



University of Venda

**CHALLENGES CONFRONTING PROFESSIONAL
NURSES IMPLEMENTING THE NURSE-INITIATED-
AND-MANAGED ANTIRETROVIRAL TREATMENT
PROGRAMME IN VHEMBE DISTRICT, SOUTH
AFRICA**

by

Rambani Norman Rasalanavho

Student Number: 11625370

A mini-dissertation submitted in partial fulfilment of the requirements for degree:

Master of Public Health (MPH)

Department of Public Health

School of Health Sciences

University of Venda

Supervisor

Dr D.U. Ramathuba

Co-Supervisor

Dr N.S. Mashau

18 December 2015

©University of Venda

DECLARATION

I, **Rambani Norman Rasalanavho**, declare that “**Challenges Confronting Professional Nurses Implementing the Nurse-Initiated-and-Managed Antiretroviral Treatment Programme in Vhembe District, South Africa**” is my own work and that all sources that I have used or quoted have been indicated and acknowledged by means of complete references, and that this work has not been submitted for another degree at this university or any other institution.

Rambani Norman Rasalanavho :
Student Number: 11625370

Date Signed :

DEDICATION

This study is dedicated to the Department of Health, Provincial and District Management for the effective intervention with regard to quality nurse-initiated-and-managed antiretroviral treatment, and to all NIMART-trained professional nurses implementing the programme to have a conducive working environment.

ACKNOWLEDGEMENTS

I thank God the Almighty Who through His grace gave me the strength and guided me throughout this study.

- ∞ My special gratitude goes to the participants in this study, for their contribution and commitment as well as the health authorities in Limpopo Province for granting permission that made it possible for this study to be a success.
- ∞ My sincere thanks is due to my supervisor, Dr D.U. Ramathuba, who held my hand throughout this journey and provided direction, insight and feedback. Your patient support and wisdom are appreciated. I am also grateful for your approach to me as a student, your drive and energy was exemplary, your constant communication, your confidence in me was a driving force to do my best.
- ∞ To my co-supervisor, Dr N.S. Mashau, for her contribution to the study, your involvement is greatly valued.
- ∞ Special thank you to my parents, Mrs Masindi Mbambale and the late Mr R.S. Rasalanavho for their tireless support and inspiration.
- ∞ I will like to thank my wife, M.M. Nkoana, for her encouragement, you have been great!
- ∞ I would like to give special thanks to my friends, Mashudu Melton Mbedzi and Mosses Moyo, for their support throughout, for the reviews during the study and positive criticisms and information.
- ∞ The editorial assistance of Professor DC Hiss, Department of Medical Biosciences, University of the Western Cape, is gratefully acknowledged (Appendix 11).

ABSTRACT

Antiretroviral treatment (ART) roll-out presents new opportunities and challenges for nurse-initiated-and-managed antiretroviral treatment (NIMART) trained nurses in the primary health care (PHC) facilities. Nurses have had central role in the management of the human immunodeficiency virus (HIV) since the disease was first reported. The purpose of this study was to explore and describe the challenges confronting professional nurses implementing the NIMART programme in PHC facilities under Thulamela B Municipality, Vhembe District. This study used a qualitative approach in which the interview was used as a data collection technique. The target population comprised professional nurses who were trained in NIMART and who were implementing the programme. Probability sampling, in particular its sub-type, the simple random sampling technique, was used to select fifteen PHC facilities within the sub-District. The non-probability purposive sampling technique was used to select the NIMART-trained professional nurses in Thulamela B sub-District. The sample size was determined by data saturation. Data were collected from the participants through semi-structured interviews, observations and field notes to assist in transcription. A digital recorder was used to log individual responses during the interview sessions. Data from the digital recordings were transcribed verbatim. Results were analysed and interpreted thematically. This study established that nurses were facing several challenges such as shortages of infrastructure and medication, lack of support from management and non-NIMART-trained nurses and discrimination. The NIMART programme was poorly supported in terms of nurse training as nurses indicated that they faced problems in performing tasks such as obtaining blood from children. Doctors were also reported to not fully supporting the NIMART programme. NIMART-trained nurses were optimistic with the implementation of the programme despite the challenges they faced. To overcome some of the challenges faced at workplaces, nurses devised mechanisms such as allocating different times for collecting tablets and review, and group education for those consulting. It was also established that nurses provided support to each other. Nurses were reported to be using their own transport to collect drugs from the local pharmacy store. Recommendations that emanated from the discussion of the findings and the conclusions of this study are likely to have implications and applications for supporting and advancing the NIMART programme.

Keywords: nurse-initiated-and-managed antiretroviral treatment, challenges, primary health care facilities

LIST OF ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral/Aniretroviral Drugs
CCMDD	Chronic Central Medication Distribution and Dispensing
CHBC	Community Home-Based Care for People with HIV/AIDS
DoH	Department of Health
FPD	Foundation for Professional Development
HAART	Highly Active Antiretroviral Treatment
HCT	HIV Counselling and Testing
HCW	Health Care Worker
HIV	Human Immunodeficiency Virus
HPCSA	Health Professions Council of South Africa
HSRC	Human Sciences Research Council
IMCI	Integrated Management of Childhood Illnesses
MSF	Médecins Sans Frontières
MDR-TB	Multidrug-Resistant Tuberculosis
NIMART	Nurse-Initiated-and-Managed Antiretroviral Treatment
Peads	Paediatrics
PHC	Primary Health Care
PICT	Provider-Initiated Counselling and Testing
PLWHA	People Living with HIV/AIDS
PMTCT	Prevention of Mother-to-Child Transmission of HIV
RSA/SA	Republic of South Africa/South Africa
SAG	South African Government
SANAC	South African National AIDS Council
SANC	South African Nursing Council
StatsSA	Statistics South Africa

TB	Tuberculosis
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children’s Fund
VCT	Voluntary Counselling and Testing
WHO	World Health Organization
XDR-TB	Extensively Drug-Resistant Tuberculosis

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT.....	v
LIST OF ABBREVIATIONS.....	vi
TABLE OF CONTENTS.....	viii
LIST OF FIGURES.....	xiii
LIST OF TABLES.....	xiii
CHAPTER 1.....	1
OVERVIEW OF THE STUDY	1
1.1 Introduction.....	1
1.2 Problem Statement	5
1.3 Rationale of the Study.....	6
1.4 Significance of the Study	6
1.5 Aim of the Study	7
1.6 Research Objectives	7
1.7 Research Questions	7
1.8 Definition of Operational Concepts	8
1.8.1 Challenges.....	8
1.8.2 Professional Nurse	8
1.8.3 Nurse-Initiated-and-Managed Antiretroviral Treatment	8
1.8.4 Theoretically-Based Literature Review	9
1.8.4.1 Meta-Theoretical Perspective.....	9
1.8.4.2 Theoretical Perspective.....	9
1.9 Outline of Chapters	10
1.10 Summary.....	11
CHAPTER 2.....	12
LITERATURE REVIEW	12
2.1 Introduction.....	12
2.2 HIV Prevalence Trends in South Africa	12
2.3 Implementation of NIMART Worldwide	14
2.4 Challenges Confronting NIMART Nurses	15
2.4.1 Human Resources.....	15
2.4.2 The Risk of Infection	18
2.4.3 Infrastructural Challenges.....	19
2.4.4 Pharmaceutical Challenges.....	20
2.4.5 Management of Children with HIV/AIDS	21
2.4.6 Emotional and Psychological Impact on Nurses.....	22
2.5 Summary.....	23

CHAPTER 3.....	24
RESEARCH DESIGN AND METHODS.....	24
3.1 Introduction.....	24
3.2. Research Designs	24
3.2.1 Qualitative Research	25
3.2.2 Explorative Research	25
3.2.3 Descriptive Research.....	25
3.2.4 Contextual Research	26
3.3 Study Setting.....	26
3.4 Population	26
3.5 Sampling	26
3.5.1 Sampling of Primary Health Care Facilities	27
3.5.2 Sampling of Participants.....	28
3.5.3 Sampling Size	28
3.5.4 Inclusion Criteria.....	28
3.6 Data Collection.....	29
3.7 Research Questions	29
3.7.1 Central Research Question	30
3.7.2 Probing Questions	30
3.8 Data Analysis.....	30
3.9 Measures to Ensure Trustworthiness	30
3.9.1 Credibility/Truth Value.....	31
3.9.2 Dependability/Consistency.....	32
3.9.3 Confirmability/Neutrality	32
3.9.4 Transferability/Applicability	33
3.10 Ethical Considerations	33
3.10.1 Permission to Conduct the Study.....	33
3.10.2 Informed Consent.....	34
3.10.3 Right to Privacy.....	34
3.10.4 Right to Anonymity and Confidentiality	34
3.10.5 Self-Determination.....	34
3.10.6 Right to Protection from Discomfort and Harm.....	35
3.10.7 Right to Fair Treatment.....	35
3.10.8 Dissemination of the Results	35
3.10.9 Disposal of Data	36
3.11 Summary.....	36
CHAPTER 4.....	37
RESULTS, ANALYSIS AND INTERPRETATION.....	37
4.1 Introduction.....	37
4.2 Research Objectives and Research Questions.....	37
4.3 Themes Emerging from Expressions of Nurses’ General Experience in Providing NIMART	38
4.3.1 Theme 1: Concerns Related to Infrastructure.....	38

4.3.1.1 Category 1: Shortage of Consultation Rooms.....	40
4.3.1.2 Category 2: No Privacy/Confidentiality	40
4.3.2 Theme 2: Poor NIMART Programme Support System for NIMART-Trained Professional Nurses.....	41
4.3.2.1 Category 1: Poor Follow-Up System.....	41
4.3.2.2 Category 2: Lack of Continuous Monitoring and Support.....	43
4.3.2.3 Category 3: Lack of Periodic Updates	45
4.3.2.4 Category 4: Lack of Mentoring and Debriefing.....	46
4.3.2.5 Category 5: More Information in a Short Period of Time	47
4.3.3 Theme 3: Burden of Overload	48
4.3.3.1 Category 1: Shortage of NIMART-Trained Professional Nurses	48
4.3.4 Theme 4: Concerns Related to Lack of Resources	49
4.3.4.1 Category 1: Shortages of Material Resources Such as Drug and Gloves.....	50
4.3.5 Theme 5: Lack of Transport for PLWHA to PHC Facilities.....	50
4.3.5.1 Category 1: Villages That are Far from PHC Facilities	51
4.3.5.2 Category 2: Poor Transport for Drug Collection	51
4.3.6 Theme 6: High Rate of HIV/AIDS Patients Defaulting	52
4.3.6.1 Category 1: Low Turnout of Patients for Drug Collection.....	52
4.3.6.2 Category 2: High Number of Patients to Follow-Up	53
4.4 Themes Emerging from Expressions of How Nurses Coped with the Provision of NIMART to PLWHA	53
4.4.1 Theme 1: Positive and Negative Experiences on NIMART Programme Implementation.....	54
4.4.1.1 Category 1: Poor Acceptance by HIV/AIDS Patients from Their Own Villages	54
4.4.1.2 Category 2: Nurses' Withdrawal from Initiating Patents Due to Negative Experiences	56
4.4.2 Theme 2: Lack of Awareness on HIV/AIDS Among Patients.....	57
4.4.2.1 Category 1: Patients Using Teas, Anointing Oils and Medicines from Spiritual Leaders	57
4.4.3 Theme 3: Concerns About Negative Attitudes to NIMART Programme	59
4.4.3.1 Category 1: Stigmatisation of HIV/AIDS on NIMART Programme	59
4.4.3.2 Category 2: Negative Feelings Towards NIMART Programme.....	60
4.4.4 Theme 4: Use of Own Facilities to Collect Drugs	61
4.4.4.1 Category 1: Sense of Ownership of the NIMART Programme	61
4.4.5 Theme 5: Positive Strategies to Cope with Large Numbers of Patients	62
4.4.5.1 Category 1: Allocation of Different Dates to Patients for Review	62
4.4.5.2 Category 2: Caucusing and Sharing Experiences	62
4.4.5.3 Category 3: Group Training of Patients.....	64
4.5 Themes Emerging from Expressions of What Could be Done to Enhance Nurses' NIMART Programme Support 64	
4.5.1 Theme 1: Need for Training of Nurses on PICT, VCT and HCT in the NIMART Programme	64
4.5.1.1 Category 1: Staff Development.....	66
4.5.2 Theme 2: Need to Increase Frequency of FPD or District Staff Dealing with HIV/AIDS	67
4.5.3 Theme 3: Timely Communication of Policies Through Formal Channels	68
4.5.3.1 Category 1: Effective Communication of Policies	68
4.5.4 Theme 4: Concerns About the Duration of NIMART Training.....	69
4.5.4.1 Category 1: Quality of Training.....	69
4.6 Summary	70

CHAPTER 5	72
DISCUSSION, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS	72
5.1 Introduction.....	72
5.2 Purpose of the Study	72
5.3 Conclusions in Relation to the Research Objectives and Questions.....	72
5.4 Discussion of the Findings.....	73
5.4.1 Research Question 1: What Were Nurses’ General Experiences of Providing NIMART?	73
5.4.1.1 Theme 1.1: Concerns Related to Infrastructure	73
5.4.1.2 Theme 1.2: Poor NIMART Programme Support System for NIMART-Trained Professional Nurses.....	74
5.4.1.3 Theme 1.3: Burden of Overload.....	75
5.4.1.4 Theme 1.4: Concerns Related to Lack of Resources	76
5.4.1.5 Theme 1.5: Lack of Transport for PLWHA to PHC Facilities	76
5.4.1.6 Theme 1.6: High Rate of HIV/AIDS Patients Defaulting	76
5.4.2 Research Question 2: How Did Nurses Cope with the Provision of NIMART to PLWHA?	77
5.4.2.1 Theme 2.1 Positive and Negative Experiences on NIMART Programme Implementation.....	77
5.4.2.2 Theme 2.2 Lack of Awareness on HIV/AIDS Among Patients.....	78
5.4.2.3 Theme 2.3 Concerns Over Negative Attitudes to NIMART Programme	78
5.4.2.4 Theme 2.4 Use of Own Transport to Collect Drugs	79
5.4.2.5 Theme 2.5 Positive Strategies to Cope with Large Numbers of Patients.....	79
5.4.3 Research Question 3: What Could be Done to Enhance Nurses’ NIMART Programme Support?	80
5.4.3.1 Theme 3.1: Need for Training of Nurses on PICT, VCT and HCT in the NIMART Programme	80
5.4.3.2 Theme 3.2: Need to Increase Frequency of FPD or District Staff Dealing with HIV/AIDS	80
5.4.3.3 Theme 3.3: Timely Communication of Policies Through Formal Channels	81
5.4.3.4 Theme 3.4: Concerns About the Duration of NIMART Training	82
5.5 Application and Integration of the Transactional Model of Stress and Coping.....	83
5.6 Conclusions.....	85
5.7 Limitations of the Study.....	86
5.8 Recommendations	87
REFERENCES	88
APPENDIX 1	96
APPROVAL OF RESEARCH PROPOSAL BY UNIVERSITY OF VENDA HIGHER DEGREES COMMITTEE	96
APPENDIX 2	97
ETHICAL CLEARANCE - UNIVERSITY OF VENDA	97
APPENDIX 3	98
REQUEST TO DEPARTMENT OF HEALTH TO CONDUCT THE STUDY	98
APPENDIX 4	99
PERMISSION FROM LIMPOPO PROVINCE DEPARTMENT OF HEALTH TO CONDUCT THE STUDY	99
APPENDIX 5	100
REQUEST TO VHEMBE DISTRICT DEPARTMENT OF HEALTH TO CONDUCT THE STUDY	100
APPENDIX 6	101
PERMISSION FROM VHEMBE DISTRICT DEPARTMENT OF HEALTH TO CONDUCT THE STUDY	101
APPENDIX 7	102

INFORMATION LEAFLET	102
APPENDIX 8.....	104
CONSENT FORM.....	104
APPENDIX 9.....	105
INTERVIEW GUIDE.....	105
APPENDIX 10.....	106
REPRESENTATIVE PARTICIPANTS' INTERVIEW TRANSCRIPTS	106
APPENDIX 11.....	116
CONFIRMATION BY LANGUAGE EDITOR.....	116

LIST OF FIGURES

Figure 2.1: HIV prevalence trends in South Africa from 2002 to 2014	13
Figure 2.2: Prevalence of HIV infections by province	13
Figure 3.1: Map of Vhembe District municipalities and study setting locality in the Limpopo Province	27

LIST OF TABLES

Table 1.1: ARV rollout statistics of Thohoyandou Health Centre 2011/2012	6
Table 3.1: Tesch's eight steps of qualitative data analysis	31
Table 4.1: Themes, categories and sub-categories on participants' experiences in providing NIMART	39
Table 4.2: Themes, categories and sub-categories on nurses coping with provision of NIMART programme to PLWHA	55
Table 4.3: Themes, categories and sub-categories on enhancing nurses' NIMART programme support.....	65

CHAPTER 1

OVERVIEW OF THE STUDY

1.1 Introduction

Globally, an estimated 34 million people, including 2.5 million newly infected people, were by 2011, living with the human immunodeficiency virus (HIV). In 2010, the prevalence of HIV was 2.7 million. However, there was a decline in the prevalence rate annually, this resulted in a decreased number of people dying from the acquired immunodeficiency syndrome (AIDS)-related causes worldwide (WHO, UNICEF & UNAIDS, 2011).

According to UNAIDS (2011), an estimated 2.3 million people were living with HIV/AIDS in Europe. This figure is considerably low when compared to Africa, which has an estimated 23.3 million people living with HIV/AIDS (PLWHA). It is assumed that European countries have better health systems to manage HIV/AIDS. Sub-Saharan Africa remains most severely affected, with an estimated 23.2 million PLWHA. This value accounts for 69% of PLWHA globally (WHO, 2011).

In 2013, South Africa, had an estimated 5.26 million PLWHA and had the largest burden of HIV disease (Statistics SA, 2013). In 2010, an estimated 2.9 million had died of AIDS-related diseases, with an annual AIDS mortality of 347,000, in which 17.8% were in the 15-49 year age group (UNAIDS, 2010). The rapid spread of HIV/AIDS negatively impacts on the already inadequate health care system characterised by a deteriorating infrastructure, lack of medical equipment, shortage of antiretrovirals (ARVs). It also makes it difficult to prevent contagion and implement HIV policies in public hospitals. HIV/AIDS has generated fear, anxiety and prejudice amongst health workers (Ramathuba & Davhana-Maselesele, 2011).

The HIV/AIDS epidemic has posed and will continue to pose tremendous challenges to the health systems of the developing countries, especially in the most severely affected countries such as South Africa. HIV/AIDS affect the health sector in a number of different ways. Health workers, themselves, may be at risk of being infected with HIV, and this will affect the supply of public health services. Caring for HIV/AIDS patients is demanding, stressful and high levels of stress may lead to greater staff absenteeism and low morale. In some cases, the quality of health care services may also be affected by the attitudes of the health care staff towards HIV/AIDS patients as they fear contracting the disease. The psychological stress involved in treating HIV/AIDS patients may also lead to a reduction in the quality of services provided. HIV/AIDS contributes to increases in health expenditures in both the public and private sectors (UN, 2003).

Health care workers have been overwhelmed by the impact of HIV/AIDS on public health care services. The majority of resources in many facilities are being used to treat people presenting with opportunistic infections or dying from AIDS-related illnesses. This has resulted in the overcrowding of under-resourced primary health care (PHC) facilities where professional nurses work under challenging circumstances that might compromise patient care and increase the risk of infection. The working conditions are worsened by lack of specialised training and a staff shortage (National Department of Health, 2007).

Ramathuba & Davhana-Maselesele (2013) reported that the Limpopo Province is experiencing a dire shortage of nurses. This is caused by urban-rural disparities in workforce distribution. Nurse training and recruitment throughout the Limpopo Province is very low compared to its population trends. The Limpopo Province Department of Health revealed that it is experiencing challenges of a shortage of nurses as well as difficulty in recruiting, training and retaining an adequate number of nurses to meet the provincial needs of service delivery. Nurse-initiated-and-managed ARV treatment (NIMART) is a programme designed for PLWHA to access treatment and maintain compliance. It is a strategy that has yielded positive results in developing countries, and some African countries have followed similar trends and reported the effectiveness of the programme.

Since the disease was first reported, nurses have played a central role in the management of the HIV/AIDS. They have been involved in all aspects of care, from diagnosis and treatment support to home-based care and palliation. In resource-poor settings around the world, nurses have taken on major responsibilities in the care of PLWHA (Furin, Haidar, Lesia, Ramangoela & Rigodon, 2012).

Fredlund (2009) indicated that NIMART poses the following benefits: Nurses are available more days onsite than doctors, thus promoting accessibility and they stay more years at a PHC facilities and nurses are able to form long-term nurse-patient relationships and NIMART empowers them by enhancing their self-esteem. However, Bester, Du Plessis & Greeff (2006) argued that professional nurses experience interpersonal discomfort and stress that can be intensified when nursing terminally ill HIV/AIDS patients.

Fairall, Bachmann, Louwagie, Van Vuuren, Chikobvu, Steyn, Staniland, Timmerman, Msimanga, Seebregts, Boulle, Nhiwatiwa, Bateman, Zwarenstein, & Chapman (2008) indicated that task shifting ART care to nurses has been increasingly used and positively described in Botswana, Lesotho, Rwanda, Zambia and Uganda. One of the factors limiting access to ART was that only doctors could initiate patients on ART. However, in 2008, task-shifting was recommended by both World Health Organisation (WHO) and the South African National AIDS Council (SANAC) in South Africa to expand access to ART through the NIMART programme.

A major component of this task-shifting strategy in South Africa is to reduce the role of doctors in managing patients on ART, in favour of PHC nurses. Unlike in many countries in the region, South Africa's National treatment programme had been largely managed by doctors. Previously, nurses were not authorised to dispense ARVs, initiate patients on treatment, or conduct medical examinations in lieu of doctors. Since most PHC facilities are staffed entirely by nurses, most accredited ART sites were located at hospitals rather than PHC facilities. In 2010, the South African government (SAG) implemented the NIMART model which allowed nurses to initiate, as

well as manage ART at PHC level. This implementation was done following success in decentralising care and allowing non-physicians to initiate ART in countries like Swaziland, Malawi and Kenya (Fairall, Bachmann, Lombard, Timmerman, Uebel, Zwarenstein, Boulle, Georgeu, Colvin, Lewin, Faris, Cornick, Draper, Tshabalala, Kotze, Van Vuuren, Steyn, Chapman & Bateman, 2012). In Botswana, the government did not want to use the physician-based model used in industrialised countries because the majority of the patients were in rural areas; so, since 2002, it opted for non-medical staff initiated therapy. This model works well and reduces the waiting time and sustains the life of people in Botswana because nurses are also monitoring the progress of the patients (Miles, Clutterbuck, Seitio, Sebegodi & Riley, 2007).

A study done by Pillay, White & McCormick (2012) indicated that the Department of Health (DoH) in South Africa planned to prepare an additional 500 public ART facilities per quarter and to initiate 500,000 new patients on ART between April 2010 and June 2011. The DoH introduced provider-initiated counselling and testing (PICT) and NIMART, in order to reduce the waiting time in health facilities. In April 2010, the DoH trained 390 nurses on NIMART and plans were set for provinces, districts and ART facilities to improve their HIV counselling & testing (HCT) and NIMART performances. Presently, the DoH in South Africa has managed to train 7,492 professional nurses to diagnose and prescribe drugs for HIV/AIDS.

ART roll-out presents new opportunities and challenges for health care providers. It heralds new types of relationships between nurses and patients, characterised by regular interactions which increase the workload and the need for constant professional updates. Campell, Scott, Madanhire, Nyamukupa & Gregson (2011) also indicated that the provision of ART to the general population in sub-Saharan Africa is a new programme requiring ongoing PHC facilities, visits and carefully managed drug prescription. As a result, it brings an increased workload. Despite enrolling ARVs to PLWHA, there are still challenges that have been highlighted in the South African National Strategic Plan on HIV/AIDS, STIs and TB prevention and care 2012 to 2016. These include the additional workload and organisational challenges, thus deepening concerns about the ongoing

shortage of human resources for health (RSA, 2011). Limpopo Province is one of the most rural provinces in South Africa, and it is faced with tremendous shortages of health personnel due to the movement of nurses to urban areas, the brain drain to other countries and the death of some nurses due to the HIV/AIDS pandemic (WHO, 2006).

On Thursday, 18 April 2013 at 21:30 on SABC3, Special Assignment highlighted the ongoing health crisis in the Limpopo Province, indicating that most of the province's hospitals have been running without essential medication, staff, and that they experienced food shortages. This has compromised the quality of public health in the province and has led to the dismissal of some public servants by the minister of health because of corruption cases. As a result, nurses at PHC facilities are the ones at the service delivery sites who bear the brunt of facing PLWHA without proper medication. This causes the PLWHA to default in their treatment and to develop resistance to drugs. The rapid spread of HIV/AIDS as well as fraud and corruption have negatively impacted on the inadequate health care system. Thus, the researcher strived to determine the challenges confronting professional nurses in providing NIMART in Vhembe District, Limpopo Province, South Africa.

1.2 Problem Statement

In Thulamela B sub-District, the epidemic has had a devastating impact, which has imposed profound suffering on individuals and their families. The impact on the health care system is of great concern due to a shortage in the nursing workforce. The shortage of nursing personnel and those who are skilled in AIDS care contributes to a negative impact on the ARV rollout. The shortage of nurses is critical as they also offer other PHC services. The increased burden of the workload makes it impossible for professional nurses to give holistic care to PLWHA, resulting in the latter experiencing complications and side effects from medications. Another major threat to ARV rollout is the negative attitudes of the nurses who are not NIMART-trained as they refuse to offer services to PLWHA and are reluctant to be inducted in the programme.

Table 1.1 shows the increasing numbers of PLWHA and the limited number of nurses offering the services. They do this without the help of other allied health care workers who assist in holistic, care resulting in coordination, fragmentation of services, and failure to provide a comprehensive NIMART programme.

Table 1.1: ARV rollout statistics of Thohoyandou Health Centre 2011/2012

Institution	Year	PLWHA on ARVs	PLWHA on wellness programme	Number of NIMART-trained nurses	Total
Thohoyandou PHC facilities	2011	548	391	4	939
	2012	814	468	7	1232

The researcher is of the view that NIMART training in terms of time is inadequate because much information is presented in the space of a week, leading to nurses missing essential knowledge on how to assess and manage patients effectively. Therefore, the present study was undertaken to explore the challenges confronting NIMART-trained professional nurses.

1.3 Rationale of the Study

ARV rollout adopted task shifting approach through the NIMART programme whereby nurses initiate and manage ARVs at PHC facilities. However, the DoH policymakers did not adequately consider resources to implement the programme. With an increasing number of PLWHA accessing the NIMART programme, nurses working in these settings are experiencing a tremendous amount of stress as they struggle with increasing patient workloads, very sick patients and fewer resources. This has motivated the researcher to explore what trained NIMART nurses have been experiencing in Vhembe District, in order to find ways to overcome these challenges.

1.4 Significance of the Study

According to Burns & Grove (2009), the significance of a study is associated with its importance to the body of knowledge. The findings of this study will provide information about NIMART

challenges which can be rectified at PHC and district levels. It will also improve the quality of care that patients on NIMART programme receive. Health management might improve the strategies for implementing NIMART programme. The study will add to the existing body of knowledge on NIMART programme implementation, and on how to better support nurses who provide the services. The study will also contribute to the reduction of mortality and morbidity associated with HIV/AIDS, as well as the reduction of expenditure in the treatment of HIV/AIDS.

1.5 Aim of the Study

To determine the challenges confronting professional nurses implementing the NIMART programme in Thulamela Municipality, Vhembe District.

1.6 Research Objectives

Objectives are clear, concise declarative statements that are expressed in the present tense and which focus on one or more variables (Burns & Grove, 2003; Brink, 2008). In this study, the objectives were to:

- ∞ Identify the challenges confronting NIMART-trained nurses in Thulamela B Municipality, and
- ∞ Describe the challenges confronting NIMART-trained nurses in Thulamela B Municipality.

1.7 Research Questions

A research question is a concise, interrogative statement that is worded in the present tense and can also include one or more variables (Burns & Grove, 2009; Brink, 2008). In this study, the central research question was:

What challenges were NIMART nurses confronted with while implementing the NIMART programme?

The research question led to the formulation of probing research sub-questions that further guided the study as follows:

- ∞ What were the nurses' general experiences of providing NIMART?
- ∞ How did nurses cope with the provision of NIMART to PLWHA?
- ∞ What could be done to enhance nurses' NIMART programme support?

1.8 Definition of Operational Concepts

1.8.1 Challenges

Challenges are tasks or situations that test someone's abilities (Oxford Dictionary, 2013). For the purpose of this study, a challenge shall mean anything which hinders the effective implementation of the NIMART programme.

1.8.2 Professional Nurse

According to the South African Nursing Council (SANC), a professional nurse is a person who is qualified and competent to independently practice comprehensive nursing in the manner and to the level prescribed, and who is capable of assuming responsibility and accountability for such practice (SANC Nursing Act no. 33 of 2005). For the purpose of this study, a professional nurse shall mean a registered nurse authorised to assess, manage and dispense medication.

1.8.3 Nurse-Initiated-and-Managed Antiretroviral Treatment

Nurse-initiated-and-managed ART (NIMART), according to the National Strategic Plan for Nurse Education, Training and Practice, 2012/13-2016/17, means a programme in which professional nurses are trained to initiate and monitor patients on ARVs. For the purpose of this study, NIMART shall mean a programme in which professional nurses are trained to assess, manage, monitor and initiate patients who are eligible for ART.

1.8.4 Theoretically-Based Literature Review

Theoretical literature refers to published materials dealing with the theory or model that underlies the topic area. It includes concept analysis, models of theories and a conceptual framework that support the research topic (Akinsola, 2005).

1.8.4.1 Meta-Theoretical Perspective

The researcher concurs with the notion that healthy persons or professional nurses exercise their duties fully and effectively when they share their needs and frustrations. The researcher further believes that an environment that deals with death and dying causes distress in professional nurses; thus their needs, aspirations and frustrations in the organisation (public sector) should be taken care of for effective and efficient service delivery. Professional nurses are always going an extra mile to care for patients, and they feel good and fulfilled when they are recognised, supported and commended for their work.

1.8.4.2 Theoretical Perspective

Lazarus & Folkman's (1984) transactional model of stress and coping was adapted to describe the theoretical framework. Lazarus (cited in Rice, 2000) contended that stress does not exist in the event, but rather it is a result of a transaction between a person and his/her environment. As such, stress encompasses a set of cognitive, affective and coping variables. The model proposes that stress can be reduced by helping stressed professional nurses change their perceptions of stressors, and by providing them with strategies to help them cope and improve their confidence in their ability to do so.

Lazarus & Folkman (1984) defined psychological stress as a case in which individuals appraise their environment as taxing or exceeding their resources and/or endangering their well-being. They further delimited coping as constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of a person. Coping involves "managing the stressful situation," which may include efforts to

minimise, avoid, tolerate, change or accept a stressful situation as a person attempts to master or handle his/her environment. Lazarus & Folkman (1984) viewed coping as a process through which individuals manage the demands of the person-environment relationship. The cognitive appraisal is seen as a process of categorising the encounter in three phases, namely: the primary appraisal, which serves to judge the encounter as either irrelevant, benign, positive or stressful; the secondary appraisal which focuses on what might be done, and it evaluates the benefits and consequences of a particular coping strategy; finally, re-appraisal, which is a successive evaluation that is based on new information obtained from the environment and/or person during the circumstance.

The Lazarus & Folkman's (1984) model identified two forms of coping, namely: problem-focused coping and emotion-focused coping. Problem-focused coping encompasses efforts to define the problem, generate alternative solutions, weigh the cost and benefits of various actions, take action to change what is changeable, and, if necessary, learn new skills. Problem-focused efforts can be directed outward to alter some aspects of the environment or inward to alter some aspects of the self, like changing the meaning of the situation or event, reducing the ego involvement or recognising the existence of personal resources and strengths. Emotion-focused coping strategies are directed towards decreasing emotional distress with tactics such as selective attention, venting emotions, seeking social support and meditating.

1.9 Outline of Chapters

Chapter 1: Overview of the Study

Chapter 2: Literature Review

Chapter 3: Research Design and Methods

Chapter 4: Results, Analysis and Interpretation

Chapter 5: Discussion, Conclusions, Limitations and Recommendations

1.10 Summary

This chapter covered the introduction and background to the study which encompassed the problem statement, rationale, significance, aims and objectives, and the research questions. Operational definitions of key terminologies and the theoretical perspectives on which the study is premised have been provided. For the purposes of this study, the researcher adopted Lazarus & Folkman's (1984) transactional model of stress and coping to describe the theoretical framework. Chapter 2 will offer greater detail of the relevant literature consulted to place the study in its proper context of the existing body of knowledge and to gain better insight of the research topic.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The literature review in this section comprises of the data-based literature and conceptual literature. Data-based literature is theoretical literature, while conceptual literature is empirical literature (Burns & Grove, 2007). Conceptual literature focuses on the challenges confronting NIMART-trained professional nurses when implementing the programme. Data-based literature centers on the data, the implementation of the NIMART programme in different countries, and challenges confronting professional nurses implementing the NIMART programme. The literature review is an evaluative report of studies found in the literature related to the selected area. The review given here describes, summarizes, evaluates and clarifies literature on a theoretical basis for the research and help the researcher to determine the nature of this research study.

2.2 HIV Prevalence Trends in South Africa

Several reports on HIV prevalence show that the proportion of South Africans infected with HIV has increased from 10.6% in 2008 to 12.2% in 2012 (Human Sciences Research Council/HSRC, 2014). National HIV prevalence, incidence and behaviour surveys indicated that the total number of infected South Africans now stands at 6.4 million; 1.2 million more than in 2008 (Mia, 2014). Statistics South Africa (StatsSA, 2014) reported HIV statistics slightly lower than those by HSRC.

The trends in the HIV prevalence since 2002 as reported by StatsSA are shown on the Figure 2.1. The results show a steady increase in the population being infected by HIV since 2002. The prevalence of HIV, as analysed by province, is depicted in Figure 2.2. The HIV prevalence was highest in KZN (16.9%) and least in Western Cape (5.0%). Limpopo Province, in which this study was carried out, has the third lowest infection prevalence (9.2%).

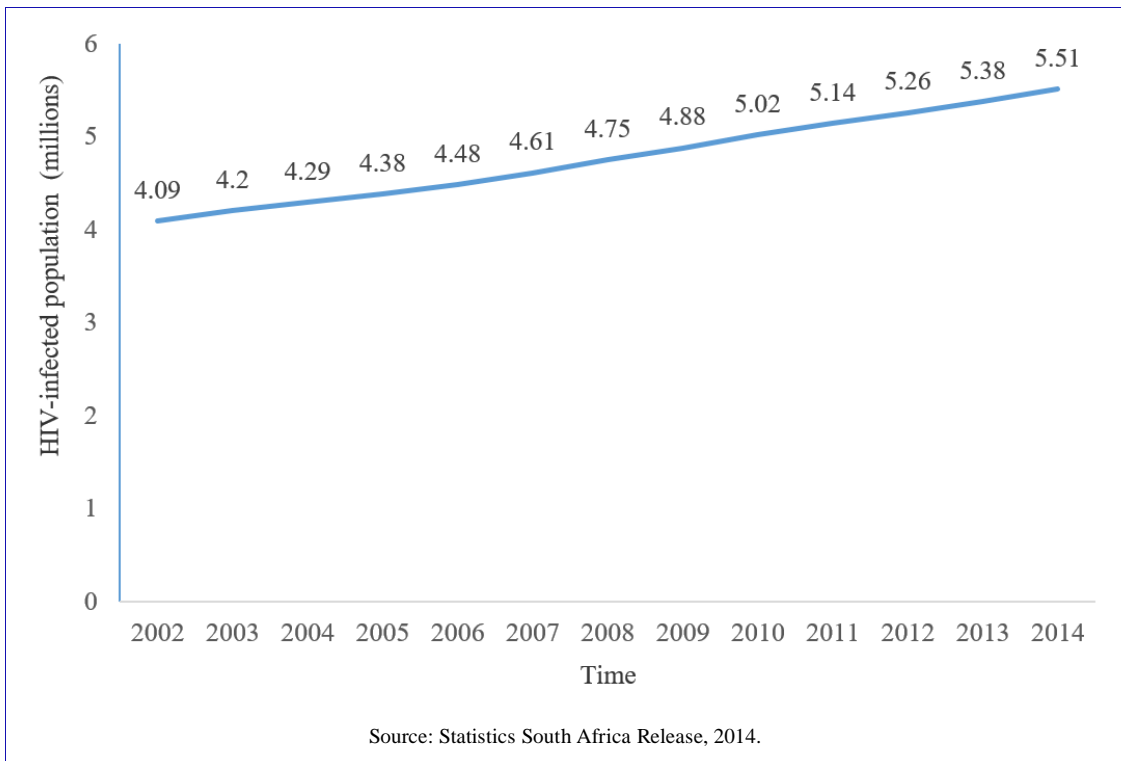


Figure 2.1: HIV prevalence trends in South Africa from 2002 to 2014

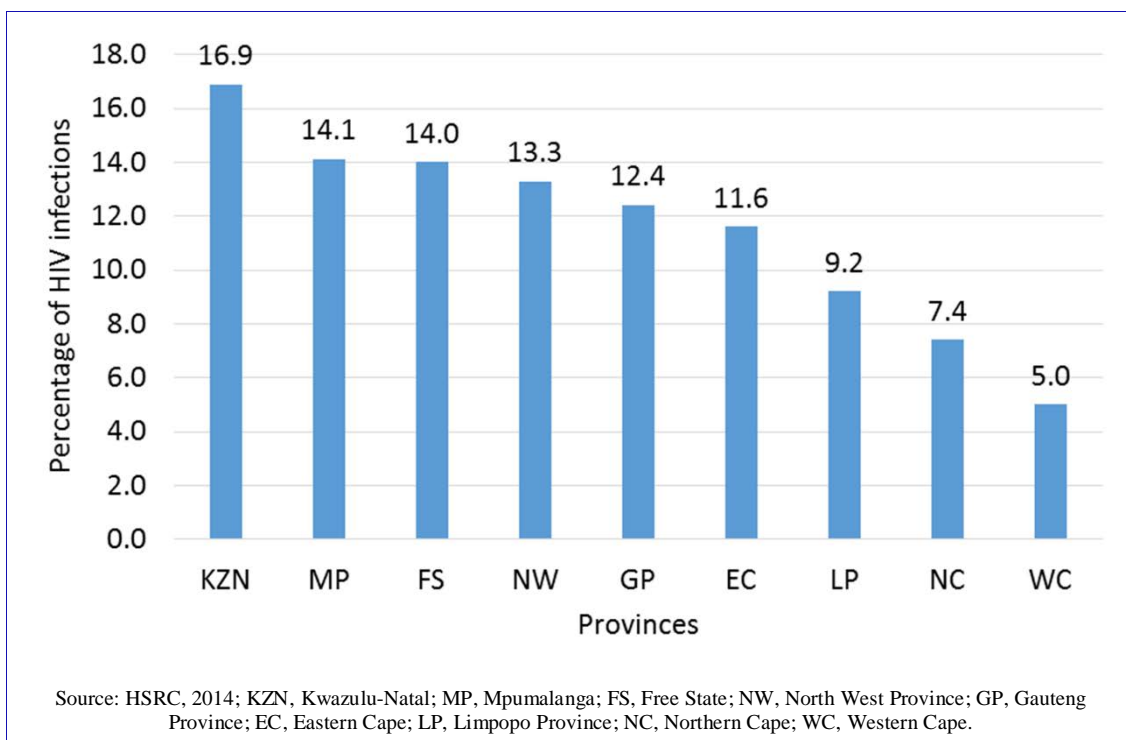


Figure 2.2: Prevalence of HIV infections by province

It is against this background that the SAG initiated the NIMART programme and allowed it to be implemented throughout the country.

2.3 Implementation of NIMART Worldwide

Médecins Sans Frontières (MSF) facilitated the initiation of ARVs in PHC in the late 2003 in Kenya at a time when ARVs were inaccessible. Clinical officers in health centres initiated ARVs, while nurses and peer educators followed-up patients who were on ARVs and counselled them. Task-shifting of nurses and peer educators was achieved by having nurses review stable patients and peer educators conduct HIV testing and adherence counselling. This task shifting, in Kenya, reduced facilities' workload and improved the quality of care provided by the Ministry of Health. It also made available more qualified staff for the care of complicated patients and empowerment of patients to become peer educators themselves (MSF, 2010). The government of Uganda has adopted a decentralised approach for scaling up ART in its National ART plan and is actively exploring and testing ways to enhance the role of non-physician clinicians in the delivery of HIV care and treatment (USAID, 2010).

Since 2006 Lesotho has permitted nurses to initiate ART in the Scott catchment area and ART was incorporated into the Lesotho National Treatment Guidelines in 2008. Unlike South Africa, the Lesotho health authorities facilitated task shifting to empower all levels of nurses to diagnose, prescribe and dispense drugs, meaning that they could initiate and manage first-line ART for adults and children. Nurses are supported by a doctor or an experienced nurse clinician who visits on a weekly or bi-weekly basis to provide clinical mentorship for nurses (Cohen, Lynch, Bygrave, Eggers, Vlahakis, Hilderbrand, Knight, Pillay, Goermaere, Makakole & Ford, 2009).

Since 2004 the Mozambican Ministry of Health shifted day-to-day responsibility for HIV/AIDS-related patient care, including care for critically ill patients, from physicians to non-physicians called "tecnicos de medicina." These non-physicians are also given powers to initiate ART without consulting physicians (Brennglinger, Assan, Mudender, Ghee, Torres, Martinez, Bacon, Bastos,

Manuel, Li, Mckinney & Nelson, 2010). South Africa (SA) is at the centre of an HIV/AIDS crisis, with more people being HIV-infected than in any other nation. More than a million patients were initiated on highly active antiretroviral treatment (HAART) between 2004 and the end of 2009. The SAG, however, has started more patients on HAART, at a faster rate, than any other country in the world. Despite this achievement, less than 50% of patients who need treatment are currently accessing HAART in SA and, in 2010, the SAG proposed that an additional 1.2 million people be initiated on HAART in the next 2 years. In addition, the SAG recently launched a major campaign to expand testing of its population and to enable its people to access HIV care through NIMART. This has added new pressures to the health system. While demand is expanding, resources, both financial and human, to meet these demands, are not expanding at commensurate rates (Webster, Sibanyoni, Malekutu, Mate, Venter, Baker & Moleko, 2011).

2.4 Challenges Confronting NIMART Nurses

2.4.1 Human Resources

The backbone of the health system is human resources. The shortage of health workers is a serious concern in 57 countries in the world and 36 of them are in Africa, where the need is most acute. According to WHO (2010), African regions have a shortfall of 817,992 doctors, nurses, and midwives, meaning that there is a need to more than double the workforce among these professional categories. The issue of scarcity of trained professional nurses becomes problematic in the context of expanding ART services.

Staffing requirements for ART are often equal to a third or more of current staff for all public health services in a country. Without appropriate planning, scaling up ART in resource-poor environments can place tremendous strain on laboratory, pharmaceutical, and physician capacity (USAID 2010). MSF (2010) indicated that, in Kenya, there was shortage of staff providing ARV services. They hired 51% additional staff, in order to support the ARV services in health facilities and to ensure provision of comprehensive integrated HIV management. All the staff went through the mentorship programme.

The success of the ART programme and its reputation led to clinics being flooded by patients. This increase in patient numbers was, however, not adequately addressed as nurses left the facilities to seek for greener pastures due to the high demands which came with more patients. According to Mangham & Hanson (cited in Campell et al., 2011), human resource shortages have been identified as the greatest potential limitation to providing ART. This is because of nurses in resource-poor environments migrating to better paying jobs in middle or high income countries. Various studies deal with the malfunctioning of health systems in developing countries because of malpractice. More recently, focus has been on problems relating to the ART rollout, especially the human resource crises (Marchal, De Brouwere & Kegels, 2005).

The Lesotho health care system has a dire shortage of health professional workers. There are just five doctors and 62 nurses per 100,000 inhabitants in Lesotho. Eighty percent of the doctors are visiting foreigners awaiting certification to practice in SA, while a quarter of the nurses leave their posts to seek work elsewhere, with another quarter of nurses leaving the profession due to death (Cohen, Lynch, Bygrave, Eggers, Vlahakis, Hilderbrand, Knight, Pillay, Goermaere, Makakole & Ford, 2009). The health workforce in Mozambique has long been among the lowest in the world, with fewer than three physicians and 21 nurses per 100,000 inhabitants. The majority of the physicians work in the capital city, worsening the situation in the rural areas (Sherr, Pfeiffer, Mussa, Vio, Gimbel, Micek & Gloyd, 2009).

Even though the WHO assessment revealed a critical shortage of health care personnel in 36 of the countries in Africa, it has become evident that the shortage does not simply mean insufficient numbers of health care personnel. For the nurses, however, the record presents a different picture. SA had more than the WHO minimum ratio of 120 nurses per 100,000 people. This ratio, generally, improved in the mid-2000s, but there were still rural-urban disparities. These contrasts are reflected in the Health Systems Trust's 2009 estimation that 35.7% of health professional posts were vacant in 2008. An assessment which was done in 2010 revealed a high vacancy rate in Limpopo Province (68%), Eastern Cape (59%) and Free State (47%) (Econex, 2010).

Vawda & Variawa (2012) acknowledged that the single most significant obstacle to attaining public health goals is the lack of adequate human resources. Furthermore, there is an imbalance between the public and private health sectors in respect of the availability and training of health care personnel, with the informal and rural areas being most disadvantaged.

In a study conducted by Georgeu et al. (2012) on implementing NIMART in South Africa, nurses in all facilities repeatedly said that paperwork demands in the health system as a whole were onerous, and had been increased by NIMART. The increase in administration work for NIMART was related to the increased numbers of ART patients rather than the unusually intense record keeping for ART patients. This burden was increased by weak and fragmented information systems that were insufficiently staffed and resourced. The overall shortage of all categories of PHC workers was also seen as a critical issue in every site. This included the shortages of nurses and physicians, as well as of pharmacists, managers, social workers, data clerks, lay counsellors and administrative staff.

Retaining health care workers (HCW) in low and middle income countries has been a major challenge because of low pay and poor working conditions. This has been exacerbated by a high prevalence of loss of HCW to HIV/AIDS and burnout related to an increasing HIV caseload. The retention of HCW is also challenged by non-financial factors such as social influences (status or stigma), anxiety about becoming infected by HIV, lack of training and workload. The number of clients enrolled on NIMART is increasing exponentially and HCW feel the burden of this high number of patients. For example, a clinic may start by having 50 patients, increase to 700 and then reaches 8,000. This indicates a massive workload, especially if the number of HCW remains the same even when patient numbers increase. HCW are also not motivated to work with HIV clients as there is no special allowance for caring for HIV clients. Clients have a host of social problems that require the expertise of social workers, and many are depressed or sometimes incapacitated by other mental health disorders. Allied staff such as social workers, clinical psychologists, dieticians and occupational therapists, to mention a few, are not available at clinic (Orner & Palmer

2011). Human resource capacity is a major barrier at facility and community levels because of the increased volume of HIV-associated tuberculosis (TB) cases, funding restraints hindering the creation of posts and resulting in difficulties recruiting and retaining staff. The use of community care workers was recommended in order to expand human resources for the health sector (Uwimana, Jackson, Hausler & Zarowsky, 2012).

Vhembe District is not exceptional—it is also experiencing workforce shortages, resulting in failure to provide a quality and effective NIMART programme. The DoH is currently under national administration and, currently, the employment of nurses is suspended. This further strains the provision of quality HIV/AIDS management. Due to the rural nature of Vhembe District, many professional nurses move to work in urban areas, and in other countries. This continues to hamper the NIMART programme.

2.4.2 The Risk of Infection

Health care providers in South Africa are seriously affected by HIV/AIDS and TB. In countries with high HIV/AIDS burdens, HIV and TB infections together account for an extremely high proportion of morbidity and mortality among health care providers. This results in an increase in the frequency of disability and sick leave taken by health care providers, which in turn, places a burden on the remaining personnel (Vawda & Variawa, 2012).

Orner & Palmer (2011) indicated that HCW are more concerned about contracting TB than HIV in the workplace. This is heightened by the fact that an estimated 70% of PLWHA has TB. Clients who know that they have TB, including multidrug-resistant TB (MDR-TB) and extensively drug-resistant TB (XDR-TB), do not always disclose and are not truthful when asked. Poorly designed or the absence of proper infrastructure, such as overcrowded waiting areas, consultation room space constraints, lack of ventilation, that is lack of extractor fans, windows that do not open or no window at all, exacerbate the spread of communicable diseases such as TB. Gloves are sometimes out of stock, and HCW can still be pricked by needles while wearing gloves. There is also little or

no supply of N95 masks at clinic. The susceptibility of HCW to contracting TB and HIV in the workplace has broad implications for the entire NIMART programme. Similar infection trends are also observed in the Vhembe District. Frequently, the district runs out of stock of protective materials such as gloves and N95 masks. This puts nurses at risk of becoming infected by diseases such as TB and HIV. The use of the tender system and corruption in Limpopo Province seem to be major causes of the shortage of protective resources.

2.4.3 Infrastructural Challenges

HCW identified lack of infrastructure and equipment in their clinic, as well as insufficient health system support from top managers as serious challenges affecting the NIMART programme. Lay counsellors often lack a private room for consultation with clients. They share the same room with HCW, and this is irritating and stressful because they have to do everything fast, which is not good for patients. Clinics have no proper waiting areas and patients have to wait in the passage, which is unacceptable and can facilitate the spread of communicable diseases such as TB (Orner & Palmer, 2011). According to a study done in the Free State Province by de Wet & du Plooy (2012), participants in the study expressed structural limitations as the greatest problem as nurses do not have proper structures to render services.

Vawda & Variawa (2012) indicated that lack of space in ARV clinics is a major concern with regard to physical environment. HCW also share consultation rooms with those serving other programmes, and this violates the patients' constitutional right of privacy. There was overcrowding in waiting rooms, no adequate ventilation and no ultraviolet light in many ARV facilities, and this accelerates the spread of communicable diseases such as TB. It was also found that there was an inadequate supply and incorrect use of protective equipment and negligent sharps and waste disposal methods. Providing ART initiation without increasing the available human and space resources results in increased stress for nurses at primary health clinic level. Lack of consultation rooms has been documented as a barrier to the rolling out of NIMART (Nyasulu, Muchiri, Mazwi & Ratshefola, 2013).

The review of the Thulamela Municipality Integrated Development Plan (2010-2013) revealed that Thulamela has inadequate health facilities. The provision of primary health services to rural areas is a particular problem because of the large catchment area and poor infrastructure. Due to the remoteness of Thulamela and the poor infrastructure, rural areas experience a markedly lower level of service than urban areas. Health facilities in Thulamela are inaccessible to people with disabilities as they have not been adapted to cater for them.

With the increasing prevalence of HIV/AIDS cases, the PHC services are likely to come under increasing pressure. This calls for greater need for pro-active strategies and the need to establish proper infrastructure to render a comprehensive NIMART programme at PHC level. Infrastructure is still a problem in Limpopo Province hospitals and clinics. There are not enough consultation rooms for counselling and for providing treatment. All the patients (supermarket approach) are consulted in the same cubicles, and this has an impact on privacy and confidentiality. There is overcrowding of patients in dilapidated buildings, which increases the risk factor of cross-infection of diseases such as TB.

2.4.4 Pharmaceutical Challenges

The widespread drug unavailability in South Africa is cause for concern for nurses as it disrupts the sustainability of the ART programme because patients are not receiving treatment consistently. Service disruptions caused by strikes, which affect the supply of drug stocks, are common in clinics and extended sites providing ARVs. Georgeu et al. (2012) reported that clinics have to deal with the backlog of new patients needing treatment soon after the service disruptions end. More important sources of frustration and delay are the pharmacy-related logistics and infrastructure challenges. In a study conducted by Georgeu et al. (2012) it became apparent that there were unreliable deliveries of ART drugs from hospitals and the central dispensing unit. Infrastructure deficits, such as non-functioning telephone lines, were reported to have had significant effects on patients already on ART, and this made it very difficult for nurses to initiate new patients into treatment.

2.4.5 Management of Children with HIV/AIDS

The treatment of children by nurses is posing a problem because there is relatively little effort to simplify paediatric formulations. Currently available formulations hardly include any fixed drug combinations, and this complicates administration and adherence. Adjusting and measuring dosages, as well as taking blood specimens in children have proved to be a problem. On the psychosocial component, paediatric HIV/AIDS cases need specific adherence support programmes to address the challenges faced by caregivers and children (WHO, 2003).

Barriers to the implementation of paediatric NIMART observed by the Southern African HIV clinician society magazine (2011), include inadequate staffing and lack of clear policies on shifting tasks to other HCW to ease the burden on nurses. Since the initiation of NIMART, nurses are now expected to provide comprehensive HIV services at PHC level. The following are challenges identified in the management of HIV/AIDS in children:

- ⌘ There are uncoordinated training and mentorship programmes that do not target nurses earmarked for ART initiation.
- ⌘ The inability of nurses to practice new skills after training, due to a lag in policy to allow ARV prescription by nurses.
- ⌘ Persistent perceptions that paediatrics specialists or experienced general practitioners are required for paediatric ART initiation.
- ⌘ A delay in the national availability of the revised Integrated Management of Childhood Illnesses (IMCI) chart booklets.
- ⌘ Doctors identified as mentors for nurses are not experienced in either the IMCI methodology or paediatric ART.

- ∞ Lack of pharmacy support package (paediatric drugs, supply chain).

- ∞ Poor integration between health services, resulting in late identification of children infected with HIV or late referral for access to treatment.

Ensuring capacity building and training, as well as mentoring of HCW to integrate HIV services, in order to provide a comprehensive package of care to patients is recommended (Nyalusu, Muchiri, Mazwi, & Ratshefola, 2013).

2.4.6 Emotional and Psychological Impact on Nurses

In the study conducted by Georgeu et al. (2012), lack of clinical confidence and poor physician support appeared to be barriers to progressing to, and sustaining full NIMART. In two sites, patient deaths and complications shortly after starting ART undermined nurse confidence and led to the temporary suspension of NIMART. Health care providers feel guilty when patients face complications after initiation of ART. They feel that it is better if prescription is done by doctors, and that the patient might not experience side effects. When the patient improves, health care providers feel proud because they see that they are doing something positive.

One nurse at a PHC referral site described the difficulty of referring patients to other distant sites for ART. Where decentralisation of HIV services had started to improve treatment access, nurses reported the same kinds of emotional satisfaction. Health care providers expressed satisfaction when they were able to initiate ART and Bactrim, as well as when they saw improvements in patients who started treatment with a low CD4 count, gaining CD4 cell count.

Nurses, however, felt that commitment often had negative effects for their own well-being. In particular, they felt that they needed much more support to sustain their clinic work, and that middle and upper management levels were uninterested, or unable to provide this support. For some, the provision of ART and being able to offer this valuable service also brought with it a feeling of accomplishment and a degree of prestige among the other nurses and patients (Georgeu

et al., 2012). Orner & Palmer (2011) indicated that HCW were previously frustrated in their attempts to provide palliative care for service PLWHA. However, since the implementation of NIMART, they are motivated by their ability to improve the health of PLWHA. The study also indicated that it is rewarding to be part of a new challenge in health care. HCW seemed to savour, and to be motivated and energised by seeing clients getting well, their condition improving, CD4 count increasing, their viral load decreasing, as well as performing normal activities at the workplace. This also builds good health care worker-patient relationship, which results in trust and belief in HCW.

2.5 Summary

This chapter provided a literature review that focused on the challenges confronting NIMART-trained professional nurses implementing the programme. It alluded to the gravity of the alarming HIV prevalence trends in South Africa and its nine provinces as reported by the HSRC and StatsSA which caused the SAG to rollout the NIMART programme throughout the country, building on the successes of task-shifting of nurses and peer educators facilitated by MSF in countries like Kenya, Uganda, Lesotho and Mozambique. Despite the accomplishments of the SAG with HAART and its campaign to expand testing of its population and to enable its people to access HIV/AIDS care through NIMART, the programme is fraught with many challenges, including human resource constraints, anxiety among HCW about risks of infection with HIV and TB, lack of training and a stressful workload in relation to increasing numbers of clients seeking NIMART. The Thulamela Municipality in the Vhembe District of Limpopo Province where the study was conducted was also a focal point of a NIMART programme in crisis because of its rural location, demographics, inaccessibility, poor drug delivery services and infrastructural challenges. Chapter 3 outlines the research design and methods used in this study to answer the research questions and achieve the set objectives.

CHAPTER 3

RESEARCH DESIGN AND METHODS

3.1 Introduction

Research in any given field of study utilises research methodologies, models and strategies based on different philosophical foundations and forms of reality. Philosophical assumptions play an important role in making a researcher and readers understand the overall perspective from which the study is designed and carried out (Krauss, 2005).

This chapter delineates the research methodology followed in this dissertation and also explores some contextual factors that affected and influenced the choice of the research methodology used. The chapter justifies the use of qualitative research methodology that implements an interview research method. Research instruments to be constructed used in this study are also introduced. The methodology used to conduct the research on challenges confronting professional nurses who were initiating ART to PLWHA at PHC facilities was qualitative in nature.

3.2. Research Designs

Research design is the overall strategy that the researcher utilises to integrate different components of the study in a coherent and logical way, thereby ensuring that one will effectively address the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data (De Vaus, 2001; Trochim, 2006). This research study utilises a qualitative case study design described in the preceding sub-sections of this chapter. The design being used in this study takes into account how data were to be collected, instruments to be employed, how the instruments were to be used and the intended means for analysing data collected. Subsequent sub-sections elucidate on the components of research design used in this study.

3.2.1 Qualitative Research

Qualitative research is an inquiry process of understanding a social or human problem based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and is conducted in a natural setting (Cresswell, 2005). The primary goal of a qualitative research approach is to describe and then understand as opposed to mere explaining social action (Babbie & Mouton, 2012). This presents the researcher with an opportunity to understand the meaning that people continually construct about an identified problem (Merriam, 2009).

Qualitative research is descriptive and is an excellent way of obtaining information and exploring a particular phenomenon. A qualitative research approach was chosen to understand, interpret and describe the challenges of professional nurses in providing NIMART. The approach assisted in gathering in-depth and rich information related to the challenges confronting professional nurses in providing NIMART in Vhembe District, Limpopo Province.

3.2.2 Explorative Research

Welman, Kruger & Mitchell (2009) defined exploratory research as an approach which aims to find a problem or a hypothesis to be tested. It tries to identify important variables in a particular area, to formulate penetrating questions about them, and to generate hypotheses for further investigation. It also investigates the full nature of the phenomenon, the manner in which it is manifested, and the other factors to which it is related. The researcher explored challenges confronting nurses who provide NIMART at Thulamela B sub-District.

3.2.3 Descriptive Research

Descriptive research aims at exploring and describing phenomenon in real life situations, as well as discovering new meaning and determining frequencies with which something occurs (Brink, 2003; Burns & Grove 2001). Through descriptive research, concepts are described and relationships identified to provide the basis for further research. In this study, professional nurses' understanding and perceptions regarding challenges confronting the NIMART will be described.

3.2.4 Contextual Research

Contextual research focuses on a preference for understanding events, actions, and processes in their context. The aim is to describe and understand events within the concrete and natural context in which they occur (Babbie & Mouton, 2012). The researcher will describe the challenges confronting the NIMART nurses in their natural context.

3.3 Study Setting

Setting is a specific place or places where data are collected and controlled; it is the real life situation or environment (Brink, 2008). Thulamela is one of the four local municipalities constituting the Vhembe District Municipality in the Limpopo Province. It is situated in the far-northern side of Limpopo Province, and it borders Kruger National Park in the East. There are 38 wards and 76 councillors. The study was conducted within various PHC facilities in three local areas which form part of Thulamela B sub-District, in Vhembe District, namely Shayandima, Sibasa and William Eddie. Thulamela Municipality is a grade four local authority established in terms of the Local Government Municipal Structures Act (no. 117 of 1998). Figure 3.1 shows a map of the Vhembe District in which the study was carried out.

3.4 Population

Population is a large group of people in a defined setting or with certain characteristics (Brink, 2008). Population is the entire group of persons or objects that is of interest to the researcher. In other words, this is the group of people that meets the criteria that a researcher is interested in studying. The target population for this study comprised of the NIMART-trained professional nurses who were implementing the programme in Thulamela B sub-District Municipality.

3.5 Sampling

Sampling is the process of selecting a portion of the population to represent the entire population (Polit & Beck, 2008). According to Brink (2008), sampling involves taking part or fraction of a whole, or subset of a larger set, to participate in the research study.

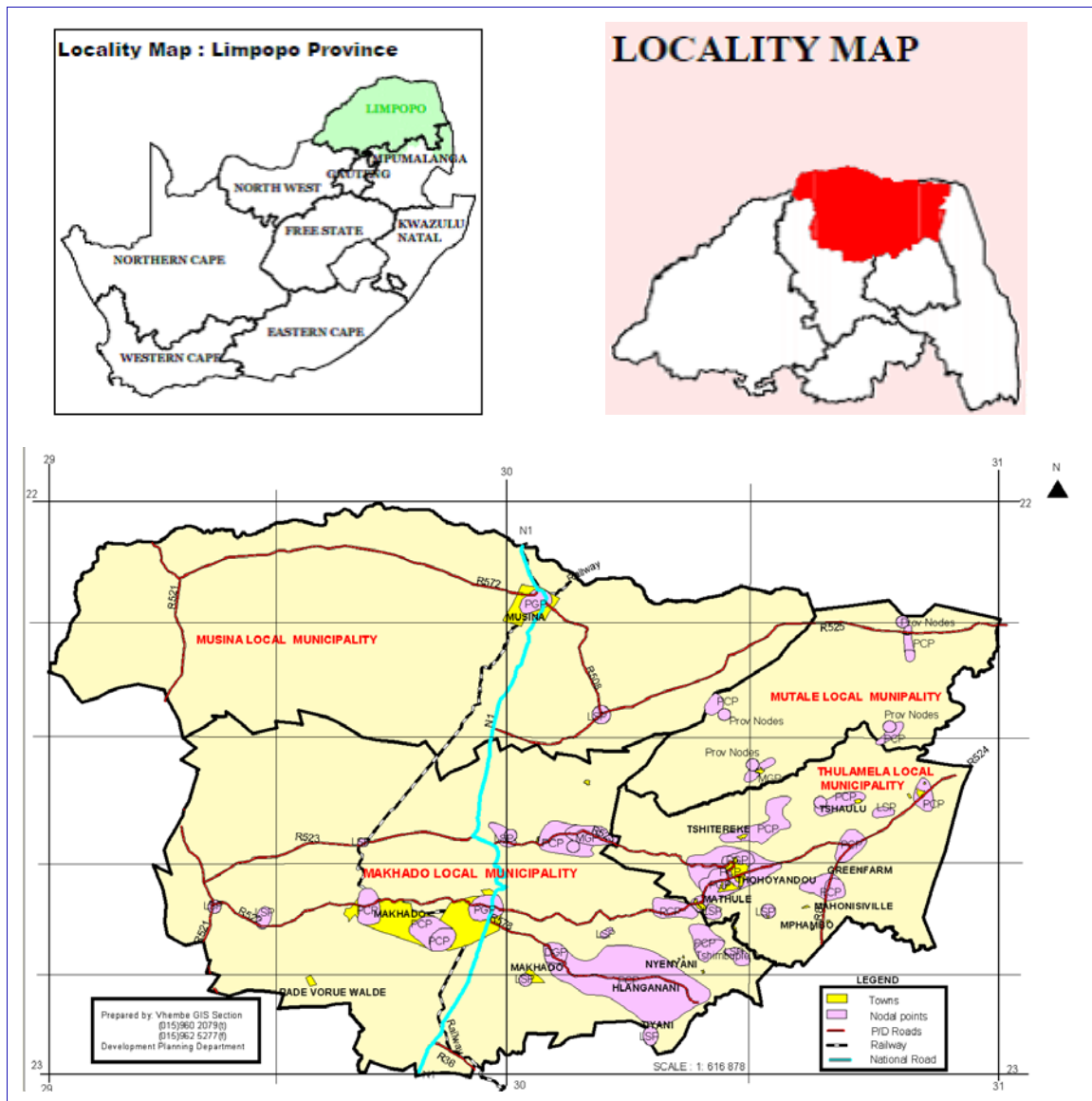


Figure 3.1: Map of Vhembe District municipalities and study setting locality in the Limpopo Province

3.5.1 Sampling of Primary Health Care Facilities

Probability sampling implies that all elements in the population have an equal chance of being included in the sample (Brink 2008). Thulamela B sub-District consists of 25 PHC facilities. The study adopted a probability sampling method. Simple random sampling was used to select fifteen PHC facilities within the sub-District. The names of the PHC facilities were written on pieces of paper, which was placed in a bowl. One piece of paper was drawn at a time until the researcher attained fifteen PHC facilities.

3.5.2 Sampling of Participants

According to Grove & Burns (2005), the purposive sampling method is where the researcher utilises his knowledge about the target population and its elements to be included in the sample. Babbie & Mouton (2012) argued that, in some instances, one may wish to study a small subset of a larger population in which many members of the subset are easily identified, but the enumeration of all of them would be nearly impossible. Patton (2002) described purposive sampling as cases for study that are selected because they are ‘information rich’ and illuminate, that is, they offer a useful manifestation of the phenomenon of interest. Purposive sampling aims at gaining insight about the phenomenon, not empirical generalisation from a sample to a population. Furthermore, the logic and power of purposive sampling is derived from the emphasis on in-depth understanding, and information-rich cases are those from which one can learn a great deal about the issues of central importance of the purpose of the research. In this study, non-probability sampling was used. Participants were selected using purposive sampling. Only NIMART-trained professional nurses in Thulamela B sub-District were selected. One NIMART-trained professional nurses were purposively selected and interviewed from the fifteen PHC facilities selected from Thulamela B sub-District.

3.5.3 Sampling Size

Sample size was determined by data saturation. When there was no more new information that could be yielded by the interviews, data saturation would have been reached. An estimated sample of 15 participants was assumed to be sufficient to explore and describe the challenges experienced by nurses who are initiating ARV treatment.

3.5.4 Inclusion Criteria

The following inclusion criteria were used for those selected to participate in the study:

- ☞ PHC facilities must be under Thulamela B and they must be implementing the NIMART programme;

- ⌘ Professional nurses must be NIMART-trained and must be initiating ARV treatment to PLWHA;
- ⌘ The participant must be employed full-time by the DoH;
- ⌘ Age and gender are not of consequence;
- ⌘ The participants should be willing to participate and be able to participate in their preferred language; and
- ⌘ The participants should have been implementing the NIMART programme to PLWHA at PHC facilities for a period of six months or more.

3.6 Data Collection

The researcher used face-to-face semi-structured interviews as a method of collecting data from professional nurses who were implementing the NIMART programme. During the interviews the researcher wrote field notes in chronological order to keep a record of which information will be written first and which later.

The interviews were audio recorded with the permission of the participants. Each interview began with one central open-ended question that focused on the research question. The interview lasted for at least one hour, and appointments were secured in advance. Interviews were conducted during the participants' spare time, at their places of residence.

3.7 Research Questions

Rubin & Rubin (cited in de Vos et al., 2005) indicated that an interview should be built on three kinds of questions, namely: the main question, followed by probing questions and then by questions that might be deemed appropriate. English was used during the interviews.

3.7.1 Central Research Question

In this study, the main question was:

What challenges are you confronted with when implementing the NIMART programme?

3.7.2 Probing Questions

The researcher used an interview guide (Appendix 9) with the following questions:

- ∞ What was the interviewees' general experience of providing NIMART?
- ∞ How did interviewees cope with the provision of NIMART to PLWHA?
- ∞ What could be done to enhance your NIMART programme support?

Data were collected continuously to the point of saturation of information, when no more new information could be obtained or when there was repetition of information (de Vos et al., 2005).

The saturated data were validated with the literature, in order to establish its reliability.

3.8 Data Analysis

Qualitative analysis is supported and facilitated by several tasks that help to organise and manage the mass of narrative data. Digital recorded interviews and field notes are major data sources in qualitative studies. Collected data were analysed independently by the researchers and independent coders using open coding method. Data analysis required that the researcher develop categories, and establish similarities and differences by comparing data (Creswell, 2009). In this study, data were analysed according to Tesch's steps (Table 3.1; Creswell, 2009).

3.9 Measures to Ensure Trustworthiness

Trustworthiness is a model which proposes four criteria for developing the trustworthiness of a qualitative study, namely: Credibility, dependability, conformability and transferability (Polit &

Beck 2008). The four criteria are discussed in the sub-sections.

Table 3.1: Tesch’s eight steps of qualitative data analysis

Step	Description
1.	Get a sense of the whole: Read what a person has said to you and transcribe the tape.
2.	Pick one document: The researchers picked one document and tried to make sense by writing the meaning at the margins. The challenges as described by the nurses were assessed one by one.
3.	Make a list of all topics: When the second step was completed, a list of topics were made, for example challenges, experiences and successes, and if the topics were recurring, they were grouped together. Similar challenges identified by the nurses were grouped together and classified as major challenges. Some new information related to the challenges was also its own category.
4.	Go back to the data: The list was re-checked to establish if all the information was on the list.
5.	Group data into different categories: Data were grouped and abbreviated as codes. These codes were then written next to the appropriate segments of the book to see if new categories were emerging. Formulations of categories and similar themes or new thoughts were also included in the abbreviations. The information and data collected on the challenges of nurses who were initiating ARVs to PLWHA at the PHC facilities was grouped. The researchers made a final decision on the abbreviations to be used for each category and these were in alphabetical order.
6.	Assemble the data: The data on challenges faced by nurses who were initiating ARV treatment to PLWHA were assembled in one place according to categories, and a preliminary analysis was performed.
7.	Recording: Literature control was done and existing data were reported.
8.	Literature control and report: The referral to other previous research that has been done was reviewed to associate and establish similarities, as well as determine the uniqueness of the present study. The findings of the study were then reported.
Sources: Tesch R (1990) <i>Qualitative Research: Analysis Types and Software tools</i> , New York, Falmer; Creswell. J.W., (2009) <i>Research Design, Qualitative, Quantitative and Mixed Method Approaches</i> , 3rd Edition, Sage Publications Inc. In this dissertation, see also Creswell (2003:156).	

3.9.1 Credibility/Truth Value

Credibility was established through prolonged engagement. The researcher engaged in a prolonged interaction with the participants and telephone appointments were honoured. The researcher spent a reasonable amount of time with the participants during appointments and this helped the researcher to establish trust, rapport and understanding of the participants’ culture and language.

The researcher also stayed in the field until data saturation has been reached. The researcher provided feedback and played back the audio tape to confirm the responses. He noted non-verbal cues from the participants, paraphrased, as well as consistently pursue interpretations in various ways. The researcher also ensured triangulation by using different methods of data collection such as observation and field notes, as well as interviews. The participants were allowed to examine the evidence in order to confirm their experiences in the evidence.

The researcher ensured peer review by seeking the opinion of his peers or those in a status similar to his or colleagues. As a measure of ensuring credibility, discussions on the research findings were carried out with research supervisors, experts and other lecturers. Those consulted had a general understanding of the stud, and were able to debate with the researcher on each step of the research process (Brink, 2012).

3.9.2 Dependability/Consistency

The strategy for establishing consistency/dependability consisted of dependability auditing, dense description of the research method, expert guidance of supervisors, peer examination, and coding and recoding procedures. The researcher got expert guidance from his supervisors and utilised field notes and a literature control. Patton (2002) described purposive sampling as cases for study that are selected because they are ‘information rich’ and illuminate, that is, they offer useful manifestation of the phenomenon of interest.

3.9.3 Confirmability/Neutrality

The researcher discussed the study findings with his peers and supervisors of the study who are knowledgeable in qualitative research. Data, the digital recorder and field notes were made available to the supervisors to confirm the findings. Confirmability will also be ensured by sending the copies of the transcripts, field notes and protocol to an independent coder for analysis. The researcher guarded against imposing his ideas, in order to ensure accuracy, relevance and meaning.

3.9.4 Transferability/Applicability

The strategy for establishing applicability is transferability. This consisted of nominated samples, a comparison of the sample to the data, time sampling, independent checking by colleagues and experts, a description of the results and direct quotations of the participants. Purposive sampling was used to nominate participants that provided a dense description of the challenges confronting nurses who were initiating ARV treatment to PLWHA at the PHC facilities.

3.10 Ethical Considerations

Qualitative research usually includes long-term and close personal involvement, interviewing and participant observation. Sound research is an absolute moral and ethical endeavour. It should be mostly concerned with ensuring that the interests of those research participants are not put in jeopardy or at risk during and on completion of the process (Halai, 2006). Since this research explored an area which may, through recall of unpleasant experiences, give rise to anxiety and embarrassment on the part of participants, the researcher was particularly sensitive about not probing too deep into areas which visibly caused discomfort for the participants. In the event of any participant demonstrating noticeable distress, the researcher offered them counselling. The following ethical considerations were observed and implemented by the researcher during the research process and thereafter.

3.10.1 Permission to Conduct the Study

The proposal was presented to the School of Health Higher Degrees Committee of the University of Venda, and the University of Venda Higher Degrees Committee (Appendix 1), to obtain ethical clearance to conduct the study (Appendix 2). It was also presented to the Provincial DoH for approval (Appendixes 3 and 4), and thereafter to the District Health Services and individual PHC facilities (Appendixes 5 and 6), in order to obtain the consent of professional nurses to participate in the study.

3.10.2 Informed Consent

The researcher considered the following:

- ∞ All participants were clearly informed verbally and in writing of what the research entails and what was to be expected of them (Appendix 7);
- ∞ All participants signed consent forms (Appendix 8), and they were given a copy of the information sheet stipulating the research project (Appendix 9) and their signed consent form.
- ∞ In the event that the participant needed to ask any questions, signed consent forms also contained the contact details of the student and supervisor.

3.10.3 Right to Privacy

The researcher informed the participants about the use of the digital recorder. However, the participants were assured that their privacy would be maintained and that their names would not be disclosed .

3.10.4 Right to Anonymity and Confidentiality

The researcher made sure that the participants' personal details were kept confidentially and would not be revealed to anyone else, except the researcher. Their personal details were not documented in any report, survey or presentation. Digital recordings were analysed by the researcher only and the interview transcripts (Appendix 10) were kept in a locked office accessible only to the researcher. Pseudonyms were used to record information given by the participants.

3.10.5 Self-Determination

The researcher ensured the following:

- ∞ Participants were informed that they have a right to withdraw at any time;

- ⌘ Participants have a right to voluntarily decide whether to participate in the study or not without the risk of penalties; and
- ⌘ Participants were not paid for participating in the study.

3.10.6 Right to Protection from Discomfort and Harm

The researcher ensured the following:

- ⌘ Participants were in no way compromised physically. However, they may find some discomfort in answering questions. These questions were asked as sensitively as possible and support and reassurance will be provided by the interviewers.
- ⌘ Participants were provided with information on how to access counselling where there is a need.

3.10.7 Right to Fair Treatment

The researcher must respect any agreements that s/he makes with the participants. The researcher ensured the following:

- ⌘ Participants have a right to fair and equal treatment at every stage of the research process;
- ⌘ The researcher honoured all the agreements reached by the researcher and the participants;
- ⌘ The researcher were accessible during and after the study; and
- ⌘ The researcher was respectful to the participants.

3.10.8 Dissemination of the Results

The findings of the research were presented to the school of Health Sciences. The findings will also be documented in a thesis, which will be submitted to the University of Venda. The research

findings would also be sent to the Provincial DoH and District Health Services where research took place. The research findings would be made available on request to the PHC facilities that assisted in providing the research participants. Finally, the researcher intends to publish the research in an appropriate accredited journal. Editorial assistance was provided by a reputable language editor ((Appendix 11)

3.10.9 Disposal of Data

All data remained confidential and would only be accessible to the researchers and will be kept in a locked room or cupboard when it is not being analyzed. All the research documents, hardware and software would be handed over to the university and would remain in storage for five years; thereafter it would be appropriately destroyed.

3.11 Summary

The NIMART programme is still in its infancy in Limpopo Province. It is therefore imperative to provide nurses with necessary support and mentorship. In order to have quality provision of the NIMART programme, there is need to provide trained professional nurses and a regular supply of ART. Confidentiality and privacy of patient information needs to be maintained always so that patients develop trust for those who are providing the programme. This chapter outlined the research methodology and ethical principles that guided this study. Chapter 4 will present the study findings and analysis.

CHAPTER 4

RESULTS, ANALYSIS AND INTERPRETATION

4.1 Introduction

This study explored the challenges confronting professional nurses implementing the NIMART programme in Vhembe District. The face-to-face interview method was used to collect data from eleven NIMART-trained professional nurses in the PHC facilities around the Vhembe District. All interviews were recorded and then transcribed. Interview transcriptions were thoroughly read over and over, noting and coding the main ideas they contained. Similar data were grouped into categories, themes then patterns, determined qualitatively before tabulating it for final analysis. The purpose of this chapter is to present and analyse the results of the qualitative data analysis. Results were presented, analysed and interpreted under respective research questions and objectives. The chapter is structured as follows: introduction, objective of the study, overview of data treatment process, presentation of results, analysis, interpretation and summary of the findings.

4.2 Research Objectives and Research Questions

The study was guided by the two objectives stated below:

- ❖ To identify the challenges confronting NIMART-trained nurses in Thulamela B Municipality, and
- ❖ To describe the challenges confronting NIMART-trained nurses in Thulamela B Municipality.

To attain the objectives, a central research question and three sub-questions were used. The same questions were used in the unstructured interview schedule.

The central research question was stated as:

What challenges were NIMART nurses confronted with while implementing the NIMART programme?

Minor questions were as follows:

- ∞ What were the nurses' general experiences of providing NIMART?
- ∞ How did nurses cope with the provision of NIMART to PLWHA?
- ∞ What could be done to enhance nurses' NIMART programme support?

4.3 Themes Emerging from Expressions of Nurses' General Experience in Providing NIMART

This study generated information on the challenges that confronted nurses during the implementation of the NIMART programme in the Vhembe District. The nurses expressed experiences with regard to infrastructure, support, training, experience pertaining to patients' behaviour towards HIV/AIDS. Thematic results were based on the objectives of the study. From the 3 objectives of the study, themes, categories and sub-categories emerged (Table 4.1) which will be discussed in the sub-sections that follow.

4.3.1 Theme 1: Concerns Related to Infrastructure

Good working environments create good morale and create a positive perspective among workers. According to Jennings (2010), a positive workplace environment is needed in order to the boost moral of nursing staff in general and to reduce stress in particular. This was also confirmed by Hogan (2015) who posited that worker tardiness and morale depend on the infrastructure of the organisation of workplace.

Table 4.1: Themes, categories and sub-categories on participants' experiences in providing NIMART

Themes		Categories		Sub-Categories	
1.	Concerns related to infrastructure	1.1	Shortage of consultation rooms	1.1.1	Limited space
		1.2.	No privacy/confidentiality	1.2.1	Loss of dignity
2.	Poor NIMART programme support system for NIMART-trained professional nurses	2.1	Poor follow-up system	2.1.1	No supervision
		2.2	Lack of continuous monitoring and support	2.2.1	Lack of commitment
		2.3	Lack of periodic updates	2.3.1	Poor planning
		2.4	Lack of mentoring and debriefing		
		2.5	More information in a short period of time		
3.	Burden of overload	3.1	Shortage of NIMART-trained professional nurses	3.1.1	Poor quality
				3.1.2	Underperformance
				3.1.3	Work stress
4.	Concerns related to lack of resources	4.1	Shortages of material resources such as drugs and gloves	4.1.1	Emotional stress
5.	Lack of transport for PLWHA to PHC facilities	5.1	Villages that are far from PHC facilities	5.1.1	Treatment interruption
		5.2	Poor transport for drug collection	5.2.1	Increase defaulter rate
6.	High rate of HIV/AIDS patients defaulting	6.1	Low turnout of patients for drug collection	6.1.1	Loss of encouragement
		6.2	High number of patients to follow-up		

4.3.1.1 Category 1: Shortage of Consultation Rooms

In this study, all participants cited that there were acute shortages of counselling consultation rooms at PHC facilities. Lack of consultation rooms cause disorganisation and retarded the effectiveness of rendering quality service to PLWHA.

Participant 6 expressed this concern:

Our main problem is infrastructure as we are working in an old dilapidated structure and not enough consultation rooms, no privacy as walls are incompletely built, even lay counsellors are using labour wards where they are counselling and testing patients.

These sentiments were expressed by most of the participants.

Participant 2 expressed concern on this issue:

It is so frustrating to consult patients, since we share cubicles among colleagues.

This problem has been seen as a norm in South Africa, a study conducted in Free State Province by Katinka de Wet and Shirley du Plooy (2012) who established that PHC facilities and hospitals were poorly designed, lacked ventilation, had no waiting space and overcrowding was a setback.

4.3.1.2 Category 2: No Privacy/Confidentiality

Lack of consultation rooms to conduct counselling sessions has been cited as another major problem emanating from poor or lack of infrastructure. Shortage of consultation rooms also leads to loss of privacy and dignity among HIV-HIV/AIDS patients who come for consultations. Orner & Palmer (2011) reported unbearable conditions to which nurses failed to maintained privacy and confidentiality due to lack of counselling rooms in PHC facilities.

Participants 3 indicated that:

Rooms did not have ceiling, but divided by curtains. Occupants of other rooms overheard what was being discussed in adjacent rooms.

The importance of confidentiality in HIV counselling was emphasised by Chippindale & French (2001) who argued that one-to-one HIV prevention counselling has a particular contribution in that it enables frank discussion of sensitive aspects of a patient's life and such discussion may be hampered in other settings by the patient's concern for confidentiality or anxiety about a judgmental response. By not providing secured consultation rooms, HIV patients become subjects of public ridicule.

4.3.2 Theme 2: Poor NIMART Programme Support System for NIMART-Trained Professional Nurses

Callaghan, Ford & Schneider (2010) regarded NIMART as a complex intervention intended to improve health care access and equity, ideally without compromising the quality of care, in resource-limited settings. This requires optimal support from stakeholders such as doctors, medical supplier, programme funders, community and patients. WHO (2007) posited that optimal task-shifting requires well-resourced and multidimensional support. In view of this, it would be expected that there should be health systems strengthening, intensive staff engagement, training and mentoring in the PHC facilities. However, the prevailing situation as revealed by the data collected showed the opposite.

4.3.2.1 Category 1: Poor Follow-Up System

In this study, it was established the PHC facilities did not have proper follow-up mechanisms on HIV patients who defaulted medications. Participants expressed poor follow-up systems implying that the supervision was almost non-existent.

Participant 11 expressed these concerns:

*High defaulter rate because patients are not compelled to disclose their status.
The patient may decide just to stop coming to collect medication and the PHC*

facilities have no mechanism of following them up. Patients give false physical addresses and cell numbers which becomes difficult to make follow-up.

Poor follow-up also emanates from other factors such as orphanage, transport costs, accessibility of the PHC facilities, and movement of patients from one location to another without records, and religious and cultural beliefs.

Participant 11 further expressed these concerns:

Poor supervision of children who are on antiretrovirals (ARVs) especially orphans is common. Those staying far from the PHC facilities do not have money for transport to come and collect medication.

This observation is consistent with previous findings that the number of nurses initiating ART in children remained very low (9/126), making it difficult to monitor and supervise children on ARVs (Cameron, Gerber, Mbatha, Mutyabule & Swart, 2012). The authors further indicated that, in some areas, all children needing initiation of ART were referred to the nearest hospital.

Participant 7 also expressed that:

... high defaulter rate as we are dealing with people from Zimbabwe who come and collect medication and go home for maybe three months only to return when they are sick again. Some defaulters use Zion Christian Church (ZCC) tea and others use sangomas who believe that they can treat HIV and others use spiritual healings. Some locals work very far.

This highlights how influential religious organisations at community level are. The literature shows that religious organisations are influential social networks that have the power to support or stigmatise PLWHA, promote or impede HIV education, and endorse or reject medical treatment of HIV (Speakman, 2012). Several studies implicated religion as a barrier to HIV testing and also treatment. Studies by Zou, Yamanaka, John, Watt, Ostermann & Thielman (2009) indicated that religious activities, communities and beliefs framed the daily behaviour and attitudes of many

people living in countries with high rates of HIV/AIDS. Speakman (2012) also observed that the predominately Christian sub-Saharan Africa possesses the highest adult prevalence rates of HIV in the world. At community level, religious organisations are regarded as influential social networks that have the power to support or stigmatise PLWHA, promote or impede HIV education, and endorse or reject medical treatment of HIV (Zou et al., 2009). This implies that members of a society tend to follow what their religious leaders believe to be working in terms of HIV treatment, hence, for example, they take teas.

However, some studies indicated that education level and knowledge of HIV were more important than beliefs in determining whether patients take medication or not. Zou et al. (2009) asserted that a small fraction of HIV patients could decline ARV treatment due to their belief in the healing power of prayer, yet, in the majority of cases religious beliefs about HIV healing pose no obstacle to the acceptance of medical treatment. A study by Dilger (2007) with the members of a Neo-Pentecostal church in Dar Es Salaam, Tanzania, found that these church members believed that HIV could either be a regular medical virus, or a spirit disguised as a virus. This led these members to believe that if the spirit disguised virus afflicted an HIV-infected person, therefore, it was possible for the pastor's prayers or traditional healers to cast out the spirit simultaneously curing the patients of HIV.

4.3.2.2 Category 2: Lack of Continuous Monitoring and Support

In this study, respondents revealed that the NIMART programme did not get enough monitoring and support it deserves from patients and nursing staff as well as management. The following sentiments were expressed by participants in this research. The Health Professions Council of South Africa (HPCSA, 2008) emphasised the need to keep records for all patients who attend a health centre.

Participant 10 voiced the following concern:

Patients concentrate on their beliefs and default treatment and their condition deteriorate. Patients move from other areas to our PHC facilities or to other PHC facilities without transfer letters ... record management becomes difficult. Poor support from local area because they do not know what to supervise since they are not trained in HIV programmes. Poor support from the district manager regarding the HIV programme as they only come when they hear that the national is coming for inspection. Poor support from the visiting doctor; is reluctant to see HIV patients as he says he is not paid for that. Doctor caters for diabetic and hypertension patients.

Patients who default and discontinue treatment are at high risk of illness and death because of AIDS-related conditions (Miller, Ketlhapi, Rybasack-Smith & Rosen, 2010). Miller et al. (2010) cited a number of reasons for defaulting from treatment programmes, including cost, transport and waiting time, stigma, family pressure, religious beliefs and illness of patients. Furthermore, defaulters were young patients and more likely to be a woman and with higher level of education and they were less likely to receive government grants or be unemployed (Miller et al., 2010). Lack of financial support seemed to have been a major contributory factor of defaulting.

Lack of commitment on the part of nurses, patients and supporting staff has also been cited as a challenge that negatively affected NIMART programme implementation in many PHC facilities. According to Moratio (2007), the duty of health care professionals should provide the necessary information and support at a level or standard that HIV/AIDS patients can understand. In this study, health care professionals seem not to be supporting patients in this way, therefore, patients' low level of knowledge and information leads to poor understanding and promotes non-compliance to treatment.

Participant 7 expressed concerns over lack of commitment by management as shown by the citation below:

No support coming from the district management. Although our manager is trained for NIMART she does not check how many patients are being attended

to and how things are being done, including the workload of the nurses. They shun the ARV PHC facilities section, but visit other sites. The district managers and HIV coordinators are also reluctant to visit the area and only come when they hear that the province is coming for audit purposes to tell us to put our things in order.

On nurses, **Participant 7** echoed that sentiment:

There is negative staff attitude towards NIMART programme and also towards PLWHA. Some nurses do not want to be trained for NIMART because they hate working with PLWHA.

Although this tends to differ with results from other researches done at the initiation of the NIMART programme such as Georgeu, Colvin, Lewin, Fairall, Bachmann, Uebel, Zwarenstein, Draper & Bateman (2012) who concluded that NIMART appeared to be highly acceptable among nurses, patients, and physicians. The prior studies also found that managers and nurses expressed confidence in their ability to deliver ART successfully. However, the confidence developed slowly and unevenly, through a phased and well-supported approach that guided nurses through training, re-prescription and initiation (Georgeu et al, 2012).

Besides the challenges brought by NIMART, it was also found that the NIMART programme changed the working and referral relationships between health staff. NIMART programme demands significant training and support. NIMART-trained professional nurses face high workload and capacity constraints while logistic and infrastructure challenges are impending (Davies, Homfray & Venables, 2013). Hlongwana (2013) argued that poor planning by the DoH to sustain activities after support from partners was the main cause of these aftermaths.

4.3.2.3 Category 3: Lack of Periodic Updates

There were generally low NIMART course updates by the districts due to poor planning.

Participant 3 shared the concerns of poor planning that led to lack of updates:

Workshops and updates are done irregularly after a long time and do not address current problems faced by NIMART nurses. Supervision is also poor from our supervisors and programme coordinators. NIMART nurses rarely get current information about the programme development.

A report by Khoza & Bhiya (2013) also indicated that nurses raised concerns about the lack of updated TB literature such as books and journals in their library, and they suggested that a book in this regard was written as a matter of urgency for the current TB literature is over twenty years old. This indicates the problem was not only with the NIMART programme. This implies that most of the changes on the implementation NIMART programme were not communicated to the nurses by the district. This could lead to a gap in what is expected and what actually takes place in various centres responsible for NIMART programme implementation.

4.3.2.4 Category 4: Lack of Mentoring and Debriefing

There were educational needs that NIMART professional nurses required in order to perform their duties properly. Some of these needs were supposed to be imparted by mentors at the workplace. However, as it turned out, this was not provided for.

Participant 10 expressed this concern:

No mentoring and debriefing given to nurses. The HIV partner who is to mentor the staff concentrates on statistics only. Poor support on mentoring from operations manager as they are not trained in NIMART. There is no debriefing and as a result nurses lack information on the programme.

Davies et al. (2013) reported that nurses described receiving support from mentors over the phone and the support proved crucial as it enabled these nurses to gain confidence gradually despite minimal on-site mentorship, and provided essential opportunity for debriefing. Davies et al. (2013) also emphasised the importance of debriefing for it enabled nurses to re-engage with NIMART after a patient's death had affected their self-confidence. A study by Green, de Azevedo, Patten, Davies, Ibeto & Cox (2014) established that in regions where the HIV burden placed large

demands on health services, nurse mentoring assisted in ensuring system efficiency for task shifting.

According to Kgalegi (2015), clinical mentoring can be used to improve the skills and knowledge of health care practitioners, nurses, doctors and pharmacists in patient management. Studies have shown that a new nurse's confidence in performing her duties was likely to improve within the first six months of participation in a mentorship program (Frost, Nickola, Desir & Fairchild, 2013). By not providing mentorship to NIMART nurses, this was likely to reduce their confidence in providing the NIMART programme. Similar studies also indicated that nurses and leaders can use mentoring to improve professionalism, confidence, and self-worth. .

4.3.2.5 Category 5: More Information in a Short Period of Time

The training given to NIMART professional nurses during the erratic training sessions seem to be more than the time allocated for training. The training period can be described as insufficient as a lot of training content is required to be covered.

Participant 12 echoed that NIMART training period needs to be increased:

More training on NIMART, even lower categories because we are having shortage of staff if the lower category are trained they can help the professional nurses while consulting or while doing the ANC and delivering – the lower category can help and increase more days on training nurses about NIMART and include paed, for example, you can increase this 5 days to two weeks – 5 days to 10 days. They usually taught us about the adult, the paed they say the doctor will initiate. Nowadays the doctors are no longer initiating they just push all paed to the nurses at the PHC facilities.

Bush (2006) suggested that despite the large number of children living with HIV, children in most developing countries currently have disproportionately low access to HIV treatment and care, as compared to adult populations. The literature identify a number of factors which contribute to this disparity, namely: lack of provider training on paediatric treatment and care; limited paediatric

HIV counselling and testing; limited access to paediatric drugs; and difficulties with diagnosis and follow-up of HIV-exposed children identified in prevention of mother-to-child transmission of HIV (PMTCT) programmes.

4.3.3 Theme 3: Burden of Overload

Wildschut & Mqolozana (2008) clearly explained the burden of work overload on the few NIMART-trained nurses through defining nursing as a critical skill which they referred to as the lack of ability of people to perform to the level of occupational competence required, because of gaps in their skills profiles. In this regard, the few NIMART-trained professional nurses were required to do all the work alone without assistance from other people or nurses unless they were NIMART-trained as they should have certain occupational competencies. Transfer of responsibilities from doctors to nurses of initiation of ART to NIMART left the nurses with more responsibilities for the NIMART trained nurses.

4.3.3.1 Category 1: Shortage of NIMART-Trained Professional Nurses

Wildschut & Mqolozana (2008) indicated the role of education and training of nurses as a contributory to effective and efficient practice of nurses, especially with the current environment where nurses should manage and deal with various resource constraints. Since nurses require special training to execute the duties, they cannot be substituted and this leaves the few trained nurses being overloaded as they are required to perform the duties of many people. This kind of scenario leaves the nurses overburdened, suffering from stress due to work overload. These are contributory factors to inefficient and ineffective implementation of the NIMART programme.

This sentiment was expressed by **Participant 2**:

There are many enrolled nurses here about four of them and all of them, only one is trained to do HIV testing and counselling, but the other three are not trained and that one is on the other group, that means the other group is suffering and you find that we are here – the professional nurses are busy,

maybe giving ARVS to patients, but there are some patients who needs counselling and testing. The enrolled nurse is sitting there not busy, but she cannot counsel and test the patient, you find that the service is poor because all the things are just waiting for the professional nurse - but it's a challenge.

Campbell et al. (2011) also highlighted that human resource shortages have been identified as the greatest potential limitation to providing ART. The shortage of professionally trained NIMART nurses has serious ramifications for the NIMART programme and the nurses themselves. Nurses will suffer from work-related stress resulting in poor quality of service and there will be underperformance by the nurses. Nurses see many patients per day and are involved in many programmes at the clinic.

A participant said:

Four nurses have retired, but not yet replaced and there is too much paperwork to write, paediatric book, the adult book, the lab forms and to document the patient on the integrated electronic art register network (TIER.NET).

The Chronic Central Medication Distribution and Dispensing (CCMDD) programme is also posing challenges as involves a lot of paperwork to be completed for those patients who are getting treatment which come by courier. These findings are supported by Georgeu et al. (2012) in that implementing NIMART in South Africa, nurses in all facilities said repeatedly that paperwork demands in the health system as a whole were onerous, and had been increased by NIMART.

4.3.4 Theme 4: Concerns Related to Lack of Resources

Availability of material, financial and human resources is the critical components which increase the chances of success of any programme. Unavailability of one of them compromises the implementation of a successful programme. A lot of support in terms of human resources—financial and material—are paramount for any new programme like NIMART to be successfully implemented and be accepted by the ordinary people and communities (DoH, 2011).

4.3.4.1 Category 1: Shortages of Material Resources Such as Drug and Gloves

Participants expressed lack of sufficient material resources to use in their day-to-day operations such as drugs and gloves. The shortage of drugs hampers the operations of any medical institution as the core business of clinics is to administer prescribed drugs to patients. When patients fail to get drugs in time this will break the prescribed cycle of taking medication and will ultimately affect compliance. Also, patients will stop visiting the clinic if there is shortage of drugs and this result in high defaulter rates. Safety of health workers should be seriously considered by providing equipment like gloves for nurses to use since they are dealing with patients who are HIV-positive. Shortage of drugs and gloves causes emotional stress to the nurses as they want to help the patients.

A participant highlighted:

We sometimes have a shortage of drugs for one to two weeks our lives are also at risk as we even run short of gloves at times.

This observation was also made by Ouko (2012) that drugs and other medical supplies are critical for effective health service delivery. Essential drugs are those that meet the basic requirements of the majority of patients and these should be available in the hospitals (Mackey & Liang, 2013) Ouko (2012) asserted that without these drugs hospitals find it difficult to deal with patients.

4.3.5 Theme 5: Lack of Transport for PLWHA to PHC Facilities

Poor transport facilities reduce people mobility regardless of their health status. Lack of transport for PLWHA to PHC facilities seriously affects the NIMART programme as few people will be initiated and this also contributes to high defaulter rate. Almost all respondents cited the need to locate funds for the monthly clinic visit as a constant source of stress and anxiety, and lack of money for transportation was a key factor in cases of missed doses and missed medical appointments. Lack of transport degenerates into other problems like being stressful to patients, compromised adherence to prescription of drugs and increased defaulter rate.

4.3.5.1 Category 1: Villages That are Far from PHC Facilities

Several participants pointed out challenges which they encounter with patients who live far from PHC facilities, with the major contributing factor being lack of transport money to visit the clinic regularly as required by the nurses. Some villages are not easily accessible due to poor road infrastructure and being far from the PHC facility. Patients are required to plan well in terms of money for transport and duration that will be spent visiting the faraway clinic. In such a scenario it requires total commitment from the affected patients, otherwise they will default.

Participant 8 pointed out that:

We experience high defaulter rate from patients who live far away from the clinic.

Syed, Gerber & Sharp (2013) indicated that:

Transportation barriers are often cited as barriers to health care access. Transportation barriers lead to rescheduled or missed appointments, delayed care, and missed or delayed medication use.

The same sentiment was echoed by Tuller, Bangsberg, Senkungu, Ware, Emenyonu, & Weiser (2010) following their research in Uganda:

The cost of transportation for monthly clinic visits has been identified as a potential barrier to ARV adherence in sub-Saharan Africa and elsewhere.

4.3.5.2 Category 2: Poor Transport for Drug Collection

The majority of participants expressed concerns over shortage of drugs at their workstations due to logistical problems. These problems include lack of transport to deliver the drugs to the clinics. Also, clinics do not have delivery vans to collect the drugs from the major hospital. Some of the NIMART-trained nurses out of their goodwill end up using their own cars to collect the drugs from the hospital without any compensation.

A participant expressed that:

There is shortage of medication for even a week or two. Sometimes the nurses on duty stop working and go to the hospital to collect medications using their own transport.

When patients visit the medical centre and fail to get their medication as prescribed this will result in some of the patients no longer returning to the clinic to collect the drugs resulting in an increased defaulter rate. Adherence in this case is seriously compromised. The findings corroborated the study conducted by Georgeu et al. (2012) in other sites where the study was conducted—there were unreliable delivery of ARV drugs from hospitals and the central dispensing unit, as well as infrastructure deficits such as non-functioning telephone lines, were reported to have had significant effects on patients already on ART and made it very difficult for nurses to initiate new patients into treatment

4.3.6 Theme 6: High Rate of HIV/AIDS Patients Defaulting

The collection of medication and consultation by patients depends on the accessibility of clinics by the patients. Results show that many patients resided very far from the clinics and, therefore, it was difficult for them to visit clinics on foot. NIMART is a complex intervention intended to improve health care access and equity, ideally without compromising the quality of care, in resource-limited settings (Claire, Davies, Homfray & Venables, 2013). The NIMART programme is expected to reduce patient transport costs and improve patient retention. However, in this study, the NIMART programme seemed to have affected negatively patients in terms of transport as clinics to which such facilities could be offered were located far away from the intended patients.

4.3.6.1 Category 1: Low Turnout of Patients for Drug Collection

In this study, participants reported low turnout of patients for consultation and collection of medication due to transport problems.

Participant 6 expressed:

At my clinic, the number of patients who come to collect their medication has dropped due to transport costs. Some patients stay quite a distance from the clinic and do not have money for transport to travel to the clinic.

The same sentiments were also expressed by **Participant 1**:

The number of PLWHA at our clinic is fluctuating as the patients cannot meet high costs of local transport to the clinics. They would rather stay at home and skip taking medication.

It is becoming difficult to motivate cash-strapped patients to visit the clinic. In view of this, it seems transport costs discourage patients from meeting their medical obligation. This leads to serious defaulting on medication and also impinges on the number of patients to be followed up.

4.3.6.2 Category 2: High Number of Patients to Follow-Up

Poor attendance due to high transport costs means that more work has to be done in follow-ups to patients. This means also that number of productive working hours is lost in this exercise.

For example, **Participant 5** responded:

Initially, large numbers of patients voluntarily attended clinic when transport costs were low. We spent most of the time helping them at the clinic. As it is now, we have to use strategies on how to make them attend. This means making follow-ups on defaulters. More time is now lost on follow-ups to customers who default.

4.4 Themes Emerging from Expressions of How Nurses Coped with the Provision of NIMART to PLWHA

Table 4.2 summarises the themes, categories and sub-categories that emerged from the expressions of how nurses coped with the provision of NIMART to PLWHA.

4.4.1 Theme 1: Positive and Negative Experiences on NIMART Programme Implementation

Participants expressed a number of positive and negative experiences during the implementation of the NIMART programme. These are stated and discussed under the respective categories and sub-categories below.

4.4.1.1 Category 1: Poor Acceptance by HIV/AIDS Patients from Their Own Villages

Nurses who come from the same village as those of the patients expressed poor acceptance by the patients. The patients did not want to be helped by these nurses because they feared that they may disclose their HIV/AIDS status to other members of the community. Secondly, the patients did not want the community to know that they are HIV-positive. Nurses who experience such challenges need emotional support from colleagues in order to continue working.

Participant 11 echoed this sentiment:

Nurses send Community Home-Based Care for People with HIV/AIDS (CHBC) to make follow up on defaulters only to find out that they are rejected by the patients due to stigmatization that neighbours see CHBC entering a home that becomes a problem.

Hall (2007) indicated that confidentiality of patients' HIV status posed challenges to nurses' work for they could not inform relatives PLWHA of the patients' status without permission from the patient. This means nurses were not able to educate relatives on precautionary measures to protect themselves and to avoid spreading the disease further. This means many people are always personally involved with PLWHA without knowing it. This situation leaves nurse to question their role as caregivers as well as their ability to curb the HIV-AIDS epidemic. HIV/AIDS stigmatization is a worldwide problem, including in developed countries such as the United States of America (USA) and the United Kingdom (UK). Ekstrand (2006) posited that stigma has been expressed in a variety of ways used to stigmatise HIV-HIV/AIDS patients.

Table 4.2: Themes, categories and sub-categories on nurses coping with provision of NIMART programme to PLWHA

Themes		Categories		Sub-Categories	
1.	Positive and negative experiences on NIMART programme implementation	1.1	Poor acceptance by HIV/AIDS patients from their own villages	1.1.1	Emotional support
		1.2.	Nurses' withdrawal from initiating patents due to negative experiences	1.2.1	Sense of responsibility
2.	Lack of awareness on HIV/AIDS among patients	2.1	Patients using teas, anointing oils and medicines from spiritual leaders	2.1.1	Nutritional support
3.	Concerns about negative attitudes to NIMART programme	3.1	Stigmatisation of HIV/AIDS on NIMART programme	3.1.1	Discrimination
		3.2	Negative feelings towards NIMART programme	3.2.1	Negative attitudes
4.	Use of own facilities to collect drugs	4.1	Sense of ownership of the NIMART programme	4.1.1	Intrinsic motivation
5.	Positive strategies to cope with large numbers of patients	5.1	Allocation of different dates to patients for review	5.1.1	Positive planning
		5.2	Caucusing and sharing experiences	5.2.1	Emotional support
		5.3	Group training of patients	5.3.1	Workload reduction

These include:

- ∞ Ostracism, rejection and avoidance of PLWHA;
- ∞ Discrimination against PLWHA by their families, health care professionals, communities and governments;
- ∞ Mandatory HIV testing of individuals without prior informed consent or confidentiality protections;
- ∞ Quarantine of persons who are HIV-infected; and
- ∞ Violence against persons who are perceived to have AIDS, be infected with HIV or belong to high risk groups

(<http://caps.ucsf.edu/archives/factsheets/stigma#sthash.FbInG2hX.dpuf>)

Faced with these possible dilemmas, patients would rather conceal their HIV-positive status to their relatives and would rather shun the NIMART nurses who would have tested them. According to Skinner & Mfecane (2004), at an individual level, stigma tends to undermine an individual's identity and capacity to cope with HIV/AIDs. This would mean that fear of discrimination would limit the possibility of disclosure even to potential important sources of support such as family and friends.

4.4.1.2 Category 2: Nurses' Withdrawal from Initiating Patents Due to Negative Experiences

Some nurses have resorted to withdrawal from initiating patients due to negative experiences that could involve death of patients or other severe side effects.

Participant 12 expressed these concerns:

Two people died after I initiated them in my first week of initiation. Investigations showed that one of them had stopped taking ARVs and was now using traditional medicine and the other was using tea instead of ARVs. This affected me emotionally and psychologically and I wanted to avoid giving ARVS to patients. I stop initiating HIV patients for a long time. I restarted initiating after realising that some people whom I had initiated CD4 cells had improved.

Nurses on the NIMART programme seem to work under a lot of pressure which, at times, compels them to avoid performing their duties. Similarly, a study by Zulu & Lehmann (2004) indicated that a wide range of pressures on nurses exist, with few initiatives in place to alleviate stress and provide support. Nurses reported a widening scope of activities as community resources persons, lack of skills, vastly increased stress levels because of feelings of helplessness and guilt. Existing support mechanisms and training provisions were considered insufficient. When patients die after initiations, responsible nurses tended to be affected negatively and resented the fact that the patients have died. The feeling of negligence made them feel more guilty leading to more self-examination and helplessness.

4.4.2 Theme 2: Lack of Awareness on HIV/AIDS Among Patients

In South Africa, there have been many HIV/AIDS awareness campaigns, which have been supported by the government and the private sector. By now it is expected that the majority of South Africans are aware of the HIV/AIDS epidemic. However, the results from this study show otherwise, as elaborated below.

4.4.2.1 Category 1: Patients Using Teas, Anointing Oils and Medicines from Spiritual Leaders

Some patients lacked awareness of HIV/AIDS as shown by their tendencies to go to spiritual leaders and belief that they were bewitched. Such patients resort to using teas, anointing oils and medicines from spiritual leaders. This has been detrimental to the NIMART programme.

Participant 4 indicated:

Viral load becomes high because patients have stopped taking medication because some people convinced them to use traditional staff. Patients, after attending prayers, feel they are no longer HIV-positive and stop taking medication. At times they are told by pastors that they are bewitched, especially with the husband and children being negative.

Participant 12 remarked:

Other patients are defaulting due to cultural and religious beliefs ... some believe that if they take traditional medicine they will survive, others are taking teas, anointing water and holy water.

A study by Musheke, Bond & Merten (2013) in Zambia, established that HIV/AIDS patients from low income sections used different herbal concoctions as substitute treatment for HIV/AIDS. The patients used teas, herb juice such as moringa garlic, ginger, aloe vera gel and others, which they thought would heal the diseases. Worse still, in South Africa, various traditional medicines and chinese herbs which have not been tested for side effects are now being sold to PLWHA. For PLWHA, herbal remedies have become a routine part of life, regardless of whether they were experiencing illness-related symptoms or not. The growth of the market for herbal remedies is worrisome, their popularity and perceived effectiveness without scientific proof and these risks undermine the success of NIMART care and consequently increase the burden of HIV/AIDS care in the long term (Musheke et al., 2013). Patients who resort to traditional medicines tend to default from prescribed medications if the symptoms of AIDS disappear. Such patients are difficult to reinitiate as echoed by a number of participants.

Participant 5 said:

Patients are initiated and then later discover that they have defaulted and some of their reasons being that they have been healed by spiritual healers or traditional healers and it becomes difficult to convince the patient to be reinitiated.

In South Africa, traditional healers, particularly sangomas, are highly respected by many people with their contribution to HIV/AIDS patients in taking treatment or not could be phenomenal. These results are similar to those in the study by Bauleth (2013) who found that HIV/AIDS patients were defaulting treatment due to reasons such as social factors that include spiritual beliefs, cultural beliefs, stigma and discrimination. Bauleth (2013) reported that patients first sought traditional healers' opinions before consulting health workers. This had effects on disclosure of HIV status and also resulted in the patient being unwilling to take medication in the presence of others.

In many cases, traditional healers convince patients that they were bewitched and can only be cured with traditional medications (Bauleth, 2013). According to Musheke et al (2013), PLWHA who default face problems with re-initiation. Such delayed re-initiation of NIMART also creates additional therapeutic costs when PLWHA eventually return for NIMART care, especially if their health has deteriorated.

4.4.3 Theme 3: Concerns About Negative Attitudes to NIMART Programme

Participants expressed concerns over negative attitudes amongst other health care professionals on the NIMART programme

4.4.3.1 Category 1: Stigmatisation of HIV/AIDS on NIMART Programme

Medical doctors in most cases refuse to handle HIV/AIDS cases as they claim not to be trained to do work in that area. This also includes some nurses who are not trained in NIMART. This stigmatisation causes other nurses not to go for training in NIMART programme.

For example, **Participant 10** remarked:

Poor support from the visiting doctor, is reluctant to see HIV patients as he says he is not paid for that. Doctor caters for diabetic and hypertension patients.

This is pure discrimination of patients by professional health personnel. This indicates a negative attitude towards NIMART by doctors. These results correspond with findings by Maskew (2007) that some HIV/AIDS patients were not prepared to disclose their HIV status to relatives and friends due to fear of being discriminated once their status was known. In PHC facilities some nurses also discriminated against HIV/AIDS patients making it difficult for patients to take or continue with their medications in the presence of relatives, friends, work colleagues and some health workers. Eventually, the patients were likely to miss medications. In this study, the refusal by some medical doctors and nurses to assist HIV/AIDS patients would ultimately lead to patients feeling being discriminated and avoid coming for medication whenever the concerned nurses and doctors were on duty.

4.4.3.2 Category 2: Negative Feelings Towards NIMART Programme

Negative feelings towards NIMART programme have been expressed by many participants in this study. For a programme to be successful it must receive positive attention from various stakeholders. However, some nurses felt otherwise.

Participant 5 said:

Some nurses do not want to work with HIV/AIDS patients initiated under NIMART programme because they are ill and need more attention.

Previous studies indicated that NIMART was highly acceptable among nurses, patients and physicians (Georgeu, Colvin, Lewin, Fairall, Bachmann, Uebel, Zwarenstein, Draper & Bateman, 2012). According to these authors, managers and nurses expressed confidence in their ability to deliver ART successfully. Contrary to these reports, the results in this study show that nurses were harbouring negative motives towards the NIMART programme and the patients. Reports from previous studies show that confidence among nurses was developed slowly and unevenly over a long period of time through a phased and well-supported approach that guided nurses through training, re-prescription, and initiation. This gave nurses time to reflect on their practices while

they were being supported. This was substantiated by Georgeu et al. (2012) who argued that NIMART changes the working and referral relationships between health staff, demands significant training and support, and faces workload and capacity constraints, and logistical and infrastructural challenges.

4.4.4 Theme 4: Use of Own Facilities to Collect Drugs

On a positive note, nurses went to show their support and commitment towards the NIMART programme in a number of ways. As alluded to above, some NIMART nurses had positive experiences from this programme and hence were prepared to contribute to its success.

4.4.4.1 Category 1: Sense of Ownership of the NIMART Programme

The sense of ownership of the NIMART programme was expressed when nurses used their cars to collect medications from central stores to deliver to PHC facilities without compensation.

For example, **Participant 5** indicated:

... medication gets finished before receiving another order and nurses end up using their own cars to follow-up medication, but are not compensated for that. Local authorities do not support with medication collection.

Participant 6 also expressed the same notion, but differently:

Pharmaceuticals are not supplied on time. The pharmacy staff request the nurse to collect the medication from the pharmacy using their own cars. Even the local authority does not help in the collection of medication without compensation. Nurses do this for the sake of patients.

This shows that NIMART-trained professional nurses are motivated to work in the NIMART programme. They are motivated to save lives of many people. Davies et al. (2013) also reported on problems that were faced by different NIMART centres, especially in the disruption of medical supplies that required nurses to use their own resources to collect them from other pharmacies.

The report also highlighted the creativity of nurses in problem-solving at the facility level in an effort to ease NIMART integration. In this way, nurses were able to successfully address various challenges to the implementation of NIMART simultaneously reducing possible disruptions to other PHC services (Davies et al., 2013).

4.4.5 Theme 5: Positive Strategies to Cope with Large Numbers of Patients

The participants expressed innovative strategies to cope with large numbers of patients

4.4.5.1 Category 1: Allocation of Different Dates to Patients for Review

Despite challenges of shortage of staff and materials, some PHC facilities have come up with strategies to cope with pressure of work emanating from the large number of patients. Some participants indicated that they now allocate different dates for review and managing of group patients.

Participant 10 expressed how this was achieved:

To cope with PHLWA, one staff is allocated to give ARV to patients and two registered nurses who are NIMART-trained and we start work as early as possible. We avoid giving the same return dates to many patients. Nurses give health education in a group.

This assertion indicates a number of successful strategies that PHC facilities use so that NIMART-trained professional nurses cope with large numbers of patients. It shows proactive planning on behalf of the NIMART-trained nurses. Davies et al. (2013) also reported cases in which NIMART nurses were able to allocate days to different NIMART activities in order to reduce work overload. This was particularly evident in PHC facilities where there were one or two NIMART nurses.

4.4.5.2 Category 2: Caucusing and Sharing Experiences

Another strategy which nurses use to cope with NIMART problems is caucusing and praying which enable them to provide emotional support to each other.

Participant 12 expressed how the nurses at their PHC facilities encouraged each other to work on the NIMART programme:

Although we do not have mentoring and debriefing at the PHC facilities, nurses we come together and share experiences and give each other advice, including reading the scripture from the bible and praying to encourage each other.

Participant 3 also reflected:

Nurses work hand-in-hand with the CHBC in re-engineering the PHC programme. It builds a good nurse-patient relationship because your client becomes your brother or sister.

By sharing experiences, nurses are able to overcome a number of emotional problems while also learning from each other. These coping strategies make it possible for nurses to overcome stresses due to work overload and unbearable working conditions. However, the situation could be different for those NIMART nurses working in many PHC facilities.

Participant 6 also added to this coping strategy:

We hold meetings every Wednesday and in-service each other. There is a problem of absenteeism. At times the manager is supportive, but does not know anything about ART.

However, each PHC facility seemed to be using its own strategies. Some did not have strategies to overcome the challenge and relied on sharing individual situations.

Participant 2 provided such evidence by saying:

I do not worry a lot, I just do what I was trained to do, that is helping patients. I get encouragement from the manager, including advice, and rely on policies and guidelines to make sure that I help patients. I concentrate on work issues during working time only. Although while at home, I sometimes reflect especially when I have made a mistake.

Davies et al. (2013) demonstrated that effective communication between facility-level staff often reduces the frustration arising from inadequate communication between senior management and ground-level staff. Inter-faculty networking provided a vital opportunity to encourage others and iron out programmatic issues.

4.4.5.3 Category 3: Group Training of Patients

Another coping strategy which was cited by participants was reducing workload through group training of patients. In some PHC facilities patients were trained in groups by a NIMART-trained professional nurse.

Participant 7 confirmed this:

Nurses give health education in a group.

Group education serves a dual purpose in that it creates time for already overloaded nurses so they can complete other tasks which could not have been covered in the same amount of time. Secondly, it boosts the morale of patients as they come together to discuss a common problem and encourage each other to continue taking medication. Through group education, nurses can cover as many general aspects of HIV/AIDS education within a short time and this can reduce the waiting for patients. However, group education may be suitable for those patients who do not need much attention.

4.5 Themes Emerging from Expressions of What Could be Done to Enhance Nurses' NIMART Programme Support

Participants expressed a number of views how support of the Nurses' NIMART programme could be enhanced (Table 4.3). These are considered under categories and sub-categories below.

4.5.1 Theme 1: Need for Training of Nurses on PICT, VCT and HCT in the NIMART Programme

Participants expressed the need for training of nurses on PICT, VCT and HCT in the NIMART, programme.

Table 4.3: Themes, categories and sub-categories on enhancing nurses' NIMART programme support

Themes		Categories		Sub-Categories	
1.	Need for training of nurses on Provider-Initiated Counselling & Testing (PICT) and Voluntary Counselling & Testing (VCT) in the NIMART programme, especially HIV counselling & testing (HCT)	1.1	Staff development	1.1.1	Integration of skills
2.	Need to increase frequency of Foundation for Professional Development (FPD) staff or district staff dealing with HIV/AIDS support every two weeks or mentor	2.1	Continuous contact between NIMART nurses and supervisors	2.1.1	Support
3.	Timely communication of policies through formal channels	3.1	Effective communication of policies	3.1.1	Communication
4.	Concerns about duration of NIMART training	4.1	Quality of training	4.1.1	Advocate for NIMART training duration extension

4.5.1.1 Category 1: Staff Development

Shortage of NIMART-trained professional nurses in various PHC facilities leads to high workloads. Thus, there is need for all nurses to be trained in NIMART. This includes all types of nurses for the smooth functioning of a PHC facility. A continuous and reliable training and staff development programme should be put in place.

The programme should address the professional needs of nurses as echoed by **Participant 2**:

There should be training of nurses on VCT and NIMART, especially HCT.

The literature indicate mixed results pertaining to staff development. Much of the literature indicate that the SAG has put in place facilities for staff development of NIMART nurses whether on-site or off-site. Most of the problems of staff development have to do with the communication and selection of the attendees by the local nursing authorities. Davies et al. (2013) observed that although nurses who attended off-site training described it as comprehensive and informative, they criticised managers for haphazard coordination and inappropriate staff selection.

Furthermore, Davies et al. (2013) indicated that in some facilities, nurses who were not interested in NIMART undermined programme sustainability by refusing to attend training. Some PHC facilities were understaffed with only single NIMART-trained professional nurses making it difficult for that particular nurse to attend staff development sessions. Nurses require integrative skills in order to work effectively (Cameron, Gerber, Mbatha, Mutyabule, & Swart, 2012):

Expanding clinical mentoring and further training in clinical skills and pharmacology would assist in reaching the target of initiating a further 1.2 million HIV-positive patients on ART by 2012.

Despite a shortage of trained nurses, mentoring and capacity building ensures trained nurses have integrative skills that may help to minimise the challenge (Nyasulu, Muchiri, Mazwi & Ratshefola, 2013).

Participant 3 also emphasised the need to:

Extend period of training to two weeks and training more professional nurses and also enrolled nurses. Increase more counsellors.

Ford (2013) shared the same sentiments:

Limited time available for training has further raised concerns around the competence and confidence of practitioners to perform NIMART.

The training period for NIMART has been designed to quickly address staff shortages within a short period of time although quality of the output is compromised.

4.5.2 Theme 2: Need to Increase Frequency of FPD or District Staff Dealing with HIV/AIDS

Participants expressed the need to increase frequency of FPD staff or district staff dealing with HIV/AIDS support every two weeks or mentor. Nurses felt that there is need for support from supervisors in order for the NIMART programme to succeed. Increasing contacts between NIMART-trained professional nurses and supervisors results in ownership of the programme and that reduces some of the problems encountered by NIMART-trained nurses. Supervisors will attempt to find solutions to some of the challenges.

Participant 2 expressed:

FPD staff or district staff dealing with HIV/AIDS have to support every two weeks or mentor because they can detect that a patient is failing early and needs a change of drugs to another regime but we cannot do it.

Davies, Homfray & Venables (2013) indicated:

Where a supportive, team-oriented culture prevailed, staff appeared more resilient to change-related pressures and morale seemed higher, whereas in facilities with an individualistic ethos, negative experiences were more common.

Support is not supposed to come from colleagues only but also from the supervisors. Davies, Davies, Homfray & Venables (2013) further accentuated:

... at facilities without telephones, or where up-referral site doctors were refusing to come on board as mentors, inexperienced nurses described feeling isolated.

Participant 3 also pointed out the need for:

Strengthening supervision from our supervisors and programme coordinators.

This means that supervision plays a vital role in the NIMART programme as it cannot be used for fault finding, but to strengthen the relationship of all working partners on the programme. Previous studies indicated potential successes of NIMART where there is good supervision.

Foundation for Professional Development (FPD, 2014) indicated:

Through a process of baseline and needs assessments, consultation and negotiation and a combination of teaching, coaching and mentoring, FPD's roving mentor teams help build the sustainable capacity of facility-level clinical, management and support staff to effectively and efficiently provide quality, integrated health services based on client needs.

Research results pointed in a different direction from what is expected according to policy.

4.5.3 Theme 3: Timely Communication of Policies Through Formal Channels

Participants expressed the importance of timely communication of policies through formal channels.

4.5.3.1 Category 1: Effective Communication of Policies

Policies play an important role in the implementation of a programme such as NIMART. In this regard, the implementers will always refer to the policies for new changes or other challenges that

could not be solved intuitively. Nurses in this study expressed that policies were either not available or changes were not communicated in time or never at all.

For example, **Participant 2** observed:

Policies should be communicated to us during meetings, with guidelines read and discussed so that we can understand rather than giving us policy documents only.

The major concern expressed by participants is lack of communication from the superiors to the nurses and which at times is done verbally without documents for reference purposes.

Davies, Homfray & Venables (2013) indicated:

Effective communication between facility-level staff often ameliorated the frustration arising from inadequate communication between senior management and ground-level staff. Interfacility networking provided a vital opportunity to encourage others and iron out programmatic issues.

There is agreement of the research results in terms of the relevance and importance of proper communication in order to achieve the intended goals of the NIMART programme.

4.5.4 Theme 4: Concerns About the Duration of NIMART Training

Participants expressed concerns about the duration of NIMART training.

4.5.4.1 Category 1: Quality of Training

Participant 11 verbalised that:

One week yee there is a lot of work which needs to be done in that one week and you tend to get out of that programme to come and initiate people on this NIMART programme when you don't have enough information - enough information that is where you find that we are having problems - we are having

problems, yes .Yaaaah we are having problems, yes. I think may be if it can be done in one month.4 weeks yeeees so that when we come out we are well vested with what to do and what not to do in NIMART.

Furthermore, the participants felt that the programme was erratic and distorted:

We were not trained to initiate NIMART for Peads, however, later on some were trained, so there is no consistency in training and capacitation.

Another participant reported that:

We were told that the doctors in the institution will in-service us, however doctors are reluctant and understaffed to workshop us.

Davies, Homfray & Venables, (2013) in their research asserted:

Although nurses who attended off-site training described it as comprehensive and informative, they criticised managers for haphazard coordination ... one district manager responded to inconsistent training coverage by instituting facility-by-facility on-site training. This approach ensured everybody in the PHC facilities becomes trained and feels comfortable with initiation through group mentorship.

Relevant training can be offered through facility to facility on-site as equipment at the work station will be used rather than train nurses on some equipment that they do not have at their work stations. This kind of training is practically oriented and reduces redundancy of station equipment in most cases.

4.6 Summary

Nurses faced multiple of experiences during their provision of the NIMART programme. Professional nurses were satisfied that they were actively involved in saving lives through the implementation of the NIMART programme. Although there were some challenges faced by NIMART nurses, there was a general feeling that the contribution made by the NIMART

programme in the community was commendable. Nurses suggested that the partners and government should provide training in the area of skills deficiency based on needs identification of an area which seemed to be neglected by the NIMART programme. Nurses also suggested the need to provide support to NIMART nurses both materially and emotionally. Chapter 5 will build on the discussion of the findings thus far and will include conclusions, limitations and recommendations.

CHAPTER 5

DISCUSSION, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter discusses research findings, presents conclusions, limitations and recommendations regarding challenges confronting professional nurses implementing the NIMART programme in Vhembe District. The chapter is structured as follows: introduction, purpose of the study, research objectives, discussions of findings, conclusions, limitations and recommendations.

5.2 Purpose of the Study

The purpose of the study was to explore and describe the challenges confronting professional nurses implementing the NIMART programme in Thulamela Municipality, Vhembe District.

5.3 Conclusions in Relation to the Research Objectives and Questions

The two objectives of the study were achieved, namely:

- ∞ Identifying the challenges that confronted NIMART-trained professional nurses in Thulamela B Municipality, and
- ∞ Describing the challenges that confronted NIMART-trained professional nurses in Thulamela B Municipality.

These objectives were achieved by answering the stated research questions which were used in the interviews. The central research question was:

What challenges did NIMART nurses confront while implementing the NIMART programme?

Minor questions derived from the main question were:

- ∞ What were the nurses' general experiences of providing NIMART?
- ∞ How did nurses cope with the provision of NIMART to PLWHA?
- ∞ What could be done to enhance nurses' NIMART programme support?

5.4 Discussion of the Findings

Three main themes emerged from the interpreted results and findings. Each of the themes is discussed under the sub-sections of the respective research question.

5.4.1 Research Question 1: What Were Nurses' General Experiences of Providing NIMART?

Themes that emerged from expressions of professional nurses' general experience in providing NIMART are discussed below.

5.4.1.1 Theme 1.1: Concerns Related to Infrastructure

All participants indicated that they were working under constraints of infrastructure which was either insufficient or dilapidated. Shortage of appropriate infrastructure such as consultation and counselling rooms meant that most of NIMART processes were conducted in the same rooms with those for general purpose where HIV/AIDS patients shared the same room with other patients. Initiation of HIV/AIDS patients became difficult to attain due to disruptions as the nurses were called to assist in other activities. This challenge was difficult for nurses to solve because putting appropriate infrastructure in place was beyond their control and capabilities. Georgeu et al. (2012) indicated that in many NIMART sites, there existed infrastructure deficits which affected both initiation and maintenance of patients on ART. Infrastructural shortage is a perennial challenge in many NIMART PHC facilities and nurses have to deal with the problem for they are not able to address it themselves.

Colvin et al. (2010) also observed that infrastructure shortages was a drawback of the NIMART programme even though nurses were prepared to work hard for its success. Smart (2011) asserted that limited infrastructure and space constraints in NIMART PHC facilities retarded the progress of the programme despite the fact that nurses and doctors have accepted the programme. Shortages of infrastructure also contributed to rooms partitioned using curtains. This compromised confidentiality as the occupants of the adjacent rooms were suspected of eavesdropping. This implied that, once HIV/AIDS patients waiting for initiation noticed this loophole, they were no longer forthcoming to be initiated, but would rather leave or divert the NIMART nurses' attention to something else (Smart, 2011). This resulted in patients giving wrong contact details to avoid follow-ups by CHBC personnel. Broken windows were also a source of concern for most of the counsellors as they realised that people passing were hearing their discussions and also saw the patients who were being attended. This was even worse with patients from the same village with those people passing-by.

According to Colvin et al. (2010) shortage of infrastructure causes nurses delay initiating patients as they will be waiting for space to be created for them or wait for a room to be free. In this case, infrastructure shortage is a real challenge in the success of NIMART programmes across South Africa. Mokoka (2011) also observed that a backlog of facilities to be assessed and delays resolving facility infrastructure issues compromise the NIMART programme in many places. A research study by Cameron (2012) established, among other challenges indicated, that lack of a consultation room in the PHC facilities to consult patients preoccupied nurses and patients.

5.4.1.2 Theme 1.2: Poor NIMART Programme Support System for NIMART-Trained Professional Nurses

Support from doctors, district managers and provincial managers have been found to be lacking in many NIMART PHC facilities. Mokoka (2011) reported that there was initially poor coordination between the nurses trained in NIMART and facilities being made ready as ART service points. In this study, participants have, on several occasions, indicated that doctors were only offer those

activities they were paid for. Some managers, although they were trained in NMART, still did not fully take part in the programme. Doctors preferred to consult booked patients and refuse to see urgent complicated cases needing expert management. Cameron (2012) also reported that lack of mentoring support left many nurses frustrated as they were deprived the change to apply what they had learnt prior to deployment.

This study has shown that besides shortage of infrastructure, there was lack of support for NIMART-trained professional nurses. This had after-effects on the way nurses performed their duties. Lack of support for nurses is one of the major challenges that affected NIMART programme implementation. If poorly managed, NIMART implementation risks inadequately supported nurses providing suboptimal care, negatively impacting patient outcomes, staff confidence, morale and broader health care services (Davies et al., 2013). George et al. (2012) indicated that nurses in their study felt that commitment often had negative effects for their own well-being, in particular, they felt that they needed much more support to sustain their PHC facilities work, and that middle and upper management layers were uninterested, or unable to provide this support, or both.

5.4.1.3 Theme 1.3: Burden of Overload

One of the major challenges in PHC facilities is staff shortage that would lead to the few members being available and given more work to do. Similarly, this study confirmed the trend of shortage of staff and increased workload among nurses in many NIMART PHC facilities. Cameron et al.'s (2012) earlier findings in a similar study showed that the overall shortage of staff in NIMART PHC facilities resulted in them being allocated other tasks to perform. Davies et al. (2013) also identified that in South Africa, health care worker experiences several challenges, including insufficient staffing, high staff turnover, unmanageable workloads and burnout and inadequate planning, emotional support, communication and responsiveness from senior management. In situations where there is work overload, NIMART-trained professional nurses ended up being allocated to other tasks. This led to great disappointment among nurses for they would not be able

to use their new skills in the areas they specialized in. This study has established that NIMART-trained professional nurses were overwhelmed with work due to staff shortages in many PHC facilities. This was one of the challenges which nurses experienced in many NIMART PHC facilities.

5.4.1.4 Theme 1.4: Concerns Related to Lack of Resources

Besides shortage of infrastructure, NIMART PHC facilities faced a series of shortages of essential materials such as medication, stationery (files and registers), gloves and equipment needed for blood collection. Previous studies by Cameron et al. (2012) and Davies et al. (2013) confirmed that these shortages existed due to either lack of support from the government or due to poor supplies by medical stores. These shortages affected negatively the way NIMART PHC facilities operated as nurses ended up not performing some activities such as blood tests. These problems cascaded down to NIMART initiations where there was lack of stationery to mark records for patients.

5.4.1.5 Theme 1.5: Lack of Transport for PLWHA to PHC Facilities

Transport for PLWHA was identified as a challenge that NIMART-trained professional nurses faced on a daily basis. In rural areas it was almost impossible for patients to walk for long distances to reach PHC facilities and there were no accessible roads for vehicles. According to Malinga (2009), transport to PHC facility to access ARVs is one of the biggest challenges facing people in Katine with HIV/AIDS (Uganda). Failure to collect drugs on time has consequences in the long run. In many cases, some patients did not have money to pay for their transport and had to walk to PHC facilities. Subsequently the tendency for defaulting collection of medication emanated.

5.4.1.6 Theme 1.6: High Rate of HIV/AIDS Patients Defaulting

A number of factors that led to defaulting by some patients were mentioned by participants, including inaccessibility of PHC facilities, beliefs in traditional and spiritual healers, lack of HIV/AIDS education and relocation. Patients who discontinued treatment are at high risk of illness

and death because of AIDS-related diseases or developing drug-resistant virus strains. Participants reported a high defaulter rate by HIV/AIDS patients in rural areas. This finding is similar to a study by Dalal, MacPhail & Mqhayi (2008) at a large public hospital in which patients who defaulted soon after ART initiation had died, and some had transferred and others had discontinued treatment voluntarily or could not be traced. Miller et al. (2013) identified reasons for defaulting as related to cost, transport and waiting time, stigma, family pressures, religious beliefs and illness. Murray et al. (2009), cited in Miller et al. (2013), pointed out that numerous studies in South Africa and elsewhere concluded that cost was a major cause of attrition in PHC, especially those that charge fees for services.

5.4.2 Research Question 2: How Did Nurses Cope with the Provision of NIMART to PLWHA?

Themes that emerged from expressions of how nurses coped with the provision of NIMART to PLWHA are discussed in the sub-sections that follow.

5.4.2.1 Theme 2.1 Positive and Negative Experiences on NIMART Programme Implementation

Any new programme brings about different experiences among implementers. NIMART-trained professional nurses have expressed their positive experiences in helping patients whom they initiated to take medication regularly. As reported in Chapter 4, some nurses felt proud when they discovered that they were contributing to the NIMART programme. However, nurses from the same villages with patients were being discriminated or stigmatised by patients. Nurses from local villages found it difficult to work with patients who suspected them of divulging information on their HIV status. Patients lacked confidence in these nurses. Affected nurses found it even harder to initiate other patients as they were afraid of being discriminated or abused by patients. Many studies confirmed that health care providers, particularly nurses, face a high risk of on-the-job abuse from patients. According to Shields & Wilkins (2009), abuse was related to gender, having less experience, usually working non-day shifts, and perceiving staffing or resources as inadequate, nurse-physician relations as poor, and co-worker and supervisor support as low.

5.4.2.2 Theme 2.2 Lack of Awareness on HIV/AIDS Among Patients

The finding of this study revealed that patients lacked awareness of HIV/AIDS despite the effort put in HIV/AIDS campaigns by various organisations. The future trend of the HIV/AIDS pandemic to a large extent depends on the level of HIV/AIDS awareness and the knowledge possessed by the people (Nwagwu, 2008). According to Tillich & Nilsson (2009), knowledge and awareness about HIV/AIDS is the important weapon that has to fight ignorance, illiteracy and poverty in various cultures. Patients who lack awareness are unable to protect themselves to re-infection or infecting other people through sexual activities (Nwagwu, 2008). According to Tillich & Nilsson (2009), is utterly important to raise the level of knowledge and awareness about HIV/AIDS and its ways of transmission. This should be the case in South Africa, especially in low income societies where poverty, lack of education and ignorance prevail.

5.4.2.3 Theme 2.3 Concerns Over Negative Attitudes to NIMART Programme

The findings revealed that some sections of the communities did not receive the NIMART programme in good spirit and, as a result, they were always harbouring negative feelings about it. Although many studies report that NIMART was being received in some areas, pockets of literature show the contrary. Gauteng Provincial Government Health Annual Report (2014) indicated that besides infrastructural challenges such as space limitations, the perceived negative attitudes of some of the health care staff members affected delivery of health care services negatively.

Negative attitudes by some nurses led to discrimination and stigmatisation of patients, refusal of performing duties related to NIMART patients. The negative attitudes by some nurses impacted negatively on the way the NIMART nurse carried out their daily duties. This could have also affected the distribution of facilities to be used for NIMART programmes in the PHC facilities. The implication is that the reported work overload could have emanated from these negative attitudes from senior staff towards NIMART.

5.4.2.4 Theme 2.4 Use of Own Transport to Collect Drugs

The findings revealed NIMART-trained professional nurses' commitment to the programme. Use of their own transport without compensation provided sufficient evidence that the NIMART programme had inherent problems and also that the nurses were prepared to see the success of the study. Shortage of drugs in PHC facilities supporting the NIMART programme has been reported to be a problem in many places. Provisioning to and accessing of medical supplies to some PHC facilities were also problematic, hence, nurses out of empathy volunteered to collect drugs before stocks ran out in their PHC facilities. However, the use of their own vehicles by nurses is a stopgap measure which will soon end if the district or medical supplies improve deliveries. This unusual development shows lack of commitment on the part of the responsible authority. Such an import programme requires funders to be committed to the good cause.

5.4.2.5 Theme 2.5 Positive Strategies to Cope with Large Numbers of Patients

Large numbers of patients attending NIMART PHC facilities meant that nurses had a lot of work to do which also delayed NIMART initiation. To deal with the dilemmas, nurses devised strategies such as group education, allocating time to collect ARVs. Davies et al. (2013) emphasised that increased responsibilities associated with NIMART implementation encouraged better use of creative problem-solving skills and teamwork to facilitate integration of NIMART into existing PHC facilities. To solve problems, nurses at different NIMART PHC facilities came up with home-based solutions that solved problems peculiar to their situation.

In their study, Davies et al. (2013) reported that despite shortages of nurses in PHC facilities, staff attitudes towards NIMART remained overwhelmingly positive as they found relief in providing continuity of care and initiating their own patients rather than knowing patients were waiting to initiate treatment at up-referral sites. Experienced nurses seemed to have solutions to many problems they encountered. However, in cases where there was only one nurse, then the situation was rather awkward as the nurse had to perform many duties resulting in longer waiting times for the HIV/AIDS patients. In some cases where managers were supportive, PHC facilities staff were

described as happier, more enthusiastic and hardworking and displaying greater capacity to cope with and adapt to new roles and responsibilities. As one younger nurse described it— such positive attitudes proved contagious and drew additional staff into the NIMART programme which created a strong, supportive team able to provide improved service (Davies et al., 2013).

5.4.3 Research Question 3: What Could be Done to Enhance Nurses' NIMART Programme Support?

Themes that emerged from expressions of what could be done to enhance nurses' NIMART programme support are discussed below.

5.4.3.1 Theme 3.1: Need for Training of Nurses on PICT, VCT and HCT in the NIMART Programme

The shortage of professional NIMART-trained nurses at workstations is a cause for concern, as all participants pointed out. The participants indicated that if all nurses are trained in VCT and NIMART, especially HCT this will reduce the workload on the few trained nurses. When nurses are trained in all of the above mentioned critical areas, they will be able to implement the NIMART programme as required by the policy of increasing the chances of the success of the programme. All staff members will be able to assist each other and there will be a reduction of some of the negative experiences encountered like stigmatisation of HIV/AIDS patients by non-NIMART-trained professional nurses at workstations. Training of more people in VCT, NIMART and HCT will help in task shifting which assist in freeing more qualified staff attending to more complicated patients. MSF & Na Mipaka (2010) in their research in Kenya concluded that:

Nurses initiated and managed ART (NIMART), as part of task shifting policies, could help overcome the obstacle of staff shortages.

5.4.3.2 Theme 3.2: Need to Increase Frequency of FPD or District Staff Dealing with HIV/AIDS

All participants expressed the high demand in expectations during NIMART programme implementation which is affected by different constraints as indicated under the theme on

experiences. Due to these constraints and challenges, the NIMART-trained professional nurses advocates for FPD with staff or district staff to mentor them. These people will be able to assist professional nurses and minimise some of the challenges which the professional NIMART-trained nurses are encountering. Through professional development and mentoring the NIMART-trained professional nurses will be uplifted professionally and spiritually and the participant pointed out that this is not happening as expected.

This seems to be the trend as other researchers has pointed in the same direction, for example, Davies, Homfray & Venables (2013), indicated:

In some facilities where mentorship from supporting partners or up-referral site doctors was lacking, informal ‘in-house’ mentoring—provided by more experienced NIMART nurses—emerged as an invaluable means to capacity-build newly trained colleagues.

At different workstations nurses ended up staff developing each other due to lack of staff development from the responsible authorities. The NIMART-trained professional nurses require regular visits for support by doctors, district officials and other senior programme officials. They require the doctors’ visits every two weeks so that they are assisted on cases they are not able to solve, for example, changing medication for an HIV/AIDS patient if the one which s/he had been given has side effects. NIMART-trained professional nurses require visits by district and senior programme officials so that they will be able to discuss some of the challenges they are encountering as they implement the NIMART programme. Regular contacts between nurses and programme officials will enhance the success of the programme as both parties will have a sense of ownership. Nurses feel isolated if there are no regular visits as expected.

5.4.3.3 Theme 3.3: Timely Communication of Policies Through Formal Channels

In this study, it came out that communication was done haphazardly as no proper channel was used. Communication of policies as pointed out by participants was done verbally during meetings

or workshops regardless of how important the information is. This has resulted in a difference with regard to implementation of policies as not everyone attends the meetings or workshops, the stations rely on the information given to them by the person who attended the meeting or workshop. Also, the people were invited for meetings and workshops telephonically which resulted in some PHC facilities not getting the information. When no one managed to attend the meeting or workshop this means what ever policy change is made will not be able to implement it as they will not be aware of it.

The research results show several discrepancies in the implementation of the NIMART programme due to differences in information received, for example, some stations pointed out that they were still waiting to get a go ahead to implement the new guidelines. Participants proposed formal channels of communication where each and every station should receive a circular on policy changes. The policy changes should be communicated to all staff through station management representative and discussions on the implementation procedure should be done. Davies, Homfray & Venables (2013) indicated in their study in Gauteng that:

Effective communication and positive interactions between different levels of care became a critical component for task-shifting success.

5.4.3.4 Theme 3.4: Concerns About the Duration of NIMART Training

All participants indicated that the one week training period for NIMART was not enough as there was a lot of knowledge and skills to be acquired during training. Due to limited training time NIMART-trained professional nurses ended up learning most of the things at work. Davies, Homfray & Venables (2013) expressed the same sentiment following their study in Gauteng:

Several nurses described providing NIMART before they felt confident enough to do so and reported feeling concerned because they were learning as we are going on and taking chances.

The newly trained NIMART professional nurses are not able to perform all duties as required, for

example, drawing blood from young children during initiation. This has significantly affected the successful implementation of the NIMART programme. Ford (2013), following his research in South Africa, shared the same sentiments:

Limited time available for training has further raised concerns around the competence and confidence of practitioners to perform NIMART.

The current situation entails greater need for mentoring and support for the novice NIMART-trained nurses from more experienced nurses and visiting doctors.

5.5 Application and Integration of the Transactional Model of Stress and Coping

The findings of this study have revealed that NIMART-trained professional nurses faced several challenges in their workplace which they need to cope with. In many cases, the nurses tried to cope with stressing challenges through various stress coping strategies many of which could be linked directly to the Transactional Model of Stress and Coping by Lazarus & Folkman (1984). Coping strategies refer to the specific efforts that people use to master, reduce, tolerate or minimize stressful events (Soliman, 2014).

Problem-based coping strategies could be seen when NIMART nurses strived to make the NIMART programme succeed in their PHC facilities despite lack of infrastructure, medication, hostile co-workers and lack of support from the management. According to Carver, Scheier & Weintraub (1989), problem-based coping attempts to change negative emotions and stress. It is evident from this study that NIMART nurses:

- ☞ Were aware of the surmounting challenges due to staff, infrastructure and medication shortages, poor communication about policy matters, improper training in handling some processes, discrimination by patients and co-workers, which is a problem definition in terms of the model;

- ∞ Coped with the majority of the challenges by generating and evaluating alternative solutions to the problems and challenges. Clear examples include nurses using their own cars to collect medication, giving patients different review dates, group training and partitioning rooms with curtains;
- ∞ Learned new skills of dealing with patients, managing meagre new resources in order to manage stress; and
- ∞ Re-adjusted their social status in order to integrate into NIMART teams and get involved with saving people.

The results also revealed situations where emotional-based coping strategies were applied by NIMART nurses. Several reported situations in the results of the study confirmed that NIMART nurse felt they had little control of the situation and were not in a position to manage the source of the problem. For example, failure to initiate many patients, patients leaving before getting help, long queues, the problem of initiating children, refusal by doctors or co-workers to assist, fear of becoming infected, patients either getting worse or dying after initiation and stigmatisation by patients and co-workers all amounted to emotional stress which required proper coping strategies. Strategies employed by the nurses involved:

- ∞ Avoiding the problem, for example, refraining from initiating patients and referring them to the next nurse or other PHC facilities. This only occurred under extreme experiences by newly NIMART-trained nurses;
- ∞ Distancing oneself from the problem to avoid negative consequences. NIMART nurses reported that some of their colleagues and even doctors distanced themselves from initiating activities, particularly involving patients whose health had deteriorated very much. They could not cope with performing the job and rather distanced themselves

- ⌘ However, not all NIMART-trained nurses distanced themselves from the impending challenges, some accepted the situation and tried to solve the problem to clear their conscience.
- ⌘ In many cases, nurses who had emotional stress sought emotional support from their partners, through prayers and discussions during limited debriefings.
- ⌘ Some form of selective attention was reported among NIMART nurses.
- ⌘ There were also situations where nurses reported to have been upset by defaulters , especially when these patients returned terminally ill. Although the action taken by nurses was not necessarily venting anger, it was stress managing in which the nurses took a tough stance against defaulters. Some of the anger could have been directed towards co-workers who did not want to cooperate in order to reduce workload.

In essence, the transactional model of handling stress at work plays a significant role in explaining some of the issues emanating from the findings of this study.

5.6 Conclusions

Although NIMART appears to be highly acceptable among nurses, many challenges that need immediate attention still exist. Nurses expressed confidence in their ability to deliver ART successfully. This confidence is growing slowly and unevenly because of outstanding policy implementation issues that need to be addressed through proper communication. Shortage of NIMART-trained nurses still persists and cause delays in initiation of patients. There was lack of support in most of the NIMART PHC facilities and this affected the implementation of the programme negatively. Lack of proper infrastructure was prevalent in most_PHC facilities and resorted sharing of rooms or time allocation for different activities. Poor delivery of drugs by medical supplies was a challenge. Limited training time was also a challenge as most NIMART-trained nurse were unable to initiate children or they prescribed wrong treatment.

The research also shows that NIMART changes the working and referral relationships between health staff, demands significant training and support, and faces workload and capacity constraints, and logistical and infrastructural challenges. Health care worker experiences identified several challenges, including insufficient staffing, unmanageable workloads and burnout and inadequate planning, emotional support, communication and responsiveness from senior management. Managers had little or no knowledge about NIMART.

5.7 Limitations of the Study

The findings of this study cannot be generalised to other similar situations because of the following constraints which were faced:

- ∞ The study was conducted on NIMART-trained professional nurse at Vhembe District. The results of this study cannot be generalized to other districts in Limpopo Province, but they can form a basis for comparison with similar studies conducted in other districts elsewhere in the province and the greater South Africa.
- ∞ Sample size was not as representative as it could have been if a quantitative study was used.
- ∞ This study dealt with one of the contemporary sensitive issues—HIV/AIDS— and the NIMART programme is an additional workload to nurses. Although the participants were free to talk about the subject, the situation could have been different had it been not related to HIV/AIDS. In some cases, the participants strayed from the questions being asked and tried to introduce emotional answers. This meant that the researcher had to spend a longer time with the participant.
- ∞ Another limitation is the instrument which was a questionnaire, therefore, some of the participants might have chosen not to answer certain questions due to personal reasons.

5.8 Recommendations

The following recommendations emanated from the discussion of findings and the conclusions made by this research study:

- ∞ Assistant, district and provincial managers should provide support, including providing the strategic leadership and proper and effective communication for NIMART programme.
- ∞ The DoH should provide infrastructure or improvement thereof, especially consultation rooms.
- ∞ Emotional support for NIMART nurses should be provided regularly regardless of whether the nurses are stressed or not.
- ∞ The DoH should revisit NIMART training content and duration of training.
- ∞ Training of more NIMART nurses should be accelerated in order to reduce the acute shortages.
- ∞ There is a need for the Limpopo Province DoH to develop strategies to recruit more professional nurse to PHC facilities.
- ∞ Limitations of using paper records should be recognized and data management processes should be migrated to electronic register systems. The DoH should devise strategies on reducing the paperwork at PHC facilities.
- ∞ The DoH should capacitate and strengthen child ARV initiation at PHC facilities through mentorship programmes.

REFERENCES

- Akinsola, H.A. 2005. Research methods in medical practice. 1st edition. Ibadan: College Press and Publishers Limited.
- Babbie, E. & Mouton, J. 2012. The practice of social research (11th ed.): Oxford University Press.
- Bauleth, M.F. 2013. Factors associated with poor adherence amongst patients receiving antiretroviral therapy at the intermediate hospital Oshakati in Namibia. Unpublished Masters in Public Health, School of Public Health, Faculty of Community and Health Sciences, University of the Western Cape.
- Bester, P., Du Plessis, E. & Greeff, M. 2006. The professional nurse's experience of the dying process of the terminal AIDS patient. *Health SA Gesondheid*, 11(2):40-52.
- Bless, C., Higson-Smith, C. & Kagee, A. 2006. Fundamentals of social research methods: An African perspective. Cape Town: Juta and Company Ltd.
- Burns, N. & Grove, S.K. 2001 The practice of nursing research: Conduct, critique, & utilization. Missouri: Elsevier Saunders.
- Burns, N. & Grove, S.K. 2003. Understanding nursing research. (3rd ed.). Philadelphia: Saunders.
- Burns, N. & Grove, S.K. 2007. The practice of nursing research: Appraisal, synthesis, and generation of evidence: Elsevier Health Sciences.
- Burns, N. & Grove, S.K. 2009. The practice of nursing research (6th ed.). Philadelphia: Elsevier.
- Burns, N. & Grove, S.K. 2009. The practice of nursing research: Conduct, critique & utilisation (4th ed). Philadelphia: WB Saunders Company.
- Bush, L. 2006. Responding to critical issues: Children and HIV/AIDS. The United States President's emergency plan for AIDS relief. <http://www.pepfar.gov/documents/organization/81028.pdf>.
- Brentlinger, P.E., Assan, A., Mudender, F., Ghee, A.E., Torres, J.V., Martínez, P.M., Bacon, O., Bastos, R., Manuel, R. & Li, L.R. 2010. Task shifting in Mozambique: Cross-sectional evaluation of non-physician clinicians' performance in HIV/AIDS care. *Human Resources for Health*, 8(1):23.
- Brink, H., Van der Walt, C. & Van Rensburg, G. 2003. Fundamentals of research methodology for health-care professionals. Cape Town: and Company Ltd.
- Brink, H. 2008. Fundamentals of research methodology for health care professionals (2nd ed). Cape Town: Juta & Co.
- Brink, H., Van der Walt, C. & Van Rensburg, G. 2005. Fundamentals of research methodology for health care professionals: Juta and Company Ltd.
- Brink, H., Van der Walt, C. & Van Rensburg, G. 2012. Fundamentals of research methodology for health care professionals: Juta and Company Ltd.

- Callaghan, M., Ford, N. & Schneider, H. 2010. A systematic review of task-shifting for HIV treatment and care in Africa. *Human Resources for Health*, 8:8-16.
- Cameron, D., Gerber, A., Mbatha, M., Mutyabule, J. & Swart, H. 2012. Nurse initiation and maintenance of patients on antiretroviral therapy: Are nurses in primary care clinics initiating ART after attending NIMART training? *South African Medical Journal*, 102(2):98-100.
- Campbell, C., Scott, K., Madenhire, C., Nyamukapa, C. & Gregson, S. 2011. Sources of motivation and frustration among healthcare workers administering antiretroviral treatment for HIV in rural Zimbabwe. *AIDS Care*, 23(7):797-802.
- Carver, C.S., Scheier, M.F. & Weintraub, J.K. 1989. Assessing coping strategies: a theoretically based approach. *Journal of Personality and Social Psychology*, 56(2):267-283.
- Chippindale, S. & French, L. 2001. ABC of AIDS: HIV counselling and the psychosocial management of patients with HIV or AIDS. *British Medical Journal*, 322(7301):1533.
- Cohen, R., Lynch, S., Bygrave, H., Eggers, E., Vlahakis, N., Hilderbrand, K., Knight, L., Pillay, P., Saranchuk, P. & Goemaere, E. 2009. Antiretroviral treatment outcomes from a nurse-driven, community-supported HIV/AIDS treatment programme in rural Lesotho: Observational cohort assessment at two years. *Journal of the International AIDS Society*, 12(1):23.
- Colvin, C.J., Fairall, L., Lewin, S., Georgeu, D., Zwarenstein, M., Bachmann, M., Uebel, K.E. & Bateman, E.D. 2010. Expanding access to ART in South Africa: the role of nurse initiated treatment. *South African Medical Journal*, 100(4):210-212.
- Creswell, J.W. 2003. *Research design: Qualitative and quantitative approaches* (2nd ed.). Thousand Oaks: Sage.
- Creswell, J.W. 2009. *Research design, qualitative, quantitative and mixed method approaches*. London: Sage Publications.
- Dalal, R.P., MacPhail, C., Mqhayi, M., Wing, J., Feldman, C., Chersich, M.F. & Venter, W.D. 2008. Characteristics and outcomes of adult patients lost to follow-up at an antiretroviral treatment clinic in Johannesburg, South Africa. *Journal of Acquired Immune Deficiency Syndromes*, 47(1):101-107.
- Davies, N.E., Homfray, M. & Venables, E.C. 2013. Nurse and manager perceptions of nurse initiated and managed antiretroviral therapy (NIMART) implementation in South Africa: a qualitative study. *BMJ Open*, 3(11):e003840.
- Davies, C.G.E.N. Homfray, M. & Venables, E. C. 2013. Nurse and manager perceptions of nurse initiated and managed antiretroviral therapy (NIMART) implementation in South Africa: A qualitative study. 3(11) <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3831110/> doi: 10.1136/bmjopen-2013-003840
- Department of Health. 2007. *The national infection and control policy & strategy*. National Department of Health. Republic of South Africa.
- Department of Health and Social Development. 2011. *Annual Report 2010-2011*. Gauteng Province: Gauteng Department of Health and Social Development.

- Department of Health. 2012/13-2016/17. Republic of South Africa: National Strategic Plan for Nurse Education, Training and Practice. 8.
- de Vos, A. 2005. Combined quantitative and qualitative approach. Research at grassroots: For the social sciences and human service professions. Pretoria: Van Schaik.
- de Voss, A.S., Strydom, H., Fouche, C.B. & Delport, C.S.L. 2008. Research at Grassroots: For the Social Sciences and Human Services Professions (3rd ed.). Pretoria: Van Schaik.
- de Vaus, D.A. & de Vaus, D. 2001. Research design in social research. London: Sage.
- de Wet, K. & Du Plooy, S. 2012. 'We are left in the cold': Nurses' perceptions and responses to antiretroviral treatment roll-out in the Free State, South Africa. *SAHARA-J: Journal of Social Aspects of HIV/AIDS*, 9(1):30-40.
- Dilger, H. 2007. Healing the wounds of modernity: salvation, community and care in a neo-Pentecostal church in Dar Es Salaam, Tanzania. *Journal of Religion in Africa*, 37(1):59-83.
- Econex. 2010 'The human resource supply constraint: The case of doctors'. In Health Reform Note (Vol. 8).
- Ekstrand, M. 2006. How does stigma affect HIV prevention and treatment? <http://caps.ucsf.edu/uploads/pubs/FS/pdf/stigmaFS.pdf>.
- Fairall, L., Bachmann, M.O., Lombard, C., Timmerman, V., Uebel, K., Zwarenstein, M., Boule, A., Georgeu, D., Colvin, C.J. & Lewin, S. 2012. Task shifting of antiretroviral treatment from doctors to primary-care nurses in South Africa (STRETCH): A pragmatic, parallel, cluster-randomised trial. *The Lancet*, 380(9845):889-898.
- Fairall, L.R., Bachmann, M.O., Louwagie, G.M., van Vuuren, C., Chikobvu, P., Steyn, D., Staniland, G.H., Timmerman, V., Msimanga, M. & Seebregts, C.J. 2008. Effectiveness of antiretroviral treatment in a South African program: A cohort study. *Archives of Internal Medicine*, 168(1):86-93.
- Ford, P. 2014. Nurse initiated and managed anti-retroviral treatment: An ethical and legal analysis in South Africa. Unpublished MSc Med (Bioethics & Health Law) thesis, Steve Biko Centre for Bioethics, Faculty of Health Sciences, University of the Witwatersrand.
- Fredlund, V.G. 2009. PHC platform and NIMART for ART service delivery. Mseleni Hospital. KZN Department of Health.
- Frost, N., Nickola, L., Desir, S. & Fairchild, R. 2013. From our readers: How mentorship affects retention rates of new nurses. *American Nurse Today*, 2013 8(4). <http://www.americannursetoday.com/from-our-readers-how-mentorship-affects-retention-rates-of-new-nurses/>.
- Médecins Sans Frontières & Na Mipaka, M. W. 2010. A model of HIV/AIDS care and treatment in a rural setting. www.msf.org.
- Furin, J., Haidar, M., Lesia, N., Ramangoela, L. & Rigodon, J. 2012. The role of the nurse in implementation of an HIV treatment program in Rural Lesotho. *Journal of the Association of Nurses in AIDS Care*, 23(2):163-169.

- Gauteng Provincial Government Health Annual Report. 2013/2014 http://www.provincialgovernment.co.za/department_annual/162/2014-gauteng-health-annual-report.pdf.
- Green, A., de Azevedo, V., Patten, G., Davies, M.A., Ibeto, M. & Cox, V. 2014. Clinical mentorship of nurse initiated antiretroviral therapy in Khayelitsha, South Africa: A quality of care assessment. *PloS One*, 9(6):e98389.
- George, J.B. 1990. *Nursing Theories: The Base for Professional Nursing Practice* (6th ed.): Pearson Education India.
- Georgeu, D., Colvin, C.J., Lewin, S., Fairall, L., Bachmann, M.O., Uebel, K., Zwarenstein, M., Draper, B. & Bateman, E.D. 2012. Implementing nurse-initiated and managed antiretroviral treatment (NIMART) in South Africa: A qualitative process evaluation of the STRETCH trial. *Implementation Science*, 7(66):66.
- Grove, S. & Burns, N. 2005. *The practice of nursing research: conduct, critique, & utilization*. Missouri: Elsevier Saunders.
- Health Professions Council of South Africa HPCSA. 2008. Guidelines for good practice in the health care professions. Guidelines on the keeping of patient records booklet 14. Pretoria. http://www.hpcsa.co.za/downloads/conduct_ethics/rules/generic_ethical_rules/booklet_14_keeping_of_patience_records.pdf.
- Halai, A. 2006. *Ethics in qualitative research: Issues & challenges*. The Aga Khan University, Karachi, Pakistan.
- Hall, E.J. 2004 The challenges HIV/AIDS poses to nurses in their work environment. In Centre for Health Policy, editor. *HIV/AIDS in the Workplace: Symposium Proceedings Johannesburg*: University of the Witwatersrand (pp. 109-122).
- Hlongwana, S. 2013. Monitoring the safety of antiretrovirals in South Africa. Afrca Pharmacovigilance Meeting 2012. Nairobi, Kenya.
- Hogan, M. 2015. Effects of tardiness on staff morale. <http://smallbusiness.chron.com/effects-tardiness-staff-morale-1891.html>.
- Human Sciences Research Council HSRC. 2014. South African National HIV Prevalence, Incidence and Behaviour Survey. 2012. Cape Town, HSRC Press. <http://www.hsrc.ac.za/uploads/pageContent/4565/SABSSM%20IV%20LEO%20final.pdf>.
- Jennings, M.B. 2010. Chapter 26. Work stress and burnout among nurses: Role of the work environment and working conditions. <http://www.ncbi.nlm.nih.gov/books/NBK2668/>.
- Khoza, C.S. & Bhiya, P. 2013. North-West nurse educators, TB-MDR and HIV/AIDS workshop report. http://www.denosa.org.za/upload/projects/north_west_tb-mdr_training_report.pdf.
- Kgalegi, L. 2015. Field experiences as a nurse mentor. http://www.anovahealth.co.za/uploads/913-news-Kgalegi,%20Louisa%20-%203_FINAL.pdf.
- Krauss, S.E. 2005. Research paradigms and meaning making: A primer. *The Qualitative Report*, 10(4):758-770.
- Lazarus, R. & Folkman, S. 1984. *Stress, appraisal and coping*. New York: Springer.

- Mackey, T.K. & Liang, B.A. 2013. Improving global health governance to combat counterfeit medicines: a proposal for a UNODC-WHO-Interpol trilateral mechanism. *BMC Medicine*, 11(1):233.
- Malinga, J. 2009. Katines HIV patients face transport hurdle to access drugs. *Guardian* Apr 28; [1]:1. <http://www.popline.org/node/205362>.
- Maskew, M., MacPhail, P., Menezes, C. & Rubel, D. 2007. Lost to follow up—contributing factors and challenges in South African patients on antiretroviral therapy. *South African Medical Journal*, 97(9):853-857.
- Marchal, B., Brouwere, V.D. & Kegels, G. 2005. Viewpoint: HIV/AIDS and the health workforce crisis: What are the next steps? *Tropical Medicine & International Health*, 10(4):300-304.
- Marshall, C. & G. Rossman 1995. Designing qualitative research. Sage Publications, Thousand Oaks California.
- Musheke, M., Bond, V. & Merten, S. 2013. Self-care practices and experiences of people living with HIV not receiving antiretroviral therapy in an urban community of Lusaka, Zambia: implications for HIV treatment programmes. *AIDS Research and Therapy*, 10(1):12.
- Pillay, Y., White, C. & McCormick, N. 2012. How times have changed-HIV and AIDS in South Africa in 2011. *South African Medical Journal*, 102(2):77-78.
- Médecins Sans Frontières. South Africa Khayelitsha Project. September 2011. Clinical Mentoring Concept Paper.
- Médecins Sans Frontières. 2010. A model of HIV/AIDS care and treatment in a rural setting: The experiences of MSF in the greater Busia District, Western Kenya 2000 --2010.
- Mia, M. 2014. SA has highest number of new HIV infections worldwide -survey. *The Mail & Guardian* 01 April 2014 <http://mg.co.za/article/2014-04-01-sa-holds-highest-number-of-new-hiv-infections-worldwide-survey>.
- Merriam, S. B. 2009. Qualitative research: A guide to design and implementation, San Francisco: Jossey Bass. Wiley Imprints.
- Miller, E.L., Murray, L., Richards, L., Zorowitz, R.D., Bakas, T., Clark, P. & Billinger, S.A. 2010. Comprehensive overview of nursing and interdisciplinary rehabilitation care of the stroke patient a scientific statement from the American Heart Association. *Stroke*, 41(10):2402-2448.
- Miller, C.M., Ketlhapile, M., Rybasack-Smith, H. & Rosen, S. 2010. Why are antiretroviral treatment patients lost to follow-up? A qualitative study from South Africa. *Tropical Medicine & International Health*, 15(s1):48-54.
- Miles, H.B. & Huberman, A.M. 1994. Qualitative data analysis. Sage Publication, Thousand Oaks California.
- Miles, K., Clutterbuck, D., Seitio, O., Sebege, M. & Riley, A. 2007. Antiretroviral treatment roll-out in a resource-constrained setting: capitalizing on nursing resources in Botswana. *Bulletin of The World Health Organization*, 85(7):555-560.
- Mokoka E. 2011. Training clinical mentors to improve nurse-initiated and managed ART. 5th South African AIDS Conference, Durban.

- Moratio, G. 2007. Psychosocial factors that affect adherence to antiretroviral therapy among HIV-HIV/AIDS patients at Kalafong Hospital. Pretoria. University of Pretoria. Masters Dissertation.
- National Department of Health. 2007. HIV and AIDs and STI Strategic Plan for South Africa. 2007-2011. Pretoria: Government Printers.
- Nyasulu, J., Muchiri, E., Mazwi, S. & Ratshefola, M. 2013. NIMART rollout to primary healthcare facilities increases access to antiretrovirals in Johannesburg: An interrupted time series analysis. *South African Medical Journal*, 103(4):232-236.
- Nwagwu, W.E. 2008. Effectiveness of sources of HIV/AIDS awareness in a rural community in Imo State, Nigeria. *Health Information & Libraries Journal*, 25(1):38-45.
- O'Connor, H. & Gibson, N. 2006. A step-by-step guide to qualitative data analysis. <http://www.pimatisiwin.com/uploads/1289566991.pdf>.
- Ouko, E.R. O. 2012. Performance Audit Report of the Auditor-General Specialized Healthcare Delivery at Kenyatta National Hospital Waiting-time for Cancer, Renal and Heart Patients. <https://afroaie.org.za/sites/afroaie.org.za/files/reports/Specialized%20Healthcare%20Kenyatta%20National%20Hospital.pdf>.
- Omer, P. 2012 Health care workers responses to HIV/AIDS care and treatment in South Africa. In 30th International Congress on Occupational Health (March 18-23, 2012): ICOH. Anova Health Institute/PEPFAR.
- Patton, M.Q. 2002. Qualitative research and evaluation methods. 3rd edition. Sage Publication. London. New Delhi.
- Polit, D. F. & Beck, C.T. 2008. Nursing research: Generating and assessing evidence for nursing practice. 8th edition. Philadelphia: Lippincott Williams & Wilkins.
- Ramathuba, D.U. & Davhana-Maselesele, M. 2013. Nurses' perceptions of support in caring for people living with HIV AND AIDS (PLWHA) in Vhembe District, Limpopo Province. *International Journal of Research in Medical and Health Sciences*, 3(2):2307-2083.
- Ramathuba, D.U. & Davhana-Maselesele, M. 2013. Challenges HIV/AIDS poses on the nursing workforce in rural health setting in Vhembe district, Limpopo Province, South Africa. *African Journal for Physical Health Education, Recreation and Dance: Contemporary Issues in Healthcare: Supplement 1*, 19(23-34).
- Republic of South Africa. 2011. National Strategic Plan on HIV, STIs and TB 2012-2016. Pretoria: South African National AIDS Council.
- Review of Thulamela Municipality Intergrated Development Plan 2010/11-2012/13.
- Rubin, J.H. and Rubin, S.J. 1995. Qualitative interviewing, the art of hearing data. Sage Publications, Thousand Oaks California.
- Sherr, K., Pfeiffer, J., Mussa, A., Vio, F., Gimbel, S., Micek, M. & Gloyd, S. 2009. The role of nonphysician clinicians in the rapid expansion of HIV care in Mozambique. *Journal of Acquired Immune Deficiency Syndromes*, 52(S20-S23).

- Shields, M. & Wilkins, K. 2009. Factors related to on-the-job abuse of nurses by patients. *Health Reports*, 20(2):7-19.
- Skinner, D. & Mfecane, S. 2004. Stigma, discrimination and the implications for people living with HIV/AIDS in South Africa: Original article. *SAHARA: Journal of Social Aspects of HIV/AIDS Research Alliance*, 1(3):157-164.
- Smart, T. 2011. Access to HIV services can be increased by task shifting-but only with support and encouragement. *HIV & AIDS Treatment in Practice*, Issue 179, <http://www.aidsmap.com/pdf/HATIP-179-July-114th-2011/page/1878808/>.
- Soliman, M. 2014. Perception of stress and coping strategies by medical students at King Saud University, Riyadh, Saudi Arabia. *Journal of Taibah University Medical Sciences*, 9(1):30-35.
- South African Broadcasting Corporation. (2013). Thursday, 18 April 2013 at 21:30 on SABC3, Special Assignment.
- South African Nursing Council. Nursing Act, 2005 (Act no.33 of 2005).
- Speakman, S. 2012. Comparing the Impact of Religious Discourse on HIV/AIDS in Islam and Christianity in Africa. *Vanderbilt Undergraduate Research Journal*, 8, DOI: 10.15695/vurj.v8i0.3490.
- Statistics South Africa. 2013. Mid-year population estimates. p 4. (Online) Retrieved August 26, 2011 from: <http://www.statssa.gov.za>.
- Statistic South Africa. 2014. Statistical Release P0303: Mid-year population estimates. <http://www.statssa.gov.za/publications/P0302/P03022014.pdf>.
- Syed, S.T., Gerber, B.S. & Sharp, L.K. 2013. Traveling towards disease: Transportation barriers to health care access. *Journal of Community Health*, 38(5):976-993.
- Tesch, R. 1990. *Qualitative Research: Analysis Types and Software Tools*. New York: Falmer Press.
- The Oxford Dictionary. 2013. Oxford University Press.
- Tillich, M. & Nilsson, A. 2002. Awareness, attitude and prevention of HIV among pregnant women in Maharashtra State, India. The Sahlgrenska Academy of The University of Gothenburg, Sweden.
- Tillich, M. & Anna Nilsson, A. 2009. Awareness, Attitude and Prevention of HIV among pregnant women in Maharashtra State, India. <http://www.vgregion.se/upload/SkaS/FoU/Awerness.pdf>.
- Tuller, D.M., Bangsberg, D.R., Senkungu, J., Ware, N.C., Emenyonu, N. & Weiser, S.D. 2010. Transportation costs impede sustained adherence and access to HAART in a clinic population in southwestern Uganda: A qualitative study. *AIDS and Behavior*, 14(4):778-784.
- Trochim, W. M. K. 2006. Qualitative Validity, <http://www.socialresearchmethods.net/kb/qualval.php>.
- USAID. 2010. The capacity module application: Estimating the human resource to scale up ART in Uganda. USAID. 1-8.
- UNAIDS. 2011. Spectrum version 4.57. United Nations, Geneva, Switzerland.

- United Nations Department of Economic and Social Affairs/Population Division. 2003. The impact of AIDS on the health sector.p 75.
- Uwimana, J., Jackson, D., Hausler, H. & Zarowsky, C. 2012. Health system barriers to implementation of collaborative TB and HIV activities including prevention of mother to child transmission in South Africa. *Tropical Medicine & International Health*, 17(5):658-665.
- Vawda, Y.A. & Variawa, F. 2012. Challenges confronting health care workers in government's ARV rollout: rights and responsibilities. PER: *Potchefstroomse Elektroniese Regsblad*, 15(2):01-36.
- Webster, P.D., Sibanyoni, M., Malekutu, D., Mate, K.S., Venter, W.F., Barker, P.M. & Moleko, W. 2012. Using quality improvement to accelerate highly active antiretroviral treatment coverage in South Africa. *BMJ Quality & Safety*, 21(4):315-324.
- Welman, P.C., Kruger, F. & Mitchell, B. 2009. Research methodology. 3rd Edition. Oxford University Press.
- Wildschut, A., & Mqolozana, T. (2008). Shortage of nurses in south africa: relative or absolute? <http://www.labour.gov.za/DOL/downloads/documents/research-documents/nursesshortage.pdf>.
- WHO. 2003. Perspective and Practice in antiretroviral treatment. Antiretroviral therapy in primary health care: Experience of the Khayelitsha programme in South Africa. Department of Public Health at the University of Cape Town, and the Provincial Administration of the Western Cape, South Africa.
- World Health Organization. (2006). The world health report: 2006: working together for health.
- WHO. 2007. Task shifting: rational redistribution of tasks among health workforce teams. Geneva: WHO, 2007. http://www.who.int/healthsystems/task_shifting/TTR_tackle.pdf
- WHO. 2010. HIV and AIDS Statistics.(Online). Retrieved August 26, 2013 from: <http://www.who.int/hiv/data/tuapr2011>.
- WHO. 2011. HIV and AIDS Statistics. (Online) Retrieved August 26, 2013 from: <http://www.who.int/hiv/data/tuapr2011>.
- Zulu, J. & Lehmann, U. 2004. Investigating the impact of the HIV/AIDS epidemic on nurses in 4 primary health care settings in Cape Town. School of Public Health. University of Western Cape.
- Zuber, A., McCarthy, F.C., Verani, R.A., Msidi, E. & Johnson, C.A. 2014. Survey of nurse-initiated-and-managed antiretroviral therapy (NIMART) in practice, education, policy, and regulation in East, Central, and Southern Africa. *Journal of the Association of Nurses in Aids Care*, 25(6):520-531.
- Zou, J., Yamanaka, Y., John, M., Watt, M., Ostermann, J. & Thielman, N. 2009. Religion and HIV in Tanzania: influence of religious beliefs on HIV stigma, disclosure, and treatment attitudes. *BMC Public Health*, 9(1):75.

APPENDIX 1

APPROVAL OF RESEARCH PROPOSAL BY UNIVERSITY OF VENDA HIGHER DEGREES COMMITTEE

OFFICE OF THE DEPUTY VICE-CHANCELLOR: ACADEMIC

TO : MR/MS R.N. RASALANAVHO
SCHOOL OF HEALTH SCIENCES

FROM: PROF J.E. CRAFFORD
DEPUTY VICE-CHANCELLOR: ACADEMIC

DATE : 06 AUGUST 2014

DECISIONS TAKEN BY UHDC OF 01st August 2014

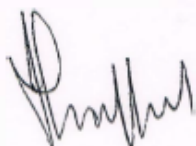
Application for approval of Master's research proposal in Health Sciences:

R.N. Rasalanavho 11625370

Topic: "Challenges confronting professional nurses implementing the nurse initiated and managed anti-retroviral treatment programme in Vhembe District, South Africa."

Supervisor:	UNIVEN	Dr. D.U Ramathuba
Co-supervisor:	UNIVEN	Dr. Mrs. N.S Mashau

UHDC approved Master's proposal



Prof J.E. CRAFFORD
DEPUTY VICE-CHANCELLOR: ACADEMIC

APPENDIX 2

ETHICAL CLEARANCE - UNIVERSITY OF VENDA

RESEARCH AND INNOVATION
OFFICE OF THE DIRECTOR

NAME OF RESEARCHER/INVESTIGATOR:
Mr NR Rasalanavho

Student No:
11625370

PROJECT TITLE: Challenges confronting professional nurses implementing the nurse-initiated and managed anti-retroviral treatment programme in Vhembe District, South Africa.

PROJECT NO: SHS/14/PH/14/2010

SUPERVISORS/ CO-RESEARCHERS/ CO-INVESTIGATORS

NAME	INSTITUTION & DEPARTMENT	ROLE
Dr DU Ramathuba	University of Venda	Supervisor
Mrs NS Mashau	University of Venda	Co-Supervisor
Mr NR Rasalanavho	University of Venda	Investigator - Student

ISSUED BY:
UNIVERSITY OF VENDA, RESEARCH ETHICS COMMITTEE

Date Considered: October 2014

Decision by Ethical Clearance Committee Granted

Signature of Chairperson of the Committee:

Name of the Chairperson of the Committee: Prof. G.E. Ekosse



University of Venda

PRIVATE BAG X5050, THOHoyANDOU, 09501, LIMPOPO PROVINCE, SOUTH AFRICA
TELEPHONE (015) 962 88 16/63 13 FAX (015) 962 906 0

"A quality driven financially sustainable, rural-based Comprehensive University"

APPENDIX 3

REQUEST TO DEPARTMENT OF HEALTH TO CONDUCT THE STUDY

Mr Rasalanavho R.N
P.O.Box 258
Mukula
0978
15 August 2013

The Head of Department
HAST/CCMCT Manager
Limpopo Province Department of Health
Private Bag x 9302
Polokwane
0700
Dear Sir/Madam

Re: APPLICATION TO CONDUCT RESEARCH

I, Rasalanavho Rambani Norman, a registered Masters student at the University of Venda, hereby request the Department of Health to allow me to conduct a research study in, Thulamela B sub-District, Vhembe District.

My research topic is: **Challenges confronting professional nurses implementing nurse-initiated and managed antiretroviral treatment programme at Thulamela B, Vhembe District, in Limpopo Province, South Africa.**

I hope my application will be taken into consideration.

Yours faithfully

R.N. Rasalanavho


.....

Contact number: 072 386 2474.

email: rasalanavho@yahoo.com

APPENDIX 4

PERMISSION FROM LIMPOPO PROVINCE DEPARTMENT OF HEALTH TO CONDUCT THE STUDY



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

Enquiries: Latif Shamila Ref:4/2/2

Rasalanavho NR
University of Venda
Private Bag X5050
Thohoyandou
0950

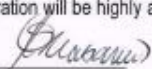
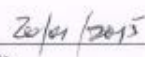
Greetings,

RE: Challenges confronting professional nurses implementing the nurse-initiated and managed anti-retroviral treatment programme in Vhembe District, South Africa.

The above matter refers.

1. Permission to conduct the above mentioned study is hereby granted.
2. Kindly be informed that:-
 - Research must be loaded on the NHRD site (<http://nhrd.hst.org.za>) by the researcher.
 - Further arrangement should be made with the targeted institutions.
 - In the course of your study there should be no action that disrupts the services.
 - After completion of the study, a copy should be submitted to the Department to serve as a resource.
 - The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
 - The above approval is valid for a 3 year period.
 - If the proposal has been amended, a new approval should be sought from the Department of Health.

Your cooperation will be highly appreciated.


Head of Department 
Date

18 College Street, Polokwane, 0700, Private Bag x5302, POLOKWANE, 0700
Tel: (015) 293 6000, Fax: (015) 293 6211/20 Website: <http://www.limpopo.gov.za>

APPENDIX 5

REQUEST TO VHEMBE DISTRICT DEPARTMENT OF HEALTH TO CONDUCT THE STUDY

Mr Rasalanavho R.N
P.O.Box 258
Mukula
0978
15 August 2013

District Executive Manager.
Department of Health
Vhembe District
Private Bag x 5009
Thohoyandou
0950

Dear Sir/Madam

Re: APPLICATION TO CONDUCT RESEARCH STUDY IN THULAMELA B SUB-DISTRICT PRIMARY HEALTH CARE FACILITIES, VHEMBE DISTRICT

I, Rasalanavho Rambani Norman, a registered Masters student at the University of Venda, hereby request the Department of Health to allow me to conduct a research study in Thulamela B sub-District, Vhembe District.

My research topic is, **Challenges confronting professional nurses implementing nurse initiated and managed antiretroviral treatment programme at Thulamela B, Vhembe district, in Limpopo Province, South Africa.**

I hope my application will be taken into consideration.

Yours faithfully

R.N. Rasalanavho


.....

Contact number: 072 386 2474

email: rasalanavho@yahoo.com

APPENDIX 6

PERMISSION FROM VHEMBE DISTRICT DEPARTMENT OF HEALTH TO CONDUCT THE STUDY



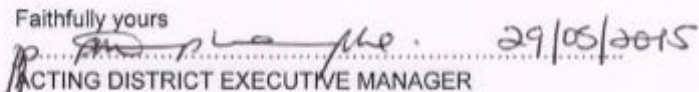
LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH
VHEMBE DISTRICT

Ref : S13/2
ENQ : Muvuri MME
DATE : 26/05/2015
FROM HRD & TRAINING
TO: All PHC FACILITIES
Attention: Rasalanavho NR

Subject : REQUEST TO DO RESEARCH IN PHC FACILITIES

1. The above matter refers.
2. Your request to do research in the PHC health facilities of Vhembe district has been received.
3. The district has no problems with your endeavor to conduct the research. You are however advised to make the necessary arrangements with the facilities you wish to visit to avoid disappointments and unnecessary disruptions of services.
4. Hope that your research will run smoothly

Faithfully yours

ACTING DISTRICT EXECUTIVE MANAGER

Private Bag X5009 THOHOYANDOU 0950 Old Parliamentary Building Tel: (01961000(Health) (015) 962 4958(Social Dev) Fax (015) 962 2274/4623.

The heartland of Southern Africa – development is about people

APPENDIX 7

INFORMATION LEAFLET

TITLE OF THE STUDY: Challenges confronting professional nurses implementing nurse initiated and managed antiretroviral treatment programme at Thulamela B, Vhembe District, in Limpopo Province, South Africa

INFORMATION

Dear participant

Introduction

We invite you to participate in a research study. This information leaflet will help you to decide if you want to participate. Before you agree to take part, you should fully understand what is involved. If you have any questions that this leaflet does not fully explain, please do not hesitate to ask the researcher (Mr R.N. Rasalanavho). The interview will last for an hour. If you agree to take part, I will ask you questions about the challenges that you face when implementing the NIMART programme. The questions are not a test and there is no right or wrong answer; it is your opinions that are essential for the study. My role as a researcher is to listen and understand your point of view and not pass judgments. If you feel uncomfortable in answering some of the questions, feel free to say so and you will not be penalised.

The nature and purpose of the study

To explore and describe the challenges confronting professional nurses implementing the NIMART programme in Thulamela Municipality, Vhembe District.

Risks and discomfort involved

There is no risk involved in participating in the study.

Possible benefit of this study

Please note that participation in the study is voluntary and that there will be no direct benefit to anyone who participates. There will be no penalties if you want to withdraw from the study or if you do not want to answer some questions which you feel are violating your rights. The study will enable us to improve the NIMART programme and make recommendations to address the challenges that professional nurses are facing.

Recording of the Interview

I would like to request your permission to voice record the interview because it is not possible to write down all your answers quickly and also to capture all the important information. It is important for you to know that the voice recorder, the digital voice data and notes will record your honest responses to the questions.

The voice recorder and the digital voice data will be listened to only by the researcher. The data will be transcribed and the transcript of the interview will bear a code, not the name of the interviewee. The voice recorder and digital data files will be kept in a locked safe. As per national requirements, the tapes and digital data will be destroyed two years after the publication of the research findings.

What are your rights as a participant?

Your participating in this study is voluntary. You can refuse to participate or stop at any time without giving reasons and your withdrawal will not affect you in any way.

Has the study received ethical approval?

Ethical clearance will be obtained from the University of Venda Ethical Committee and permission to carry out the study will be obtained from the School of Health Sciences Higher Degree Committee, the University's Higher Degree Committee and the Limpopo Department of Health.

Contact person

The contact person for this study is Mr R.N. Rasalanavho. If you have any questions please contact him at 072 386 2474.

Compensation

Your participation is voluntary. No compensation will be given to you for participating.

Confidentiality

The information that you give will be kept confidentially. All participants will be given codes which will be used when the data is transcribed. These codes will only be known by the researcher. All information provided by you will be used only for the purpose of the study and will be treated as private and confidential. The answers given by participants will be combined and analysed according to common themes and categories. The combined information will be written in the form of a report.

APPENDIX 8

CONSENT FORM

I, Rasalanavho Rambani Norman, am a post graduate student in the Department of Public Health in the School of Health Sciences at the University of Venda. I am conducting a research on the challenges confronting professional nurses implementing the NIMART programme at Thulamela B sub district.

I would like you to participate in this study and I assure you that any information obtained from you will be treated as confidential. Your participation in this study is voluntary and your decision to take part in this study will not impact negatively on you. An audiotape will be used to record the interview. You are free to withdraw from the study at any stage of the research process should you feel the need to do so.

Researcher's Signature: Date:

Researcher's contact details: 072 386 2474

Participant

I,, ID number have read through the content of this form and hereby voluntarily give consent to participate in this study.

Participant's Signature: Date:

APPENDIX 9

INTERVIEW GUIDE

Research question: "What challenges are you confronted with when providing the NIMART programme?"

Follow up questions that will be asked to gain deeper understanding of participants' challenges are as follows.

- ∞ What is your general experience of providing NIMART?
- ∞ What are some of the positive experiences that you have encountered while implementing NIMART?
- ∞ What are some of the negative experiences that you have encountered while implementing NIMART?
- ∞ How long have you been implementing NIMART?
- ∞ How do you cope with the provision of NIMART to PLWHA?
- ∞ What can be done to enhance your NIMART programme support?

APPENDIX 10

REPRESENTATIVE PARTICIPANTS' INTERVIEW TRANSCRIPTS

Participant No. 2

Key: R=Researcher

P=Participant

R: What challenges do you encounter when implementing the NIMART programme?

P: Mmm we are having few challenges. May be I can start with infrastructure.

Ok myself I'm Masindi Thivhionali Sophy. I am working as a professional nurse here at Makonde clinic and I'm also NIMART trained since mmmm, 2011 February. I'm giving ART to patients doing pre and post-test counselling. Sooo... my challenges at this clinic mmm, I will start by infrastructure, we have a serious problem of confidentiality because our consulting rooms are not conducive. Eeeeh... they are open, they are not closed, they, we have to close by curtains. Even the curtains are no longer there and then they are not built up to the ceiling, there is an open space. Eeee..., the consulting room number one its near the dressing room and immunizations room and also they are windows broken, if someone is outside mmmm, those people can hear us doing counseling.

Another thing ,there is no curtains, there no privacy which means of I am examining my patients, somebody outside going to the toilet as you can see our toilet are just near the consulting room, they can see us.

Another thing is that my mmm, the lay counselor inthis clinic that helps us with HCT, she does not have a room to provide pre and post-test counselling. She use labour room, where we deliver our women and on Wednesday usually there is congestion because we use that room to examine our women - maternity women and on Wednesday usually they are many. You find that she has no space to do counseling pre – post test counseling.

And then the mmm..., and if there is a women may be who hasdelivered in another room. We just improvised and give her that post natal ward, but if there is somebody, there is a women who has delivered we find that there no place she have to work. When she has too..., we have to divide the labour room, we examine on the other side while she is testing on that other side - the space is open and still you can hear a person working from next-door.

And then again, ourrrr... dispensary or our pharmacy room, it doesn't have an air conditioner and air conditioner is very important, because the temperature at this side is so hot, now in December it can be not up to 400cthat means our ARV's are not safe, and then our patient has to take this ARVs which are, which has not loosen potency and which are in good condition.

With the waiting area, I think the place is enough.

R: Are you also having UV lights and working?

P: Yes, the UV lights are available and working and we keep few patients inside. Most of the patients you find that they waiting outside where there is fresh air unless if its raining and the space outside its not enough.

And then also on the dispensary, the other side we have that'' Mutwa'' I don't know how to call it in English. The cupboards are old and some of the space we can not put our medication, that means that space is just there

but we are unable to use it.

R: Is the clinic accessible by community or do the patients experience problems?

P: When it's raining, if it rains heavily, they experience - we experience challenges especially using ambulance or even the car can not reach this clinic if it has rained heavily but if its not heavily, usually the cars can arrive here. Mmmm...., the problem started having worse after they are some municipality came with another what an I say, they say they are improving the road and then they pour gravel on this road, that gravel its like its slippery but before it was better. We didn't have much problem unless only it was only on the gate but now from up thereee.... near the river it's slippery.

R: What more can you say on the challenges?

P: Another challenge eeeehh, I can say on the staffs. They are many enrolled nurses here about four of them and all of them, only one is trained to do HIV testing and counseling but the other three are not trained and that one is on the other group, that means the others group its suffering and you find that we are here - the professional nurse are busy, may be giving ARVS to patients but they are some patients who needs counseling and testing. The enrolled nurse is sitting there not busy but she cannot counsell& test the patient, you find that the service is poor because all the things are just waiting for the professional nurse - but it's a challenge.

Then with NIMART we still need more nurses to be trained because there is another professional nurse, who is not yet trained. We also need may be addition of some professional nurses who may be trained because we are now seven here in number, only six are trained and the one is trained but she didn't do VCT, she only did PMTCT . There is a need for VCT.

R: Are you well staffed or still need more?

P: I still need more as I said eeeehh, we still need may be professional nurses who can be trained on NIMART, even assistant nurses they may be of help. Because if we have enough staff neeeh, most of the patient you find that they are able to communicate well outside there with - with the nurses on lower categories, voicing their problem up there, youuu...., out there and us for testing but you fond that that nurse cannot be able to help those patient because she is not trained.

Then another challenge may be its eeeehhh... high defaulter rate, we have many patient who have defaulted. I have put even the files eeeeh... separately up there, plus or minus 30 , I did not count them (estimations). Defaulted due to many reasons: some of them they relocate to other areas without saying good bye. They go to work to other areas. Some may be becomes sick and then they move may be to parents home or to someone who can take care of them, and then eeeehh, some you find that we have initiated then when they are very sick but when they feel better they decided to leave the medication. And then some of them you find that we have initiated them, while pregnant, you qualify to be initiated so we initiate them, they are pregnant then may be they get miscarriage then they leave. We no longer seen them, some of them deliver their babies immediately after delivery, I don't may be they didn't get enough information on how do, on what this treatment is for?and then how do they stop if they want to stop. Soyou find that even the person with low Cd4 have stopped because, she have delivered, she feel that she was supposed to get that - these treatment only while only pregnant.

R: What do you do when you have these defaulters?

P: We have challenge with that, that one is also a challenge because we use to have a tracer team which comes and then they are ask who are the person, the patient who are defaulted and then we give names and then they go and trace them at the community but nowadays they no longer coming. What we are going , we just may be allocated somebody one day and she takes all the files and try to call them using our phone - try to call them no the nurses with home based carers .

No the nurses with CHBC usually, unless if may be patient is sick we can send the CHBC to ask what is happening but we have challenges of confidentiality some of the patient doesn't want the HBC to go to their homes, so if eeeehhh, they said if CHBC is coming the neighbours will know that "haai", I am suffering from HIV. So we don't send them, usually for that, they help us usually in TB patients but with HIV patients, eish some, those defaulters they are stubborn or they have a negative attitude. We find that those HBC cares are beingtold nasty things. We don't do home visits.

R: Do you still have more challenges when it comes to the implementation of NIMART?

P: Another thing is mmmm, I think recurrent changes on managing HIV/ AIDS clients. That one is a challenge between us staff members - the nurses. Because you find today there is a policy which says, I remember the policy which says eeeeh, if a person a women is pregnant, when if first comes, it said when the women is pregnant and the CD4 are less than 350, she less than 200, she qualifies to get treatment the same day. That policy which come, it was not welcomed by all the nurses, because they were used that we have to do adherence first and take baselines bloods and then initiate so some of them were not implementing or initiating the person the same day. It was even saying if the CD4 is less than 100 we initiate the same day and then we take baseline bloods the very same day, but some of them, they said we can't initiate without baseline bloods.

R: Are you saying you are having staff members who are resistant to change?

P: Yes. we are having staff members who are resistant to change. They don't accept, what they have being told before its hard, its not easy for them to change.

R: Now we are talking of new change of 16H46 initiating L500 CD4, then how are you going to cope?

P: It's also a going to be a challenge because we were discussing it that in January, we were told eeeeehh from 500 and below, we have to start ARV, Some of them were saying its going to be a workload, haaai this patient are going to default because they have high CD4 and they are not sick. If you start treatment when patient is not sick the person default easily because it's like we are forcing the treatment. We are forcing them to take treatment when they are not ready. Some of them were saying patients will be many and they are many its more work. It's going to be a challenge, you find that because somebody will be complying or somebody its willing to do what policy its -new policy is saying- but the other said that I can't do that.

R: Do you do in- service training when there is new policy and discuss about it?

P: We do meetings every Wednesday and we in service one another but the problem you find that somebody it's not there on Wednesday maybe attending meeting or attending something, then in between it's a problem may be giving each other workshops again, you find another person said I don't know what has been discussed last Wednesday. I was not there; I cannot do that because I was not told. It's a challenge, but we do in-service one another.

Then with our manager, our manager is very supporting in NIMART, but she herself doesn't know more about this ART. Usually most of the things she asked us. Because usually she train late and she not always on the clinical site. Sometimes she have to be in the meetings or she is supervising, she is not dealing straight with patient but she is very supportive if we have problems.

Then the other challenge is Doctors, we use to have Doctor. Doctor Maligana use to come, we use to cal him that we have a patient who is may be who is having treatment failure or a person who is have a certain condition, a patient who is on ART and having a certain opportunistic infection which a not healthy. We used to call him and then he comes, usually he comes, if he is not there he usually gives us advice on what to do. Even now he can give advice but he is no longer coming and it's a challenge because sometimes you find that other patients are having side effects of some drugs which has to be changed. So when we, that times he comes he was the one who changes maybe the drugs, may be for example he is changing Efavirenz to Alluvia. He was the one who helps us a lot. We were feeling that we were supported a lot but now eish we get frustrated. Sometimes we don't find him on the phone, may be he is on the meetings ,or what- and he used to come with a certain Lady from FPD. They can even come every Wednesday, that time they used to come every Wednesday or every two weeks.

R: In other words were you getting mentoring?

P: Now it's rare, usually they come being busy. They tell us we have just come to collect statistics. We have still going to where -where -where to another clinic. I don't know may be because they changed staff. Because Phidane used to come but now another Lady, and then may be when you phone you are having a challenge of a patient, or child you want to initiate you will find that the person just said aaaaii... look at the guideline (laughing). And then laughing is it's a problem because Doctor just tell you do 1,2,3,.. and take this and this bloods. Mmmm, so with support from staff, FPD or other managers from district its poor.

R: What about support from District HIV managers?

P: No they don't come every month. You find that they come after may be after two months or three month. I don't see her often.

R: What about laboratory services and medication supply?

P: With laboratory services it's very good because we also have these machines. We receive usually may be - I have taken blood on Friday, you find that during the weekend I get the results before the come back on Monday. It's very good and even they know that Makonde, we are always having blood. They come every day. Laboratory service it's very good.

But with supply of ARV, we used to have problems back then, when we were using those triple therapy but now were this single drugs coming, we are using single drugs now, there is also CCMDD, aaiwe don't have shortage- we are able to estimate eeeeehh to, we know our statistics and able to order enough drugs. But there is a challenge on treatments paed treatment Nevaripine – we were given a guideline that NVP there is shortage. That 240 mls, that there will be shortage. Now when we order it's no longer coming and even that 100 mls, yaaah it's no longer coming. We were told to use AZT and but when I order AZT its not also coming. I have one bottle of NVP left, I don't know what I'm going to do moving forward because we have kids who are being delivered from HIV+ mothers and now have to be given NVP.

Another challenge is this CCMDD. Yaaah it's going to create us problem, shortage of drugs because some of them, mmm, especially this December, they are a lot of patient who didn't receive their packets but some receive double, some didn't receive, I don't know may be its because of holidays or not - and we have to take from our stock.

The other challenge is that those treatment have to be taken for six month, you find that outside they are being given by somebody who doesn't know that packet its written review, you have to review the patient, that person just let the patient sign and give the treatment. The chronic form its filled again because we have to fill the chronic form at six month- when the patient comes again no treatment. That means may be there lack of communication to other nurses, but we have dealt with that. Maybe this problem will be resolved not so long.

Then another thing policies come to us late, some of them do not reach us or maybe it's because you find that some of the meeting we didn't attend because there was lack of communication, maybe we didn't know about the meeting cause now during HAST meeting I hear that there is new policy on this breast feeding on PMTCT. It was saying we even give AZT may be to women who are/who were not taken FDC for more than six weeks, but know we don't have that policy- we have the old one which says we give NVP until six if the patient was on ARV's but I heard the Doctor reading it, it has changed, they are some changes on that policy that's my problem.

R: What are your general experiences of implementation NIMART programme?

P: My general experience, is that I feel I m changing peoples life to be good or I'm preserving life, which will have been lost because most of the patients were dying of HIV. But now that a nurse can be able to initiate treatment patients won't die cause they don't have to travel to go to hospital to get treatment. They get it nearby. I'm also saving children who were going to be infected with HIV. Most children who are on treatment of this FDC or this triple therapy to pregnant women have been done long ago, we would have saved them. They would have not been infected with the virus. You find that when you do counseling the patient doesn't, for the first time some of the patient does not accept that they are HIV positive. They just felt that maybe this disease was supposed to be for somebody, may be who is prostitution or what, but as time goes on when you do post test counseling then you adhere the patient until he/she agrees to take treatment, after sometimes they thank you that "haaai" nurse you have helped me a lot, I wouldn't being alive and at first I was refusing. I was on denial but you.. you talk to me nicely, you pushed me to take treatment but now I am ok. Usually many of the patients thank are for providing them with treatment.

R: How do you feel when patients are improving?

P: I do feel great; I feel I am proud of my profession. I don't feel, I feel I am contributing to the community a lot and the.. to the economy or to the yaaah, economy of South Africa because people have been dying so I am the one, I am one of the nurses who are making this South Africa to be a better place.

R: What negative experiences did you encounter when impleneting this NIMART programme?

P: Yaaah, I think all fall on those things that I was saying because mothers are taking treatment and children are being saved. And then also the stigma it's decreasing because we give them treatment when they are still ok. We don't wait for them to get sick, especially pregnant women they get it when they are fine and usually after breastfeeding some of them are willing to continue, they don't even want to stop. They remain beautiful and

healthy, so its one the good things or I put it as positive experience that I think the stigma goes down because they just see a person, they don't see that, that person is HIV positive. You can not differentiate that that person is sick, because they just start may be when they are fine. They even breastfeed the child, it's not like before when we use to prevent them from breastfeeding and then give them formula. So when you are using formula they stigmatize. They just say "haai" that one is sick but now they, every one its breastfeeding. They just think the person is not having the virus, so it's one of the positive experience that the stigma may be will go down because nobody known that others, nobody assume that they others are sick.

R: What are the negative experiences you encountered while implementing this programme?

P: Yaaaah mmm, the negative experience I can say that they are some patients who denied that they are HIV positive - and then they end up dying, may be because of different things. They may be deny saying that "haai" I am just be witched, so it a negative attitude. You find that in the community they are some people who belief in witchcraft and if then, if a person talks about witchcraft, it's not easy to convince him or her to take treatment - and then some of them to, do take treatment and then in the middle they just decide to stop, may be because of the belief the church. They are some churches who says, they can heal HIV/AIDS, so those churches hinder our programme. It's a negative experience that I have experienced, because some of them even come to test - retest, some of them won't know that person its using treatment. They just come and say they want to be tested. When you ask, is if for the first time, they said yes, when you test may be the results came negative cause may be the virus it's suppressed. When they go back they said, some of them even ask for a letter that you can write that, they are HIV negative. When they go back there, they are going to use that thing and even confess at the church that "haaii", I was HIV positive and now I am healed.

They come back at later stage and they are sick again. When they come back they won't even tell the Pastor, it's also a negative experience - and then another negative experience on the NIMART nurses, some of them are not supportive, some of them are not willing to do NIMART. I remember one of the nurse said "haii nna" I cannot initiate because there is this "eeeeehh" syndrome it's called IRIS, I think I cannot initiate because i am going to kill a patient, she eeeehh, but nawadays she is better.

R: Did you coach, in-service or mentor that person to gain confidence?

P: Yaah, we discuss it and then we workshopped each other that IRIS, we gave her example that since we started giving - initiating may be we only see one or two patients who had that IRIS, most of them are coping well - is then that she started to change and the other day she find that she is alone, she nanot shift or she nanot say the..the booked patient must come back again - she felt that she have to initiate, but now she is coming she is better.

Another negative experience its untrained professional they may not know - you find that a child for 6 weeks, for immunization, isn't that the enrolled nurses are the ones who are doing the immunizations and then child needs to be done PCR and then to be given Nevaripine some of them use to...to omit that. They didn't check that page because the child will be done PCR very late or not done all or not receiving Nevaripine - and then the Nevaripine have to be changed doses - and you find that because of shortage of staff areaaa... may be enrolled nurse will just say haai there is a women who have baby and that baby needs Nevaripine, so I just said give Nevaripine and then forget may be to check the mmmmm, to tell that nurse that hey the baby has to change doses as to go to 2mls may be at 6weeks. At birth isn't that we give 1,5mls, so the changing of doses it's a problem and even on these kids with which are on triple therapy or on ART, the grown ups they are growing we have to change the treatment according to weight, we have to increase the dose. You find that she is being vaccinated by a professional nurse, she.....she is not NIMART trained so she doesn't know that we have to change the or to look a weight that the baby is gaining weight. We have to increase the dosages, so this are some of the challenges - negative experiences , yaah, and then another thing patients do worry about confidentiality with in our clinic they are many nurses who are coming from local, most of them we are having may be about 4 it not 5, eeeech, the patients complains about confidentiality they are saying their status are being discussed outside with others so but we have discussed that with staff members that, nobody agrees that I am disclosing somebody status to anyone.

R: Are they knowing that it's an offence to disclose someone's status?

P: They know, we have discussed it a lot that eeeehh it's an offence - but some of the patients just have a negative attitudes may be towards nurse because I remember there is another nurse, who is an ancillary nurse, it's a young nurse, because some of them knows - she is from here, I y---. she used to help us to retrieve the files so people don't want her to retrieve , take their mmmm take their files, they just assume that she now - she knows that our HIV status - so we have problems because I have may be to take the file or even to give that medication CCMDD treatment, isn't that she can helps us just to give packets and then let the patient sign, then I have to go, if the data capturer its not there, I have to go myself and do that, that one is.

R: Do you work as a Team?

P: Yaah, we do support each other. It's just that some you find that they do resist to change if you are going report that heey, they said we must do like this or that, some will say haai they are just saying things because they are up there, we at operation site haai we cannot do that. That is some of the experience.

R: How do you cope with the implementation of NIMART to PLWHA? Do you suffer from emotional, psychological problems?

P: Mmmm, myself I don't worry a lot, I just.... because I believe in doing what I am taught to do to help the patient, mmmm... I just told myself mmm.. may be if something goes wrong is the will of God. So believe or church help me a lot and then also very good on support from this—the manager... our manager is very good in support. Supporting whatever we do or whatever challenges that we met here, so like she helps me a lot because most of the things I do tell her, then she give advice, then I also – I use policies and guidelines in order to make sure that I help the patient fully because mmm.... by using your head without the use of the guideline you can go wrong. But we don't have a lot of support may be eeehh.. somebody who do counseling to us or who support us may be... be counseling from the District.

R: May derolling from your role after initiating or debriefing?

P: After meeting challenges, but I don't have problem a lot, when I go home usually I focuss on my personal things, and forget about work issues and but when I am at work I will concentrate on work issues and then make sure that I help the patient – make sure that I don't feel.... when I am at home I feel that “haai” I have done mistake, I should have done this and this to that patient. I don't carry my work problems at home and my home problems to work

But sometimes after counseling may you find that you have counselled a couple and another one is negative and another one is positive, Yaah... you can feel “uri yaah” it's a problem, I just hold myself its not my problem. They will see how to get along.

R: Is there something you think can be done on order to enhance support of NIMART programme?

P: Mmm, there is training, training more nurses on VCT and NIMART it's needed especially HCT because this enrolled nurses – I can see they are still young – they are young people and they are willing to help us – and they are also willing – they can counsel – because here we don't have older people, maybe we have only two – but these young ones I can see they are eager to learn and they are willing. If there is a program which can come now they say we are going, and they talk mmm.. I mean friendly to patients and I can say they are closer – the patients wants to get closer to them especially the mothers - because they deal with immunization issues - enrolled nurses so training is needed. Also these FPD staff or District staff dealing with HIV /AIDS – they should do support may be every two weeks or the mentoring. They can resolve our problems because we do have meet challenges that the patient – some of them are failing on drugs. Doctor use to helps us a lot, you find that the viral load is just increasing – just increasing, then we- we- waste time may be thinking that it will go down - while going up then if we have support – I mean – I think we can detect that the patient is failing early and then change drugs to another regimen. Because if they don't come for support you find even the – we NIMART nurse sometimes we forget to check the blood – when last did the patient was blood – if the patient have viral load – Doctor said may be we can take if after three month – not want for six month or one year – then if there is no support –if the is no – the managers are not coming, FPD not coming, nobody will see that this patient have high viral load and its long that has being taken – until the patient is deteriorating without our knowledge. Also the Doctors must come back – may be we have a NIMART Doctor who came once a month.

We use to call him and he came every Wednesday, he is no longer coming or even if they come twice a month –and he change and was coming twice a month – after that once per month – or after that he said you can call me may I will come. When you call him he said next week – I will be in meeting – that week I will be doing what - what until now that he said that haai... he will no longer be coming to our clinic.

Another thing – policies must be communicated to us may be during meeting – the guidelines has to read and discussed so that we can understand. The managers doesn't have just give us the policies and said this is the new policies – we need to read it through and understand it. Then this monthly HAST meetings also have to continue – I think it can help us a lot. Then clinic managers workshop may be to – on this NIMART so that they can have more information, and then also the local area people may be to improve their communication because there is usually communication breakdown, you usually find that there is a meeting and we are told on

the morning or there is a meeting some of the clinics doesn't know – and important meeting.

For example now we have an incubator – we are unable to operate it – but they said there was a meeting where people were shown how to - to mmmm.. operate that incubator – just deliver my baby and that baby I am afraid that if I switch it on may be exceed the temperature, during winter its going to be a problem. So you find that some of the meeting that meeting we didn't go there – because were told in the morning. Staff need to be oriented on new equipments on how they work. What I can say is that the manager mmm.... from the District office – if they can give us more training. We are already trained – may be the – how can I say – follow up training with NIMART, updates on programmes – updates on everything that pertains to HIV and also these re-engineering of maybe we can – we knowhow to collaborate. There is reengineering in the clinic – but I don't think we are using it effectively – they are HBC but this HBC they were going to help with this tracing of defaulter. But unfortunately they are around Makonde, some of the patients are around Khubvi, some are come from Vho- Matangari, but because reengineering it's like they go house to house may be the patients won't feel stigmatized because they will be going house to house.

R: What about NIMART training duration – was it enough or short period?

P: They were few, I think may be if I can have three weeks, - if it can be two weeks may it can be enough - and then if we also even practice - more practice on how to initiate – because we do have challenges when it comes to patient who have TB – especially children – mmm if they have TB we have feeling that they have to be initiated by the Doctor. And now the Doctor its not coming – we have to send the patient to Hospital and its difficult because the patient can tell you about money - that I don't have money to go to the Hospital – so it becomes a challenge but with initiating myself - I was confident as long as I phone the Doctor that I have the patient, he is like this and I want to initiate treatment.

R: Do you NIMART duration to be extended?

P: A lot of information and there is a lot – especially if the patient have other condition we didn't have enough information on which drugs are contraindicated – which drugs are contraindicated - we have to find out our self when come back on this guideline PC101. The guideline itself is contraindicated with mental illness - this one when you have TB and so on. I think two weeks it's enough.

R: Any recommendation to NIMART programme or anything you can finalize with?

P: At our clinic, I need a new infrastructure - if I can have a functioning pharmacy and then privacy – consulting room may be they increase to four and they have privacy. I think this programme will run smoothly and if we have enough staff because we allocated somebody with dealing with eeeehh... for that day – who is dealing with ART – because you find that patient are complaining outside that heeey... they are a lot of patient – the services slow. If we can have good infrastructure and staff – I think we will be ok.

R: That's the end of our interview thanks very much. Thanks you too.

P: I think maybe you will recommend something after this interview which will help us.

Participant No.12

R: How long have you been implementing the NIMART programme?

P: Mmm...I was implementing NIMART programme since 2009 August.

R: What challenges do you encounter when implementing the NIMART programme?

P: I have got many challenges but I will start with number one human resources shortage – few nurses were not trained for NIMART or VCT, even lower category were not trained. As from January 2015 workload has increased due to patient initiated when the CD cell is less than 500 and nurses now they tum to push the workload and the quality of the service is becoming poor.

Shortage of medicine – we do experience shortage of medicine mmmm...infrastructure the.....

R: Before you go to infrastructure - shortage of medications-meaning that when you order you don't get them from the Hospital or you don't get them from the depo?

P: We don't get them from the hospital.

- R:** Are they saying they don't have enough?
- P:** They don't have enough of tenofovir, efavirenz, abacavir single doses and lamivudine. Lamivudine and tenofovir now is about two month with no supply.
- R:** You may continue with the challenges?
- P:** The other challenge is infrastructure – the storage of medicine is not enough even for the general medicine not specifically for the ARV's and the air con in the dispensary is not working, it's now taking a year and it was reported and it is not repaired – and then ARV's are not stored in the main dispensary due to shortage of - of space and the consulting room are not enough.
- R:** Where are you storing the ARVs?
- P:** We are storing them in the consulting room. Our clinic have been renovated and when they were renovating the clinic we ask them to build or to design the...the cupboards for us, then cupboards were designed so we are storing those medicines in the cupboards and the waiting room is also small and the building itself its well – its renovated last year – I think it was January –February – March.
- R:** With that you are feeling that they way the infrastructure is its compromising the NIMART programme?
- P:** Yes.
- R:** Lets continue with the challenges?
- P:** And we are experiencing defaulter rate which is rising up. We are having a problem of immigrants people when they came in we test them after getting that they are positive we..... start this ARV's and they collect once. When you do the follow ups the number and the name given and the address both are not correct – you cannot trace that person. Other people are defaulting due to the cultural belief and religious belief – some believe that if the take this traditional medicine they will survive and others they are taking this tea's and the anointing water and the holy water.
- And another challenge is the CCMDD – this programme of CCMDD when it was introduced, it was like we are..the burden is going to be reduced but now we see that the burden is more because when we are – when a person who is having mmmm... this parcel of ARV's once the parcel you stop consulting and look for the parcel which consume time, and if the person who is on CCMDD does not receive the parcel on sms they do come to the clinic and report that and then ended giving them our stock and it means our stock will be going down.
- And management support the ...
- R:** Is that another challenge?
- P:** Yes it is another challenge. The managers of the local area does not support this programme due to – they don't have enough knowledge about NIMART and the District manager and the provincial manager of NIMART does not support the programme. They don't come unless there is a..a problem they will come but for support they don't come. I think if they are coming for support they will be lifting a burden from nurses because if you see a person coming frequently you tell that person your problems even if that person won't solve the problem at that time you are burden is a little bit relieved.
- R:** You may continue with the challenges?
- P:** No mentoring from the departmental managers, the mentoring is not arranged from them departmental managers so nurses need the mentoring and those which are from the FPD, instead of mentoring the nurses they come only for their statistics and they don't do mentoring or debriefing.
- And we also have a problem of initiating children's, sometimes there is no staff or sometimes there is no medicines for the paed's. In the clinic we only have two nurses who are trained for paed's ARV's when when they are not there we experience a problem and also we experience a problem when it comes to withdrawing of blood from children's because others are not exposed to paed's for long time. I myself I was exposed to paed's for my whole training only two month.
- R:** Ok meaning that when those two nurses who have done paed's ART are not in how do you manage children's?

- P:** We... we ask – if we that children want to be initiated we check the offs and if the that nurse is coming back soon we will refer or give the follow up date so that that person can - may come back on a specific date for that nurse.
- R:** You may continue with the challenges?
- P:** Risk of infection – nurses are at risk of infection because we don't have n - N95 masks at the clinic because if the CD cell of those people or those people living with HIV they do have the...most of them do have some TB so nurses are exposed to TB so if we have N95 is better.
- R:** So when you order those N95 masks they don't provide you or what are they saying?
- P:** No they don't provide if they provide they give us the do.. the the a certain type which is not N95 and that type of mask does not serve the purpose.
- R:** Ok you may continue.
- P:** And sometimes we experience attitudes of nurses when it comes to implementing the NIMART programme, some nurses does not want to be trained for NIMART. They say they are afraid of infection.
- R:** Do you still have any challenge or you think you have covered the challenges that you are having?
- P:** I think I have covered.
- R:** Let's continue to another question. What is your general experience of implementing the NIMART programme?
- P:** I'm having two different experiences; I have got the negative and the positive experiences but I will start with the positive experiences.
Mmm people are getting well soon after starting ARV even if the CD cell is very low for example if the CD is 1 they recover .Their life expectancy is increased and there is low mother to child transmission.
- R:** Those are the positive experiences?
- P:** Continue.
- P:** My negative experience is this one and I feel not fine when I think of this negative experience. When I started initiating this ARV's I had a bad experience because two positive people died after few weeks of initiation then I did....I did some investigation – I found that the other one was using ARV together with the traditional healer medicine and the other one was using tea instead of ARV's she stopped and started using tea and these two clients died and felt discouraged. I thought I am the one who is killing them.
- R:** So did those things have - affect you negatively, psychologically, emotionally, spiritually?
- P:** I was affected negatively, psychologically so and spiritually and physically I was reluctant to even to touch those ARV's and the...anything to do with ARV's I was afraid to touch them thinking that if I can give another person ARV that person will also die.
- R:** What effect did those negative experiences have on your contribution towards the implementation of NIMART programme?
- P:** I was not initiating anymore but after a long time. I restarted initiating people and those people whom I initiated they get well soon. Those who adhere to my advises they get well soon even if the CD cell was very - very low and it makes me happy when looking on this clients even today I still feel comforted up because they are alive.
- R:** Is there any other effect or is that all?
- P:** I think it's all.
- R:** How do you cope to implementation of NIMART programme to PLWHA?
- P:** Mmmm at my clinic because we don't have this mentoring an debriefing eeehh when those nurses who are implementing this programme we come together and share experiences and then we give each other advice.

Sometimes we even read the scripture from the bible encouraging each other and then we continue.

- R:** Is there something you think could be done in order to enhance support of this NIMART programme?
- P:** Mmmm..I think the all managers must support the programme or if they don't have enough knowledge I think the department must send them for training so that they must support what they know especially the local area managers. I think those who are leading the NIMART they do have knowledge but the local area does not have. I think this will help to relieve the burden the nurses about this programme and nurses are also... the nurses need this debriefing or mentoring on monthly basis. All vacant posts need to be filled. Motivation must be written for upgrading infrastructure. More training on NIMART even lower categories because we are having shortage of staff if the lower category are trained they can help the professional nurses while consulting or while doing the..the ANC and delivering – the lower category can help- and increase more days on training nurses about NIMART and include paed's for example you can increase this 5 days to two weeks – 5 days to 10 days.
- R:** Meaning that – you saying that the duration of NIMART training it's not enough?
- P:** Yaaa.. It's not enough. I think you can increase it up to 10 days.
- R:** Your reason is what? Why are you saying it needs to be increased?
- P:** Because if they increase this NIMART days they will includes paed's ARV's so that the nurses may gather both the adult and the paed's information.
- R:** For now they are being not taught about the paed's ones – they are teaching the adult and what?
- P:** They usually taught us about the adult the paed's they say the Doctor will initiate. Nawadays the Doctors are not...no longer initiating they just push all paed's to the nurses at the clinic.
- R:** Ok you said another recommendation of yours is a motivation must be written for upgrading infrastructure. Who is going to write this motivation?
- P:** I think the...the local area manager in consultation with the operational manager and I think also if the upgrading is not going through the – the operational manager together with the local area manager they can apply for the park homes so that the space of the NIMART ca be increased.
- R:** So that's the end of our interview. Do you have any other thing that you want to add?
- P:** No.
- R:** You are fine.
- P:** Yes I'm fine.
- R:** Thank you very much and thanks for your time.
- P:** Thank you.

APPENDIX 11

CONFIRMATION BY LANGUAGE EDITOR



FACULTY OF NATURAL SCIENCES

DEPARTMENT OF MEDICAL BIOSCIENCES

Donavon C. Hiss | University of the Western Cape | Private Bag X17 | Bellville 7535 | South Africa
Tel: 021 959 2334 | Cell: 072 200 1086 | Fax: 021 959 3215 | E-mail: dhiss@uwc.ac.za or hiss@gmx.us

18 December 2015

To Whom it May Concern

This serves to confirm that I have edited the language, spelling, grammar and style of the MPH mini-dissertation thesis by **Rambani Norman Rasalanavho**, titled: **“Challenges Confronting Professional Nurses Implementing the Nurse-Initiated-and-Managed Antiretroviral Treatment Programme in Vhembe District, South Africa.”** The manuscript was also professionally typeset by me.

Sincerely Yours



Dip. Freelance Journalism, Dip. Creative Writing, MSc (Medicine), PhD