION OF ART SITES INTO PHC CLINICS**

The challenges described by the participants during semi structured registered nurses' interviews and focus groups discussions were long waiting times caused by shortage of staff in the clinics, inadequate consulting rooms for nurses and waiting areas for clients, stigma and lack of confidentiality due to mixing of all clients in one waiting area. These were factors that hindered the successful implementation of integration of ART services into PHC clinics.

#### **4.5.1 Sub-theme 1: Long waiting times due to shortage of staff**

Shortage of staff caused delay in getting treatment on time. Participants from both semi structured registered nurses' interviews and FG 1 indicated that clinics have long waiting times due to shortage of nurses. In the following excerpt the participant mentioned challenges associated with staff shortage.

*There was a delay in getting treatment at our clinic because there were many clients and the nurses responsible for initiating and managing ART services were only two, they took long time to finish one client as a result others ended up fainting in the waiting area due to long waiting period, because we arrived in the morning and stayed at the clinic for more than six hours”.*

(FG 1)

*"Although integration of hospital ART sites into PHC clinics was a good idea because many clients benefitted in terms of saving money for transport, it resulted in more services at the clinics but there was no improvement in terms of adding more staff or taking nurses from the hospital to the clinics, thus increased workload to few nurses because it takes approximately 20-25 minutes to initiate one patient on ART”.*

(Individual participant)

It appeared that transfer of ART clients from hospital to PHC clinics with the aim of increasing accessibility to ARV treatment resulted in high number of clients to be seen in the clinics without additional staff or taking nurses who have experience in managing ART clients from the hospital to deal with the workload, thus resulted in long waiting times and delay in getting treatment. This means that both participants need additional trained registered nurses on ART initiation to avoid long waiting times in the clinics.

#### **4.5.2 Sub-theme 2: Inadequate consulting rooms for nurses**

Participants from semi structured registered nurses’ interviews indicated that clinics have inadequate space to accommodate many clients due to less consulting rooms, since many clients were transferred from the hospital to the clinics. This resulted in overcrowding and sometimes clients’ privacy was compromised

*"There were less consulting rooms to accommodate many clients and all the programmes offered in the clinic and some programmes including HCT, ART, PMTCT and STI need privacy which was sometimes difficult to maintain”.*

(Individual participant)

*"Integration of ART sites into PHC clinics resulted in high number of clients seen in our clinic, but there was no provision made such as increasing number of consulting rooms by providing park homes, to accommodate our visiting doctor and lay counselors when doing HIV counseling and testing which needs privacy. As a result we ended up sharing the consulting rooms which compromises clients' privacy".*

(Individual participant)

#### **4.5.3 Sub-theme 3: Lack of proper waiting area for clients**

Some clinics did not have proper waiting rooms for clients they used small passages as waiting areas and this resulted in inadequate space and overcrowding especially when the clinics were full. Participants from both semi structured registered nurses' and FG 2 interviews were of the view that

*"There is no proper waiting room in our clinic, we use the passage as the waiting area but when it is full they have to wait outside the clinic, thus make it difficult to do health education to all clients at the same time".*

(Individual participant)

*"The waiting area is too small and congested, when it is full we stand outside in the veranda and it became a challenge if the weather is too cold or raining as it is an open space".*

(FG 2)

Lack of consulting rooms for nurses and lack of waiting area for clients were factors that hindered the successful implementation of integration of ART services into PHC clinics which resulted in serious challenges including delay in getting medication, limited space and overcrowding. Participants from registered nurses' interviews stated that the challenge of less consulting rooms to accommodate visiting doctor and counseling rooms can be solved by providing park homes to increase the number of consulting rooms.

#### **4.5.4 Sub-theme 4: Stigma and lack of confidentiality**

Although most participants were of the same view that integration of ART sites into PHC was a good decision, there was still stigma attached because few participants from FG 4 stated that they were not comfortable at the clinic as they were mixed with other patients who will see them taking ARV treatment.

*"It was better at the hospital because we used to be alone at the ART site in hospital unlike at the clinic where there is no confidentiality, we mix with other people from local and be seen that we are on ARV treatment in a congested waiting area".*

(FG 4)

Another participant from semi structured registered nurses' interviews stated that ARV treatment have increased the stigma as it is difficult to hide it, therefore some clients ended up defaulting.

*"Although the ARV treatment was provided to reduce HIV associated morbidity and mortality in people living with HIV/AIDS, stigma still existed as it was noted in the clinic that clients were hiding their ARV treatment by putting it in different containers, and were not comfortable to be seen by other people from the community which resulted in non-adherence to treatment".*

(Individual participant)

It appeared that mixing of all clients in one waiting area with the aim of implementing supermarket approach posed stigma to some of the clients taking ARV treatment with the fear of being seen by local people, thus increasing clients' defaulter rate to ARV treatment. Participants were of the view that stigma can be reduced through maintenance of confidentiality by health care providers in the workplace.

#### **4.6 THEME 3: DELAY IN AMBULANCE SERVICES**

During interviews the following participants reported that ambulance was a challenge when referring the patients to the hospital, it delayed to arrive at the clinic which sometimes resulted in complications. They also highlighted that means of communication were poor because telephones were not working in some clinics.

#### **4.6.1 Sub-theme 1: Ambulance delays during referrals to hospital**

Ambulance delays were highlighted by participants from semi structured registered nurses' and FG 3 interviews as the major challenge in referral system between clinics and hospital.

*"Referral system was still a challenge between clinics and hospital, the ambulance took time to arrive and even in cases of emergency you will be told that there was only one ambulance and it will be available in 3-4 hours as a result a patient might ended up developing serious complications.*

(Individual participant)

*"It would be better if the government could provide each clinic with a vehicle meant for transporting referrals to hospital on time instead of waiting for one ambulance, because a patient could complicate and die whilst still waiting for an ambulance in the clinic".*

(FG 1)

Both participants during interviews stated that an ambulance took more than three hours to arrive at the clinic in cases of emergency and that could result in serious complications therefore they preferred that clinics must have their own transport that stationed at the clinic for referrals instead of depending on ambulances which were not there when needed.

#### **4.6.2 Sub-theme 2: Poor communication due to lack of telephones**

Participants from semi structured registered nurses' interviews stated that communication is also a challenge in some clinics, especially in rural areas due to lack of telephones.

*"Lack of telephones in the clinics made it difficult to discuss a client with the doctor in the hospital or to refer a client to other health care workers including social workers and dieticians. Sometimes we use our cellphones in cases of urgent referrals. Therefore each clinic needs to be provided with cellphone and airtime so as to improve the means of communication whilst still waiting for installation of telephones".*

(Individual participant)

Majority of participants from registered nurses' interviews suggested the provision of cellphones with airtime especially in rural clinics without telephones in order to improve means of communication in cases of referring clients to different health care professionals.

#### **4.7 THEME 4: LACK OF MULTI DISCIPLINARY TEAM**

The participants expressed that the multidisciplinary approach was planned to implement successful integration of ART services into PHC, but it did not function well because only sessional doctors doing visits at the clinics to review complicated cases on ARV treatment, there were no dieticians, psychologists and social workers visiting and this compromises comprehensive quality patient care. The following subthemes emerged within the theme:

##### **4.7.1 Sub-theme 1: Reviewing of complications by sessional doctors.**

Participants mentioned that the sessional doctors were not doing treatment reviews to all patients taking ARV treatment in the clinics because of the number seen per day, including other chronic patients that are reviewed every six months, most reviews were done by nurses.

*"Clients with complications who need referral to hospital were seen and reviewed at the clinic by the visiting doctor and booked for specialists to the hospital, as a result not all patients were referred to the hospital as it used to happen before integration others were seen by trained registered nurses because the doctor did not spend the whole day in the clinic".*

(Individual participant)

Another participant during interviews mentioned that the visiting of a doctor to the clinic reduced the workload they experienced due to increased number of clients

*"In our clinic, only one doctor allocated to do sessions daily from 09h00 to 11h00. Clients with complications were put aside for him to consider referral to hospital; therefore the workload was reduced although he used to see a limited number because of allocated hours".*

(Individual participant)

The participants were of the opinion that doctors played a significant role in the clinics as their visits benefitted both clients in terms of reviewing complications and refer to specialists and nurses in terms of reducing workload.

#### **4.7.2 Sub-theme 2: Lack of other health care professionals.**

The majority of participants from semi structured registered nurses' interviews and FG 4 were not happy about the lack of other health care professionals like dieticians, psychologists and social workers in the clinics. As a result when one experienced psycho social and socio economic problems at the clinics he had to be referred to the hospital.

*Integration of ART sites into PHC clinics was good except for lack of other health care professionals like social workers, psychologists and dieticians where it took time when referring a patient to hospital because of long waiting list in the booking system"*

(Individual participant)

*"There are no social workers in our clinics, when experiencing a problem you have to be booked for referral to the hospital and ended up waiting for sometimes a week or more because of the long waiting list, whereas it would be better if the social workers and dieticians were at the clinics or visiting on sessions like the doctors".*

(FG 4)

*"The psychologists and dieticians must visit the clinic even if it is twice a week like doctors in some clinics to avoid patients waiting for a week or more because sometimes one forgot the date if it is too far which resulted in missing of appointment and spending more money to the hospital".*

(Individual participant)

Both participants from semi structured registered nurses' interviews and FG 4 preferred that also social workers, psychologists and dieticians should do sessional visits to the clinics even if it is twice a week like the doctors. This will assist the clients as they will be seen immediately instead of waiting for an appointment date from the hospital and in saving money for transport to the hospital.

## **4.8 THEME 5: ATTITUDES OF HEALTH CARE PROFESSIONALS IN THE CLINICS**

### **4.8.1 Sub-theme1: Positive and caring staff attitudes**

*"At the clinics nurses were doing their best irrespective of staff shortage, their attitudes remained positive and they always gave explanation about the delays and they gave support and care when needed".*

(FG 3)

The majority of participants from focus groups interviews showed satisfaction regarding nurses' attitudes and referred to them as always positive and caring.

### **4.8.2 Sub-theme 2: Commitment in rendering quality patient care**

The participants in the below excerpt stated that despite the limited resources and poor working conditions in the clinics, nurse's attitudes remained positive and showed commitment towards clients.

*"Although clinics have inadequate staff to implement integration effectively, the team work that we had in our clinic made us to be highly committed as a result we shared the responsibility among ourselves to sustain the integration of ART services and render quality patient care".*

(Individual participant)

Despite the various challenges faced by nurses in the clinics including shortage of staff, nurses' attitudes remained positive because of their commitment to render quality patient care to the communities. The above statement was supported by the participants from FG 3 where they mentioned that nurses were doing their level best in caring for clients in the clinics irrespective of staff shortage.

## **CHAPTER FIVE**

### **DISCUSSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter discussed the findings of the study whereby participants described different experiences related to integration of previously hospital based ART sites into PHC clinics of Lukhanji sub-district. The discussion followed the themes that emerged from the interviews. The findings of the study were linked to the available literature.

#### **5.2 Views of participants regarding the integration of ART sites into PHC clinics of Lukhanji sub district**

In this study the participants in both groups supported the view of integration of ART sites into PHC clinics with the aim of achieving equity and improve accessibility, availability and affordability of services through decentralized management services and localized service provision. The World Health Organisation (2008) defined integration as the bringing together of inputs, delivery, management and organization of services related to diagnosis, treatment, care, rehabilitation and health promotion with the aim to improve the quality of these services in terms of accessibility, availability, user satisfaction and efficiency (WHO, 2008).

This definition was supported when Conradie (2013) indicated that there was a shift from caring for the terminally ill community members due to HIV/AIDS and TB from hospital based care to the family and community centered care, hence the re-engineering of PHC strategy emphasized the importance of caring for individuals in the community. However, this strengthened the idea of integrating HIV/AIDS, TB, STIs and ART services into PHC which were initially rendered at the hospitals.

The technical report for the development of DHS in South Africa identified two dimensions of integration which were organisational and functional integration. Organisational integration entailed that the different health services rendering authorities within a district be collapsed and integrated into one unified authority and administrative structure, whereas functional integration was regarded as the integration of provincial and local government health services for the purpose of decreasing vertical and duplicated services. It was also a vital step in securing the delivery of integrated comprehensive PHC services. Therefore functional integration focused on how the health delivery system functioned and sought ways to integrate services as opposed to integration of the authorities in organizational integration (Van Rensberg, 2008).

### **5.2.1 Accessibility of ART services**

The integration of ART sites into PHC clinics was one of the strategies introduced to increase access to ARV treatment for people living with HIV/AIDS. In the clinical guidelines for the management of HIV/AIDS in adults & adolescents (2010) the aim was to minimize the distance travelled by patients from facility to facility and this had been positively acknowledged by both groups in this study ( Uebel, et al., 2010).

The majority of participants referred to the idea of integration of previously hospital based ART sites into PHC clinics in Lukhanji sub-district as a strategy introduced by Government to bring services closer to people, so as to increase accessibility to ARV treatment and minimize costs for travelling long distances.

According to Stanhope & Lancaster (2008) the National Health Plan based on PHC approach for South Africa in preparation for democracy was developed in 1994. The goal was the creation of a comprehensive, accessible, equitable and integrated national health system. The basic rights approach within the national health system had ensured access to health care for all South Africans. The PHC approach was the underlying philosophy for restructuring of health system and aimed to reduce inequalities in access of health services including HIV/AIDS and ARV services especially in deprived communities from rural areas (Van Dyk, 2012).

### **5.2.2 Availability of ART drugs**

In the standard treatment guidelines (2012) emphasis was on availability of ARV treatment to improve access and reduce defaulters. Good adherence to medication was among the key determinants of successful HIV treatment outcome and minimized drug resistance. In the current study both groups concurred with the statement above as they defined availability of drugs as receiving complete treatment package in one facility without being turned back or referred to the hospital for drugs that are out of stock.

According to Clinical guidelines for the management of HIV/AIDS in adults & adolescents (2010) integration of ART sites into PHC clinics became a reality in the service delivery at Integrated Primary Health Care (IPHC) project supported facilities. The project focused on strengthening the district health system, building a cadre of health workers who were competent in planning, implementing and evaluating comprehensive high quality PHC services. Accreditation of PHC clinics as ARV sites resulted in clients collecting all their treatment including ARV treatment at the nearest facilities, instead of visiting different facilities on different days, spending more money which can result in high defaulter rate. Client's treatment need to be monitored by home based carers in order to ensure adherence (Department of health, 2010).

### **5.3 Challenges facing integration of ART sites into PHC clinics**

Despite the benefits of integration of ART sites into PHC clinics, there were still several challenges. These include shortage of staff, lack of trainings and mentoring of all professional nurses on ART initiation at PHC clinics, long waiting times, inadequate consulting rooms and waiting areas, delay in ambulance services, lack of multidisciplinary team, stigma and lack of confidentiality.

### **5.3.1 Shortage of staff**

The integration of ART services from hospital based into PHC clinics with the aim to increase access of ARV treatment to all communities also increased the workload in nurses initiating and managing clients on ART. This was supported by the opinion of participants in both groups as they defined staff shortage as limited number of health care workers to manage the high volume of patients. They further associated long waiting times with shortage of staff where they stated that transfer of ARV clients from hospital to PHC clinics with the aim of increasing accessibility to ARV treatment, resulted in high number of clients to be seen in the clinics without additional staff or taking nurses who have experience in managing ART clients from the hospital to deal with the workload.

The shortage of staff is one of the challenges that compromised health care delivery in both hospitals and PHC clinics. According to TAC (2007) staff shortage were major challenges to scaling up ART in both PHC and hospitals in rural areas of South Africa. WHO (2008) states that one of the major obstacles in reaching the key health MDGs, particularly the three health related goals of reduction in child mortality, improving maternal health and combating HIV/AIDS with other diseases, was the poorly functioning health system due to staff shortage. WHO (2008) further states that despite many efforts that were made by the Department of Health in South Africa to retain nurses, by using many strategies including financial incentives like occupational specific dispensation (OSD), rural allowance and scarce skill allowance, shortage of staff remained a challenge because of migration of health professionals to the developed countries and high staff turnover due to financial constraints.

To overcome this challenge, SA developed a clear policy that will require the new qualified health care professionals to first do community service in S.A. before migrating to developed countries. Retention strategies including offering bursaries to health professionals to further their studies and also increase of incentives could improve staff commitment. There is also a need for additional staff including professional nurses trained on initiating and managing patients on ARV treatment because of increased numbers of patients accessing ARVs in the PHC clinics (WHO, 2008).

### **5.3.2 Lack of trainings and mentoring of all professional nurses on ART initiation at PHC clinics**

A paradigm shift in health care was undergone where the responsibilities that used to belong to doctors have been shifted to nurses, among others initiation of ARV treatment was currently done by registered nurses in non-complicated cases at the clinics. Only complications referred to the doctor for further management (Uebel, et al., 2010).

PHC in S.A. was overwhelmingly nurse-based, therefore in response to increased burden of disease and a growing population, the training of sufficient numbers of nurses with appropriate skills must be a first human resource priority. Mentorship and supportive supervision are also essential in addition to clinical training and efficient use of all health staff to provide HIV services needed by the patient (Lehman, 2009).

Van Rensburg (2008) stated that it was important to train all health care providers including nurses on how to assess people living with HIV (PLHIV), initiate ART, do follow-up, identify and refer complications to the hospital. USAID (2009) also supported that development of adequate human resources as vitally important, as it was the developing strategy to implement HIV efforts in order to ensure the delivery of ART services (Van Rensburg, 2008). WHO (2008) recommended that ART programme managers had to expand ongoing training capacity, clinical support and supervision at the PHC level through training, education and mentoring.

### **5.3.3 Long waiting times due to staff shortage**

In the current study transfer of ART clients from hospital to PHC clinics with the aim of increasing accessibility to ARV treatment resulted in high number of clients to be seen in the clinics without additional staff to deal with the workload. This resulted in long waiting times and delay in getting treatment. NCCEMD (2012) indicated that long waiting times is the worldwide problem and issues leading to this need to be addressed in order to improve quality of care. Delays in care have been reported to be amongst the causes of deaths and also infringe the patient's right of access to health care.

The strategies which can be used to reduce long waiting times include supermarket approach, introduction of booking system and triage. Also appointment of queue marshals in the clinics can assist in sorting of patients according to their needs. The supermarket approach was identified as an excellent approach in reducing long waiting times if used properly. The patient is able to enter clinic and receive the complete treatment in a convenient and timely manner, which results in the increase in productivity, availability and convenience to the patient (Schaay & Sanders, 2009).

WHO (2008) supported the idea that integrated services were acknowledged as serving the needs of patients more efficiently and effectively as they had all their needs met at one service delivery site to ensure greater continuity of care. The current study revealed that supermarket approach will be effective for patients because they do not have to wait for long time or days to access their ARV treatment, as integration reduces differences in the access and utilization of services between geographic and socio-economic groups thus leading to equity in health care. The patient satisfaction is directly linked to the waiting time, therefore the shorter the time the patients wait the more satisfied they are with the service.

Booking and triage systems are also strategies that need to be put in place in order to address the challenge of long waiting times and overcrowding in PHC clinics. Through bookings clients are distributed according to different dates and given booking slips to avoid delays on the appointment dates. Treatment defaulters can easily be identified and traced through booking system. Triage system assist in sorting of clients into priority groups according to their needs and resources available. It can be successful through identification of a committed triage nurse and also appointment of queue marshals in all the clinics (Schaay & Sanders, 2009).

### **5.3.4 Inadequate consulting rooms and waiting areas**

Due to an increase in the number of people accessing ARV services at PHC clinics, space became a challenge in waiting areas, consulting rooms and counseling rooms (Walley, et al., 2008). In the current study most participants complained about inadequate waiting areas for clients resulting in clients to wait outside the clinic. Therefore there is a need to improve physical space through providing park homes as suggested by most participants. Also privacy can be maintained by increasing the number of consulting rooms and counseling rooms.

In 2012, nurses trained on initiating ART treatment started to initiate adult patients, and experienced some constraints including lack of sufficient consulting rooms and privacy (Conradie, 2013). This was supported by the findings in the study where participants reported that inadequate space resulted in lack of privacy which makes it difficult to perform activities like HIV counseling. The results of the study revealed that in clinics where there are limited resources, participants complained of long waiting times.

### **5.3.5 Stigma and lack of confidentiality**

Stigma and lack of confidentiality need to be addressed by conducting community awareness campaigns with the involvement of all the stakeholders including support groups, community leaders, community based care providers, PLHIV and youth groups. PLHIV need to be empowered with education about HIV and activities that include direct interaction among affected groups and this can promote higher levels of adherence to treatment and minimize stigma (UNAIDS, 2009). Involvement of clients in support groups can contribute to the successful implementation of integrating ART services into PHC clinics, as they play an important role in providing information regarding their health needs to the health care providers and support each other.

### **5.3.6 Delay in ambulance services during clients referrals**

According to Patients' Rights Charter (1999) a patient has a right to be referred for a second opinion. Among the key challenges that affect the successful implementation of integration of ART sites into PHC was the delay of ambulance when referring a patient to the hospital. It was highlighted by the participants during interviews that an ambulance took more than three hours to arrive at the clinic in cases of emergency and that can result in serious complications (Clark, 2014).

Another challenge identified was the means of communication as there were no telephones in some clinics in the rural areas, thus made it difficult to communicate with the hospital when referring clients with complications. Participants from both interviews were of the opinion that clinics must be provided with vehicles to transport patients that need referral to hospital, instead of waiting for one ambulance which will arrive after three hours.

### **5.3.7 Lack of multidisciplinary team at PHC clinics**

In the previously hospital based ART sites, clients were treated holistically and comprehensively by the multidisciplinary team consisting of doctors, social workers, pharmacists and dieticians as compared to the PHC clinics where there are no social workers, psychologists and dieticians, clients depended on referrals to the hospital to access these services (Conradie, 2013). It is against this background that participants preferred a full support and involvement of all multidisciplinary team members including psychologists, social workers and dieticians to provide comprehensive quality patient care.

## **5.4 Positive staff attitudes**

Lehmann (2008) stated that the important factors in the successful implementation of integration of ART sites into PHC clinics are the positive staff attitudes and good working relations. The successful implementation of integration of ART sites into PHC clinics can be achieved by continuous support of staff, through trainings and mentoring of nurses who initiate clients on ART to facilitate their professional development, as it is the process whereby professional nurses who are mentors pass their wisdom of caring and technical skills to the mentees.

Therefore the staff become highly motivated and confident in implementing guidelines and treatment regimens (Maharaj, 2012). This was supported by findings of the current study where majority of participants reported that nurse's attitudes were always positive and supportive in giving information about their treatment.

### **5.5 Limitations of the study**

The research study was conducted specifically in the clinics of Lukhanji sub-district. There is a need to conduct the research in other areas to compare the results. The study was focused only on professional nurses trained on ART initiation and management of HIV positive clients, professional nurses who are not trained were not included whereas they might have different experiences regarding integration of ART sites into PHC clinics. Therefore research in other health care professionals is needed.

### **5.6 Conclusion**

Integration of previously hospital based ART sites into PHC clinics was supported by both participants in this study. The objectives of the study which included assessment of staff attitudes, adequacy of the physical environment in the clinics, determining the waiting times of clients in the clinics and checking whether ARV drugs were available at all times in the clinics were met. Although integration of ART services into PHC has improved the accessibility and availability of ARV treatment to all the communities, there were still some challenges which include staff shortage, inadequate consulting rooms and waiting areas, poor referral system and lack of multidisciplinary team that hindered its successful implementation in the PHC clinics. Therefore there is a need for improvement of the identified challenges to render comprehensive ART services.

## **5.7 Recommendations**

The following recommendations are based on the research findings: additional staff including registered nurses because of increased numbers of clients accessing ARVs in the PHC clinics. Based on findings of the current study, there is some evidence that task shifting can partly bring a solution in the problem of shortage of nurses especially in some programs like HIV/AIDS where counseling and testing is done by trained lay counselors. Task shifting is one of the strategies used to scale up work force by moving appropriate tasks to less specialized people like community health workers (Schaay & Saunders, 2009).

Training of all registered nurses on initiating and managing clients on ART so as to be able to provide comprehensive services to clients is the priority in the PHC setting. Mentorship and supportive supervision are also essential in addition to clinical training and efficient use of all health staff to provide HIV services needed by clients. The supermarket approach, booking and triage systems were identified as strategies that need to be put in place in order to address the challenge of long waiting times and overcrowding in PHC clinics.

Improvement of physical space, through provision of park homes and extending of clinics to create additional rooms as suggested by the participants in the current study can bring the solution. Additional space can increase ventilation to control the spread of TB and other infectious diseases. Also privacy and confidentiality can be maintained by increasing the number of consulting rooms and counseling rooms. To address the challenge of ambulance delays, it is recommended that clinics to be provided with vehicles to transport patients that need urgent referrals to hospital. Each clinic should be given a cellphone with airtime to improve communication especially in the rural areas where there are no telephones. Also through an active involvement and full support of all multidisciplinary team members including psychologists, social workers and dieticians a comprehensive quality patient care can be achieved. An effective, successful and sustainable integration of ART sites into PHC clinics can only be achieved through teamwork (Uebel, et al., 2010).

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FACULTY OF HEALTH SCIENCES  
POSTGRADUATE EDUCATION, TRAINING, RESEARCH AND ETHICS UNIT

HUMAN RESEARCH COMMITTEE  
CLEARANCE CERTIFICATE

PROTOCOL NUMBER : 024/2014

PROJECT : THE INTEGRATION OF PREVIOUSLY HOSPITAL BASED ANTIRETROVIRAL (ARV) SITES INTO PRIMARY HEALTH CARE (PHC) CLINICS IN LUKHANJI SUB DISTRICT OF CHRIS HANI DISTRICT MUNICIPALITY

INVESTIGATOR(S) : NONKOLISO PAKADE

DEPARTMENT : NURSING

DATE CONSIDERED : 25 SEPTEMBER 2014

DECISION OF THE COMMITTEE : APPROVED

N.B. You are required to provide the committee with a progress or outcome report of the research after every 6 months. The committee expects a report on any changes in the protocol as well as any untoward events that may occur at any time during the study as soon as they occur.

Dr. M. Ntsaba  
CHAIRPERSON

28/09/2014

Walter Sisulu University  
Academic Health Service Complex of the Eastern Cape  
Postgraduate Education and Training  
Faculty of Health Sciences  
Walter Sisulu University  
P'Bag X1, WSU, 5117, E.C.  
Tel: (047) 509-2400 Fax: (047) 509-2301

25/09/2014  
Date

DECLARATION OF INVESTIGATOR(S)

(To be completed in duplicate and one copy returned to the Research Officer at Office L311, 3<sup>rd</sup> Floor, Old Library Building, NMD Campus, WSU)

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Research Ethics Committee. I/We agree to a completion of a yearly progress report.

NONKOLISO PAKADE

N.B. Please quote the protocol number in all enquiries.  
Institutional Review Board (IRB) 00007448

25.09.2014

HREC 1202009-020

## **Appendix B**

### **Letter of request to conduct a study from ECDOH**

757 Zone 3

Ekuphumleni

**Whittlesea 5360**

Cell: 0834903404

E-mail: nonkolisopakade@rocketmail.com

28 February 2014

The Manager

Department of Epidemiology

Eastern Cape D. O. H.

**BHISHO 5600**

Dear Mr. Merile

#### **Request for permission to conduct a study at Ezibeleni, Ilinge, Philani and Sada clinics in Lukhanji sub district of Chris Hani District Municipality in Eastern Cape**

I am a Registered nurse currently studying towards a Master's degree in Nursing at Walter Sisulu University (WSU). The degree requires that I undertake a full research project. The title of my study is: **The Integration of previously hospital based ARV sites into PHC clinics in Lukhanji sub district.** This study is being conducted under the supervision of Dr M.J.Ntsaba. The purpose of this study is to describe the experiences of patients taking ARV treatment regarding the integration of previously hospital based ARV sites into PHC clinics of Lukhanji sub district.

The results of this study will be made available to ECDOH, WSU and Chris Hani health district and could be transferable to other areas to improve ART services. If permission is granted for this study no names will appear on any documentation other than the consent forms of participants, which the researcher will keep in a safe confidential place. The interviews will take place during the day and a voice recorder

will be used to capture comments. The voice recorder is necessary as the researcher will not have a scribe to assist in recording the discussion. The interviews will take approximately 20 to 30 minutes.

There will be no risk, participants will be under no obligation to participate, and they have a right to withdraw at any time and refuse to participate without giving any reason for such an act. Participants will not be paid for participating in the interviews. The researcher will check the findings of the study together with participants to ensure that what is in the report is valid. Explanation and the purpose of the research will be explained in English for Health Professionals and isiXhosa for the patients. The content and procedures will also be explained. The participants will sign the written informed consents. The participants will only be involved in the study after the permission has been granted by the WSU Ethics Committee, ECDOH, Chris Hani District, Lukhanji Sub district, Ezibeleni, Ilinge, Philani and Sada clinics.

To avoid discomfort of the subjects the researcher will ensure that there will be anonymity to protect subjects and data will not be shared with outsiders. Therefore confidentiality and privacy will be maintained. There will be no recording of personal data together with the subject identity. The researcher will also ensure that written informed consent is obtained from the participants.

.....  
Nonkoliso Pakade (Investigator)  
Contact number: 0834903404

.....  
Dr M.J Ntsaba (Research Supervisor)  
Contact number: 0760132827

**Appendix C**  
**Letter of approval to conduct research from ECDOH**



**Eastern Cape Department of Health**

Enquiries: Zonwabele Merile

Tel No: 040 608 0830

Date: 21<sup>st</sup> October 2014

Fax No: 043 642 1409

e-mail address: zonwabele.merile@impilo.ecprov.gov.za

Dear Ms N Pakade

**Re: The integration of previously hospital based antiretroviral sites into primary health care clinics in Lukhanji Sub-District of Chris Hani District Municipality**

The Department of Health would like to inform you that your application for conducting a research on the abovementioned 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 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 Epidemiological Research & Surveillance Management. You may 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.

**DEPUTY DIRECTOR: EPIDEMIOLOGICAL RESEARCH & SURVEILLANCE MANAGEMENT**



## **Appendix D**

### **Letter of request to conduct a study to Chris Hani district**

757 Zone 3

Ekuphumleni

**Whittlesea 5360**

Cell: 0834903404

E-mail: nonkolisopakade@rocketmail.com

28 February 2014

The District Manager

Chris Hani Health District

**Queenstown 5320**

Dear Mrs. Kizza

#### **Request for permission to conduct a study at Ezibeleni, Ilinge, Philani and Sada clinics in Lukhanji sub-district of Chris Hani District Municipality in Eastern Cape**

I am a Registered nurse currently studying towards a Master's degree in Nursing at Walter Sisulu University (WSU). The degree requires that I undertake a full research project. The title of my study is: **The Integration of previously hospital based ARV sites into PHC clinics in Lukhanji sub-district.** This research is being conducted under the supervision of Dr M.J. Ntsaba. The purpose of this study is to describe the experiences of patients taking ARV treatment regarding the integration of previously hospital based ARV sites into PHC clinics of Lukhanji sub-district.

The results of this study will be made available to Chris Hani health district and could be transferable to other areas to improve quality in other clinics in the same district. If permission is granted for this study no names will appear on any documentation other than the consent forms of participants, which the researcher will keep in a safe confidential place. The interviews will take place during the day and a voice recorder will be used to capture comments. The voice recorder is necessary as the researcher will not have a scribe to assist in recording the discussion. The interviews will take approximately 20 to 30 minutes.

There will be no risk, participants will be under no obligation to participate, and they have a right to withdraw at any time and refuse to participate without giving any reason for such an act. Participants will not be paid for participating in the interviews. The researcher will check the findings of the study together with participants to ensure that what is in the report is valid. Explanation and the purpose of the research will be explained in English for Health Professionals and *isiXhosa* for the clients. The content and procedures will also be explained. The participants will sign the written informed consents. The participants will only be involved in the study after the permission has been granted by the WSU Ethics Committee, ECDOH, Chris Hani District, Lukhanji Sub district, Ezibeleni, Ilinge, Philani and Sada clinics.

To avoid discomfort of the subjects the researcher will ensure that there will be anonymity to protect subjects and data will not be shared with outsiders. Therefore confidentiality and privacy will be maintained. There will be no recording of personal data together with the subject identity. The researcher will also ensure that written informed consent is obtained from the participant.

.....  
Nonkoliso Pakade (Investigator)  
Contact number: 0834903404

.....  
Dr M.J Ntsaba (Research Supervisor)  
Contact number: 0760132827

**Appendix E**  
**Letter of approval to conduct research from Chris Hani District**



Province of the  
**EASTERN CAPE**  
DEPARTMENT OF HEALTH

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Ward F Komani Hospital P.O. Box 1661, Queenstown 5320  
Chris Hani Health District Office. Eastern Cape. REPUBLIC OF SOUTH AFRICA.

Enquiries : Ms W. Shongwe  
Tel. : 045 807 1102, Fax 045 807 1189,  
Email : [welekazi.shongwe@impilo.ecprov.gov.za](mailto:welekazi.shongwe@impilo.ecprov.gov.za)  
[Nomeko.kizza@impilo.ecprov.gov.za](mailto:Nomeko.kizza@impilo.ecprov.gov.za)

28 October 2014

Dear Mrs Baba

**RE: GRANTING PERMISSION TO CONDUCT STUDY IN EZIBELENI, ILINGE,  
PHILANI AND SADA CLINICS FOR N PAKADE**

Miss Nonkoliso Pakade who is currently studying toward a Master's degree in Nursing at Walter Sisulu University is request permission to conduct research at Ezibeleni, Ilinge, Philani and Sada Clinics in Lukhanji Sub District. Permission has be granted to her to do the study.

Your in service.

NM KIZZA  
DISTRICT MANAGER

## Appendix F

### Subject information letter to participants (English)

Dear Participant

I am a Registered nurse currently studying towards a Master's degree in Nursing at Walter Sisulu University (WSU). The degree requires that I undertake a full research project. The title of my study is: **The Integration of previously hospital based ARV sites into PHC clinics in Lukhanji sub-district of Chris Hani District Municipality in Eastern Cape**

This research is being conducted under the supervision of Dr M.J. Ntsaba. The reason for undertaking this study is that the researcher would like to describe the experiences of clients taking ARV treatment regarding the quality of integration of previously hospital based ARV sites into PHC clinics of Lukhanji sub-district.

The results of this study will be made available to Chris Hani health district and could be transferable to other areas to improve ARV services in other clinics in the same district. You are requested to participate with the aim of obtaining information about your understanding regarding the integration of ARV sites into PHC clinics. Should you agree to participate in this study no names will appear on any documentation other than the consent forms, which the researcher will keep in a safe confidential place. The interview will take place during the day and a voice recorder will be used to capture comments. The voice recorder is necessary as the researcher will not have a scribe to assist in recording the discussion.

The interviews will take approximately 20 to 30 minutes. There will be no risk, you are under no obligation to participate, and you have a right to withdraw at any time and refuse to participate without giving any reason for such an act. You will not be paid for participating in the interviews. The researcher will check the findings of the study together with participants to ensure that what is in the report is valid.

.....  
Nonkoliso Pakade (Investigator)

Contact number: 0834903404

.....  
Dr M.J Ntsaba (Research Supervisor)

Contact number: 0760132827

**Appendix G**  
**Subject Information letter to participants (*IsiXhosa*)**

Mthathi nxaxheba

Ndingu mongikazi ofundela isidanga se masters kwezokonga kwidyunivesithi yase Walter Sisulu. Ngoko ke kuyimfuneko ukuba ndenze uphando kwesi sidanga ndisifundelayo. Uphando endingathanda ukulenza luthi "Ukuhlanganiswa kwenkonzo zamachiza okulwa intsholongwane ka gawulayo (ARV treatment) ebezifudula zikwi zibhedlele zika rhulumente ngoku zikwi kliniki zika rhulumente eLukhanji sub district.

Isizathu esibangela ukuba umphandi enze oluphando kukuchaza izimvo zabantu abathatha la machiza mayela nobume bomgangatho wenkonzo abazifumanayo kolu hlanganiso. Iziphumo zolu phando zingagqithiselwa nakwamanye amaziko ezempilo ukuphucula umgangatho wonikezelo lwamachiza okulwa ugawulayo kwikliniki zase Chris Hani. Uyacelwa ukuba uthabathe inxaxheba ukuze kufumaneka inkcukacha ngoluvo lwakho malunga noluhlanganiso lwenkonzo kwikliniki. Xa uvuma ukuthabatha inxaxheba , igama lakho alizukuvula ndawo ngaphandle kwefomu ye ntsayino gama ezakugcinwa ngumphandi ikhuselekile. Oluphando luzakwenziwa emini. Umphandi uzakusebenzisa ivoice rekhodi ukwenzela ukuba achola-chole zonke iinkcukacha.

Ingxoxo zizakuthatha malunga namashumi amabini ukuya kumashumi amathathu emizuzu. Awunakuba sesichengeni ngokuthatha inxaxheba koluphando. Unelungelo lokurhoxa nanini na xa ufuna ngaphandle kokunika isizathu soko. Akukho ntlawulo uzakuyifumana ngokuthatha inxaxhe

.....  
Nonkoliso Pakade (Investigator)  
Contact number: 0834903404

.....  
Dr M.J Ntsaba (Research Supervisor)  
Contact number: 0760132827

**Appendix H**  
**Consent form for clients (English)**

**Study title:** The integration of previously hospital based ARV sites into PHC clinics in Lukhanji sub-district of Chris Hani District Municipality in Eastern Cape

**Investigator:** Nonkoliso Pakade

**Research Supervisor:** Doctor M.J Ntsaba

**Institution:** Walter Sisulu University

I am a registered nurse studying the integration of previously hospital based ARV sites into PHC clinics in Lukhanji sub district of Chris Hani District Municipality. The study will provide information that will enable the health professionals to provide quality ARV services in PHC clinics. The study and its procedures have been approved by the research committee at Walter Sisulu University as well as Provincial Department of Health. I can assure you that there will be no risks or discomforts to you in sharing your own experience in the integration of previously based hospital ARV sites into PHC clinics.

The interview will take approximately 20 to 30 minutes to complete. You are free to ask any questions about the study and you can contact the researcher at 0834903404. Your name will not be on the transcription, so that the data will not be linked with your name. Your participation in this study is totally voluntary, even after the interview has started you can refuse to answer specific questions or decide to terminate interview at any point or time. I have read and discussed the consent and I understand the benefits and obligations involved in participating in this study. I hereby freely consent to take part in this study.

.....

Participant's Signature

.....

Date

I have explained this study to the above participant and have sought his/her understanding for informed consent.

.....

Investigator

.....

Date

**Appendix I**  
**Consent form for professional nurses (English)**

**Study title:** The integration of previously hospital based ARV sites into PHC clinics in Lukhanji sub-district of Chris Hani District Municipality in Eastern Cape

**Investigator:** Nonkoliso Pakade

**Research Supervisor:** Doctor M.J. Ntsaba

**Institution:** Walter Sisulu University

I am a registered nurse studying the integration of previously hospital based ARV sites into PHC clinics in Lukhanji sub-district of Chris Hani District Municipality. The study will provide information that will enable the health professionals to provide quality ARV services in PHC clinics. The study and its procedures have been approved by the research committee at Walter Sisulu University as well as Provincial Department of Health. I can assure you that there will be no risks or discomforts to you in sharing your own experience in the integration of previously based hospital ARV sites into PHC clinics.

The interview will take approximately 20 to 30 minutes to complete. You are free to ask any questions about the study and you can contact the researcher at 0834903404. Your name will not be on the transcription, so that the data will not be linked with your name. Your participation in this study is totally voluntary, even after the interview has started you can refuse to answer specific questions or decide to terminate interview at any point or time. I have read and discussed the consent and I understand the benefits and obligations involved in participating in this study.

I hereby freely consent to take part in this study.

.....

Participant's Signature

.....

Date

I have explained this study to the above participant and have sought his/her understanding for informed consent.

.....

Investigator

.....

Date

**Appendix J**  
**Consent form for clients (*IsiXhosa*)**

**Study title:** The integration of previously hospital based ARV sites into PHC clinics in Lukhanji sub district of Chris Hani District Municipality in Eastern Cape

**Investigator:** Nonkoliso Pakade

**Research Supervisor:** Doctor M.J Ntsaba

**Institution:** Walter Sisulu University

Ndingu mongikazi ophanda ngokuhlanganiswa kwenkonzo zamachiza okulwa intsholongwane ka gawulayo (ARV treatment) ebezifudula zikwi zibhedlele zika rhulumente ngoku zikwi kliniki zika rhulumente eLukhanji sub district. Akukho nzuzo uzakuyifumana koluphando kodwa inxaxheba yakho inganceda abongikazi ukuba banikeze iinkonzo ezise mgangathweni ngamachiza kagawulayo kwi kliniki zika rhulumente.

Oluphando neenkukacha zalo lufumene invume kwiDyunivesithi iWalter Sisulu, nakubaphathi be Phondo leMpuma Koloni kunye nabaphathi bekliniki. Ndiyaqinisekisa ukuba awunakuba sesichengeni xa undinika ulwazi lwakho malunga nokuhlanganiswa kwenkonzo zamachiza okulwa ugawulayo kwiikliniki zika rhulumente.

Ingxoxo izakuthatha malunga namashumi amabini ukuya kumashumi amathathu emizuzu. Unelungelo lokubuza ngoluphando, ndifumaneka kulenombolo 0834903404. Ukuthabatha kwakho inxaxheba kuthetha ukuba uyazinikela, unelungelo lokwala, okanye emveni kokuba ingxoxo ziqalisile ungala ukuphendula imibuzo okanye ungarhoxa nangawuphi na umzuzu. Ndisifundile esi sivumelwano, ndaxoxa nomphandi, ngoko ke ndiyeva ukuba inzuzo yokuthatha kwam inxaxheba kolu phando ithini na. Ndinika invume ngaphandle kokuzibophelela koluphando

.....

Intsayino gama

Ndiluchazile olu phando kumthathi nxaxheba wavisisa ngesi sivumelwano

.....

Umhla

.....

Umphandi

.....

Umhla

## **Appendix K**

### **Interview guide for clients**

The interview guide for participants who took ARV treatment from previously hospital based ARV site and currently taking ARV treatment from PHC clinics was developed to allow them to discuss their experiences regarding the integration of ARV services into PHC clinics. The age, gender, duration on ARV treatment at Frontier ARV site and duration on ARV treatment at clinics will be included because the researcher believed that these attributes will have a significant difference in the manner which participants will respond to questions.

#### **Research Sites**

Ezibeleni clinic	Ilinge clinic	Philani clinic	Sada clinic
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#### **Personal details**

Age:	15 -25 years	25-45 years	45 years and above
Gender:	Male	Female	
Duration on ARV treatment at Frontier hospital:	Less than 1year year		More than 1 year
Duration on ARV treatment at the clinic:	Less than 1 year		More than 1 year

## **Appendix L**

### **Interview questions in English**

#### **Introductory question**

Describe your view regarding the integration of ARV services into PHC clinics?

#### **Core questions**

1. Describe your view regarding the treatment you obtain in the clinic compared to when you took your treatment from the hospital
2. Explain the care you obtain from health personnel in the clinic as compared to when you were at the hospital
3. How would you compare the ARV treatment and other drugs availability between hospital and clinic?
4. Explain how you are referred to the Doctor, Social worker, Dietician and radiologist
5. In your view which site (Hospital or Clinic) is regarded as best for your complete health care?
6. Is there anything you would like to discuss with me which is not included in my questions?

**Appendix M**  
**Imibuzo ngesi*Xhosa***

**Umbuzo ophambili**

1. Chaza uluvo lwakho malunga nokuhlanganiswa kwenkonzo zamachiza okulwa intsholongwane ka gawulayo (ARVS) ebezifudula zikwi zibhedlele zika rhulumente ngoku zikwi kliniki zikarhulumente eLukhanji sub-district.
2. Chaza ngoncedo olufumana kubasebenzi bezempilo xa uzothatha amayeza ekliniki.
3. Ingaba amayeza ayafumaneka ngalo lonke ixesha ekliniki njengasesibhedlela ?
4. Cacisa ngendlela enithunyelwa ngayo kugqirha nakwezinye inkonzo zoncedo xa kukho ingxaki.
5. Kuluvo lwakho leliphi icala elinikeza inkonzo ezise mgangathweni phakathi kwesibhedlela nekliniki?
6. Ingaba ikhona into onqwenela ukuba singathetha ngayo ,endingayifakanga kule mibuzo?

## **Appendix N**

### **Interview guide for professional nurses**

In formulating this guide the researcher will consider the following: nurse's experience in initiating and managing clients on ARV treatment. Research questions and research objectives will be considered in formulating the interview guide. The reason for this is to determine whether the posed questions will answer the research questions and research objectives.

#### **Research Sites**

Ezibeleni clinic

Ilinge clinic

Philani clinic

Sada clinic

#### **Personal details**

Gender:

Male

Female

Experience on ARV treatment initiation:

1 year and  
above

More than 2  
years

## **Appendix O**

### **Interview questions in English**

#### **Introductory question**

1. Describe your view regarding the integration of ARV services from hospital based clinic into PHC clinics?

#### **Core questions**

2. Describe the availability of ARV treatment and other drugs when you used to obtain your treatment in hospital based ARV Clinic

3. Describe the availability of ARV treatment and other drugs that you get from the Clinic

4. How do you refer patients to the Doctor, Social worker, Dietician and Radiologist?

5. What challenges do you experience in initiating and managing clients on ARV treatment?

6. Is there anything you would like to discuss with me which is not included in my questions?