The experiences of NIMART-trained nurses providing care to children living with HIV at ART clinics in the Windhoek District of Namibia

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DECLARATION

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third-party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

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ABSTRACT

Background

Globally, an increase in the number of children living with the Human Immunodeficiency Virus (HIV) has been observed. This is a result of the expanded antiretroviral therapy (ART) coverage. Most of these children live in sub-Saharan Africa, a region that has scarcity of healthcare human resources. Task shifting was introduced as a means to increase access to ART and HIV related health- care services. Nurses trained in the initiation and management of ART (NIMART) have become an integral part of the paediatric HIV/AIDS response workforce through task shifting and decentralisation of services strategies. There is scarcity of information regarding the experiences of NIMART-trained nurses providing care to paediatric ART patients in Windhoek District of Namibia.

Aim

The aim of this study was to explore the experiences of NIMART-trained nurses providing care to children living with HIV at ART clinics in the Windhoek District of Namibia.

Objectives

To explore the experiences of NIMART-trained nurses regarding individual, interpersonal, institutional, community and policy factors and how these affect the provision of paediatric HIV care.

Population and study setting

The target population was all (25) NIMART-trained nurses practising paediatric ART in health facilities within the Windhoek District. The accessible population were 16 NIMART- trained nurses practicing within the three selected facilities within Windhoek district. The study was conducted in 3 of the 14 public health facilities in the Windhoek District of Namibia, namely Katutura State Hospital, Katutura Health Centre, and Otjomuise Clinic**.** The three facilities were purposively selected to represent a hospital setting, a health centre setting and a clinic setting. These three facilities also had the highest number of paediatric ART patients among the categories of health care settings they represented.

Methods

This study applied an exploratory-descriptive qualitative approach which aimed at gaining in-depth knowledge and understanding of the experiences of NIMART-trained nurses providing paediatric ART care. Data was collected by the researcher and a study assistant using semi-structured individual in-depth interviews (face to face). Twelve (12) participants, including a pilot

interview participant, were interviewed. Data was analysed using content analysis. Ethics approval was obtained from the Stellenbosch University Health Research Ethics Committee and the Namibia Ministry of Health and Social Services Research Ethics Committee. Permission to conduct the study was also obtained from the Khomas Region Health Directorate, and the Medical Superintendent of Katutura State Hospital.

Results

The five themes that emerged were aligned to the objectives of the study: experiences related to individual factors, experiences related to interpersonal factors, experiences related to institutional factors, experiences related to community factors, and experiences related to policy factors. In general, the NIMART-trained nurses expressed both positive and negative experiences in their provision of paediatric ART services. The positive experiences related to empowerment of the nurses, improved self-esteem, job satisfaction and perceived reduction of new HIV infection among the infants exposed to HIV. The negative experiences emanated from inadequate paediatric ART knowledge and skills, increased workload and staff shortages, lack of teamwork, inadequate supervision and mentoring, lack of support from caregivers, and lack of resources, and poor socioeconomic backgrounds of the paediatric patients.

Conclusion and recommendation

Task shifting has brought paediatric ART initiation and management into the practice of NIMART-trained nurses. Therefore, it is necessary that the nurses are equipped with knowledge and skills vital for this role. In addition, supervisory and mentoring support is necessary to help improve their confidence in managing paediatric ART patients. The healthcare system should also focus on dealing with barriers such as material, infrastructural and material resources that hinder effective provision of paediatric ART services by NIMART-trained nurses.

Key words: HIV/AIDS, NIMART, Paediatric ART, Task shifting, antiretroviral therapy

OPSOMMING

Agtergrond

Wêreldwyd is bevind dat daar 'n toename in die aantal kinders is wat met MIV leef, as gevolg van die uitgebreide dekking vir antiretrovirale terapie. Die meeste van hierdie kinders woon in Afrika suid van die Sahara, 'n streek met skaars menslike hulpbronne vir gesondheidsorg. Taakverskuiwing is ingestel as 'n manier om toegang tot gesondheidsorgdienste met ART en MIV te verhoog. Verpleegkundiges wat opgelei is in die inisiëring en bestuur van ART, het 'n integrale deel van die kinders se MIV / VIGS-reaksiewerkers geword deur taakverskuiwing en desentralisering van diensstrategieë. Daar is skaars inligting oor die ervarings van verpleegkundiges wat deur NIMART opgelei is, wat sorg vir pediatriese ART-pasiënte in die Windhoekdistrik in Namibië.

Doelwit

Die doel van hierdie studie was om die ervarings van verpleegkundiges wat deur NIMART opgelei is te verken wat pediatriese sorg aan kinders met MIV by ART-klinieke in die Windhoekdistrik in Namibië bied.

Doelstellings

Om die ervarings van NIMART-opgeleide verpleegkundiges met betrekking tot individuele, interpersoonlike, institusionele, gemeenskaps- en beleidskwessies te ondersoek en hoe dit die voorsiening van MIV-sorg vir kinders beïnvloed

Populasie en omgewing

Die teikenpopulasie is alle verpleegkundiges wat deur NIMART opgelei is om kinderkuns in gesondheidsinstellings in die distrik van Windhoek te beoefen. Die studie is uitgevoer in 3 van die 14 openbare gesondheidsinstellings in die distrik van Windhoek in Namibië, naamlik die Katutura-staatshospitaal, die Katutura-gesondheidsentrum en die Otjomuise-kliniek.

Metode

Hierdie studie het 'n kwalitatiewe benadering wat eksploratief en beskrywend is toegepas, wat daarop gemik is om diepgaande kennis en begrip te verkry van die ervarings van verpleegkundiges wat deur NIMART opgelei is om pediatriese ART-sorg te bied. Data is deur die navorser en 'n studie-assistent versamel deur middel van semi-gestruktureerde individuele diepte-onderhoude (van aangesig tot aangesig). Twaalf (12) deelnemers, waaronder 'n deelnemer aan die loodsonderhoud, is ondervra. Data is geanaliseer met behulp van inhoudsanalise. Etiese goedkeuring is verkry van die Universiteitskomitee vir

Gesondheidsnavorsing aan die Universiteit Stellenbosch en die Navorsingsetiekkomitee van die Ministerie van Gesondheid en Maatskaplike Dienste. Toestemming om die studie uit te voer, is ook verkry deur die gesondheidsdirektoraat in Khomas-streek en die mediese superintendent van die Katutura-staatshospitaal.

Resultate

Die vyf temas wat na vore gekom het, is in lyn gebring met die doelstellings van die studie: individuele faktorverwante ervarings, interpersoonlike verwante faktorervarings, institusionele verwante faktorervarings, gemeenskapsverwante faktorervarings en beleidsverwante faktorervarings. Oor die algemeen het verpleegkundiges wat deur NIMART opgelei is, positiewe en negatiewe ervarings uitgespreek in die lewering van ART-dienste vir kinders. Die positiewe ervarings hou verband met bemagtiging van verpleegkundiges, verbeterde selfbeeld, werksbevrediging en vermeende vermindering van nuwe MIV-infeksie onder kinders wat aan MIV blootgestel is. Die negatiewe ervarings het voortgespruit uit gebrekkige ART-kennis en vaardighede by kinders, verhoogde werkslading en personeeltekort, gebrek aan spanwerk, onvoldoende toesig en begeleiding, gebrek aan ondersteuning van versorgers, gebrek aan hulpbronne, en swak sosio-ekonomiese agtergronde van die pediatriese pasiënte.

Slotsom en aanbevelings

Die taakverskuiwing het die inisiëring en bestuur van kinderartikels in die praktyk van NIMART-opgeleide verpleegkundiges geplaas. Daarom is dit nodig dat die verpleegsters toegerus is met kennis en vaardighede wat nodig is vir hierdie rol. Daarbenewens is toesig- en mentorsteun nodig om hul vertroue in die bestuur van ART-pasiënte te verbeter. Die gesondheidsorgstelsel moet ook fokus op die hantering van hindernisse wat die effektiewe verskaffing van kinder-ART-dienste deur NIMART- opgeleide verpleegkundiges belemmer.

Sleutelwoorde: MIV / VIGS, NIMART, Kinderartikels, taakverskuiwing, antiretrovirale terapie

DEDICATION

I dedicate this thesis to my beloved late parents,

Purity Anna Gichuhi

and

Samuel Gichuhi Muriuki.

How I wish you were here to celebrate with me.

Thank you so much for the foundation you set for me.

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ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral therapy
BMI	Body mass index
ECHO	Extension for Community Health Outcomes
EN	Enrolled nurse
HCW	Health Care Workers
HIV	Human Immunodeficiency Virus
MUAC	Mid upper arm circumference
NIMART	Nurse Initiated and Managed Antiretroviral therapy
PLWHA	People Living with HIV/AIDS
PHC	Primary Health Care
RN	Registered Nurse
UNAIDS	United Nations Programme on HIV and AIDS
WHO	World Health Organisation
MOHSS	Ministry of Health and Social Services

CHAPTER 1:
FOUNDATION OF THE STUDY

1.1 INTRODUCTION

The Human Immunodeficiency Virus (HIV) that causes Acquired Immune Deficiency Syndrome (AIDS) is still a significant health issue of concern globally. By the end of 2018, the United Nations Programme on HIV and AIDS (UNAIDS) estimated that 37.9 million people were living with HIV/AIDS, with 1.7 million people being newly diagnosed with HIV (UNAIDS, 2019:1) Out of this number, approximately 160 000 were children younger than 15 years (UNAIDS, 2019:4). Lifelong ART and care is necessary to reduce morbidity and mortality rates among these children (Republic of Namibia, 2016:68). Due to the shortage of qualified medical personnel in sub-Saharan Africa, decentralisation of care for children living with HIV to ART specific clinics and primary health care (PHC) settings were necessary to ensure increased access to paediatric HIV services. In these settings, nurses trained in the initiation and management of ART (NIMART) provide paediatric HIV services. Therefore, the researcher wished to investigate the experiences of these NIMART-trained nurses in the Windhoek District on the provision of paediatric HIV care.

1.2 RATIONALE

Globally, many studies have been done from the perspective of the caregivers of HIV infected children (Nasuuna, Kigozi, Muwanguzi, Babirye, Kiwala *et al.*, 2019:3-7; Mafune, Lebese & Nemathaga, 2017:3-7; Gichane, Sullivan, Shayo, Blandina, Donnell *et al.*, 2018:702-704). However, little has been done to examine the experiences of nurses who care for both the caregivers and the children in a new role traditionally restricted to doctors. New HIV infections are still reported in children younger than 15 years. In 2018, 160,000 children were newly infected with HIV (UNAIDS, 2019:4). Achieving successful ART outcomes among these children is challenged by many factors. For example, in India, Mothi, Karpagam, Swamy, Lala Mamatha and Santiretroviralode (2011:912-919), identified barriers to the efficient management of children living with HIV as delayed infant diagnosis, lack of appropriate paediatric formulations and lack of skilled health personnel.

The World Health Organization (WHO), estimates a global shortage of 7.2 million health workers, with the African Region accounting for a skilled health workforce deficit of 1.8 million or 25% of the global total (WHO, 2013:36). Therefore, NIMART-trained nurses have been included in the management of paediatric patients through the task-shifting approach. In the PHC clinics in Nelson Mandela Bay health district of South Africa, Williams, Van Rooyen and Ricks (2018:3-8) found that NIMART-trained nurses face challenges in the provision of paediatric HIV care, in terms of human and material resources, training and mentoring, and interpersonal relationships.

In Namibia, the Ministry of Health introduced NIMART training to prepare practising nurses for the provision of ART services, including paediatric ART services. The study of O'Malley, Asrat, Sharma, Hamunime, Stephanus *et al.* (2014:9) showed that task shifting in ART care was seen as feasible and acceptable in Namibia by doctors, nurses and patients, but did not explore the implications of this shift. Besides, it did not document any specific experiences of the NIMART-trained nurses providing this care to children living with HIV.

From the researcher's experience as a NIMART-trained registered nurse and HIV Nurse Mentor, nurses face challenges providing care to paediatric patients living with HIV. Therefore, the researcher found it essential to explore these experiences from the perspective of the NIMART-trained nurses in the Windhoek District of Namibia. Knowledge of these experiences will help re-strategize care provision to achieve improved quality care that will lead to better paediatric HIV outcomes.

1.3 PROBLEM STATEMENT

In primary health care settings, NIMART-trained nurses are expected to initiate ART on paediatric patients and manage them during their follow-up visits. However, according to the retrieved literature, some barriers have been identified as hindering efficient provision of paediatric HIV care. Examples of these barriers include inadequate knowledge and skills (Iwu & Holzemer, 2017:396), increased workload, staff shortage and lack of infrastructural and material resources (Rujumba, Mbasaalaki-Mwaka & Ndeezi, 2010:6-7).

In most of the health facilities in Windhoek District, NIMART-trained nurses offer both paediatric and adult ART care. However, the researcher has observed that NIMART-trained nurses tend to avoid paediatric ART. In facilities that have a resident doctor, nurses often refer the paediatric clients to be attended to by the doctors, while in health facilities with visiting physicians, paediatric clients are booked on days when the medical officer visits the facility. In addition, some aspects that need documentation in the paediatric care booklets were frequently left blank, with some paediatric clients eligible for regimen and dosage changes being kept on the same prescription notwithstanding changes in weight and age. This is despite the nurses having undergone NIMART training, which is the standard training for nurses before being assigned to provide ART care to both adults and paediatric ART clients.

There are no specific studies done to explore the experiences of the nurses providing care to paediatric ART patients in Windhoek district. Therefore, the researcher saw the need to explore these experiences since this would help in determining the kind of support needed by these NIMART-trained nurses to better provide care to paediatric patients.

1.4 RESEARCH QUESTION

The research question that guided this study was: What are the experiences of NIMART- trained nurses providing care to children living with HIV in the Windhoek District of Namibia?

1.5 RESEARCH AIM

The aim of this study was to explore the experiences of NIMART-trained nurses providing care to children living with HIV at ART clinics in the Windhoek District of Namibia.

1.6 RESEARCH OBJECTIVES

The specific objectives of this study were to:

- explore the experiences of NIMART-trained nurses regarding individual factors that affect the provision of care to children living with HIV
- explore how interpersonal factors influence the provision of care to children living with HIV
- describe institutional factors that affect the provision of care to children living with HIV by the NIMART-trained nurses
- describe community factors that affect the NIMART-trained nurses in the provision of care to children living with HIV
- explore how current programme policies affect the provision of care to children living with HIV by NIMART-trained nurses.

1.7 THEORETICAL FRAMEWORK

This study was guided by the ecological model for health promotion (Mcleroy, Bibeau, Steckler, Steckler & Glanz, 1988:355). The framework assumes that health promotion interventions are based on determinants of behaviour across five levels of social interactions (Mcleroy *et al.*, 1988:355). The model can be used to provide a comprehensive public health approach that assesses health outcomes from both the patient's side and the side of the providers of health care. It can also be used in determining solutions at different levels of the social environment which will ultimately change outcomes. For example, Mukumbang, Mwale and Van Wyk (2017:2) used the ecological framework to determine the factors affecting retention in care of patients on ART in the Kabwe District, Zambia. The model was selected for this study since it could help explore how the interactions of the NIMART-trained nurses with persons and systems around them shape their experiences in their provision of paediatric HIV care and therefore impact the quality of care. For example, knowledge and skills will determine the clinical management of the patient, which will ultimately determine the quality of care that the paediatric ART patient will receive. Below is an illustration of the theoretical framework developed by the researcher for the purpose of this study.

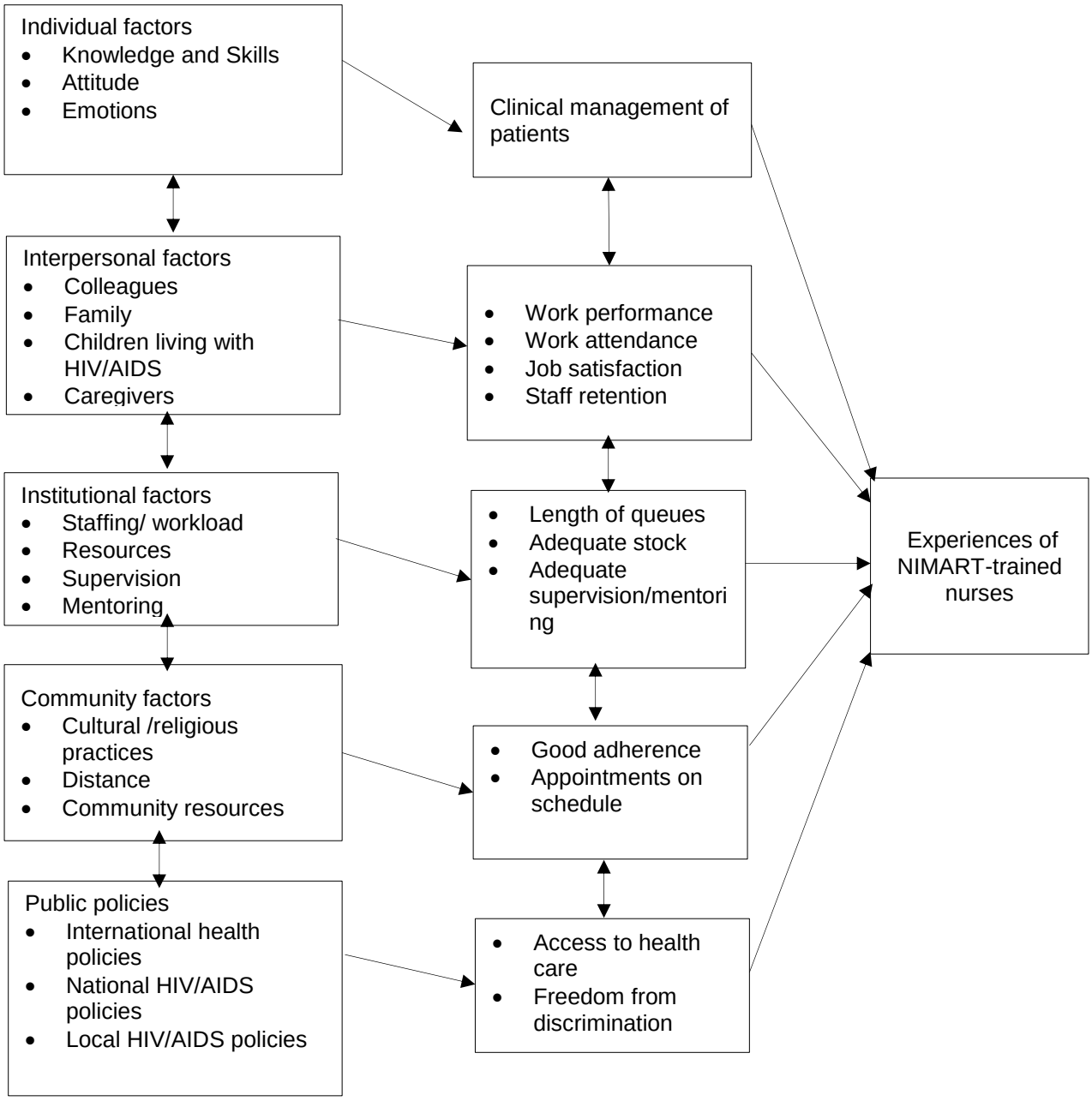

Figure 1.1: Theoretical framework for NIMART-trained nurses' experiences on the provision of paediatric HIV care

(Adapted from Mcleroy, Bibeau, Steckler & Glanz, 1988:351-377)

Figure 1.1 illustrates how the model was adapted to develop five groups of factors, viewed from the perspective of a NIMART-trained nurse that may influence outcomes in paediatric HIV care directly or indirectly. The five groups include (1) individual, (2) interpersonal, (3) institutional, (4) community and (5) policy factors.

The ecological framework emphasises the importance of interactions between individuals and their physical and social environment in determining behaviour. The model suggests that changes in the social environment will lead to changes in the individual and that supporting individuals will also bring changes to the environment (McLeroy *et al.*, 1988:351-377).

Experiences of the NIMART-trained nurses will depend on the five factors of the ecological model; individual factors such as knowledge, skills and attitude which are intrinsic in a person influence the behaviour of the person (UNICEF, 2019:2). These factors play a significant role in determining how the nurse responds to different circumstances. The interpersonal factors include the elements that may arise from the interactions between the nurse and other nurses, children living with HIV/AIDS and family members. Then there are institutional factors like the facility setting, which are related to the work environment and how they affect the provision of services by the nurse.

Furthermore, there are community factors such as standards of behaviour that exist formally or informally among individuals or groups in a community. Some of the community factors that may have an impact on the experiences of the nurses include distance to the health facility, availability of basic needs and amenities, and cultural beliefs and practices. Lastly, international, national and local policies, such as decentralisation and task shifting, and testing and treating can also have an effect on the provision of ART services to paediatric patients.

1.8 RESEARCH METHODOLOGY

The current chapter contains a brief description of the methodology as applied in the study. A detailed report is provided in chapter 3.

1.8.1 Research design

For this study, an exploratory qualitative-descriptive design was applied to explore the experiences of nurses providing paediatric HIV care in the Windhoek District of Namibia.

1.8.2 Study setting

The study setting included 3 of the 14 public health facilities in the Windhoek District of Namibia, namely Katutura State Hospital, Katutura Health Centre, and Otjomuise Clinic.

1.8.3 Population and sampling

The population for this study included 25 NIMART-trained nurses in the 14 health care facilities within the Windhoek District. The accessible population was 16 NIMART-trained nurses working in three selected health facilities (one hospital, one health centre and one clinic). In Namibia, both registered and enrolled nurses are included in the NIMART training and practice since most of the institutions have more enrolled nurses than registered nurses. The interviews continued until

data saturation was reached. Data saturation was reached after twelve interviews, giving a final sample size of twelve.

1.8.4 Data collection tool

The researcher used a semi-structured interview guide based on the objectives of the study during the interviewing process (Appendix 6).

1.8.5 Pilot interview

A pilot interview was conducted with one participant from the target population, as a trial for the practical aspects of the proposed main study and to identify and correct any errors that might arise. The pilot interview was conducted on 4 September 2020. Data from the pilot interview was included in the final analysis of the study.

1.8.6 Trustworthiness

To achieve trustworthiness in the study, the model of Lincoln and Guba (1985) as cited by Polit and Beck (2017:982) was adopted. The model includes credibility, dependability, confirmability and transferability.

1.8.7 Data collection

Data collection was done using semi-structured interviews following an interview guide (Appendix 6). The interviews were conducted and recorded at the participant's venue of choice. Open-ended questions and probing were applied to gain breadth and depth coverage of the topic. The interviews took place from the fourth of September 2020 up to 26 October 2020.

1.8.8 Data analysis

Thematic analysis using Braun and Clarke's (2006) six-phase guide, as described in Maguire and Delahunt (2017:3352) was used to analyse the data that was collected.

1.9 ETHICAL CONSIDERATIONS

Ethical approval (HREC Reference No: S20/03/085) was obtained from the Health Research Ethics Committee (HREC) of Stellenbosch University on 19 June 2020 (see Appendix 1). Approval to conduct the study was also received form the Namibian Ministry of Health and Social Services (MOHSS) Ethics Committee on 30 July 2020 (see Appendix 2). Permission to conduct the study was received from the chief medical officer of Katutura Hospital on 2 September 2020 (Appendix 3), and from the Khomas Regional Health Directorate on 4 September 2020 (Appendix 4). Following the submission of approval letters from the national, regional and hospital levels to the participating facilities, verbal permission was sought from the nurse managers of the facilities where data collection was done. Three fundamental principles guided the researcher: respect for

self-determination, right to protection from discomfort and harm, and the right to anonymity and confidentiality.

1.9.1 Right to self-determination

Right to self-determination requires that all persons who are involved in a study should be treated with respect (Republic of South Africa, 2015:14). It also requires that their choice to participate in a study or not to participate be respected without prejudice or penalty (Republic of South Africa, 2015:14). In this study, the researcher obtained consent from the NIMART-trained nurses who participated in the study. All information about the study was provided and explained to them. They were also informed of their right to choose not to participate in the study or withdraw from the study even if they had initially agreed, without any repercussions. For details of the consent form, see Appendix 5.

1.9.2 Right to confidentiality and anonymity

The right to confidentiality and anonymity refers to protecting the identity of the participants and ensuring that the information they disclose will not be shared with any unauthorised person or persons not involved in the study (Gray, Grove & Sutherland, 2017:286). Confidentiality was limited during the interviews as the researcher, or study assistant was in contact with the participants, and the interviews were recorded. However, besides the researcher, no one else will be able to identify the participant since pseudonyms were used. The recordings were labelled as digits such as "*Interview one"* without any name being linked to the record, and no names (facility or person) were mentioned in the recordings. Anonymity was maintained throughout the data management and data storage. Digital records were password protected, while consent forms and transcriptions were stored in separate lockable storage to which only the researcher and the supervisor had access to. Audio recordings were destroyed after completion of the transcription process.

1.9.3 Right to protection from discomfort and harm

Beneficence refers to doing good and actively promoting what is right (Moodley, 2017:71). In contrast, non-maleficence refers to actively avoiding actions that may cause harm to the study participants (Republic of South Africa, 2015:14). The participants were reminded of the right to withdraw from the study at any point during the interview. Arrangements for psychosocial support had been made with a regional social worker in case any of the participants became emotionally distressed during the interview. Refreshments, in the form of a cold or warm drink with a snack were provided to make the participants comfortable and as a token of appreciation for their time. The participants were allowed to choose the venue and time to be used for the interviews and were informed that they could refrain from questions they felt that would make them

uncomfortable. The participants incurred no transport costs since the researcher went to the participants' venue of choice.

1.10 OPERATIONAL DEFINITIONS

Registered Nurse: In this study, a registered nurse is a person registered in a category under section 20 to practise nursing or midwifery in terms of the Nursing Act 8 of 2004 of Namibia (Government of the Republic of Namibia, 2004:5), and has also undergone NIMART training and is certified to initiate and manage patients on ART.

Enrolled Nurse: In this study, an enrolled nurse is a person enrolled as such in terms of section 20, or who is regarded to be so employed in terms of section 64 of the Nursing Act 8 of 2004 of Namibia (Government of the Republic of Namibia, 2004:4), and has also undergone NIMART training and is certified to initiate and manage patients on ART.

NIMART-trained nurse: A registered nurse or enrolled nurse who has undergone in-service training and certification on the initiation of ART and management of patients receiving antiretroviral medication (Ford, 2013:5).

Paediatric ART patients: Children aged 0 to 14 years old who have been diagnosed with HIV and are enrolled and receiving care in ART clinics (UNICEF, 2020:np)**.** NIMART-trained nurses working for the context of this study also attended to adolescents (fourteen-eighteen years) living with HIV/AIDS.

Task shifting: A process of identifying and delegating specific tasks, where appropriate, to health care personnel with lesser qualifications or specialisation (WHO, 2008:7). In this study, task shifting refers to the delegation of ART initiation and provision of follow-up care and treatment services to people living with HIV/AIDS (PLWHA) by NIMART-trained nurses.

1.11 DURATION OF THE STUDY

Table 1.1: Duration of the study

Year	Month	Activity
2020	19 June	Approval from HREC
2020	30 July	MOHSS ethics committee approval
2020	4 September	Pilot interview
2020	September -October	Data collection and analysis
2020	November-December	Writing of thesis with continuous review by the supervisor of the study
2021	January	Technical and grammar editing
2021	March	Submission of the thesis

1.12 CHAPTER OUTLINE

Chapter 1: Foundation of the study

Chapter one introduces the study and presents the context thereof. After that, the problem statement, the aim of the study, research objectives, and the research significance were presented.

Chapter 2: Literature review

This chapter will focus on literature review on some of the variables that will be studied. This will include the personal challenges of the individual NIMART-trained nurses, interpersonal difficulties, institutional problems, community challenges and public policy challenges.

Chapter 3: Research methodology

This chapter presents the research methodology and research design. It gives a detailed explanation of the study population and sample, research instrument and data collection process. This chapter also describes how data analysis was carried out.

Chapter 4: Findings

This chapter presents and discusses the findings. The themes and subthemes that emerged from the study are discussed here.

Chapter 5: Discussion, conclusions and recommendations

This chapter will provide conclusions and propose recommendations based on the findings of this research.

1.13 SIGNIFICANCE OF THE STUDY

The findings of the study generated new knowledge and provided recommendations to the planners and implementers on how to improve the paediatric HIV programme to achieve improved health outcomes for children living with HIV.

1.14 CONCLUSION

HIV care for paediatric patients is a relatively new challenging role taken up by nurses because of task shifting in Namibia. Chapter one of this document proposed a study to explore experiences of NIMART- trained nurses regarding the provision of care to HIV positive paediatric patients by applying the ecological model as a framework for the study. The proposed research will result in a better understanding of the experiences of NIMART-trained nurses providing this care. Chapter two focuses on reviewed literature that provides an insight into the practice of NIMART-trained nurses regarding paediatric ART care.

CHAPTER 2:
LITERATURE REVIEW

2.1 INTRODUCTION

A literature review is an organised, written interpretation of studies reviewed by a researcher to discover the most recent and relevant information about a particular phenomenon, to identify what is known and not known about the subject (Polit & Beck, 2017:207). This section will focus on the review of previous studies related to this study, focusing on the experiences of nurses working with children living with HIV/AIDS. The literature review is organised around the conceptual framework (see section 1.8), which identifies factors affecting the provision of nursing care. These factors are discussed in the context of how they shaped nurses' experiences when providing care to HIV patients. The literature broadly looked at care to all paediatric patients and adults so that it can provide an insight into what is known and what is unknown in the field of nurse-provided paediatric ART care and will help in identifying some of the gaps.

2.2 ELECTING AND REVIEWING THE LITERATURE

Several databases were searched, including the PubMed (2010-2020), Google Scholar (2010-2020), CINAHL, EBSCOhost and Africa digital repository (SABINET). The keywords used included HIV/AIDS, NIMART, experiences of nurses, task shifting and paediatric HIV. The search was limited to articles, not more than ten years old. Fifty six articles were identified as being relevant to the current study and were used in the literature review. The literature review was carried out from February 2019 up to April 2021 when the final version of the thesis was submitted. To ensure a comprehensive inclusion of information, some textbooks that were published not more than five years ago were also consulted. The researcher could not find any published studies on the experiences of NIMART-trained nurses regarding paediatric ART in Namibia.

2.3 FINDINGS FROM THE LITERATURE

Findings from the literature will be presented under the following headings

- Individual factors
- Interpersonal factors
- Institutional factors
- Community factors
- Policy factors

2.4 INDIVIDUAL FACTORS

Individual factors are characteristics of an individual that make the individual unique and influence his/her behaviour (UNICEF, 2019:2). In this review, the individual factors that were reviewed include knowledge, attitude, skills and emotions and how they shaped experiences of nurses working with PLWA.

2.4.1 Knowledge and skills

Working with PLWHA require nurses to procure a new set of knowledge and skills to be able to manage the patients; hence it is a critical factor in the working experiences of nurses (Marranzano, Ragusa, Platania, Faro & Coniglio, 2013:1). In a study done to explore nurses' perceptions of NIMART implementation in South Africa, it was found that the nurses felt empowered by their expanded roles that NIMART introduced them to. In addition, nurses reported that the increased responsibilities encouraged creative, problem-solving and teamwork skills (Davies, Homfray & Venables, 2013:3). Subsequent studies supported the fact that in-service training had contributed to raising awareness and a level of knowledge about HIV/AIDS among nurses (Okpala, Uwak, Nwaneri, Onyiapat, Emesowum, *et al.*, 2017:4; Makhado & Davhana-Maselesele, 2016:5). With adequate knowledge on HIV/AIDS, nurses were satisfied and happy in the execution of their job and were more willing to care and treat the patients with HIV/AIDS than those with limited knowledge (Shabani, 2011:40). On the other hand, a study done in South Africa found that the nurses who had insufficient knowledge on HIV/AIDS were negatively affected and struggled to cope in caring for patients with HIV/AIDS (Mulaudzi, Pengpid & Peltzer, 2011:8).

In one study carried out in South Africa, Gauteng Province, the nurses described the training and mentoring experience as adequate, and the guidelines were considered helpful (Mophosho, 2015:36). Similarly, study findings from the Free State province of South Africa reported that NIMART was well supported and the clinical guidelines were suitable for the nurses (Georgeu *et al.*, 2012:8) . However, some studies showed that nurses regarded the training as insufficient and not standardised (Mabelane, Marincowitz, Ogunbanjo, & Govender, 2016:11; Mboweni & Makhado, 2020:2). One study from Nigeria further indicated that there was limited access to training and mentoring, which reduced the level of satisfaction of the nurses (Iwu & Holzemer, 2017:396). The insufficient levels of knowledge among the nurses had a negative influence on the implementation of the NIMART and ultimately to the management of patients living with HIV (Mboweni & Makhado, 2020:10).

The studies above did not distinguish between working with paediatric patients and working with adult patients. It is important to look specifically at how the knowledge level regarding paediatric care influences the experiences of nurses.

In paediatric HIV, Rujumba, Mbasaalaki-Mwaka and Ndeezi (2010:4) conducted a descriptive study to identify the challenges faced by health workers in providing counselling services to children living with HIV/AIDS in Uganda. The findings indicated that 24% lacked knowledge or had inadequate knowledge about paediatric HIV care (Rujumba *et al*., 2010:4). Similarly, Williams *et al*. (2018:5) conducted a descriptive study in Nelson Mandela Bay health district in South Africa to identify the challenges the health care workers (HCW) faced providing paediatric HIV care. The findings indicated that the HCW lacked knowledge in terms of interpreting the side effects of the antiretroviral medication, and distinguishing between side effects of antiretroviral medicines and the results of HIV disease (Williams *et al.*, 2018:5). The lack of adequate knowledge can be explained by studies conducted in line with NIMART training.

Inconsistencies in training have been raised as a challenge to successful NIMART practice. In a study that was conducted to identify the challenges influencing NIMART training and implementation in Ngaka Modiri Molema District, North West Province, Mboweni and Makhado (2020:5-6) found that inconsistencies related to lack of a standard NIMART training curriculum, duration of the training, failure to incorporate theory into practice, and inadequate facilitation skills which led to limited or inadequate knowledge among the NIMART trained nurses. Davies *et al.*, (2013:4) also found that haphazard coordination of NIMART training and inappropriate staff selection to be factors that negatively influenced NIMART training. As a result, some nurses reported to have provided ART services, but they were concerned, because they were not sure of what they were doing (Davies *et al.*, 2013:5).

2.4.2 Attitude

Attitude is a positive or negative feeling or emotion toward something and can affect the behaviour of an individual towards a specific subject (Okpala *et al.*, 2017:548). Furthermore, Okpala *et al.* (2017:548) expound that attitude is gained through experience, and new experiences and information may change it. Studies on nurses' attitudes towards people living with PLWHA showed mixed results; some had negative attitudes, while some had positive attitudes. A study in Lao People's Democratic Republic (PDR) demonstrated that half of the nurses stigmatised PLWHA and this negative attitude was associated with a low level of knowledge and experience resulting in missed opportunities to help patients (Vorasane, Jimba, Kikuchi, Yasuoka &Nanishi *et al.*, 2017:6). These findings are supported by one study in Russia among nursing students where nursing students had a moderate level of knowledge and negative attitudes toward people living with HIV and AIDS (Suominen, Laakkonen, Lioznov, Polukova & Nikolaenko *et al.*, 2015:4). In this study, almost 78% of the students felt that they should have the right to refuse to deal with persons with HIV or AIDS and that about 40% would outrightly refuse to care for PLWHA (Suominen *et al.*, 2015:6). Although this study was done with hypothetical patients, it would be

essential to determine the real attitudes of the nurses who deal with actual HIV-positive patients, and more specifically**,** children living with HIV. On the other hand, a study to determine nurses' knowledge and attitude to the care of patients with HIV/AIDS in the south-east of Nigeria, Okpala *et al.* (2017:551) found that 94.6% of the nurses had positive attitudes towards the care of PLWHA.

Lack of personal confidence is a factor that was identified as likely to contribute to the negative attitude of nurses regarding taking care of PLWHA (Wada, Smith & Ishimaru, 2016:3). In a study to identify the challenges influencing NIMART training and implementation in Ngaka Modiri Molema District, North West Province of South Africa, Mboweni and Makhado (2020:7) found that nurses lacked confidence managing children living with HIV even after undergoing NIMART training. The nurses in this study reported that the children presented late when they were very sick and with complications and that during training, scenarios are mostly used when it comes to paediatric ART (Mboweni & Makhado, 2020:7). Also, during the completion of the portfolio of evidence following NIMART training, there were very few paediatric cases that were managed for the certification process (Mboweni & Makhado, 2020:7). Similarly, in Nelson Mandela Bay health district of South Africa, Williams *et al.* (2018:7) found that lack of confidence in paediatric HIV led to the failure of the HCW to initiate ART in paediatric clients. The nurses in this study attributed the failure to initiate ART on the children as advanced HIV disease among some of the paediatric clients and fear of making errors in paediatric prescriptions.

2.4.3 Skills

In Dar es Salaam Tanzania, Sariah, Rugemalila, Somba, Minja, Makachulo *et al.*, (2016:4) conducted a study to determine the experiences of HCW regarding disclosure of HIV-positive status to an infected child. The findings indicated that the HCW felt they lacked adequate skills in counselling and disclosure to the children and their caregivers, compared to performing similar services to the adults (Sariah *et al.*, 2016:6). The HCW attributed the inadequate skills to more theoretical training than practical training in the HIV disclosure training they received (Sariah *et al.*, 2016:6). Likewise, Rujumba *et al.* (2010:4) found that nurses involved in the delivery of HIV counselling and testing services for children and their caregivers lacked skills in paediatric counselling, dealing with difficult caretakers, and HIV status disclosure to children. As a result, the nurses felt that their ability to provide paediatric ART services was compromised leading to a sense of hopelessness and uncertainty in what they were doing (Rujumba *et al.*, 2010:6).

In Uganda, Rujumba *et al.* (2010:6) found that some of the nurses providing HIV/AIDS- care services to the paediatric clients lacked skills in performing a phlebotomy on children. Instead, they opted to refer these paediatric clients to the laboratory for the phlebotomy. Similarly, Williams *et al.* (2018:6) found that nurses found it challenging to draw blood from children living with

HIV/AIDS, and this sometimes led to delays in diagnosis. Another study in Kenya revealed that nurses experienced inadequate prescription skills, with only 37% of those trained feeling competent in the field. Still, only 27% were practising initiation of first-line paediatric ART (Smith, Odera, Chege, Muigai, Patnaik *et al.*, 2016:325). Also, Alharbi, Almuzini and Aljohani (2018:1787) found that nurses who felt that they lacked skills to perform specific procedures chose to stay away from work on days that they were supposed to perform those particular tasks.

2.4.4 Emotions

Nurses are generally expected to show compassion in the care they provide to patients. Emotions such as anxiety, fear, stress, relief and anger were found to be shared among medical and nursing students (Weurlander, Lönn, Seeberger, Broberger & Hult, 2018:77-79) Therefore, emotional competence is an essential aspect of caring for children living with HIV (Wada *et al.*, 2016:2-3). Tazakori, Moshfeghi and Karimollahi (2017:2) argue that nurses working with HIV-positive patients experienced many psychological and emotional challenges.

A study carried out in South Africa showed that the registered nurses had both positive and negative experiences of caring for children living with HIVAIDS (Enerholm & Fagrell, 2012:10). In this study, the nurses demonstrated skills of being mentally healthy by being supportive, hopeful and non-judgemental (Enerholm & Fagrell, 2012:10-11), but also showing signs of feeling powerless, helpless and stressed (Enerholm & Fagrell, 2012:12-13) as they delivered care to the children. Similarly, a study conducted in Iran indicated that nurses had both positive and negative emotions associated with the care of PLWHA, showing emotions such as fear and curiosity (Tazakori *et al.*, 2017:2). In a study done in Limpopo Province of South Africa, nurses experienced burn-out and emotional exhaustion in dealing with HIV/AIDS-related work (Makhado & Davhana-Maselesele, 2016:4). Besides, some of the tasks that NIMART-trained nurses perform may lead to emotional feelings such as sympathy and fear that something may go wrong. Examples of such tasks include performing phlebotomy, especially on children, initiating ART, diagnosing opportunistic infections, dispensing medication and nursing paediatric clients with advanced HIV disease (Williams *et al.*, 2018:6).

In Vhembe district of Limpopo Province in South Africa, a study to explore and describe the experiences of nurses caring for PLWHA found that most of the participants lost morale and felt depressed when they could not provide further help (Ramathuba & Davhana-Maselesele, 2011). In this study the nurses explained that they experienced loss of morale and depression especially when the death of a patient they had been caring for was inevitable (Ramathuba & Davhana-Maselesele, 2011:7). The same study found that most of the health workers were also emotionally drained and overwhelmed and were unable to deal with their emotional reactions (Ramathuba & Davhana-Maselesele, 2011:7).

Anxiety about the risk of acquiring HIV has also been found to influence the reluctance of nurses to provide care to PLWHA (Wada *et al.*, 2016). In a study to explore the clinical learning experience of undergraduate nursing students in Malawi, Msiska, Smith, Fawcett and Nyasulu (2014:1249-1250) found that novice nursing students feared contagion after nursing patients with HIV/AIDS and this led to avoidance of such patients in the clinical areas. However, the same study indicated that the students became less fearful and gained confidence as their knowledge on HIV/AIDS improved and cleared some of their misconceptions, or for some of them, after having provided care to relatives living with HIV/AIDS (Msiska *et al.*, 2014:1250).

There is a need to provide emotional support services to nurses and other HCW providing care to PLWHA to retain them in service and improve on the declining quality of care to PLWHA (Shipanga, Augustyn & Ashipala, 2017:103). In their study to describe the care and support services available for nurses who care for PLWHA at the Intermediate Hospital, Oshakati, Shipanga *et al.* (2017:4) found that 75% of the nurses had experienced emotional stress while caring for patients with HIV/AIDS. At the same time the study found that almost 58% of the nurses who participated, indicated that through counselling, they were helped to cope with building the self-confidence required to care for patients with HIV/AIDS (Shipanga *et al.*, 2017:106). However, this was a quantitative descriptive study, and it did not focus on the more profound experiences of the nurses providing this care, and neither did it differentiate between adult and paediatric HIV care. It would therefore, be valuable to explore the emotional experiences of the nurse who provides paediatric HIV care specifically in the Windhoek District.

2.5 INTERPERSONAL FACTORS

Interpersonal factors relate to formal and informal social interactions and social support systems that influence individual behaviour (UNICEF, 2019:2). This section will discuss the interpersonal factors, in particular the relationships of NIMART-trained nurses with other nurses, family, caregivers and children living with HIV, and how these interactions impact on the nurses' work performance.

2.5.1 Colleagues

Health care provision requires teamwork; hence nurses working with HIV patients work with colleagues, some senior and some junior to them, as well as other professionals. How the team members relate to one another influences their work experiences. In a study to identify and describe characteristics of conflict between nurses, Wright, Mohr and Sinclair (2014:5) found that nurse-nurse conflicts (37%) were the most commonly reported of all conflicts compared to conflicts with patients/families (34%), nurse managers (14%), and physicians (14%). Williams *et al.* (2018:4) found that lack of appreciation and support from colleagues caused conflict within the

work environment in Nelson Mandela Bay health district. Nurses expressed lack of fairness in terms of work distribution, refusal of some of the HCW to perform some duties, and failure of the other staff to help whenever there is an increase in workload in one area of the clinic (Williams *et al.*, 2018:4).

2.5.2 Family

Many people who are employed have challenges of coping with work and family roles (Nohe, Meier, Sonntag, & Michel, 2015:1). Family-work conflicts are types of inter-role conflicts that occur when the energy, time, or behavioural demands of the work role conflicts with family or personal life roles (Nohe *et al.*, 2015:1). In the same way, nurses also have both family and work responsibilities and hope to balance these two aspects of their lives (Wang & Tsai, 2014:200). A study to examine the relationship between family-work conflict and job performance in five hospitals in Taiwan, Wang and Tsai (2014:204) found that family-work conflict had a significantly negative impact on job performance, resulting in declining job performance. They also found that when staff encounter the moderating effect of family on work, they tend to have unfavourable perceptions, which impact on the professional self or job performance (Wang & Tsai, 2014:204). This study was conducted in hospital settings, and therefore does not provide specific information related to the family-work conflict concerning HIV/AIDS in clinic settings.

In Nigeria, Adisa, Mordi and Mordi (2014:23) conducted a study to determine the challenges and realities of work-family balance among Nigerian female doctors and nurses. The findings indicated that the stress of immediate and extended family issues had a tremendous debilitating effect on their general work-life (Adisa *et al.*, 2014:31). In this study, the participants indicated that they invested a lot of energy and time in family-related duties which in turn affected their performance and concentration at work (Adisa *et al.*, 2014:32). This study was conducted among female doctors and nurses, leaving out their male counterparts. It was also done in hospital settings, and it is unclear whether the views of nurses providing paediatric ART care were included.

Family matters have also been shown to cause absenteeism among nurses. In a study to determine the reason for absenteeism among nursing staff in a maternity and child hospital in Egypt, Alharbi *et al.*, (2018:1787) found that social reasons, difficulty in getting permission for time off during the shift, and failure to take action for repeated absences were the reasons for absenteeism among the nurses. Social problems contributed to the highest score (77%) for the reasons for absenteeism among the nurses (Alharbi *et al.*, 2018:1787). Similarly in one general hospital in Durban, South Africa, Mudaly and Nkosi (2015:626) found 83% of the nurses reported that they took time off to attend to family issues especially where there was child care, elderly care or single parenthood involved.

2.5.3 Children living with HIV/AIDS

The success of the paediatric NIMART-programme depends on a good working relationship between the nurses and the patients and or caregivers. Studies have shown how this relationship influences key programme indicators such as adherence to treatment and follow-up visits, ultimately affecting nurses' job performance and satisfaction. The study of Genberg, Wachira, Kafu, Wilson and Koech *et al.* (2019:6) that was conducted in Kenya showed that nurses experienced uncooperativeness from patients resulting in poor outcomes, and the nurses felt they lacked control of the situation. Among children living with HIV/AIDS, the situation is more critical as revealed in a study by Williams *et al.* (2018:7) in which some children refused to take their antiretroviral medication as required. The paediatric patients proved a challenge to provide counselling to, since it took more time and they (nurses) felt unsure of whether the children understood the information they were being given (Kranzer, Meghji, Bandason, Dauya, Mungofa *et al.*, 2014:4). Similarly, Rujumba *et al.*, (2010:4) found that the HCW had challenges counselling children since they (children) were unable to express themselves and had to spend more time with them during the counselling process, and this added to the increased workload in the health facilities**.**

Coming to the disclosure of the status of the children, nurses experienced challenges (Ndacayisaba, 2017:37). According to Makworo and Odero (2019:1-2), HIV disclosure to children under 12 years old can be complicated and factors such as stigma, social support concerns, family relations, parenting skills and emotional maturity should be considered. Nurses experienced communication challenges managing children who were not aware of the condition that was being managed (Makworo & Odero 2019:3). Ndacayisaba (2017:37) also found that children diagnosed with HIV did not understand the disease and its management compared to children with other less stigmatised chronic conditions like diabetes. Due to the lack of understanding of their condition and its management, children living with HIV/AIDS ask why they are taking treatment and when they will stop (Ndacayisaba, 2017:37).

2.5.4 Caregivers

Nurses rely on caregivers to support the children in the management of HIV/AIDS services; hence this also affects the nurses' experiences. Adherence is the essential requirement to ensure that the goal of viral suppression is achieved (Republic of Namibia, 2019:33). In several studies, lack of support from family or caregivers were found to contribute to poor adherence among PLWHA, more so in children (Rujumba *et al.*, 2010:5-6; Williams *et al.*, 2018:7; Wasti, Simkhada, Randall, Freeman & van Teijlingen, *et al.*, 2012:5). Some biological parents were found to deny being the birth parents of the children to avoid being known as being HIV positive as well. At the same time, some collected their own medication and left the children's medication in the clinics for collection

on a different day (Williams *et al.*, 2018:7). A study in Canada demonstrated that nurses faced challenges such as feelings of powerlessness when there was non-adherence to treatment by people living with HIV/AIDS (Rouleau, Richard, Côté, Gagnon & Pelletier, 2019:31).

According to Rujumba *et al.* (2010:4) nurses reported that some caretakers were either overprotective of their children in that they were unwilling to have the status of the children revealed to them or were fearful that the children would blame them for infecting them. Similarly, Williams *et al.* (2018:10) found that some caregivers were reluctant to have the status of their children disclosed to them due to fear of stigma. In Dar es Salaam, Tanzania, Sariah *et al.*, (2016:7) reported that nurses felt that caregivers were hesitant to disclose HIV status to children because of fear that the child would reveal the information to other people. In addition, there was reluctance of caregivers to disclose the HIV status to their children due to the fear that the child might not react well leading to poor performance in their studies (Sariah *et al.*, 2016:7). The nurses also reported that some parents declined disclosure because they felt that the children were too young to understand or handle such information. In contrast, others opted to lie about the diagnosis to justify the need for daily medication (Sariah *et al.*, 2016:7). Some caregivers misinterpreted information from the healthcare providers which meant that their children were no longer HIV infected and therefore, did not need medication and go for follow-up treatment anymore (Wachira, Middlestadt, Vreeman, & Braitstein, 2012:25).

2.6 INSTITUTIONAL FACTORS

Institutional factors refer to operational attributes, processes or conditions within an organization that affect the running of the organisation (Valaitis, Meagher-Stewart, Martin-Misener, Wong, MacDonald *et al.*, 2018:2). This may include the institution's structure and philosophy, team resources, administrative support, as well as communication and coordination mechanisms (Valaitis *et al.*, 2018:2). In this review, institutional factors that will be reviewed include staffing, workload, resources and supervision.

2.6.1 Workload and Staffing

There is a general shortage of human resource for health globally, and task sharing has expanded the workload for nurses. Evidence showed that staff shortages are a significant barrier to the adequate performance of NIMART-trained nurses (Mabelane *et al.*, 2016:10; Mboweni & Makhado, 2020:7; Cameron, *et al.*, 2012:3). The increase in workload is also due to the introduction of new tasks to the ones previously being done by the same number of HCW (Rujumba *et al.*, 2010:7). Due to the increase in workload, Mametja (2013: 38) found that nurses agreed that there was a compromise in the quality of care (Mametja, 2013). Williams *et al.* (2018: 3) reported similar findings, whereby it was indicated that staff shortages led to the deterioration

of quality service and productivity among the HCW. Furthermore, in the PHC facilities of Nelson Mandela Bay health district, Williams *et al.*, (2018:3) found that staff shortages contributed to the failure of the nurses to implement NIMART, since they were allocated other nursing duties to cover staff shortages. Ultimately, all this increased workload resulted in poor quality of care. In Mulango hospital, Uganda increase in workload was found to cause stress to the nurses and as a result they ended up being less productive (Erkki & Hedlund, 2013:36).

In hospitals, patients admitted due to HIV/AIDS related conditions require prolonged hospitalisation also add to the workload in units that are already experiencing a shortage of nurses (Mametja, 2013:39). Prolonged admissions of patients with advanced HIV disease were reported to range between weeks and months, depending on the comorbidities the patients had, which led to increased workloads of constant observation and management (Mametja, 2013:38). Similarly, Bodilenyane and Motshegwa (2012:67) found that the increase in workload due to HIV/AIDS led to less job satisfaction among the nurses. This is because patients admitted due to HIV/AIDS related conditions require more specialised care and more prolonged treatment, which can be a burden to the nurses (Bodilenyane & Motshegwa, 2012:67). Also, when the healthcare sector is overwhelmed with additional responsibilities due to HIV/AIDS, Bodilenyane and Motshegwa (2012:67) found that some nurses end up quitting their jobs and seeking employment elsewhere. Their positions remained vacant for a long time resulting in an increase in workload for the remaining few nurses. Ngwarati (2015:30) also found that high turnover of NIMART-trained nurses for greener pastures or inter-departmental transfers also contributed to staff shortages and increased workload for the remaining staff.

2.6.2 Resources

The availability or lack of resources affects the experiences of nurses rendering care to children living with HIV/AIDS. A qualitative study conducted in South Africa, on experiences of enrolled nurses, showed that lack of resources impacted negatively on the nurses caring for PLWHA (Mabelane *et al.*, 2016:2). Apart from the critical shortage of human resources that is faced by many countries burdened with the HIV pandemic, lack of resources in terms of drugs, stationery, telephones, equipment and working space are some of the challenges that the HCW in decentralised systems of ART- care points experience (Mabelane *et al.*, 2016:2; Cameron *et al.*, 2012:99; Williams *et al.*, 2018:5)

In the Limpopo Province of South Africa, Mabelane *et al.* (2016:11) found that shortage of drugs was a common challenge at all PHC facilities. In this study, nurses expressed the problem of having to turn away patients and having them return for their medication on another day (Mabelane *et al.*, 2016:11). Sometimes patients had medication dispensed for a shorter period and had to return frequently to the clinic to collect more medication, usually at their own expense

(Mabelane *et al.*, 2016:11). Rujumba *et al.* (2010:6) also found that some facilities in Kampala and Kabarole districts in Uganda lacked paediatric friendly formulations which caused adherence challenges among the paediatric clients.

Infrastructure was insufficient in the PHC facilities, even before decentralisation of ART services began (Davies et al., 2013:6). Some of the facilities lacked enough consultation rooms, leading to shifting some services to other places for ART services to be provided (Mabelane *et al.*, 2016:11). In some instances, two HCW are forced to share a room while providing services to two different clients (Williams *et al.*, 2018:5; Crowley & Stellenberg, 2014:4). Some of the PHC facilities are exceedingly small to accommodate the increasing number of patients demanding care, leading to overcrowding (Mboweni & Makhado, 2020:8). Inadequate space at the clinics also hinders comprehensive assessment of children in the clinics as there is lack of enough play or interaction space for the proper evaluation in a natural setting (Rujumba *et al.*, 2010:6). Such infrastructural constraints were found to demoralise nurses and compromise the health of staff and other patients (Davies *et al.*, 2013:6). Apart from that, poor infrastructure also undermined NIMART-trained nurses' capacities to safeguard patient confidentiality during consultations (Davies *et al.*, 2013:6).

Lack of necessary equipment such as otoscopes, thermometers, and blood pressure monitors has also been cited as a challenge in the provision of ART services (Crowley & Stellenberg, 2014:5). Williams *et al.* (2018:5) also found that PHC facilities lacked essential equipment like functional weighing scales and oxygen. In paediatric ART, medication regimens and dosages are adjusted based on the age and weight of the child, thereby making a weighing scale a mandatory requirement in a paediatric HIV clinic setting (Republic of Namibia, 2019:28).

2.6.3 Supervision and mentoring

Nurses have cited ineffective supervision and management as a challenge towards the provision of ART services (Mboweni & Makhado, 2020:8; Williams *et al.*, 2018:4; Lerotholi, 2011:46). Therefore, efforts must be put in place to equip nurse managers with practical leadership skills and tools that would help them to build an effective leadership style appropriate for their contextual environments (Chipeta, Bradley, Chimwaza-Manda, & McAuliffe, 2016:5).

In Vhembe district of Limpopo Province of South Africa, nurses caring for PLWHA indicated that lack of support from the management caused a challenge in the way they delivered services to their patients (Ramathuba & Davhana-Maselesele, 2011:9). In this study, the nurses reported lack of support in terms of systems to address stress and emotional burnout, staffing and workload (Ramathuba & Davhana-Maselesele, 2011:10). Similarly, Shipanga *et al*., 2017:106) found that 41.7% of the nurses providing care to PLWHA felt that the management did not appreciate their

work. Besides, in a study in the Limpopo Province of South Africa, the nurses expressed feelings of lack of appreciation from the management, and unavailability of a forum for a debriefing following emotional aspects of caring for PLWHA (Mabelane, *et al.*, 2016:7).

Other studies pointed out that inadequate supervision was linked to the poor health care system. One study carried out in Kenya found that nurses felt weak links between them and the management which left them in a powerless position to make decisions about clinic operations (Genberg *et al.*, 2019:6). Similarly, in Nigeria the nurses who participated in the study pointed out systematic challenges as weakening the managerial support for the nurses working with PLWHA (Iwu & Holzemer, 2017:2). Genberg *et al.* (2019:7) further revealed that the healthcare system failed to account for all the work nurses do, leading to nurses not fully appreciating their worth, and a feeling of being less valued. Lerotholi (2011:46) also found that nurses felt that their efforts were not being appreciated by the management, with no support in terms of additional staff, despite the increase in workload. As a result, the nurses felt stressed and frustrated in the execution of their duties (Lerotholi, 2011:46).

In 2005, the WHO recommended clinical mentoring as a way of addressing the need for ongoing professional development in the decentralized HIV-care delivery system, with the purpose of ensuring sustainable high-quality clinical HIV care outcomes (WHO, 2006:9). Clinical mentorship is a system of practical onsite training and consultation that contributes to ongoing professional development to yield sustainable high-quality clinical care outcomes (WHO, 2006:8). An increase in clinical knowledge and confidence allowing for initiation and maintenance of antiretroviral therapy, increased clinic efficiency, improved patient systems in terms of documentation and supplies and increased access to ART have been reported as results of effective mentorship (Chien, Phiri, Schooley, Chivwala, & Hamilton *et al.*, 2016::5-7). However, inadequate clinical mentoring, lack of in-service training, and different mentoring strategies have been reported to contribute to failure to practise NIMART, poor application of theory to practice, and low quality HIV services (Cameron *et al.*, 2012:3; Williams *et al.*, 2018:6; Mboweni & Makhado, 2020:22).

2.7 COMMUNITY FACTORS

In the delivery of care to PLWHA, there are community-related factors that impact on nurses' working experiences and these are cultural practices, distance patients travel to the health facility and the resources at the disposal of the patients. These factors impact on the patients' ability to attend to appointments as scheduled and their adherence to treatment. Adherence to treatment and meeting appointments are vital for the nurses; hence it influences their experiences of working with PLWHA.

2.7.1 Cultural beliefs and practices

Culture is defined as a set of patterns of knowledge, beliefs, and behaviour that constitute one's way of life (Cormack, Mazanec & Panke, 2019:469). It determines an individual's experiences and responses to specific circumstances, including ill-health treatment and death (Cormack *et al.*, 2019:469). Every individual, nurse or patient, has different cultural practices, perceptions and beliefs about HIV/AIDS, which ultimately influences their experiences when dealing with HIV/AIDS (Lerotholi, 2011:53). Studies have shown that culture and religious beliefs can positively or negatively affect nurses' experience of providing care to PLWHA.

In a study from Puerto Rico, religion was the cause of nurses blaming PLWHA for their condition, and this negatively affected the service they rendered (Reyes-Estrada, Varas-Díaz, Parker, Padilla & Rodriguez-Madera, 2018:7). However, other nurses used religion as a source of compassion and became supportive and improved the quality of service they rendered (Reyes-Estrada *et al.*, 2018:7). In Iran Tazakori *et al.*,(2017:2) also found that nurses used religious beliefs as a protective behaviour in caring for PLWHA.

Among some PLWHA, some cultural practices have been known to influence patient compliance to ART (Ashby, Asante, Aikins, Lamptey, & Atuahene, 2011:30-31). In a study to identify the factors that contributed to ART defaulting in eastern Ghana, the HCW reported that some patients defaulted their ART due to certain beliefs in their traditions (Ashby *et al.*, 2011). In a different study that investigated the prevalence of use of traditional medicines amongst PLWHA on ART in Kano, Northwest Nigeria, Tamuno (2011:154) found that 27.5% of the participants had used traditional medicine before their commencement of the antiretroviral therapy. In addition Tamuno, (2011:154) also found that 4.3% of the study participants were using conventional medicine and antiretroviral medications concurrently.

In South Africa, the HCW reported that some patients participated in religious activities such as prayers that discouraged them from using antiretroviral therapy (Coetzee, Kagee & Vermeulen, 2011:149). Similarly, Wachira *et al.* (2012:26), found that religious practices like prayers were offered whenever the infected child fell ill, and this was accompanied by refraining from any form of treatment to obtain complete healing. Patients who have an erroneous view of the nature of their disease may hold the inaccurate beliefs that their status may reverse from positive to negative (Coetzee *et al.*, 2011:150). NIMART-trained nurses should be sensitive to these practices and improve their skills in handling these matters in order to improve adherence to ART for PLWHA.

2.7.2 Distance and transport

In the Western Cape, a qualitative study found that lack of transport related to poverty contributed to non-adherence to ART (Mukumbang *et al.*, 2017:7). Similarly, in the Eastern Province of Ghana, poverty was found to be the highest contributor to patients defaulting their ART with patients reporting lack of transport to the facilities and lack of money to buy food which they need to take with their ART medication (Ashby *et al.*, 2011:36). Ashby *et al.*, (2011:23) also found that 43.5% of study participants who had to pay for transport to the clinic had at one time lacked money for transportation and as a result had to miss their appointment at the ART clinic.

In Nelson Mandela Bay health district in South Africa, running out of medication and distance to the health facilities were also raised by the HCW as some of the contributing factors to poor adherence among paediatric ART clients (Williams *et al.*, 2018:8). Furthermore, in Nepal, Wasti *et al.* (2012:6) found that patients seeking ART services often did not have enough money to go to the health facility to get their repeat prescriptions. In one Infectious Disease Clinic (IDC) in South Africa, the HCW reported that apart from lack of transport money, the public transport vehicles did not pass directly near the clinics (Coetzee *et al.*, 2011:148). As a result, patients had to walk long distances to the clinics while weak or when accompanied by smaller children (Coetzee *et al*., 2011:148).

The studies above had a focus on factors contributing to poor adherence, hence did not discuss the experiences of nurses. There is a need to explore how nurses work experiences are affected by patients who miss their follow-up appointments and how they respond to these challenges. For example, in the study by Ashby *et al.*, (2011:23), the time between follow-up visits prescribed by nurses influenced attendance rates, with more misses in patients who were given monthly prescriptions as compared to those given two monthly medicines.

2.7.3 Availability of basic needs and resources

Community-related resources have been identified as a contributing factor to patients' non-adherence to antiretroviral medication. One qualitative study in Ethiopia revealed that economic factors and weak social structures lead to poor adherence (Bezabhe, Chalmers, Bereznicki, Peterson & Bimirew *et al.*, 2014:4) . Weiser, Tsai, Gupta, Frongillo, Kawuma *et al.* (2012:6) also found that food insecurity was associated with weak patterns of healthcare utilisation as little money is faced with competing demands between food needs and healthcare needs. Also, the findings of Wachira *et al.* (2012:23) suggested that lack of finances to meet the basic needs of families such as food have led to caregivers failing to take their children for their follow-up in the clinics. While these findings relate to the patients' experiences, studies are showing that nurses working with HIV/AIDS patients are affected by the plight of their patients.

A qualitative study done in Uganda showed that the situation of the patients shaped nurses' experiences and they sought to understand their patients' condition, in particular issues of poverty and family support (Erkki & Hedlund, 2013:11). In Kenya Genberg *et al.*, (2019:6) found that nurses who were concerned about the socio-economic conditions of their patients needed extra support to be able to sufficiently help their patients (Genberg *et al.*, 2019:6). The nurses in this study highlighted that they were frustrated by failing to fulfil their patients' healthcare needs because they could not deal with their social and structural determinants of health including financial assistance (Genberg *et al.*, 2019:5).

2.8 POLICY RELATED FACTORS

Policy factors refer to laws and procedures that regulate or support health actions in the provision and practices for disease prevention and health promotion (Mcleroy et al., 1988:355). In this section the policies that will be discussed include decentralisation and task shifting.

2.8.1 International health policies

The concept of task shifting became more common as the demand for the provision of specialised HIV/AIDS care expanded. In an attempt to strengthen the healthcare workforce and simultaneously increase access to the much-needed HIV care, the WHO first recommended a three-dimensional strategy for the human resources crisis in the context of HIV/AIDS (WHO, 2008:6). The strategy focused on the treatment of HCW infected or affected by HIV, pre-service and in-service training of HCW, and retaining them in the workforce (WHO, 2008:7). The training was meant to allow the sharing of tasks among HCW, doctors and nurses in particular, as well as the decentralisation of health services. Decentralisation of health services is a strategy employed as part of chronic care in resource-limited settings (Houben, Van Boeckel, Mwinuka, Mzumara, Branson *et al.*, 2012:1). The aim of decentralised health services was to reduce the distance between patient and clinic and thereby reduce the time and costs involved in travelling to the health facilities (Houben *et al.*, 2012:1).

The training concept also focused on identifying and reallocating tasks that can be performed by HCW with lesser qualifications, hence the term task shifting (WHO, 2008:7). Task shifting refers to a process of shifting specific tasks to HCW with shorter and lesser qualifications (WHO, 2008:7). In their recommendation number 19, nurses and midwives were identified as a cadre of HCW who could undertake a range of clinical HIV services (WHO, 2008:44). The tasks that were shifted are commonly practised by nurses under the term Nurse Initiated and Managed ART (NIMART). Some of the tasks that WHO recommended for shifting to nurses include counselling and testing, determining eligibility for ART, initiating first-line ART, screening and treating some

opportunistic infections, prescribing appropriate prophylaxis and requesting baseline and subsequent blood tests related to HIV treatment (WHO, 2008:52-63).

In a study done to explore nurse and facility and programme manager perceptions of NIMART implementation in Gauteng, South Africa, the study participants felt empowered by their expanded roles. They also felt that the increased responsibilities associated with NIMART implementation encouraged creative problem-solving skills and teamwork (Davies *et al.*, 2013:3). There was also an increased level of job satisfaction among the nurses. They also reported increased good nurse-patient relationship due to the insight that ART patients have over their illness (Davies et al., 2013:4).

In a different study done in Region F of Johannesburg in South Africa, to determine the statistical significance of the impact of NIMART rollout on the referral hospital initiations and region monthly initiations revealed that decentralisation of ART initiation by professional nurses was shown to increase ART uptake and reduce workload at referral facilities (Nyasulu, Muchiri, Mazwi, & Ratshefola , 2013:234).This enabled the physicians in the referral hospitals to concentrate on complicated cases. The findings in these studies support the purpose of task shifting which is to increase access to antiretroviral therapy for those who need it.

2.8.2 National and local policies

Namibia has a critical shortage of HCW, with the lack of doctors and pharmacists being more severe than nurses (Republic of Nambia, 2017:51). McQuide, Kolehmainen-Aitken and Forster (2013:5) applied the WHO Workload Indicators of Staffing Need methodology in Namibia. The findings indicated that hospitals only had one-third of the doctors that they required based on workload. and health workers were generally inequitably distributed among regions (McQuide *et al*., 2013:5). Therefore, decentralisation and task shifting were adopted as a means to increase access to HIV care, and to reduce the workload in the hospital settings.

The Namibian Ministry of Health and Social Services (MOHSS) developed and updated its guidelines on the management of ART based on emerging evidence and new guidance from WHO (Republic of Health, 2019:iii). Therefore, at the global level, the Namibian National Strategic Framework is aligned with the Sustainable Development Goals (SDGs) and in particular Goal 3 (Republic of Health, 2017:1). This goal aims at ensuring healthy lives and promoting wellbeing for all ages, and in particular, the 90-90-90 fast track strategy to end the AIDS epidemic in Namibia (Republic of Namibia, 2017:1). The 90-90-90 strategy is a global HIV/AIDS treatment plan that aims at ensuring that by the year 2020, 90% of individuals who have HIV/AIDS know their status, 90% of those who are HIV positive receive ART, and 90% of those on ART are virally suppressed (UNAIDS, 2014:1). When it comes to paediatrics, the Start Free, Stay Free, AIDS free strategy

for the elimination of paediatric HIV/AIDS aims to provide antiretroviral therapy to a target of 1.4 million children (aged 0–14 years) globally by the year 2020 so as to reduce the chances of HIV disease progression to AIDS (UNAIDS, 2020:9).

Before the full-scale implementation of task shifting and decentralisation in Namibia, a small task-shifting project was undertaken by the Ministry of Health and Social Services to assess the viability of task shifting in Namibia. Using a mixed-method approach, nurses, doctors, and patients were interviewed, followed by observation of patientcare delivery services by nurses and doctors. This mixed-method evaluation of task shifting revealed that doctors perceived nurse-led initiation and monitoring of ART patients as feasible and acceptable in the Namibian context (O'Malley *et al.*, 2014:10). Although this study gave the MOHSS motivation to implement task shifting in the ART sector, it does not describe any encounters with nurses providing care to paediatric clients.

Many studies have been done to explore the experiences of nurses working with HIV patients. This literature reviewed above highlighted the factors that shaped the experiences of nurses when working with these patients.

2.9 CONCLUSION

Literature based on both quantitative and qualitative study designs conducted in different countries suggests that nurse prescribers have different experiences when implementing nurse-led initiation and management of ART in general and paediatric ART in particular. The experience relates to understaffing, work overload, lack of resources, patient and caregiver related challenges, managerial challenges and apprehension working with paediatric clients with HIV. There was, however, the scarcity of literature on paediatric ART in the Namibian setting, especially about the experiences of nurses managing these clients. Exploring this gap will provide evidence for improving HIV care and treatment outcomes among children in Namibia. Chapter three describes the research methodology.

CHAPTER 3:
RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter presents an in-depth discussion of the research methodology that was used to explore and describe the experiences of NIMART-trained nurses providing paediatric HIV care in the Windhoek District of Namibia. Research methodology refers to the type of the enquiry selected to analyse and solve the research question (Gray *et al.*, 2017:323). This chapter includes a description of the qualitative research approach with the exploratory descriptive design. It also includes the study setting, population and sampling, the inclusion and exclusion criteria, trustworthiness, data collection and data analysis.

3.2 RESEARCH DESIGN

Research design is a clearly defined plan and structure that guides the researcher towards answering the research question (Polit & Beck, 2017:120). The design for this study was qualitative in approach, with an exploratory, descriptive design.

3.2.1 Qualitative approach

Qualitative research is a process of enquiry on real-life experiences to gain an in-depth understanding of phenomena, especially in poorly understood areas or where little is known (Klenke, 2016:6). This approach was chosen as it enabled the researcher to explore and describe the experiences of the nurses providing care to children living with HIV/AIDS.

3.2.2 Exploratory design

Exploratory studies aim to investigate phenomena in the manner in which it manifests and the factors that surround it, especially in areas where nothing or little is known (Polit & Beck, 2017:53). In this study little is known about the experiences of NIMART- trained nurses providing care to paediatric ART patients in Windhoek District of Namibia. Therefore, an exploratory study is the best approach to investigate these experiences.

3.2.3 Descriptive design

Descriptive research is used when a phenomenon needs to be observed and described as it occurs in its natural setting (Polit & Beck, 2017:374). Also, descriptive research is suitable to answer research questions related to experiences and understanding of a poorly known phenomenon (Kim, Sefcic & Bradway, 2017:22). Data collection for this study was done at the healthcare settings where the NIMART-trained nurses practise, and it focused on gaining insight

into the experiences of the NIMART-trained nurses in their provision of paediatric ART care. Therefore, a descriptive design was best suited for this study.

According to Gray *et al.*, (2017:71), exploratory-descriptive qualitative research is carried out to explore matters or problems that need a solution and understanding with the intent of describing the topic of interest and promoting understanding. Since there is limited evidence on experiences of NIMART- trained nurses on caring for children living with HIV/AIDS in Windhoek District of Namibia, an exploratory, descriptive qualitative research design and methods were considered the most appropriate.

3.3 STUDY SETTING

Study setting refers to the exact location in which a study was conducted (Gray *et al.*, 2017:973).This study was conducted in 3 of the 14 public health facilities in the Windhoek District of Namibia. The three facilities selected include a large facility, medium-sized facility and a small facility. In this study, a large facility is represented by a hospital setting, a medium-sized facility is represented by a health centre, while a small facility is represented by a clinic. The facilities identified for this study were Katutura State Hospital, Katutura Health Centre, and Otjomuise Clinic. The three facilities were purposively selected to represent a hospital setting, a health centre setting and a clinic setting. These three facilities also had the highest number of paediatric ART patients among the categories of health care settings they represented.

The facilities selected are accessible to the researcher as they are situated within a 10 km radius from the Windhoek central business district. Otjomuise Clinic is situated in Otjomuise Township which is in the north-western part of the Windhoek District, while Katutura State Hospital and Katutura Health Centre are located within the Katutura Township.

Figure 3.1 below indicates the administrative and political boundaries of the Windhoek District.

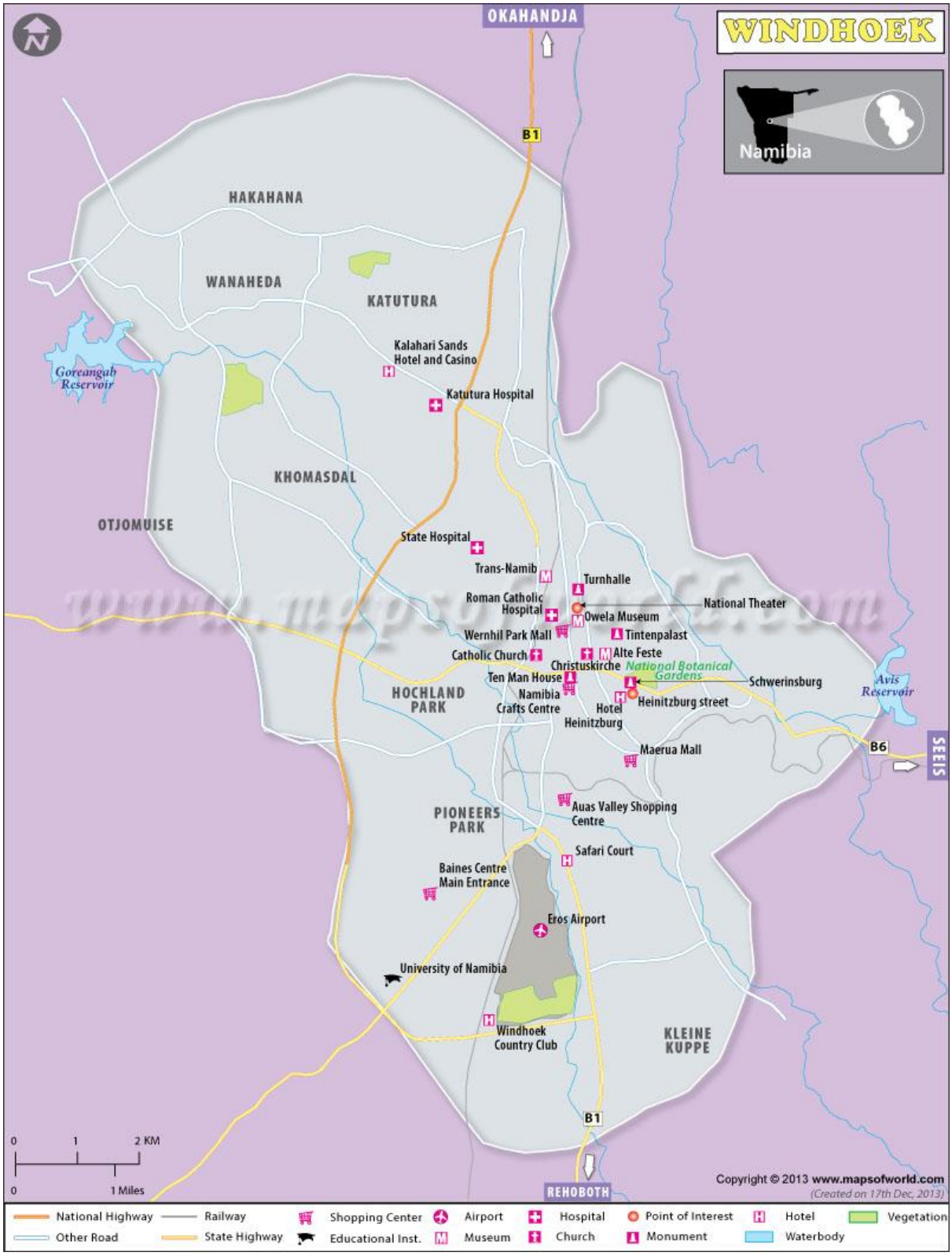

Figure 3.1: Map of Windhoek, Capital City of Namibia

Source: Maps of the World (2020)

3.4 POPULATION AND SAMPLING

According to Gray *et al.*, (2017:107) population refers to an entire group of people who represent the focus of the research. In qualitative research, participants are recruited into a study due to their particular knowledge, experience or views related to the study (Gray *et al.*, 2017:407). The population for this study was 25 NIMART-trained nurses (registered nurses and enrolled nurses) who practice in all ART facilities within Windhoek District.

Sampling refers to selecting a portion of the population in a way that represents the study population to obtain information concerning a phenomenon (Polit & Beck, 2017:484). The researcher used a purposive sampling technique to select nurses who participated in this study. In purposive sampling, the researcher deliberately picks the sample based on an inclusion criteria that allows only participants with rich experiences to take part in the study (Gray *et al.*, 2017:407). In this context, the participants who were interviewed were those NIMART-trained nurses who had experience in providing care to paediatric patients with HIV.

Sixteen nurses (12 registered nurses and 4 enrolled nurses) were approached by the researcher to participate in the study. However, two registered nurses declined to participate. None of the NIMART-trained nurses was on leave during the data collection period, since there was need to reorganize staffing in all the facilities due to the coronavirus disease 2019 (COVID-19) pandemic. The researcher used the inclusion criteria in 3.5.1 to select initially one participant per facility, giving an initial sample size of 3. While this may be less than what is used as a guiding sample size (15-20) in qualitative studies of this nature, the researcher continued conducting the interviews until a final sample size of 12 was achieved at data saturation. Data saturation is when there is no new relevant information emerging from the data collection process, the research question has been adequately answered, and any additional data is a repetition (Polit & Beck, 2017:127). Out of these 12 participants, nine were registered nurses, while the remaining three were enrolled nurses. Two of the registered nurses were from the hospital, four from the health centre and the remaining three were from the clinic setting. The hospital, health centre and the clinic had one enrolled nurse participant from each setting. Through simultaneous data collection and analysis, the researcher was able to determine when data saturation was reached. Therefore, more than one interview was conducted per clinic to reach saturation. Concurrent data collection and data analysis are recommended in qualitative data analysis to improve the quality of data collected and ensure that the research question is being adequately addressed by the data being collected (Gray *et al.*, 2017:430).

3.4.1 Inclusion criteria

- Registered or enrolled to practise as a nurse in Namibia
- Must have undergone NIMART training

- Must be currently working in the ART clinic within Windhoek District
- Must have provided paediatric ART services

3.4.2 Exclusion criteria

There were no conditions that warranted the exclusion of any of the NIMART-trained nurses from this study.

3.5 DATA COLLECTION TOOL

The researcher utilised face-to-face in-depth interviews to collect data on the experiences of NIMART-trained nurses providing paediatric HIV care in the Windhoek District. A semi-structured interview guide developed by the researcher was used during data collection to allow the participants freedom to talk about their experiences, while the researcher remained in control of the interview. A standard interview guide that could help explore the subject of the study could not be identified; hence, the researcher developed an interview guide. The interview guide was validated by the researcher's supervisor and a lecturer who is an expert in qualitative research. The interview guide comprised two parts. Part 1 included demographic questions such as the age of participants, gender, facility setting, nursing qualification, year of NIMART training, any additional HIV training received, and the number of years of experience with paediatric HIV care and treatment.

Part 2 consisted of five guiding questions: one question for each objective. The guiding questions were constructed, based on the research framework developed for the study. See Appendix 6 for the detailed interview guide.

3.6 PILOT INTERVIEW

A pilot interview is a limited trial of the study that a researcher carries out to refine the research methodology (Gray *et al.*, 2017:109). In this study, the researcher carried out one pilot interview with one participant who met the inclusion criteria for this study. The pilot interview was done to ascertain whether the questions were clear and were well understood by the participant. However, no changes were made on the content of the study as well as on the interview guide. The information obtained from the pilot interview was used to refine the guiding questions, and the data collected during that interview was included in the findings since it provided valuable insights to the purpose of this study. The researcher received training in interview skills during a workshop at Stellenbosch University. This happened before the pilot interview was conducted. Following the pilot interview, the researcher’s supervisor assessed the interviewing skills of the researcher by listening to the pilot interview. The supervisor provided formative feedback; for example, that the sound was a little bit soft, and the importance of mentioning that the interview was being voice recorded.

The pilot interview was conducted 4 September 2020 and took 42 minutes and 34 seconds. The study participant signed the informed consent before the pilot interview commenced.

3.7 TRUSTWORTHINESS

To achieve trustworthiness in the study, the model of Lincoln and Guba (1985) as cited by Polit and Beck (2017:982) was adopted. The model includes credibility, dependability, confirmability and transferability as elaborated on below.

3.7.1 Credibility

Credibility refers to confidence in the data collected and the interpretation (Gray *et al.*, 2017:392). Credibility was achieved through collecting data until saturation was reached. Member checking with the participants was also done immediately after the interview by summarising the interview, and after data transcription to discuss the emerging findings and to clarify that what they intended to say was what had been captured and interpreted by the interviewer.

3.7.2 Transferability

Transferability refers to the extent to which the findings of a study can be applied in another setting (Gray *et al.*, 2017:392). Although transferability will largely depend on the judgement of the person doing the generalising, the researcher strove to provide a thick database and detailed description of the research process in the final report. However, transferability was not the intention of this study.

3.7.3 Dependability

Dependability refers to the stability of data over time (Gray *et al.*, 2017:392). In this study, a formal enquiry was not conducted. However, the researcher kept all data (voice recordings, transcriptions, and interview notes) and data analysis word documents in case an evaluator or auditor should require it. In addition, the study supervisor checked the total process of data collection and analysis to ensure the true value thereof.

3.7.4 Confirmability

Confirmability refers to proving that the data collected represent the information that the participants gave, and not the researcher's views and opinions (Gray *et al.*, 2017:392). To ensure confirmability, the researcher adopted reflexivity, which involved looking into her presumptions, background and position and ensure that these did not influence the data collection, data analysis processes and the interpretation of the results. Coding of the transcribed data was first done by the researcher. Thereafter, coding was also done by an independent professional qualitative researcher to ascertain that the coding and interpretation of the data was the message conveyed by the participants.

3.8 DATA COLLECTION

The researcher and the study assistant utilised face-to-face in-depth interviews to collect data. The study assistant was a NIMART-trained nurse practising in the Windhoek District but not in one of the facilities that were selected for this study. Probing in the form of open-ended questions was applied, seeking breadth and depth coverage of the topic. Twelve (12) participants, including the pilot interview participant, were interviewed. The interviews were conducted from 04 September to 26 September 2020, over a period of seven (7) weeks. This was due to the COVID-19 pandemic which resulted in restriction of movement, and postponement of this type of research activities. The interview period was also delayed since staff worked on a rotational basis and therefore the researcher had to wait for them to be on day shift again.

The researcher is also a nurse mentor to some of the NIMART-trained nurses. Therefore, she interviewed participants from the facilities she does not provide mentoring support to, which are Katutura Hospital and Katutura Health Centre, while the study assistant interviewed participants from the facility where the researcher is a mentor (Otjomuise Clinic). The researcher received training in interview skills at a workshop at Stellenbosch University before conducting the pilot interview, and in turn, trained the study assistant how to conduct interviews.

The interviews were conducted at the participants' venue of choice, which happened to be the health facilities where they were working. The researcher recorded the interviews on a digital voice recording device and they were saved on OneDrive and later downloaded for transcription. After obtaining informed consent from a participant, the participant was allowed to decide on the venue, the time and language for the interview with due consideration of privacy. All the interviews were conducted in English since English is both the official language and a universal medium of communication among Namibians from different cultural backgrounds. Also, all training for nurses is conducted in English. None of the study participants raised a concern regarding preference to be interviewed in a different language. The participants were given pseudo names like RN1, EN1 with no reference to the facilities they worked in. No names were mentioned during the interviews to ensure anonymity. Since data collection was done during the COVID-19 pandemic, measures such as wearing of face masks and social distancing were practiced to mitigate the risk of spreading the virus.

During and immediately after the interviews the researcher also wrote field notes. Field notes are taken by researchers during data collection to record occurrences in the field and the interpretation of such occurrences (Polit & Beck, 2017:1270).

Challenges experienced during the interviewing process included noise from an aeroplane and on-coming traffic, since one of the facilities is located next to a busy road. The interview was

paused for a moment to allow the aeroplane and vehicles to pass. There were also interferences from ringing cell phones. However, all the interviews were audible enough for correct transcription, and they were sent to the researcher's supervisor.

Before commencement of the interviews, the researcher and the study participants had a general talk which included greetings and introductions to create a relaxed environment and to ensure that the participants felt at ease during the interviews. The researcher had also explained the purpose and objectives of the study, and the participant's role beforehand to ensure that the participants were aware of what was expected of them. The participants were reminded that participation was out of their free will, and they had a right to withdraw from the interview at any point. Refreshments were also provided to the participants to take at their free will. The shortest interview lasted 27 minutes and 29 seconds, while the longest interview lasted 1 hour 6 minutes and 30 seconds.

The researcher was a bit nervous at the beginning of the first two (2) interviews since she had never conducted interviews before. But with the subsequent interviews, confidence had been gained and the researcher was able to make the participants feel more relaxed and used probing words and followed up questions confidently.

3.9 DATA ANALYSIS

Data was analysed thematically using Braun and Clarke's (2006) six-phase guide as described in Maguire and Delahunt (2017:3352). Thematic analysis aims at identifying patterns in the data that are important or interesting, and using these patterns to develop themes which ultimately address the research (Maguire & Delahunt, 2017). Thematic analysis of the data was started simultaneously with the first interview and continued throughout. After the completion of every interview, the recording was transcribed verbatim into Microsoft Word documents. Data transcription was done by a professional transcriber, with the researcher listening to and reading each interview transcription to confirm the accuracy of each transcription. The interview recordings were shared with the researcher's supervisor and the transcriber via OneDrive, while the Word documents were shared via email. In order to maintain anonymity, no reference to the participants or the facilities they work in were included in the Word documents.

3.9.1 Step 1: Become familiar with the data

In this study, 10 interviews were conducted by the researcher, while the remaining two were conducted by the study assistant. During the interviewing process, the researcher got an in-depth understanding of the data as the interviews proceeded. Familiarization with the data continued during the proof reading of the transcribed data against the audio recordings. Furthermore, the researcher read and re-read the transcribed data to become more familiar with it. During this

process, short notes were made, and early impressions were identified from the data. Examples of the short notes made is as follows:

> *The nurses seem to find paediatric ART challenging. There is a sense that the requirements for paediatric ART are much more than for adults, and the nurses seem to feel that they are not adequately equipped to meet all these requirements.*

3.9.2 Step 2: Generating initial codes

This phase involves organising the data in a meaningful and systematic way, and identifying initial codes (Maguire & Delahunt, 2017:3355). Bearing in mind the research question and the research objectives, the researcher worked through each transcript and coded every section of the text that seemed relevant to the research question. The process was done manually on printed transcripts using pens and highlighters. Initial codes were assigned to each part of the text that was coded. During this phase, the researcher also changed and modified the codes as more scripts were analysed. Coding was done by the researcher and confirmed by an independent qualitative researcher to ensure that the codes reflected the views expressed by the participants**.** Examples of the text and the initial codes that were generated are illustrated in the table below.

Table 3.1: Coded segments and Initial codes

Coded segment	Initial code
Paediatric ART was just one chapter	Inadequate training
There is only one NIMART-trained nurse and the queue is very long	Increased workload

3.9.3 Step 3: Searching for themes

According Maguire and Delahunt (2017:3356) a theme is a pattern that captures something significant about the search question. In this study, the researcher studied the codes and fitted together those that seem to address the same issues into broader categories, referred to as themes. The researcher used a table format on Microsoft Word to enable easier reorganising of themes and subthemes. For example, there were several codes that related to relationships and interactions between the nurse and people within her environment, and they were classified into a theme named, interpersonal factor-related experiences. In addition, each theme had several subthemes, as illustrated in the example below.

Table 3.2: Sample theme and subthemes

Theme	Subthemes
Experiences related to interpersonal factors	Inter-professional experiences Nurse-patient experiences Nurse-caregiver experiences

3.9.4 Step 4: Reviewing of themes

This phase involves reviewing, modifying and developing the preliminary themes (Maguire & Delahunt, 2017:3358). During this phase, the researcher read the data associated with each theme, to determine whether the data supports the theme. The identified themes were compared against all the transcriptions to determine whether the theme fitted the entire data, or whether it was relevant for one specific interview only. Finally, the themes were compared to the study objectives to ensure that each theme addressed a different objective, and that all the themes ultimately answered the research question.

3.9.5 Step 5: Defining of themes

This was the final step of refining the themes and it involved identifying what each theme is all about (Maguire & Delahunt, 2017:33511)**.** The researcher compared each theme against other themes to ensure that each theme addressed a specific issue that was different from the other theme. The subthemes were also compared against the themes to determine how they relate. At the end of this phase, 5 themes that relate to the research objectives were generated. These themes are illustrated in Chapter 4.

3.9.6 Step 6: Write-up

This was the end point of the study and it included the compiling and report writing step (Maguire & Delahunt, 2017:33512); the researcher went back to the transcripts to check for similarities. Data that had not been used was also investigated to ensure that no relevant information was being left out. The researcher also reflected on her own professional position as an HIV-nurse mentor, and personal assumptions, to ensure that no biases are made during the conclusion and compilation of the study findings. Finally, the researcher interpreted the data and made conclusions. Chapter 4 gives a detailed explanation of interpretations supported by quotes from the transcribed verbatim text.

3.10 CONCLUSION

This chapter discussed the research design and methodology that were applied in this study in detail. The sampling method that was applied was discussed. Details of the data collection process were included from preparation for the interview up to the post-interview phase. The data analysis process was outlined. Measures to enhance trustworthiness during the study were also outlined. Chapter 4 discusses the findings of this study.

CHAPTER 4:

FINDINGS

4.1 INTRODUCTION

Chapter 3 (three) covered the research process and methodology that were used for data collection and data analysis. In this Chapter, the research findings are presented. The findings are presented starting with the biographical data of the participants, followed by the themes that emerged from the data analysis process. A summary of the findings will conclude the Chapter.

4.2 SECTION A: BIOGRAPHICAL DATA

Twelve (12) participants were interviewed. The participants were aged between twenty-five (25) and forty- six (46) years. Nine (9) were female with the remaining three (3) being male. Regarding nursing qualifications, three (3) were enrolled nurses, five (5) had a diploma in nursing and four (4) were in possession of an honours degree in nursing. Of these twelve nurses, four (4) participants were from a clinic setting, five (5) from a health centre setting and the remaining three (3) from a hospital setting. The participants received their NIMART-training between 2014 and 2018, with the number of years of experience in paediatric ART ranging from one (1) year to six (6) years.

4.3 SECTION B: THEMES

Five themes were identified and were aligned to the study objectives. The themes, subthemes and codes are summarised in table 4.1 and discussed in detail.

Table 4.1: Themes, subthemes and codes

Theme	Subtheme	Codes
Experiences related to Individual factors	Knowledge and Skills	Inadequate training Inadequate knowledge Counselling skills Technical skills Confidence Unfriendly ECHO[1] hours

[1] Extension for Community Health Outcomes (ECHO) is a video conferencing network where health care workers in remote areas connect with experts and other clinicians to discuss different topics related to their clinical practice in order to build health care worker capacity and support peer-to-peer cross-facility learning (Bikinesi, O'Bryan, Roscoe, Mekonen & Shoopala *et al.*, 2020:2).

Theme	Subtheme	Codes
	Emotions	Emotional pain attending to HIV positive children Guilt due to phlebotomy procedures Empathy Lack of emotional support
	Attitudes	Interest in paediatric ART Doctors' duty Lack of interest in paediatric ART Time consuming Too much work
Experiences related to interpersonal factors	Inter-professional experiences	Inadequate social worker support for paediatric ART patients Inadequate counselling by health assistants Inadequate support from doctors Support from doctors Support from health assistants
	Nurse-to-nurse experiences	Good teamwork Lack of teamwork Role conflict Insubordination
	Nurse-patient experiences	Easier to work with Late clinic visits Missed appointments Poor adherence Pill dumping Denial of status Rebellion
	Nurse-caregiver experiences	Supportive caregivers Failure to supervise treatment Delayed HIV disclosure Failure to attend counselling Failure to accompany children for appointments Inadequate paediatric patient history Parental guilt Multiple caregivers Lack of HIV/AIDS knowledge of caregivers
Experiences related to Institutional factors	Staffing/workload	Inadequate staffing Few NIMART-trained nurses Questionable selection of ART staff Policy related increase in workload
	Supervision and mentoring	Lack of support from nurse mentors Different mentoring strategies Supportive mentors High turnover of nurse mentors Lack of support from the supervisors Increased demand from the mentors and supervisors

Theme	Subtheme	Codes
	Material resources	Use of personal finances for resources Malfunctioning equipment Lack of equipment and supplies Use of inappropriate equipment Inconsistent paediatric formulations Lack of comprehensive tools to support paediatric counselling
Experiences related to Community factors	Poor socio-economic conditions	Lack of safe water and sanitation Poor living conditions Lack of food
	Distance/transport	Lack of transport money Long distance to clinics
	Cultural and religious practices	Withdrawal from treatment for prayers Withdrawal from ART for traditional treatment
Experiences related to Policy factors	International, national and local policies	More exposure for nurses Policies benefit patients Improved self-esteem for nurses Increased access to care Services are closer to the patients Policies empowered nurses Fewer cases of vertically transmitted HIV

4.3.1 Theme 1: Experiences related to individual factors

This theme describes individual factors that shaped the experiences of nurses in the provision of care of paediatric patients. Three subthemes of knowledge and skills, attitudes and emotions made up this theme.

4.3.1.1 Subtheme – Knowledge and skills

This subtheme describes how the participants' experiences were influenced by their knowledge and skills in paediatric ART care. The majority of the study participants expressed inadequate knowledge and skills, which hindered effective provision of paediatric ART services. Although they verbalised that they received NIMART training, they indicated that little emphasis was put on paediatric ART, more focus was on adult ART training. Specifically, the paediatric component only included the ART regimens for paediatric patients.

> *"The training itself did not include much on paediatric. It was mostly on adults and the paediatric was not really emphasized." (RN8)*

> *"The NIMART training, I think there's only one topic on paediatric, and is more on medication." (RN4)*

The participants went on to highlight that the whole NIMART training and certification process was dominated by adult ART making them unprepared to provide paediatric ART care. There was

no practice for paediatric ART during the certification process but in their actual day-to-day functioning, they were expected to initiate paediatric patients on ART.

> *"And for me initially, because when I did my NIMART training, I did not have patients, paediatric patients to practice on. So, because of that I was not really so sure of what to do at some point." (RN5)*

> *"You are not supposed to initiate paediatrics before you are now NIMART certified. But then after you are NIMART certified, you can initiate paediatrics. You just learn it on your own, maybe from the ART guidelines or anywhere else." (RN6)*

Due to the minimal training on paediatric ART and lack of exposure to paediatric ART during the certification process, the nurses expressed challenges in managing paediatric patients and sometimes avoided initiating them on ART. Even where additional training is provided through ECHO video conferencing sessions, some participants were unable to attend due to unfavourable scheduling.

> *"But after the training, we didn't know that we are going to work with paediatric. We thought it was just for adults, but we found ourselves now seeing paediatric patients. So, it's very difficult because we have to learn as we go." (RN8)*

Besides initiating paediatric patients on ART, the participants also cited that they struggled with paediatric nutritional assessment.

> *"The most problem is the BMIs and MUACs, those scores, and the length and height, and those stories, that's the problem. Those stories I find them to be more complicated. They are not easy. "(EN2)*

The study participants expressed that their skills in paediatric counselling was also inadequate. One participant reported that a disclosure tool was provided to assist the HCW with HIV disclosure to the paediatric clients. However, the tool lacked information on other issues that affected the lives of children living with HIV.

> *"Quite challenging. I still don't feel like I'm competent enough to counsel or to address a child. Like I said, we do go by the tool, the disclosure tool which doesn't have sufficient information, but it is challenging counselling a child." (RN 1)*

> *"And when it comes may be to really like talk to the kids, like addressing what may be the fear, their stigma, like the mental awareness part, then there is nothing that we can do." (RN 4)*

Participants felt they also lacked phlebotomy skills. They stated that despite their efforts to obtain blood samples from some paediatric clients, they were frustrated by the failure to obtain the test results from the laboratory, which was attributed to insufficient samples of blood that they submitted for the tests.

> *"Yes. So but now here and there, there are some I manage, but some, you will try here there is nothing, you try… Especially when the baby starts crying now it will also make you… Like it also affects you. It makes you panic because you don't… like you are hurting someone. Yeah. We usually call* [redacted] *the old nurse, whereby there are some days she tries but nothing comes out she tries here, she tries on the other leg we go on the arms, mm. And also the tubes, today Okay, and we managed to take the blood. You send. When the results come, CD4 blood was insufficient, viral load insufficient, you take, you send" (RN 7)*

In summary, the study participants expressed that their levels of knowledge and skills were inadequate to provide comprehensive paediatric ART care.

4.3.1.2 Subtheme – Emotions

The nurses experienced paediatric ART care as an emotionally filled situation. Study participants reported emotional issues such as pain and feelings of guilt. The pain was mainly triggered by seeing the children suffering from the effects of HIV, while the feelings of guilt were elicited by performing painful procedures such as phlebotomy.

> *"I feel pain every time I see a child who is positive. I really feel pain. I don't know how to express it, but it's really painful to see a child going through such problems". (RN 8)*

> *"When you fail, you feel, you know, you feel guilty that I have been pricking this kid, and the pain and then at the end of the day you did not succeed, you really feel a let-down, but you know that you can't get everything right." (RN9)*

Some participants projected their emotions, thinking of how they would have felt if it were their own children, who probably got HIV through sexual assault.

> *"Unfortunately, sexual assault does not only happen on girls (yes,) but the fact that I have a girl, it makes me think more of her, it makes me think more about her, it makes it difficult cause I get emotional." (EN1)*

Having experienced paediatric ART care as an emotional experience, they felt that they lacked support in terms of dealing with these emotions. The nurses reported that even though social

workers were there**,** they were not available to provide emotional counselling and support to the nurses**,** hence, they ended up containing the emotions within.

> *"Unfortunately, these emotions just build up in us. Even though we have social workers. We have people that you can go to, but no one actually comes to the health care worker to say can't we book a session for you where you'll talk about this thing or someone gives us emotional counselling. We just gobble all these things up in us." (RN2)*

> *"But there are certain things we don't really talk about them unfortunately, but it becomes a burden that you have. For me personally, I need to cry out for me to feel better and I cannot cry it out at work coz I'll become a freak." (RN5).*

Some ended up seeking personal therapists or turning to family support as a way of dealing with the emotions of working with children living with HIV.

> *"Personally, I have booked myself for a therapy. So, I see my therapist every two to three weeks. Okay sometimes on demand, it depends." (RN 1)*

Overall, paediatric ART care was described as an emotionally draining experience for the NIMART-trained nurses who also felt that they had inadequate coping strategies.

4.3.1.3 Subtheme – Attitudes

Despite the negative emotions associated with the provision of paediatric ART care, study participants reported both positive and negative attitudes towards paediatric ART care. Some participants expressed that they had an interest in paediatrics and enjoyed working with children rather than adults.

> *"Like me am interested, am more interested in paediatrics." (RN7)*

> *"The [paediatric] treatment part for me I enjoy more than the adult coz with the adult it is just straight forward." (EN1)*

On the other hand, some participants indicated that they had no interest in paediatric ART, describing it as a forced situation where they had to do the doctors' job because there were no doctors.

> *"Maybe I [am] just not, am not into paediatrics treatment. Not so much interested." (EN2)*

> *"When I have to attend to paediatric mmmmh it is like, sometimes it's just like you are just forced because there are times when there is no doctor in the clinic." (RN3)*

There were mixed attitudes towards paediatric ART with some of the nurses having a positive attitude, while others were having a negative attitude towards it.

4.3.2 Theme 2: Experiences related to interpersonal factors

The study participants expressed different experiences interacting with people within their immediate environment. These interactions were grouped into three subthemes, namely inter-professional experiences, nurse-patient experiences and nurse-caregiver experiences.

4.3.2.1 Subtheme – Inter-professional experiences

The study participants expressed contrasting experiences from interactions with their colleagues. Different cadres of HCW were reported to interact with the study participants with different experiences across each cadre and across all facilities. The participants indicated that they had a good working relationship with doctors when it came to tasks beyond the nurses' skills, such as drawing of blood and management of complicated cases.

> *"If I am stuck with drawing blood, I have to call the doctor, because when it comes to drawing blood if I can't see the vein then I just refer to the doctor as well." (RN2)*

> *"There is a doctor that I work with so whenever I am not sure about something I can always I consult them." (EN1)*

However, the idea of doctors only seeing complicated cases were also the source of negative experiences for the nurses. Nurses ended up having far more patients than doctors to attend to, because doctors just reviewed complicated cases and left the rest of the patients to nurses. The nurses were of the opinion that the doctors could help with all the cases and not only the complicated ones.

> *"Like most with doctors, they only see complicated cases, like with high viral load patient in this clinic. Like for our clinic, we are not having so much now, let's say most are suppressed, so it's like with doctors, they only see few patients compared to us now." (EN3)*

> *"I'm supposed to only send or refer the ones that have, you know, issues that I can't handle but then at some time the line is so long. He could equally just help me but then this doesn't help." (RN5)*

Even in situations where nurses and doctors shared roles such as, consultation of patients, nurses felt that they had to do more work than doctors did. One nurse expressed that while both the nurse and the doctor requested blood tests during consultation, it is only nurses who had the

responsibility of drawing the blood for the tests, often after the doctors had seen the patients and left.

> *"Let's say you have a queue, you and the doctor are both seeing clients at follow-up, you are both writing their medication and then you are both requesting for blood but you still have to finish whatever you are doing here and then go take the bloods, because the doctors don't take blood." (RN1)*

Besides the doctors, the nurses interacted with social workers and health assistants albeit indirectly. Both the social worker and the health assistant provided social support to the children that the nurses also worked with. Even though the interaction was indirect, it influenced the nurses' experiences providing care for paediatric ART patients. The nurses felt the health assistants were not providing proper counselling to the children, because they observe persistent problems that should have been solved through counselling.

> *"No, in the counselling room I cannot specifically say what happens. I don't know if they do counselling, I don't know what specific counselling, what I know is what I say because I am not sitting…. I am not there. But I have observed that the kids lack that intense counselling." (EN2)*

> *"Because they are being sent to the health assistant to do the counselling (mmhh). And if it is just a normal counselling for any reason and it is not a disclosure, they are not using the booklet. They don't give the proper information". (RN3)*

Nurses reported that the social support was inconsistent, with some cases resulting in positive outcomes, while others did not show an improvement. With the negative outcome, the nurses assumed that either the social workers did not provide the help, or they failed to provide the right kind of help.

> *"Often times the cases are individualized. When you refer them to the social workers, sometimes you do see changes in the client and then others are continuing with the same issues. So perhaps they were either not seen or they just didn't get the help that they were sent for." (RN1)*

4.3.2.2 Subtheme – Nurse-to-nurse interaction

The interactions among nurses in provision of paediatric ART care influenced the experiences of the study participants both positively and negatively. Demonstration of good teamwork among the nurses was reported where one nurse could ask the other one to help when overwhelmed with the hope of the favour being returned.

> *"So if I have a lot of patients, then I can ask for her to assist and they'll accept to assist me. It's not like they refused because next time it will be them when we shift, when we rotate. So, we help each other at least especially if it's full and then there are lots of [ART] initiation. (EN3)*

However, the participants in this study also experienced challenges during interactions with other nurses. Some nurses were not ready or willing to help others, despite being available and having been trained in NIMART. On the other hand, when all nurses were busy at the same time due to staff shortages, none could help the other.

> *"But other colleagues are not willing to come like to help. Whether the facility is very full, you can see them sitting around (mmh). Some of them are trained in NIMART but they will not even come. It is you to come and call them, it is like you are forcing them to come and assist you whether they see the situation." (RN3)*

> *Yeah, there is staff, they may probably would like to work to help. But now this nurse who you want to call, she's also alone in the screening room. The other one is doing antenatal care, the other one is doing immunization. So they will not come because they are just alone also in their respective places. So there is really no way that they can get help from them." (RN8)*

Similarly, study participants reported instances where supervisors and subordinate nurses failed to get along, due to age differences, in particular when the supervisor was younger than the subordinate. In such cases, the participants indicated that the older subordinates disregarded the supervisors' instructions, interpreting it as rudeness or shouting. This was reported as creating a difficult working environment for the other nurses in the department.

> *"Let me say for example, people that are working, they are people from different age groups. And sometimes the persons supervising may be younger than the person being supervised and sometimes they…. they do consult their supervisors and may be the tone was too high and they felt like they were shouted at and then. That can bring a kind of misunderstanding." (EN1)*

> *"It is challenging to work with them, sometimes they also choose when they want to do something, they do not want to do certain things, so it means that you have to do everything (laughs) you know." (EN1)*

The study participants reported role conflict between nurses in the facility as a source of negative experiences. In one facility, a paediatric expert nurse was assigned to the facility by a supporting

organisation. This nurse was deployed specifically to initiate ART, monitor and provide follow-up care and treatment services for children living with HIV/AIDS, including meeting all the project reporting requirements. The other nurses in the unit perceived this role negatively since the paediatric expert nurse was not performing other routine nursing duties. This arrangement created a challenging working relationship, as the NIMART-trained nurses felt the consultant nurses choose what they wanted to do and what they did not want to do. This clashed with expectations of the participants who expressed that they were all nurses and should perform the same duties.

> *"So, they felt like, one staff felt like no, when I was brought here, some of these responsibilities [such] as drawing blood was not for me, was not supposed to be mine. And the others felt like, no, if I am a nurse, you are a nurse, you prescribe, you draw blood, I prescribe, I draw blood, something like that." (RN9)*

In summary, the study participants reported both instances of being supported and lacking support from the HCW they interacted with. The different cadres of HCW that were presented in this study as having interactions with the NIMART-trained nurses included the doctors, nurses, health assistants, and social workers.

4.3.2.3 Subtheme – Nurse-to-patient interactions

The participants expressed divergent experiences interacting with paediatric clients. The nurses verbalised that it was easy to work with paediatric patients for several reasons. They described the children as polite, obedient and honest as compared to the adult patients. However, some nurses labelled some of the children as troublesome. This was mainly associated with the older children, who were getting rebellious as they grew older and became aware of their HIV status.

> *"I feel like it's easier to work with them in the sense that they are not rude (laughs). They do everything that you tell them, yeah. Communication is also [more open] for me….. I don't feel it's challenging; I feel like they are more honest than adults. And as they are getting a bit bigger, they tend to become a bit more rebellious. This is when they find out about what is going on, you know it is HIV yeah, so it seems like as they are growing up they tend to become a bit more rebellious." (EN1)*

> *"So, they are those kids that are troublemakers. I don't know if I can tell… I can call them troublemakers" (RN4)*

On the other hand, the participants also reported negative experiences with paediatric ART clients. These negative experiences were associated with HIV diagnosis and adherence to treatment. With HIV diagnosis, the participants reported that some of the paediatric patients

refused to accept their status once disclosure was done. One participant explained this rejection of diagnosis as follows:

> *"Okay, they found out from I don't know where but then when it came to time to tell them that no, you are HIV positive, you are taking antiretrovirals to keep you healthy, they denied the status. They refused that it's their status and then they actually stomped out started crying but calmed down later and then decided they want to be retested for HIV because that is not their result." (RN1)*

Disclosure of HIV status in the three facilities was reported as starting from the age of 6, and that it was expected that by the time the child is 10 years old, full disclosure would have been attained. Following disclosure of the HIV status to the paediatric patients, the participants also reported that some of the parents reported to them that their children started blaming them for infecting them.

> *"They will think that "why is it only me who's drinking this medicine in this house and others are not? I'm not going to take this medicine." And sometimes they would also ask like their mothers "why, why?" Eee, they will think that it is because it is their mother who gave them the disease." (RN4)*

In addition, the participants reported that as the children grew older, some began to demonstrate poor adherence to treatment, demonstrated by out-rightly declining to take medication, pill dumping or spitting out medication and refusal to visit the ART clinics for their regular follow- up.

> *"It's like no, I'm not going to take the medicine, drink your medicine yourself." (RN4)*

> *"When they are young, when they are small, sometimes the parents complain that if it's a bit bitter then they spit out." (EN1)*

The study participants described their experiences with paediatric clients in both positive and negative aspects. The positive aspects related to their general conduct, while the negative issues related to rebellion, poor adherence, and failure to accept their HIV status.

4.3.2.4 Subtheme – Nurse-caregiver interactions

The participants of this study reported to have had experience with different kinds of caregivers. The caregivers were described as biological parents of the children, relatives and school hostel guardians. The participants expressed contrasting experiences from the interactions with these caregivers. The experiences were described in terms of adherence to treatment, disclosure of HIV status to the paediatric patients, and accompanying the children for their clinic visits. Some

caregivers were reported to be generally supportive in terms of the health progress of their children.

> *"They are very open. They are very helpful, they are very supportive, even when we call them for the meeting, if they are not coming, then you will want to know what is happening and stuff like that." (RN9)*

In terms of adherence to treatment, the participants reported that some caregivers failed to supervise or administer treatment to the children. This was attributed to their assumption that the children were old enough to be able to take their treatment unsupervised. Alcohol consumption by some caregivers was also reported as a contributing factor to non-adherence to treatment by the caregivers themselves, which also affected the children under their care. The participants also reported that some opportunistic infections were not taken seriously, since some caregivers felt that they were normal occurrences in HIV infected children.

> *"Okay, so they do have guardians who are alcoholics, or you find these parents who have given up on themselves, which will also affect the child." (RN7)*

> *"So they are not always available to give the treatment to the kids on time or to remind the kids to drink their medicine. Let's say yeah, may be 7 years old [child] and they are able to [take medicine on their own]. So that if the caregiver is busy with something or they have a lot of kids to take care of, it might also contribute to issues of [not] adhering to treatment." (RN1)*

The study participants had to deal with challenges of guardians who failed to accompany their children for follow-up appointments due to work-related challenges, while others opted to ask other people to accompany the children. As a result, there was lack of continuity of care, due to this non-attendance or using other people as 'substitute guardians' to take the children to the clinic. Some of the caregivers who accompanied the children had inadequate information about the condition of these children.

> *"Yeah, they have other things to do. They have work, I don't know, but you will just be told my mother she went to work, you will be told my sister, she is doing what what." (EN2)*

> *"But the caretaker who comes this time, it's not the same caretaker who was here before. There were problems, you explained to this caretaker. So when they come again is a different one. And this different one will [say}, you know, he didn't tell me what you told them." (RN8)*

The nurses reported experiencing challenges regarding disclosure of HIV status to the paediatric ART patients. Caregivers were reluctant to disclose the HIV status to the children, due to fear that the child will disclose the status to other people. In some cases, the caregivers accidentally disclosed the status to other people resulting in the child being hurt emotionally.

> *"Because they're afraid if they disclose the status to the child, then the child will just go in the Locations, '[I] am HIV positive or reactive' and things like that. 'I'm taking medicine and things'." (EN2)*

> *"They would want to be given medicine let's say only in a separate room. But since the auntie does not know why the child has to take the medicine, she just gives the child medicine in front of everyone and this also hurts the child emotionally as well." (RN2)*

In summary, the study participants expressed that the caregivers' role, especially their availability and level of commitment, influenced the care of the children living with HIV, hence affecting the experiences of the nurses.

4.3.3 Theme 3: Experiences related to institutional factors

This theme relates to the experiences of the NIMART-trained nurses regarding the institutions they work in, and how their experiences of providing paediatric ART care were shaped by the institutions. Different experiences regarding institutional factors were reported by the participants. The experiences described were based on staffing, supervision and resources.

4.3.3.1 Subtheme – Staffing

There were mixed feelings from the participants regarding availability of human resources in the health facilities. Participants from the hospital settings reported adequate staffing in their facilities. However, those from the health centres and clinics expressed a general shortage of staff in their facilities. Specifically, the participants reported a shortage of NIMART-trained nurses in their facilities that resulted in increased workload for the few who were trained.

> *"We are booking up to, may be if we see it is a very busy day, we talking about 20 patients, or 25 patients, 30 may be. And we have about 4 health workers that are attending [to them], both nurses and doctors and so the staffing [in this hospital] is good." (RN9)*

> *"And a busy clinic like this one, it is very challenging, because here other patients are complaining and you have a child and sometimes you might even find that you are the only one nurse in the clinic. If the other staff are not around, you might experience a challenge, the clinic is overloaded with patients and you are the only one to attend to each and every one." (RN3)*

The participants felt that some of the nurses that were deployed to the ART departments were mainly the nurses close to retirement age and those who failed to perform in other departments. This led to an increase in the workload for the few NIMART-trained nurses who ended up doing most of the work.

> *"And also, I have noticed that ART clinic we get people that are about to retire. So, I think that could be a contributing factor. So for a young nurse, it feels like most of the work is on you, cause old nurses if I can say, they are unproductive (laughs)." (EN1)*

> *"Offloaded I mean, where you get staff that are not performing and then they are shifted to another department. Yeah, just to do away with those staff, either they can be problematic, or then the people just want to shift them because they do not want to deal with their problem. By problematic I mean either they were absconding, either they are forever sick, either they're forever absent, or they're just not productive at all." (RN2)*

Participants in this study generally expressed how they were constantly faced with an increased workload. The heavy workload was attributed to staff shortage at the health centre and clinic settings. Some of the participants from the hospital settings and health centres felt it was also due to questionable processes of staff selection for the ART facilities.

4.3.3.2 Subtheme – Supervisory and mentoring support

This subtheme relates to the kind of support the study participants felt they received from the institutions. The participants described their supportive experiences in terms of supervision, management and mentoring.

4.3.3.2.1 Supervision

There were contrasting experiences about the supervisors. The participants described the supervisors as supportive but not in all areas. The positive experiences were expressed in relation to the general running of the clinics. For example, participants reported that their supervisors tried to ensure human and material resources were made available in the facilities, with failure in some instances.

> *"Sometimes we ask [for clinical supplies and stationary] from other health facilities. I used to inform my supervisor. She usually used to call other health facilities." (RN7)*

> *"Our supervisor really tried to address this thing when attending meetings, especially with the resources and with staff, and as I told you she was told that we should wait" (RN 4)*

The participants explained that in terms of staffing in the facilities, despite having a shortage of staff, the supervisors had failed to solve the issue of questionable staff selection for the ART

clinics. The nurse manager of the ART site in one of the facilities expressed that his attempt to engage the health centre managers regarding staff deployment to the ART site was not helpful.

> *"There was a time I discussed with the nurse manager on the staff that I wanted. Then I was told you only want to take our best staff." (RN2).*

> *"Nothing! Nothing! They only tell you that that is what they are having, so there is nothing they can do, they cannot keep these people at general clinics because they are lazy and they are never present at work and they will just send them to ART clinic, because may be they think that ART clinic is not very busy and it does not require people who work hard or something." (RN4)*

In terms of support regarding paediatric ART services, the participants expressed that they generally received no support from their managers. They further added that they felt the supervisors' knowledge in paediatric ART was limited and were therefore not able to assist them.

> *"Especially paediatric ART, so if someone has limited knowledge in something then it is also, so you know, difficult for supervision, you can't supervise something that you do not know or [you have] limited knowledge on." (RN4).*

> *"Yes one thing that I noticed, the challenges which I face, the area where I struggle, I tried to ask but then I noticed that we are on the same page, we [both] struggle." (RN7)*

The study participants reported that the kind of support they received from their supervisors related to the general running of the clinic. However, they lacked support from their supervisors in terms of staffing and paediatric ART.

4.3.3.2.2 Mentoring

There were mixed feelings about the experiences of interactions between mentors and the NIMART-trained nurses. Mentors were expected to give support and guidance to the NIMART-trained nurses in the management of ART patients including management of complicated cases. Cases that were above the scope of practice for nurses, for example, requesting for an HIV drug-resistance test, the clinical mentor, who is a doctor, was always contacted by both nurse mentors and the NIMART-trained nurses. Some of the participants felt that the mentors were extremely helpful, while some felt that they lacked support from the mentors. Windhoek District has one clinical mentor, a position reserved for doctors, and two nurse mentors, who support six (6) facilities each. On positive experiences, one of the participants reported as follows:

> *"Yeah, mmmh for mentors, like for me, let me talk on my part. I usually used to get help. I don't see anything like wrong from my mentor, because they are mostly not there, but then*

yeah, there is another way of getting to them. You can call, because due to the situation, there are a lot of facilities whereby they are also mentoring." (RN7).

Other participants reported that they received inadequate support from the mentors. This was reported in terms of unavailability for consultation, lack of training opportunities and meetings. In addition, some participants felt that the nurse mentors also had inadequate knowledge in paediatric ART, and they opted to consult the clinical mentor whenever they had challenges managing the paediatric clients.

"Okay, we have mentors assigned to us. But sometimes they are never available when you reach to them. And even if you call them they don't answer. Maybe they are always in meetings and you're having a baby in front of you. So some of them they're not really helpful. I don't really know why maybe it's because they're also not, should I say, maybe they're not competent enough in paediatric ART." (RN5)

"So the nurse mentors we had, when they were coming, they don't call for a training, or a meeting. If I am seeing a paediatric [client] and there is something I do not understand, with the switching [of ART regimen] or with the dosage, I normally call the clinical mentor, and then we discuss and she can guide me." (RN3)

The participants also reported that the mentors demanded complete documentation, and comprehensive reports, regardless of the challenges the NIMART-trained nurses were facing. Consequently, the participants reported that they would sometimes resort to unprofessional practices just to meet the demands of the mentors.

"They just want at the end of the day as long as they can report and say [redacted] *clinic all our babies have hundred percent nutritional assessment. Even if it's not the true picture on the ground then they know they're in good books with their bosses, may be. But otherwise, sometimes we just copy and paste because we don't have time, seriously." (RN5)*

"In most cases we copy and paste from the previous. Because you want to be seen you are doing things, you do not want the blanks (laughs), the blank spaces, so you want the mentors and supervisors when they come and see the patient care booklet at least they will see it was done. You cannot leave it blank." (RN4)

There was also a concern over the high turnover of nurse mentors. The participants felt that this was affecting their learning process as different mentors were reported to have different ways of mentoring.

"Because the nurse mentors keep on changing most of the time. This year we have one, the following year is a different one." (RN3)

"I think maybe they get new jobs. Maybe their staff turnover is very high. So always we just get introduced, so this is your new mentor. We don't really ask questions because they are not attached to our facility. They are coming from another agency. Okay, so and they're all different. I've noticed that they all teach differently. They all mentor differently because maybe they have different skills." (RN5)

The study participants reported supervisors and mentors were supportive in some instances and unsupportive in others. The supervisors were described to be supportive in terms of general running of the clinic, but unsupportive in terms of staffing and issues related to paediatric ART. While some participants felt that mentors were available for consultation, others felt that the mentors were not available for consultation, they failed in their role to organise in-service training, increased demands from the mentees which always led to falsification of data, and the perception that they (mentors) had inadequate knowledge in paediatric ART.

4.3.3.3 Subtheme – Material resources and infrastructure

The study participants expressed a general experience of inadequate material resources relating to paediatric friendly medication, equipment and supplies, stationery and infrastructural inadequacy. One participant reported that since the facilities are government institutions, they often run out of supplies.

"So, when it comes to resources, because we are government institution, almost you know there are times that the things that you feel you need are not there." (EN1).

In some cases, paediatric friendly formulations were in short supply and lead to paediatric patients being given refill medications for shorter durations. This led to missed doses, referral of patients to other facilities to collect the medication or frequent visits to the pharmacy for refills.

"Okay, and then when it comes to the aspects related to their medicine, some formulations are not available. They can be available at the moment, then when the child comes in the next visit, they are out-of-stock." (RN2)

"So sometimes we end up, okay, either the child doesn't get the medication that specific date. Sometimes they refer to another pharmacy, like here in Windhoek, it's only Katutura Health Centre that normally keeps those formulations…" (RN 8)

In terms of equipment, the participants from the health centre and the clinic setting reported lacking equipment necessary for paediatric ART management. This includes the mid upper arm

circumference (MUAC) tapes for nutritional assessment and growth monitoring, and appropriate paediatric weighing scales. Lack of the MUAC tapes and height board were reported to contribute to failure of the nurses to perform nutritional assessment on the children. The weighing scale is crucial equipment in the provision of paediatric ART services. This is because the medication dosages are adjusted based on the child's weight. However, the health centre and the clinic participants reported that they did not have paediatric weighing scales and resorted to using adult weighing scales. The participant described the situation as follows:

> *"…we [don't] have things that we actually need. We need MUAC tapes." (RN 2)*

> *"And we still do not have the paediatric scale, so now you can just imagine how, because [in] paediatrics, the dosage like the drugs, the dosage and drugs depend on weight and height." (RN 4)*

The participants further expressed their lack of confidence in the weights they obtained from using the adult weighing scale on the children. They felt that the weights could be inaccurate and could lead to either overdosing or under dosing of the paediatric clients. In some instances, the nurses described how this put them in an awkward position when it came to writing prescriptions when the child's weight is not available. One participant explained that sometimes they are forced to initiate ART, based on an estimated weight.

> *"Yes, but to me, that's [using the adult scale] not the correct way on how to get the weight, because it will give you various readings. Yeah, and then it leads you to giving inaccurate treatment to this child. You either under-dose the child or overdose the child. Which is…actually we're not doing justice to this child." (RN2)*

> *"So sometimes what we do is we look at their age. (Okay,) So unfortunately for paediatric babies again, I mean if the child is infected you don't expect them to have a normal weight with the sick baby, but we just do an estimation. Not so safe but it's better than nothing, I guess." (RN5)*

The participants also reported that sometimes, even when they have the paediatric weighing scales, the batteries are not available. Some of them reported to have used their personal finances to buy the batteries. A nurse manager in one of the facilities also explained that they have not had a paediatric weighing scale for about three years, and his attempts to obtain a new one has been futile due to the procurement process.

> *"So we normally used to get [batteries] once in two months, or three months. These things do not last. These batteries they don't last. But yeah, sometimes we will contribute*

[money]. Sometimes you ask for contributions, no one [gives]. So you have to sacrifice to get the batteries." (RN 7)

"Yes. Yes. I've placed an order on the scale, and our procurement process is actually not a friendly one, because you put in the order then they'll tell you these things are coming. From that year (2017) to now, it's still coming." (RN2)

In terms of stationery, one participant reported stock out of blood request forms. He further reported that attempts to make photocopies of the form also were unsuccessful, due to the lack of printing ink in the facility. He also reported that placing orders for the stationery has been unsuccessful due to the financial constraints the government was facing. In the end, he uses personal finances to make copies of the blood request forms.

"There was a time we were told they are not in stock, and it is only one [lab request form remaining]. You have to try by all means to go make copies. Sometimes you have to use your own money to go outside to go make copies." (RN7)

"The reason that we get [is] the government is broke." (RN7)

In terms of infrastructure, participants from the hospital setting reported that they felt that the facility was adequate for paediatric care provision in terms of availability of a play area for the children. However, they described inadequate consultation rooms which led to the sharing of a consultation room between a nurse and a doctor. This was also reported to lead to accidental disclosure.

"The facility setting is quite sufficient to nurse or to take care of young adults or young kids. It's quite young-people-friendly, and there is sufficient space for them to play around if they are waiting for service, okay the nursing staff, and…. we do also provide some games for [playing] in these spaces." (RN1)

"But then when it comes to privacy, we sometimes have a six-year-old and we have 14 year old or 13 year old and then this [one] is not disclosed to and [while] the other one is disclosed to. When it comes to privacy, the privacy is a big challenge because it is not a big room, we are only using a screen to separate now." (EN1)

On the other hand, the health centre setting was reported not to be paediatric friendly, due to lack of a paediatric specific corner with baby friendly environment. The paediatric patients sat in the same waiting area with the adults, sometimes with no fast-tracking of paediatric clients.

> *"And that facility has to be child-friendly because when a child enters the facility the walls are so dull that they want to go back home immediately. Yeah, it has to have pictures, it has to have…it just has to be friendly." (RN2)*

In summary, the participants expressed different views on institutional factors that affected their experiences in paediatric ART care. An increase in workload was attributed to inadequate or questionable staffing of the facilities. Support from supervisors was reported as relating to the general running of the clinic, but not in terms of paediatric ART care and staffing. Mentors were reported as supportive and unsupportive in terms of availability for consultation, knowledge of paediatric ART, meetings and trainings and placing increased demands on the mentees. The primary health facilities generally lacked material and infrastructural resources in terms of space, consultation rooms, equipment and supplies, and stationery.

4.3.4 Theme 4: Experiences related to the community

This theme relates to the experiences of the NIMART-trained nurses regarding the community where their clients reside, and how these communities affect their provision of paediatric ART services. The experiences that the participants mentioned are further represented in the following subthemes: poor socio-economic conditions, distance and transport, and religious and cultural influences.

4.3.4.1 Subtheme – Poor socioeconomic conditions

The study participants from all the three health facilities reported that most of their paediatric patients come from families with poor socioeconomic backgrounds with most of them living in the informal settlements. The participants further reported that these informal settlements were associated with poor housing conditions, lack of basic amenities such as safe water and sanitation.

> *"Actually, these are informal settlements, you know, so you find in one room, there are ten or seven people, they are sharing. Which is hard. Water is quite a challenge for them. Sanitation, toilets which are not there. You find like the whole informal settlement sharing one community toilet, which is…" (shakes head)." (RN7)*

Study participants associated these poor socioeconomic conditions with incidents of opportunistic infections among the paediatric clients which consequently made it more difficult to manage the patients' conditions. In addition, the participants reported that the opportunistic infections resulted in increased pill burden for the patients which made adherence to treatment a challenge.

> *"Sometimes water is not…there is no clean water. The issue of diarrhoea, hepatitis E, dysentery, all those things come in. So, they are likely to get opportunistic infections because of the unhygienic situations that they live in." (RN 4)*

> *"Now I have to like, amm, have to manage some diseases or infections because of the unhygienic situations. It will really affect the treatment, coz it will give you more job, it will give you more challenges." (RN4)*

> *"So, this person instead of like, instead of getting one or two [pills], now he will be on like…he'll be having a lot of medicine which also sometimes will discourage [him], which leads to defaulting [treatment]." (RN7)*

Furthermore, the participants expressed food insecurity as a contributor to treatment interruption.

> *"What I have noticed is that if food is a problem, they also don't take the medication." (EN1)*

The participants expressed that their paediatric clients were from poor socio-economic backgrounds. They further explained that the paediatric patients lacked good housing, safe water and sanitation facilities and food, which contributed to some of the opportunistic infections and resulted in poor adherence to ART. Poor adherence to ART results in development of resistance to antiretroviral medication, treatment failure and subsequent development of opportunistic infections and ultimately AIDS.

4.3.4.2 Subtheme – Distance and transport

The study participants reported distance as one of the challenges that affected some of the clients, they rendered care to. They further reported that some of the clients required transport money to reach the clinics, or they had to visit the clinics on foot. Due to the socioeconomic situations of the paediatric clients' families, the participants reported that they failed to visit the clinics for their follow-up. Those who walked to the clinic arrived late and did not receive comprehensive care as required.

> *"They are missing their dates because they do not have the transport fees because of the distance. So, when they reach here it is already almost knocking off hour. So we will not also not have time to give attention to them." (RN3)*

The participants also reported that due to the economic challenges that the paediatric clients face, they were often referred for social grants. However, the help the paediatric patients received from the social services were reported as insufficient. In return, the health workers sometimes used their personal finances to assist the paediatric patients in terms of food and transport money.

> *"As the health worker, sometimes they would come to you, Ohh, sometimes they would come to you saying, 'sister please help me with taxi money. I have to foot, I am coming from school…' It [the social grant] is not enough because they are telling us what they received and so on and it seems like it is not enough." (EN1)*

The participants expressed that some of their clients lived in places that were quite far from the health facilities, and that they needed to cover long distances, walking or looking for transport money to reach a health facility. They further reported that the paediatric clients did not receive adequate support from the social services offices they were referred to.

4.3.4.3 Subtheme – Cultural practices and religion

Some cultural and religious practices that were observed by the study participants, included the use of traditional medicine and prayers which, in rare cases, led to withdrawal of the patients from treatment.

> *"It is rare, cases that you find are parents that neglect to give the medication and the child gets sick and they would ask the doctor for the child to be taken out of the hospital for those traditional practices, but it is very rare." (EN 1)*

> *"It's just mostly with religious like some churches they tell them that you are cured. You can stop going at the clinic you're fine. They give them…they pray, then they'll tell them go for HIV testing again." (EN3)*

Interruption of treatment to engage in traditional and /or religious practices were reported to result in patients reporting back when they were critically ill, with some ending up dying. A participant expressed how the withdrawal of the paediatric ART patients from treatment for traditional medicine and religious practices led to feelings of failure of HCW in educating the caregivers on the importance of ART.

> *"So most of the ones that are told to stop, they come back being sick, very sick." (EN 3)*

> *"Then that makes you feel horrible as a health worker because it feels like you have failed in a way to make the caregiver understand that the child's needs to be on treatment." (RN1)*

The participants expressed that they experienced negative cultural and religious practices among their paediatric clients although these were extremely rare. They further explained that once their clients were withdrawn from treatment for religious and cultural practices, they returned to care, critically ill while some of them died.

4.3.5 Theme 5: Experiences related to international, national and local policy

The participants in this study described policies as strategies that they were implementing to combat HIV and to reduce the risks of new paediatric HIV infection. The policies discussed are international policies that were also adopted to become national policies in Namibia. No local policies were mentioned by the participants. In addition, the participants described policies related to HIV as being beneficial to them (and their patients) but in some cases, detrimental to them. The international, national and local policies that were commonly discussed by the participants in this study included task shifting, decentralisation, test-and-treat and elimination of mother-to-child transmission.

Task shifting was described by the participants as empowering to the nurses. They explained that it improved their self-image as professionals, increased their job satisfaction and level of knowledge. However, task shifting came with increased workload as the nurses took on some of the roles previously restricted to doctors, while still retaining their traditional roles.

> *"It makes you feel proud, it makes you feel like you know, and prescribing for someone, seeing people you have prescribed for improve, you feel proud. You feel you have done your job. Back then we used to feel like... like... we did not feel like a nurse." (RN9)*

> *"Okay, they are just taking off from what the doctors [were doing], just dividing, or shifting what the doctors are already doing. So basically, it has increased the nurse's workload. Okay. So now the nurse is doing more." (RN1)*

Besides task shifting, the participants experienced decentralisation as being beneficial to patients in terms of distance and transport costs, and early initiation of ART. However, participants indicated in certain cases decentralisation was not implemented successfully. Some clients declined to be transferred to health facilities near their homes, hence the workload remained high in central facilities.

> *"It's also one of the positive notes of this [policy]. So by now decentralising, the NIMART nurse now came to help also with the decentralisation because wherever there is a NIMART-trained nurse, the patient can be initiated on treatment anytime." (RN 8)*

> *"Now again the workload is back again. Because decentralisation was done so that the facility can be decongested at least for us to see fewer clients so that* the quality of care we give can be like higher." (RN 4)

Test-and-treat was reported as being beneficial in terms of initiating ART before the patient's condition deteriorated. However, the participants reported that they experienced an increase in

workload because of the test-and-treat policy. In addition, the participants expressed inconvenient laboratory transport schedules which left them stranded on ART initiation when they received a newly tested HIV-positive paediatric patient in the afternoon hours.

> *"Okay, and treat all, that helped a lot. Because ahhh when you waited for the CD4 to go down before we started the patient on treatment, not everybody was recovering because we started late." (RN 9)*

> *"Yes, maybe a person will show up at 2:00 [pm] at the testing site. The person will be tested. The person needs counselling, and he needs confirmatory test. By the time they reach at my site now, my consultation room, it's around 3:00 [pm]. Around 3 pm, there is pressure from NIP whereby you have to take blood before 4:00 [pm]!" (RN7)*

The participants' experiences regarding elimination of mother-to-child transmission was reported positively as having contributed to a reduction in the number of infants who tested HIV positive. In addition, one participant felt that the success brought about by the policy had reduced the number of paediatric clients who required blood to be drawn for HIV testing, which was a challenge to the NIMART-trained nurses.

> *"This PMTCT has actually helped… It's helping us. It's not like back then; even when it comes to the transmission now from mother to their kids it's really at a lower rate." (RN7)*

> *"So, we do not even have a challenge with blood room anymore. But those days we were having a big challenge because we were having a lot of small children being put on [ART) initiation and it was a challenge." (RN3)*

Generally, HIV treatment related policies were described as being beneficial to both the patients and the NIMART-trained nurses. The benefits to the NIMART nurses were expressed as increased knowledge, empowering and job satisfaction. Benefits to the patients were expressed as reduced waiting time for the patients in the clinics, early ART initiation, reduced new HIV infections among infants and saving on distance and transport costs. However, some of the policies were experienced as having increased the workload for the nurses, with decentralisation not being fully accepted by the patients.

4.4 SUMMARY

This Chapter presented and discussed the findings of the study. The findings were discussed in relation to the five themes that emerged from the interviews. The five themes related to the individual factors, interpersonal relations, institutional factors, community-based factors and policy-related factors. Overall, these themes and the subthemes described the experiences of

NIMART-trained nurses providing care to paediatric clients in the Windhoek District. The next chapter provides a discussion of the findings in relation to the literature, the limitations and the conclusions.

CHAPTER 5:
DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

Chapter 1 of this study entails a description of the purpose and aim of the study. This is followed by a comprehensive literature review in chapter 2. Chapter 3 described the research methodology that was applied, and the findings were presented in chapter 4. This chapter includes the discussion of findings, followed by conclusions and recommendations for further study.

5.2 DISCUSSION

The aim of this research was to explore the experiences of NIMART-trained nurses providing care to children living with HIV at ART clinics in the Windhoek District of Namibia. The findings of this study are discussed according to the study objectives.

5.2.1 Experiences of NIMART-trained nurses regarding individual factors that affect the provision of paediatric HIV care

5.2.1.1 Knowledge and skills

The findings indicated that the knowledge, skills, emotions and attitude were among the individual factors that shaped the nurses' experiences in provision of paediatric HIV care. In general, the nurses experienced that their knowledge and skills were inadequate for comprehensive paediatric HIV-care provision. These results build on existing evidence of Rujumba *et al.*, (2010:4) in which 24% of the nurses who participated in that study reported inadequate knowledge in paediatric ART, which is similar to the findings by Smith *et al.*, (2016:325) where only 27% of the nurses who had received NIMART training were comfortable practising first-line paediatric ART. In this study, the lack of knowledge and skills was attributed to training which focused on adult ART while neglecting paediatric ART, while in practice, the NIMART-trained nurses experienced paediatric *ART to be quite different from Adult ART. In addition, this study also highlights the lack of skills of the nurses to understand the child and adolescent development as well as the skills to communicate with children and adolescents which is usually not part of NIMART training.

With limited knowledge and skills, the NIMART-trained nurses expressed lack of confidence and feared making mistakes when initiating ART; some reported that they had never initiated paediatric ART. These findings support those of Cameron *et al.*, (2012:2) who found that only 9 out of 126 NIMART-trained nurses were initiating paediatric ART after NIMART training. The nurses also reported inadequate paediatric counselling skills, due to lack of training and in general, expressed inability to provide for the general needs of children living with HIV/AIDS, similar to findings made by Rujumba *et al.*, (2010:6). The findings of this study and literature

confirm that NIMART-trained nurses are not well equipped with the necessary skills to manage paediatric ART patients with more focus being on adult ART. There is a need to pay more attention to paediatric ART so that nurses become competent to provide this service.

5.2.1.2 Emotions

This study demonstrated that caring for paediatric patients triggered negative emotions among the nurses, especially in relation to caring for children with advanced HIV disease, death of a paediatric patient and paediatric phlebotomy. This data contributes to existing evidence, which suggests that caring for children living with HIV/AIDS is an emotional experience. For example, Ramathuba and Davhana-Maselesele, (2011:7) found that nurses felt depressed when they could not do anything else to save the life of their patients with advanced disease. In addition, Williams *et al.*, (2018:6) found that nurses had a fear of providing care to children living with HIV/AIDS, including drawing blood and prescribing medication, because they felt it was too much for kids. Due to this emotional aspect of paediatric ART care, nurses need social support services to cope as demonstrated in a study by Shipanga *et al.*, (2017:106) where counselling was provided for nurses.

However, in this study, no counselling services were available for nurses leading to emotional build-up in the course of their duty. The findings revealed that NIMART-trained nurses handled the emotions by keeping it to themselves, discussing it with their peers, discussing with their spouses, crying or going for private therapy sessions. The findings of this study revealed that nurses caring for paediatric ART patients experienced some stress, which they mostly did not deal with in the appropriate way, hence the need to provide comprehensive emotional support services for these nurses.

5.2.1.3 Attitudes

Data from this study indicated that the nurses had both positive and negative attitudes towards paediatric ART care. Some nurses expressed general interest and fulfilment in caring for the children, watching the children living with HIV growing up healthy, accepting their status and living positively with HIV. The nurses with negative attitudes were not driven by lack of interest, but their lack of understanding of task shifting and lack of knowledge and skills, which made it difficult for them to manage the patients. These findings are in keeping with the findings of Vorasane *et al.*, (2017:6) who found that nurses with a low level of knowledge and experience had a negative attitude towards PLWHA. Suominen *et al.*, (2015:6) also found that 78% of the students with a moderate level of knowledge on HIV felt that they had a right to refuse to provide care to HIV patients. Therefore, nurses do not necessarily dislike paediatric ART care, but they are often underprepared for the task, indicating the need for proper training of nurses in the provision for paediatric ART care.

This study suggested that nurses are interested in providing paediatric ART care, but they face challenges of lacking adequate knowledge and skills leading to difficulties in providing the care. Consequently, some become disinterested in the paediatric ART care. In addition, the emotional situations that nurses encountered while caring for HIV-positive children, what some described as a tough experience, may have contributed to negative attitudes towards paediatric ART care.

5.2.2 Experiences of NIMART-trained nurses regarding interpersonal factors that influence the provision of paediatric ART services

5.2.2.1 Inter-professional experiences

The study found that the interactions of nurses with other nurses and healthcare professionals influence the nurses' experiences in delivering care to children living with HIV/AIDS in different ways. Nurses felt that doctors were a resource to be consulted in areas they were not competent, but the doctors tended to leave the nurses to do most of the work. In addition, the nurses in this study thought that the health assistants and social workers were not adequately complementing the nurses' work. According to the nurses, the social workers and health assistants were not providing counselling services to the children competently. The nurse-to-nurse interactions were reported to be more negative than positive across the three facilities as shortage of nurses and role confusions made it difficult for the nurses to work as a team in providing paediatric ART care.

The findings of this study support Williams *et al.*, (2018:4) who reported that nurses experienced unfairness in terms of work distribution, failure of some of the HCW to perform some duties, and other staff who were unwilling to help when the workload was high in one area of the clinic. It should be noted however that while ART staff experienced high workload and needed help, nurses in other departments could similarly be having high workload and therefore could not help. On the other hand, doctors may have viewed task shifting as an opportunity to leave everything to nurses, rather than the nurses helping the doctors to reduce their workload. These negative experiences were also reported by Wright et al., (2014:5) indicating that interactions among HCW can be a source of conflict. However, in this study not only was conflict reported but also positive aspects were mentioned**.** The conflict in roles seem to arise from lack of interprofessional understanding of roles and collaborations**.**

The perception by nurses that social workers and health assistants were failing in the provision of counselling services could be explained by the fact that communicating with children is a challenging undertaking (Rujumba et al., 2010:4). Previous studies have demonstrated that paediatric patients are difficult to counsel and one is never sure if the children understand the information that is discussed (Kranzer et al., 2014:4). Therefore, a team approach among the nurses, social workers and health assistants can help all understand the challenges better and avoid the blame game.

5.2.2.2 Nurse-to-patient interactions

The interactions between nurses and the patients showed that nurses had a good experience with children describing the children as polite, obedient and honest as compared to the adult patients. The good experiences began to wane as the children grew up into older adolescents, with some nurses labelling them as troublemakers. The negative experiences came in the aspects of disclosing the diagnosis and adherence to treatment, which were associated with denial. Denial often took the form of refusal to take medication or failure to go for regular follow-up visits and blaming of their parents for their status. These findings reveal the positive aspects of nurses when working with paediatric patients, which were not reported in previous studies which highlighted the negative aspects also reported in this study. For example Williams *et al.* (2018:7) found that some children refused to take their antiretroviral medication as required and Ndacayisaba (2017:37), and Makworo and Odero (2019:1-2), reported that disclosing to children their HIV status was a challenging experience for nurses. It is expected that children will have difficulties in understanding their HIV situation due to several factors such as stigma, social support concerns, family relations, parenting skills and emotional maturity (Makworo & Odero, 2019:1-2). In future, the positive findings of this study can be the key to finding solutions in the challenges of working with paediatric patients.

5.2.2.3 Nurse-caregiver interactions

In this study, nurses experienced positive encounters with caregivers who were supportive to the children under paediatric care making it easy for the children to come for follow-up visits and adhere to treatment. Previous studies reviewed were silent on the contribution of supportive caregivers to the provision of paediatric ART care. Most of the studies emphasised the unsupportive aspect of caregivers which was found to contribute to poor adherence to ART, more so in children (Rujumba *et al.*, 2010:5-6; Williams *et al.*, 2018:7; Wasti *et al.*, 2012:5). In this study, nurses also reported incidents where caregivers were unsupportive and failed to supervise treatment, to accompany children for follow-up visits, and showed unwillingness to facilitate disclosure of HIV status to the children. Unsupportive caregivers created problems for the ART nurses leaving them powerless when the children fail to adhere to treatment (Rouleau *et al.*, 2019:31).

Furthermore, caregivers fail to support nurses when they conceal the status of the child to protect the children from stigma or for fear of being blamed for infecting the children (Rujumba *et al.* 2010:4; Williams *et al.* 2018:10). Findings of this study and existing literature strongly suggest that most of the time the relationship between caregivers and nurses is challenging. It is necessary to provide health education to caregivers, especially on their role regarding the paediatric ART patients to ensure that they can work hand in hand with the nurses. Although it can be assumed

that caregivers lack information or can misinterpret information as suggested in some studies, the approach to correct this problem should be two ways involving both nurses and caregivers (Wachira et al. 2012:25).

The interactions of nurses with other nurses, healthcare professionals and caregivers and the children living with HIV influenced how nurses experienced provision of paediatric ART services. The findings of this study point out an important set of soft skills required by nurses and other healthcare professionals as they work with one another, paediatric clients and caregivers. The role confusion reported in the study is expected considering that tasks have been shifted mainly from doctors to nurses, and nurses already had their own tasks, which they continue to perform. Therefore, nurses may always consider doing their traditional role first before taking up the shifted tasks, while doctors may tend to neglect the shifted tasks creating the confusion.

5.2.3 Experiences of NIMART-trained nurses regarding institutional factors that affect the provision of paediatric ART care

5.2.3.1 Human resources

The participants generally expressed increased workload, which was attributed to staff shortage in the health centre and clinic setting. The participants from the hospital setting felt that the shortage was created due to questionable processes of staff selection for the ART facilities and this compromised the quality of care provided. This had a negative impact on the quality of service provided by the nurses. Generally literature supports the finding that there is a shortage of staff in health facilities and that includes ART facilities hence limiting the performance of the ART staff nurses (Mabelane *et al.*, 2016:10; Mboweni & Makhado, 2020:7; Cameron, *et al.*, 2012:3). Increased workload has been found to cause stress to the nurses resulting in poor implementation of ART services (Erkki & Hedlund, 2013:36; Williams *et al.*, 2018:3). The data contributes to the understanding that while a shortage of nurses exists in the provision of paediatric ART care, it tends to be more in primary health care facilities (clinics) that are detached from big hospitals and the shortage is worsened by improper staff allocation. One explanation for shortage of staff at clinics is that clinics offer diverse services, including ART while hospital-based ART facilities only focus on ART. Improper staff selection could be an issue of managerial shortcomings that need to be addressed.

5.2.3.2 Supervision and mentoring

Nurses described the role of the supervisors as supportive in ensuring that supplies were available, but the role of supervisors was considered less supportive in other areas. In the allocation of staff for the ART clinics, the nurses expressed that the supervisors could not help to ensure that there was proper allocation of staff. Furthermore, the nurses considered the supervisors as having limited knowledge regarding paediatric ART hence their inability to help the

nurses. While the role of the supervisors was appreciated in this study, most studies are in agreement with the fact that supervision in the provision of ART services is mostly ineffective (Mboweni & Makhado, 2020:8; Williams *et al.*, 2018:4; Lerotholi, 2011:46). The findings of this study confirm other pieces of evidence, which suggest that nurses lack support in terms of staffing and workload (Ramathuba & Davhana-Maselesele, 2011:10). Furthermore, it seems that little is done by the supervisors to address the challenges of staffing (Lerotholi, 2011:46). However, with the general shortage of HCW, it may also be difficult for the supervisors to address this challenge.

In terms of mentoring, the NIMART-trained nurses had mixed experiences, describing the mentors as supportive in some instances and not so supportive in others. The mentors were available most of the time to provide support or reachable remotely when needed. Nevertheless, some nurses highlighted that some of the mentors lacked knowledge on paediatric ART and were too demanding regarding the documentation requirements of ART. The study findings confirm that mentoring of NIMART trained nurses has been a successful programme (Green, De Azevedo, Patten, Davies, Ibeto and Cox, 2014:5; Visser, Wolvaardt, Cameron and Marincowitz, 2018:1). It was confirmed that mentoring and support by a clinical mentor strengthened quality improvement and motivated health workers to address constraints in the provision of ART. Similarly to literature describing different views regarding mentoring, nurses in this study found some weakness in the mentoring, in particular regarding the competence of the mentors. On the other hand, the required documentation in ART services is different and often heavier due to the more complex monitoring and evaluation systems compared to other outpatient nursing services, so it is expected that nurses will feel burdened.

5.2.3.3 Resources

Nurses explained that they had insufficient material resources such as medication for the children, stationery and other paediatric specific equipment needed for optimal paediatric ART service provision. Besides material resources, the nurses also mentioned that the infrastructure at clinics was generally inadequate and not child-friendly, with shortage of consulting rooms and child-friendly spaces. The lack of resources was reported to negatively affect the quality of service with paediatric patients sometimes receiving inadequate doses and forced to return for more drugs in a short space of time. These shortages often frustrated the nurses because it interfered with their services, compromising the quality of their work.

The findings are in line with other studies which demonstrated that countries with a high burden of HIV often lack resources such as drugs, stationery, telephones, equipment and working space (Mabelane *et al.*, 2016:2; Cameron *et al.*, 2012:99; Williams *et al.*, 2018:5). In such cases, it was found that medications ran out, forcing nurses to dispense drugs for a shorter duration, and forcing patients to return to the clinic more frequently than necessary (Mabelane *et al.*, 2016:11).

Similarly, Rujumba *et al.* (2010:6) found that the lack of paediatric-friendly antiretroviral formulations resulted in adherence challenges among the paediatric clients. The need to visit the health facilities for more medication meant that the patients and caregivers needed more time and money for transport, and as demonstrated by this study, patients struggle to get money for transport.

Besides medications, lack of infrastructure such as consultation rooms reported in this study, is supported by other studies. According to Davies et al., (2013:6) and Mabelane *et al.*, (2016:11), PHC facilities had inadequate infrastructure leading to overcrowding and shifting some services to accommodate ART services (Mboweni & Makhado, 2020:8). Other studies further confirm that consulting rooms specific for ART services are in short supply with HCW forced to share a room while providing services to two different clients (Williams *et al.*, 2018:5; Crowley & Stellenberg, 2014:4). Consistent with the findings of this study, Rujumba *et al.* (2010:6), reported how the shortage of resources hindered the delivery of comprehensive ART care to the paediatric patients, which according to Davies *et al.*, (2013:6) led to feelings of demoralisation among nurses. With inadequate space and sharing of consulting rooms, it was inevitable that nurses could not maintain patient confidentiality during consultations (Davies *et al.*, 2013:6).

Institutional factors such as human resources, material resources and infrastructure played a role in determining the experiences of NIMART-trained nurses in the provision of paediatric HIV care. These findings have been confirmed by the existing literature, but the findings provided additional data suggesting that staff allocation can play a role in establishing adequacy of staff in ART facilities.

5.2.4 Experiences of NIMART-trained nurses regarding community factors that affect the provision of paediatric HIV care

5.2.4.1 Poor socio-economic conditions

The study demonstrated that nurses caring for paediatric patients were concerned about the social and economic circumstances of their clients. They described that most of their paediatric clients were from poor socio-economic backgrounds and lacked good housing, safe water and sanitation facilities and food, which increased their risk of contracting opportunistic infections and poor adherence to ART. The findings of this study are consistent with other study findings which demonstrated that nurses were concerned with the situation of their patients and wanted to understand issues of poverty and family support (Erkki & Hedlund, 2013:11; Genberg *et al.*, 2019:6). Just like in this study, the poor economic situations led to poor food security leading to defaulting of treatment (Bezabhe, Chalmers, Bereznicki, Peterson & Bimirew et al., 2014:4; Weiser, Tsai, Gupta, Frongillo, Kawuma et al. 2012:6). The nurses ended up frustrated when their patients failed to adhere to treatment because they could not deal with their social and structural

determinants of health, including financial assistance (Genberg et al., 2019:5). The body of evidence strongly suggests that it is not enough to provide free treatment without providing further economic support for the patients. In the end, the nurses will fail to provide quality care to paediatrics, due to the socio-economic situation of the patients.

5.2.4.2 Distance and transport

Long distance to clinics and lack of money for transport were expressed as the cause of failure for clients to turn up for follow-up visits. Failure to come for follow-up visits means clients will run out of medications leading to defaulting of treatment. This is a great cause of concern for nurses. The findings in this study are in line with other studies which highlighted that poverty resulted in lack of transport money for clients to go to a health facility for their follow-up visits leading to defaulting of treatment (Mukumbang *et al.*, 2017:7; Ashby *et al.*, 2011:36). Wasti et al. (2012:6) also found that patients seeking ART services often did not have enough money to go to the health facility to get their repeat prescriptions. Due to the nature of ART care, nurses need their patients to regularly visit the health facility for close monitoring. While the treatment could be free, the caregivers usually struggled to get transport money to go to the health facilities, negatively affecting the quality ART services rendered by nurses to the paediatric clients.

5.2.4.3 Cultural practices and religious beliefs

In this study, negative cultural and religious practices were not reported to be major factors in paediatric ART provision. When the clients or caregivers engaged in religious and/or cultural practices, it was mainly with negative consequences such as withdrawing from treatment and later returning to the health facility in a critically ill condition. These findings are in line with a study in Ghana where the HCW reported that patients defaulted ART due to cultural practices (Ashby *et al.*, 2011:31). In a study in Nigeria, although patients used traditional medicines, the prevalence was low at about 4.3 % of the clients (Tamuno, 2011:154). In addition, evidence exists to show that not only culture but also religious beliefs such as prayers were offered to infected children leading to non-compliance with treatment (Wachira et al. (2012:26). Although the influence of culture and religious beliefs was not a major issue in this study, its existence interfered with the work of nurses in providing paediatrics ART care. A child who become more ill or missed treatment presented challenges to nurses and the health system, due to the more specialised care required to manage the patient's worsened condition.

5.2.5 Experiences of NIMART-trained nurses regarding programme policies affect the provision of paediatric ART care

Policies discussed by the participants were mainly international policies that were adopted by the national government and practised at local health facilities. There were no policies that were formulated nationally or locally that were discussed by the participants.

5.2.5.1 International, national and local policies

Policies were explained as being beneficial to both the patients and the NIMART-trained nurses. The benefits to the nurses were experienced as increased knowledge, empowerment and job satisfaction. Benefits to the patients were reported as reduced waiting time for the patients in the clinics, early ART initiation, reduced new HIV infections among infants and saving on travelling time and transport costs. However, the policies were experienced as having increased the workload for the nurses, with decentralisation not being fully accepted by some of the patients. According to Houben *et al.*, (2012:1) the aim of decentralised health services was to reduce the distance between patient and clinic and thereby reduce the time and costs involved in travelling to the health facilities. In this study, the aim of the policy of decentralisation was not fully realised with patients still being reported to struggle to find transport and money to get to the hospital and health centre. Further investigation is needed to examine how the policy directive and the policy in practice correlate so that measures can be taken to close the gap between the two so that the aim of decentralisation may be fully realised.

The implementation of task shifting was found to be an empowering experience for the nurses resulting in improved self-image, job satisfaction and knowledge level. The findings are in line with other researchers who reported that nurses felt empowered and developed problem-solving skills and teamwork as a result of task shifting (Davies *et al.*, 2013:3). Task shifting meant that nurses at clinics were able to initiate paediatric patients on ART, a move that increased uptake of ART (Nyasulu, Muchiri, Mazwi & Ratshefola, 2013:234). As predicted in earlier studies, the nurses' experiences showed that task shifting was feasible and acceptable by nurses, doctors and the patients with no one opposing its implementation (O'Malley *et al.*, 2014:10). However, the nurses also reported that task shifting had a negative side whereby their expanded responsibilities led to increased workload.

5.3 STRENGTHS AND LIMITATIONS OF THE STUDY

To the best of my knowledge, this is the only study that has sought to investigate the experiences of NIMART-trained nurses providing care to paediatric ART care in Namibia. It is also one of the few studies that specifically explored the experiences of paediatric ART nurses in the region. Most of the other researchers studied the experiences of nurses both in paediatric and adult care and therefore the paediatric experiences are usually masked by the adult experiences.

However, this study evaluated NIMART-trained nurses practising paediatric ART in three facilities in the Windhoek District of Namibia, and findings, therefore, may not be generalizable across the country. In addition, some of the NIMART-trained nurses who participated in this study were

providing care to adults, older adolescents and children, therefore their experiences might include those from older adolescents and adults.

5.4 RECOMMENDATIONS

Based on the findings from this study, the researcher realised that NIMART-trained nurses faced some challenges while managing children receiving ART in the ART clinics within the Windhoek District. The researcher, based on the objectives and findings of the study, is therefore putting forward the following recommendations for implementation in clinical practice, education and research.

5.4.1 Recommendations related to individual factors

- The NIMART training should include equal components of both adult and paediatric ART content. The paediatric part should include all aspects of paediatric HIV assessment, treatment, counselling and monitoring. This should be followed by a comprehensive paediatric ART certification process. This study also recommends that the NIMART-trained nurses are provided with a consolidated paediatric specific ART guideline that addresses all issues pertaining to paediatric ART care.
- The institution should establish avenues that will help the HCW deal with emotional challenges they experience as a result of providing care to HIV patients. For example, the services of social workers and psychologists should be made available to nurses. Occasional debriefing sessions with other HCW providing similar services can also be established within the district. Stress management and self-care should be part of all training that pertain to the management of HIV patients.

5.4.2 Recommendations related to interpersonal factors

- There is a need to cultivate a sense of teamwork and strengthen communication across all the different cadres of health professionals to minimise role conflicts. This can be done through remoulding of ART services along the inter-professional scopes of practice in which the different cadres have clear definitions of their roles in the team to avoid role conflicts and enhance teamwork.
- Child-friendly health education guidelines that address issues such as stigma, discrimination, acceptance of their HIV status, good adherence to treatment and achievement of viral suppression should be developed and distributed to the paediatric HIV clients, as necessary.
- The healthcare facilities should organise occasional thematic discussions or health education sessions for caregivers of children living with HIV/AIDS. Examples of themes for discussion with caregivers include disclosure, adherence to treatment, stigma and

transitioning to adolescence and adulthood. However, this recommendation will require additional resources which needs to be advocated for.

5.4.3 Recommendations related to institutional factors

- Units within health facilities where ART services are provided should be viewed as important health care provision units within the institutions requiring adequate and competent staff just like other units or departments. Interest in ART service delivery should be considered when deploying staff to the ART clinics. NIMART training should be provided to all staff before deployment to the ART sites to improve their confidence working in these units.
- Institutional management must prioritise the procurement of essential paediatric ART materials and resources such as paediatric needles, paediatric weighing scales and nutritional assessment equipment.
- Mentors and supervisors should be adequately equipped with knowledge on paediatric ART together with skills to supervise paediatric ART care provision by NIMART-trained nurses.

5.4.4 Recommendations related to community factors

- Existing community outreach services where health care workers visit the community to provide services such as immunization, family planning and antenatal/postnatal services, should be expanded to include paediatric ART services. It is important that outreach services are established in areas that are far from the clinics to reduce the number of lost to follow-up clients and transportation costs for the patients.

5.4.5 Recommendations related to policy factors

- Whereas task shifting has contributed a lot to expanded ART coverage, there is a need to re-evaluate the tasks shifting policy and distribute tasks rationally across all HCW. The findings of this study indicate that nurses seem to be overburdened by the existing task shifting policy, especially with tasks that can be assigned to lower levels of HCW. Examples of tasks than can be shifted from nurses include weighing of patients, retrieving of patient care booklets, filing of patient results and care booklets.

5.5 FUTURE RESEARCH

Since this study focused mainly on the Windhoek District, the researcher recommends that a replica study should be conducted in a different district in Namibia in order to compare the findings. In addition, the researcher recommends that other qualitative studies that focus more on certain aspects of care, for example, the roles of different HCWs in the provision of paediatric ART care can be done. Since this was a qualitative study, the researcher also recommends

that a quantitative study should be conducted to accurately measure and assess the knowledge, attitude and practices of the NIMART-trained nurses regarding paediatric ART.

5.6 DISSEMINATION

The findings of this research will be disseminated through HIV-conference proceedings and workshops. In addition, a copy of the thesis will be submitted to the national and regional health management offices of the Windhoek District. The researcher will also seek to publish the findings of this study in a peer- reviewed HIV journal.

5.7 CONCLUSION

The aim of this study was to explore the experiences of NIMART-trained nurses providing paediatric ART care in the Windhoek District of Namibia. The findings of this study indicate that as much as the NIMART-trained nurses provide care to paediatric ART patients, they lack adequate knowledge, skills, resources, and infrastructure to execute their roles effectively and confidently. The findings also indicate that the NIMART-trained nurses lack support in terms of supervision and mentoring. These findings answer the research question that sought to investigate the experiences of NIMART-trained nurses providing paediatric ART care in the Windhoek District of Namibia.

There is a need for increased emphasis on paediatric ART during NIMART training, adequate supervision and continuous mentoring. It is hoped that the findings and recommendations of this study will be addressed as a matter of urgency to improve on the quality of care provided to paediatric ART patients.

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APPENDICES

Appendix 1: Ethical approval from Stellenbosch University

UNIVERSITEIT
STELLENBOSCH
UNIVERSITY

Approval Notice

New Application

19/06/2020

Project ID :14909

HREC Reference No: S20/03/085

Project Title: The experiences of NIMART-trained nurses providing care to paediatric HIV patients at ART clinics in the Windhoek District of Namibia

Dear Ms Peris Maronda

We refer to your response received on 31/05/2020. Please be advised that your submission was reviewed and **approved** by members of **Health Research Ethics Committee** via **expedited** review procedures on 19/06/2020.

Please note the following information about your approved research protocol:

Protocol Approval Date: 19 June 2020

Protocol Expiry Date: 18 June 2021

Please remember to use your Project ID 14909 and Ethics Reference Number S20/03/085 on any documents or correspondence with the HREC concerning your research protocol.

Please note that the HREC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

After Ethical Review

Translation of the informed consent document(s) to the language(s) applicable to your study participants should now be submitted to the HREC.

Please note you can submit your progress report through the online ethics application process, available at: Links Application Form Direct Link and the application should be submitted to the HREC before the year has expired. Please see *Forms and Instructions* on our HREC website (www.sun.ac.za/healthresearchethics) for guidance on how to submit a progress report.

The HREC will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly for an external audit.

Provincial and City of Cape Town Approval

Please note that for research at a primary or secondary healthcare facility, permission must still be obtained from the relevant authorities (Western Cape Departement of Health and/or City Health) to conduct the research as stated in the protocol. Please consult the Western Cape Government website for access to the online Health Research Approval Process, see: https://www.westerncape.gov.za/general-publication/health-research-approval-process. Research that will be conducted at any tertiary academic institution requires approval from the relevant hospital manager. Ethics approval is required BEFORE approval can be obtained from these health authorities.

We wish you the best as you conduct your research.

For standard HREC forms and instructions, please visit: Forms and Instructions on our HREC website https://applyethics.sun.ac.za/ProjectView/Index/14909

If you have any questions or need further assistance, please contact the HREC office at 021 938 9657.

Yours sincerely,

Mrs. Melody Shana

Coordinator

HREC1

National Health Research Ethics Council (NHREC) Registration Number:

REC-130408-012 (HREC1)-REC-230208-010 (HREC2)

Federal Wide Assurance Number: 00001372
Office of Human Research Protections (OHRP) Institutional Review Board (IRB) Number:

Page 1 of 2

Appendix 2: Permission from Namibia's Ministry of Health and Social Services

REPUBLIC OF NAMIBIA

Ministry of Health and Social Services

Private Bag 13198
Windhoek
Namibia

Ministerial Building
Harvey Street
Windhoek

Tel: 061 – 203 2507
Fax: 061 – 222558
E-mail: itashipu87@gmail.com

OFFICE OF THE EXECUTIVE DIRECTOR

Ref: 17/3/3 PMM
Enquiries: Mr. A. Shipanga

Date: 30 July 2020

Ms. MG Maronda
PO Box 40279
Ausspannplatz
Windhoek

Dear Ms. Maronda

Re: The experiences of NIMART trained nurses provided care to paediatric HIV patients at ART Clinics in Windhoek District of Namibia.

1. Reference is made to your application to conduct the above-mentioned study.

2. The proposal has been evaluated and found to have merit.

3. **Kindly be informed that permission to conduct the study has been granted under the following conditions:**

3.1 The data to be collected must only be used for academic purpose;

3.2 No other data should be collected other than the data stated in the proposal;

3.3 Stipulated ethical considerations in the protocol related to the protection of Human Subjects should be observed and adhered to, any violation thereof will lead to termination of the study at any stage;

3.4 A quarterly report to be submitted to the Ministry's Research Unit;

3.5 Preliminary findings to be submitted upon completion of the study;

3.6 Final report to be submitted upon completion of the study;

3.7 Separate permission should be sought from the Ministry for the publication of the findings.

4. All the cost implications that will result from this study will be the responsibility of the applicant and **not** of the MoHSS.

Yours sincerely,

EXECUTIVE DIRECTOR
MINISTRY OF HEALTH AND SOCIAL SERVICES

BEN NANGOMBE
EXECUTIVE DIRECTOR

"Health for All"

Appendix 3: Permission from Khomas regional health directorate

9-0/0001

REPUBLIC OF NAMIBIA

Ministry of Health and Social Services

Private Bag 13322
Windhoek
Namibia

Regional Office
Khomas Region
Florence Nightingale Street

Telephone (061) 203-5011
Telefax (061) 235997

Enquiries: Mrs. P N Ambambi

Reference: S 4/9

Date: 03 September 2020

OFFICE OF THE DIRECTOR

STAFF MATTER: CONFIDENTIAL

MS. Peris M G Maronda
P.O.BOX 40279
Ausspannplatz
Windhoek

Dear Ms. Maronda

I have the pleasure to inform you that as per Executive Director's approval permission is granted for you to conduct a study on " Experiences of NIMART trained Nurses providing care to pediatric ART patients" in Windhoek District in Khomas Region.

The office wishes you success with your research.

Yours sincerely

MRS. PATEMOSHELA HAMUNYELA
ACTING DIRECTOR: KHOMAS REGION

MINISTRY OF HEALTH
AND SOCIAL SERVICES
OFFICE OF THE DIRECTOR
04 SEP 2020
TEL NO: 061-2035001 / 6
P/BAG 13322. WINDHOEK
DIRECTORATE, KHOMAS REGION

"Your Health. Our Concern"

Appendix 4: Permission from the chief medical officer, Katutura hospital

Republic of Namibia

Ministry of Health and Social Services

Private Bag 13215
WINDHOEK
Namibia

Intermediate Hospital Katutura
Independence Avenue
WINDHOEK

Telephone (061) 203 4004/5
Telefax (061) 222706

Enquiries: Dr. F. M. Shiweda

Date: 2 September 2020

OFFICE OF THE CHIEF MEDICAL OFFICER

Ms. MG Maronda
P.O. Box 40279
Ausspanplatz
Windhoek

Dear Ms. M.G. Maronda

RE: **THE EXPERIENCES OF NIMART TRAINED NURSES PROVIDED CARE TO PAEDIATRIC HIV PATIENTS AT ART CLINICS IN WINDHOEK DISTRICT OF NAMIBIA.**

The above mentioned subject refers:

This office hereby grants you permission to do a research on the experiences of NIMART trained nurses provided care to paediatric HIV patients at ART Clinics at Katutura State Hospitals, Windhoek, Khomas Region.

Thank you

Please provide this office with a copy of your findings.

Yours in health,

MINISTRY OF HEALTH
AND SOCIAL SERVICES

.....

DR. M. JOSEF
ACT. MEDICAL SUPERINTENDENT

Appendix 5: Participant information leaflet and declaration of consent by participant and investigator

PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

TITLE OF RESEARCH PROJECT:	
The experiences of NIMART-trained nurses providing care to paediatric HIV clients at ART clinics in the Windhoek District of Namibia	
DETAILS OF PRINCIPAL INVESTIGATOR (PI):	
Ms. Peris Maronda	Ethics reference number: S20/03/085
Full postal address: P O BOX 40279, Ausspannplatz, Windhoek, Namibia.	PI Contact number: +264 813462016

We would like to invite you to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please ask the study staff or doctor any questions about any part of this project that you do not fully understand. It is very important that you are completely satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is entirely voluntary and you are free to decline to participate. In other words, you may choose to take part, or you may choose not to take part. Nothing bad will come of it if you say no: it will not affect you negatively in any way whatsoever. Refusal to participate will involve no penalty or loss of benefits or reduction in the level of care to which you are otherwise entitled. You are also free to withdraw from the study at any point, even if you do agree to take part initially.

The Health Research Ethics Committee at Stellenbosch University has approved this study. The study will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, the South African Guidelines for Good Clinical Practice (2006), the Medical Research Council (MRC) Ethical Guidelines for Research (2002), and the Department of Health Ethics in Health Research: Principles, Processes and Studies (2015).

What is this research study all about?

- This study aims to explore the experiences NIMART-trained nurses have when providing care to paediatric patients living with HIV.
- For this study, paediatric HIV clients are defined as children younger than 15 years old who have been diagnosed with HIV and have enrolled in care in one of the facilities under which this study will be conducted.
- The study will be conducted in 3 public health facilities within the Windhoek District, namely: Katutura Intermediate Hospital, Katutura Health Centre, and Otjomuise Clinic.
- The study will involve interviewing and audio recording the NIMART-trained nurses on their experiences in providing care to paediatric ART patients at their convenient time and place.
- The researcher aims at interviewing at least 6 participant from the participating healthcare facilities identified. The researcher will stop the interviews once she realises that no more new information is being obtained from the participants.
- The researcher will audiotape the conversation during the interviews. The interviews will be recorded on an audio recording device and a cell phone as a backup recording method.
- The researcher will also write brief notes during the interview with focus on key words or statements used by the study participants and responses that need further probing.

Why do we invite you?

- You have been chosen to participate in this study because you are a NIMART- trained nurse, and you have provided HIV care or services to paediatric HIV patients.

What will your responsibilities be?

- You will be expected to sign a consent form after you have understood what the study is all about and what is expected of you during the study.
- You will be asked to suggest an appropriate time and place for the interview to be conducted.

- You will be expected to participate in an individual interview which will be recorded and may take up to 45 minutes.
- You may be asked to avail yourself for a second interview if needed, to clarify information obtained during the first interview.

Will you benefit from taking part in this research?

- There are no direct benefits to this study, but it is expected that the results of this study will generate knowledge and provide recommendations to the planners and implementers of the paediatric HIV programme in Namibia on how to improve the paediatric HIV and NIMART programme, in order to achieve improved health outcomes for children living with HIV, and better working experiences for the NIMART nurses.

Are there any risks involved in your taking part in this research?

- The study will not involve any invasive procedures, however minimal temporary discomfort in the form of inconvenience of time, or emotional discomfort may occur.
- You may decline to answer any or all questions, and you may terminate your involvement at any time if you choose to.

If you do not agree to take part, what alternatives do you have?

- If you choose not to take part in the study, you will not be forced to or be prejudiced against in any way. You may also withdraw from the study at any point if you choose to.

Who will have access to the information you give?

- At no point will the information gathered be shared with the management or any other persons not involved in this research process.
- All interviews will be held in private, and at the convenience of the study participants and all notes, interview transcriptions, audio recordings and any other identifying participant information placed in a locked file cabinet in the personal possession of the researcher and no unauthorised person will have access to it.
- A pseudonym will be assigned to participants and will always be used while referring to the participants. No participants or the facility they work in, will be identified in the final research report.

Will you be paid to take part in this study and are there any costs involved?

- There will be no monetary compensation for participating in this study. However, refreshments, in the form of a warm or cold drink and a snack will be provided.

Declaration by participant

By signing below, I ……..……. agree to take part in an audio recorded research study entitled “The experiences of NIMART-trained nurses providing care to children living with HIV at ART clinics in the Windhoek District of Namibia”.

I declare that:

- I have read or had read to me this information and consent form, and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions, and all my questions have been adequately answered.
- I understand that taking part in this study is voluntary, and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished if the researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Signed at (place) .....….....……on (date) ……...…….. 2020

Signature of participant Signature of witness

Declaration by investigator

I (name) ……..…… declare that:

- I explained the information in this document to ……..
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I did/did not use an interpreter. (If an interpreter is used then the interpreter must sign the declaration below.

Signed at (place) .....….....…… on (date) ……...……..

Signature of investigator……Signature of witness…….

Appendix 6: Interview guide

STUDY TOPIC: The experiences of NIMART-trained nurses providing care to children living with HIV at ART clinics in the Windhoek District of Namibia

Part I-Demographic information

Ask and/or observe and record the following demographic information:

- Age of participant
- Gender
- Facility setting
- Nursing qualification
- Year trained in NIMART
- Any additional HIV training received
- Number of years of experience with paediatric HIV care and treatment

Part 2: Guiding questions

Objective 1: To explore the experiences of NIMART-trained nurses regarding personal issues that affect the provision of paediatric HIV care.

- Can you tell me about your personal experiences that tend to hinder your provision of paediatric HIV care?

Objective 2: To explore how NIMART-trained nurses experienced the interpersonal relationships and interactions between them and their families, colleagues, and other healthcare workers in the provision of paediatric ART services.

- Can you describe how interpersonal relationships and interactions between you and the people within your immediate environment affect the provision of paediatric ART services?

Objective 3: To describe institutional factors that affect the provision of paediatric HIV care by the NIMART-trained nurses.

- Can you explain any institutional and the health system related factors that affect your performance in the provision of paediatric HIV services?

Objective 4: To describe community factors that affect the NIMART-trained nurses in the provision of paediatric HIV care.

- How do you feel the community /location from which your patients come affects the overall care and outcome of the services you provide?

Objective 5: To describe how current programme policies effect on the provision of paediatric HIV care by the NIMART-trained nurses

- Please tell me about how the public policy affects your provision of paediatric HIV care.
- Probing words: How, why, explain further, elaborate

Appendix 7: Confidentiality agreement with data transcriber

Confidentiality agreement with data transcriber

This is an agreement is between Peris M G Maronda, a Masters of Nursing science student at Stellenbosch university and Lucas Silas whose address is 20752 WINDHOEK

The agreement is based on research data transcription for the research project titled

The experiences of NIMART-trained nurses providing care to paediatric HIV patients at ART clinics in the Windhoek District of Namibia.

I **Silas Lucas** understand that I will have access to confidential information about research participants and the sites they practice. By signing this agreement, I agree to ensure confidentiality of the information that will be in my possession. I will not divulge or share the information with anyone other than with the Researcher. I will ensure all information regarding this research is secure while in my possession, and that I will return all information pertaining to the research back to the researcher upon completion of the task assigned to me. I will destroy any information that will be left in my possession after consulting the researcher.

Transcriber name Lukas Silas Signature

Date 02/09/2020

Researcher Name PERIS M.G. MARONDA Signature

Date 02/09/2020

Appendix 8: Extract of transcribed interview

RN 7-Transcribed

Interviewer: Good morning

Interviewee: Good morning

Interviewer: Thank you so much for accepting to participate in this study. My name is Peris Maronda, like I have introduced myself. I am a student at Stellenbosch University, pursuing a Masters' degree in nursing science. And I am conducting a study on the experiences of NIMART-trained nurses providing care to children living with HIV in the ART clinics in Windhoek District of Namibia. So you are one of the NIMART trained nurses and that is why you are in this study. So just to start off, I am going to ask you a few questions about yourself.

Interviewee: Okay

Interviewer: Okay, so how old are you?

Interviewee: Mmh, am 25

Interviewer: Okay, what's your nursing qualification?

Interviewee: Registered nurse

Interviewer: You are a registered nurse. Which year did you receive NIMART training?

Interviewee: 2019

Interviewer: 2019. Okay do you have any additional training that is related to HIV?

Interviewee: No, so far

Interviewer: Nothing, okay. So for how long have you been practicing with children living with HIV?

Interviewee: Its just 1 year

Interviewer: It's just one year. Okay, alright. Thank you so much for that information. So now I'll go straight to the questions that pertain to this Interview

Interviewee: Okay

Interviewer: So am going to ask you about your personal experiences caring for these children. If the question is not clear, just ask me to clarify and I will do that.

Interviewee: Okay

Interviewer: Okay, so can you tell me about your personal experiences caring for paediatric patients with HIV.

Interviewee: Okay, aaah when it comes to paediatrics, this is one of the areas where I find …it's very challenging

Interviewer: It's very challenging

Interviewer: Yeah

Interviewee: Okay

Interviewer: Aah let me start off at the beginning when I went for NIMART training.

Interviewer: Yes

Interviewee: Aah, there, let me say, 80% we were just talking about adults. The management of adults. Paediatrics, the only thing that we were touching I think is the medicine, what else? Yeah. So it was all about the medicine but then when it comes to like providing details or training regarding how will you go along to handle paeds we never, or I didn't get anything from them. So when I came to the clinical area now, like to face it, things that I have been coming across, are the things which I never got at the training. So it's really quite difficult, to a point whereby I feel like there is a gap. There is need for me to improve whereby they should introduce something, a training at least for paediatric management regarding to ART.

Interviewer: Okay. So what you are saying is that you find paediatric ART challenging, and you are attributing this to the training that you received which was based on Adults, 80% of it (yes) and that you said the paediatric part you basically discussed the medicine (yes). Okay and the other details pertaining to ART care, you did not.

Interviewee: No no.

Interviewer: There was nothing on that?

Interviewee: Nothing

Interviewer: Aah okay. I get what you are saying. Okay aam let me ask you basically, a question based on the knowledge that you received following that training. So you talked about medicine, what part of paediatric ART apart from the medicine do feel like is challenging to you? Because you said it's challenging?

Interviewer: When it comes to assessment of the patient.

Interviewee: Okay, so you say assessment of the patients?

Interviewer: It's a challenge,

Interviewee: Okay, what challenge do you face with assessment….. Assessing the children?

Interviewer: First of all, I was never shown on how to do it.

Interviewer: Okay.

Interviewee: There is no time

Interviewer: There's no time.

Interviewer: So when it comes to PCB, patient care booklet, (Yes) aah most of the things which are there, its quite complicated.

Interviewee: So you say the paediatric booklet is complicated.

Interviewer: Yes

Interviewee: okay.

Interviewer: Okay, so you've given me two things. So you say you were not trained on how to assess children?

Interviewee: Interviewee: Yes.

Interviewer: So this was during the NIMART training?

Interviewee: Yes.

Interviewer: Okay. Now then you say there's no time, why do you feel like there's no time?

Interviewee: Due to work load.

Interviewer: Okay, so it's an issue of workload.

Interviewee: Yes.

Interviewer: Okay

Interviewee: And when it comes to people that are like, people that are attending to patients, (Yes) its only one NIMART trained nurse (Okay) who will be there, And you'll be seeing plus-minus 40-something patients so which is hard for you to take like more than 30 minutes on one patient. The others will be complaining, will be there knocking on the door, giving you like some pressure. So which is really hard. You end up even making mistakes because of the pressure from patients.

Interviewer: Okay (Oh, yes). Yes. All right. So you're saying that you don't have time because of the workload. You are only one nurse (yes), and you get to attend to about 40 patients. So when you're, one nurse what are you duties there on a typical day?

Interviewee: When the patient comes in, first you have to do the vital signs? (Yes), then go through like the patient's care with the booklet. Then you attend to the patient like you assess the patient, is the patient on time, then you provide the care.

Interviewee: Yes. (Hmm). Okay on a typical day how many paediatric patients do you see?

Interviewer: Aah plus-minus 4 or 5. But then mostly on Thursdays. That's where by the number is quite a lot.

Interviewer: Okay. So you say Thursdays or Fridays, that's when the paediatric patients are more?

Interviewee: Yes

Interviewer: Okay, so when you see paediatric patients, how long does it take you to see one paediatric patient?

Interviewee: As I was saying, dealing with kids is quite a challenge, whereby you have to try to dig deep for you to get the information which you need. It might take 20 minutes or so, but then this will be whereby you have to like to try to call in a counsellor like Mme [redacted] (okay) to come and assist whereby if she comes then probably less than 20 minutes. If she's not around then it's hard.

Interviewer: So what you're saying is you do need help when it comes to paediatric patients (very much) and the people who help you, one of them is a health assistant. (Yes.) Yes, and without the health assistant it will take you more than 20 minutes to see a paediatric patient (yes). So what kind of help do you get from the health assistant?

Interviewee: For her, she normally used to work with these kids.

Interviewer: Oh, she's someone who has worked with these children?

Interviewee: Yes

Interviewer: Okay

Interviewee: There is a health centre whereby these small ones, they are more open to her. Let me say when I started, my first patient, it was a 13 old girl, whereby I tried to ask she could not, she doesn't even know like she is on ART treatment.(Okay). Everything that I was asking I would not get the information. Until when I called the health assistant that I was talking about. When she came in that ka-little one she started to talk. (Oh, Okay). That's when I noticed that there are more open to……

Interviewer: To her than they are open to you. (mmmh) Okay.

Interviewee: So without the assistant, yeah, it's quite hard.

Interviewer: It's a bit of a challenge to you eeh?

Interviewee: Yes

Interviewer: Okay. So you feel like the Health assistants are quite useful?

Interviewee: Yeah.

Interviewer: So when you call the health assistant in, what is now her role?

Interviewee: Aaah for her she tries to like…. most of the things that she does she tries to counsel and also, she helps when it comes to the guardians.

Interviewer: To the guardians of these children?

Interviewee: Yes .(okay) sometimes these kids also, let me say this young ones, they have problems at home (okay), so to get this information, I think, that's where the health assistant falls in. How she does it…(laugh) yeah, but she always gets information.

Interviewer: Okay, so you talked about this health assistant being able to counsel these children and get information. You yourself, do you ever do paediatric counselling? I'm talking about 0 to 14 years of age. Do you do counselling?

Interviewee: No, as I was saying it's hard you know

Interviewer: It's hard

Interviewee: I don't get information. Even if I try

Interviewer: Even if you try. (Yes) So you feel like your skills in paediatric counselling……..

Interviewee: mmmh, I need more.

Interviewer: You need help. (Yes). Okay. All right. I get what you're saying. All right. I'm not going to keep you there for a long time. Let me just move to the next question. So this one now we're going to talk about the people you interact with here at the clinic, we talking about at Home, in the clinical we are talking about your colleagues. We are talking about the patient's themselves we're talking about their caregivers. So I'd like to ask you to describe how these relationships and interactions enhance or hinder the way you provide care to paediatric ART patients. So, let me let me let start with your colleagues. Yes, let's start with your colleagues.

Interviewee: Aah when it comes to my colleagues, I think at our facility there is quite good teamwork. (Okay). But then specifically when it comes to NIMART the majority that I here they are not trained in NIMART. (Alright) There are some days where by you the NIMART nurse will just be alone at the clinic, at the facility, coz usually we rotate. We are three or four sometimes one is on leave. The other one is on night shift (Okay). Like the sister in charge who is also trained, sometimes she's not around. Whereby you might need help, you are alone. So there's no way unless you called the mentor. (Okay) Yes.

Interviewer: Okay. So what you're saying is that you do have good teamwork, but the unfortunate part is that the number of NIMART trained persons in this clinic are very few. (Very) So let me say you need help probably drawing blood that does not require NIMART training. Yeah.

Interviewee: Yes. Yeah. This one is usually ….she is like our old Nurse, Sr [redacted]. She's good, she is good at it, so she normally helps when it comes to blood withdrawing.

Interviewer: Okay so they've got no issues where they can assist they usually come and assist

Interviewee: yes.

Interviewer: Okay All right, so that is basically for the team work in the facility, you've got no other issues regarding that (yes). So when your… you have 40 patients, at your site and there's an extra NIMART nurse within the facility, when you ask for help, do you get the help?

Interviewee: Yes, I do. Sometime…. it's long back there, where by people used to go. I used to knock off at six whereby I have to finish all the patient's. Once people that are working inside are done then everyone leaves, one by one until they are all gone. I'll be alone.

Interviewer: So do you ever do ask for help? You know there's an extra nurse who is NIMART trained - yeah, and you have a lot of patients and its five o'clock. Do you….. Have you ever asked for help?

Interviewee: Aaah during that time now, it was only the sister in charge. So I tried but, they were also seeing a lot of patients may be inside there. That was maybe an excuse I don't know.

Interviewer: So you tried but you did not receive help (yes) meaning that they are times when you ask for help and you are not…. They don't give you the help (yes)

Interviewee: All right. Okay. Let's move to your patients the way you interact with your patients. Tell me something about that.

Interviewee: Patients (paediatric patients) aah paediatric patients, we interact, but as I mentioned earlier it's really hard. And also there are sometimes where by these situations ….it also gets to you.

Interviewer: Yes, it gets to you in what way?

Interviewee: Like it touches you. Let me say a patient comes in, you look at the situation patient is presenting with. The patient…it didn't come from the kid himself. It came it came from their parents due to negligence of the parents, the person is sick but they are just keeping the person at home.

Interviewer: Oh, okay. So meaning you are seeing a child who's really sick?

Interviewee: Yes. Yes.

Interviewer: They are coming to the clinic and they are very sick?

Interviewee: Yes

Interviewer: And you say you feel what? What did you say? Which word did you use?

Interviewee: It's touching

Interviewer: You feel touched

Interviewee: Yes. I remember there is this patient, it's actually an in transit patient (Yes) mmmh she came from where? She came from the north (yes). I was told according to the aunt that brought her usually she defaults. She defaulted where she came from, kama they used to give her but then she doesn't take (Yeah). Later by the time they came to me the condition that she was

in….aahaah. I was trying to talk to her but…….It never happened to me. I also like … (Laughter) how will I say it now?

Interviewer: Say it, use any word. You were touched, but touched in what way?

Interviewee: Emotionally

Interviewer: Ooh emotional

Interviewee: Yes, whereby I could not, I could not take it. I tried. Yeah, I tried, mm, where did I go?

Interviewer: You called someone else?

Interviewee: Eeh. I tried, I talked to the mother and I am like, I provided what they came for. (Yes), then from there, I sent to Katutura

Interviewer: To the hospital

Interviewee: Yes. But the patient was admitted, after two days I was told she is gone.

Interviewer: The patient is dead

Interviewee: Yes.

Interviewer: Okay. That was sad

Interviewee: Ahha! That was too much.

Interviewer: It was too much Okay. Now that you say you get that emotional feeling, how do you deal with that emotional feeling?

Interviewee: Aaah I always used to try to talk to people, especially my work mates.

Interviewer: Oh you talk to your colleagues?

Interviewee: Yes. Yeah. But then it's hard to let go.

Interviewer: It's difficult to just let it go

Interviewee: It's difficult, yes, at once just like that no no.

Interviewer: What kind of help do you think you need to help you cope with that?

Interviewee: I think just to have someone to talk to especially like social worker (ahh okay), it can also help.

Interviewer: So, you feel like you need help with getting someone to talk to regarding this emotional issues?

Interviewee: Mmmh yeah. Someone that understands,

Interviewer: Someone that understands?

Interviewee: Yes

Interviewer: Okay. All right. Okay, I get what you're saying. Mmh anything else about these patients, paediatric patients?

Interviewee: Anything related to their care?

Interviewer: Sorry?

Interviewee: Related to care?

Interviewer: Yes related to care, the way you provide their treatment.

Interviewee: With treatment just like I mentioned earlier, it's a challenge. But we always, I always try by all means yeah. So far the way I am now is not like when I started. So what yeah, at least I have some patients, small ones now that are more open to me even when they see me, I live in [redacted], there are some that live in [redacted] where by when they see me they always call me by my name.

Interviewer: Oh they call you by your name?

Interviewee: Yeah, but then we also have a problem when it comes to adherence

Interviewer: Okay so there's an adherence problem with these children.

Interviewee: Yes

Interviewer: So 0- 14 years of age, adherence problem. Okay, tell me about that.

Interviewee: One of the reason which I tried to like….. the common reason which I got or which I noticed is like these kids, coz ever since they were very young, they've been taking this medicine, but then if you ask them it's for what, there is……that understanding (Okay,) is not yet there really. They didn't really comprehend it very very much. Or like what will happen if I don't take this. You'll find this as I mentioned poor adherence. Which will lead to a person refusing to take medication like the example which I gave the patient that came.

Interviewer: Yes, that patient

Interviewee: And also cultural practice ooh, It' the religious

Interviewer: So, you have those ones who….

Interviewee: Yes, this is due to the influence of their guardians or their parents. (Okay). I had one. This patient defaulted. We tried to talk but we could not convince them. The parents now, they were like we are going for prayers. They were told actually with prayers the person will be healed completely. (Yes). Yes kama with God, so long as you believe that will do it. If you ask you will be given. So Yeah, well, I tried to call the health assistant to talk, I tried to talk to them to make them understand this is the only way.

Interviewer: But did it work or it did not work?

Interviewee: Eh now it's even….now even now it's working whereby this ka kid the viral load is supressed. By that time it used to be very very high. Yes in September my last time of being there (yes), it was less than 40

Interviewer: Oh, okay so did they go for the prayers?

Interviewee: Yeah prayers plus the medicine.

Interviewer: Oh so they went for prayers together with the medicine and the child is now suppressed.

Interviewee: Yes like first of all, they used to go for prayers. That's why this patient defaulted, but now when they came, we were like, yes prayers they do help but then, for it to work you need the medicine (ah okay). For God to help also you need some efforts yourself. (Yes) Yes. This is the condition the patient is in, and the only way forward is the medicine.

Interviewer: ooh Okay. So you got…. what you're saying is actually you've experienced patients who aah withdraw from treatment (yes) to seek religious intervention and then they still come back (Yes). Okay. All right, I get that one. Now. I'm thinking these are children who are 0 to 14 years old (Yes). Most of the time I don't think they're the ones who make these decisions.

Interviewee: It comes from their guardians, from their parents

Interviewer: So it comes from their parents …. These decisions. Even with the adherence issue you are talking about, because these are children. I believe they require supervision.

Interviewee: Very much.

Interviewer: So, where's the problem now?

Interviewee: Sometimes you'll find these parents which drinks too much.

Interviewer: Okay, so they do have Guardians who are alcoholics

Interviewee: Who consume alcohol.

Interviewer: Yes

Interviewee: So whereby the end of the day they neglect the patient, their child. Or you find these parents who have given up on themselves, which will also affect the child. (Yes) So it's quite hard but then we normally used to talk to the parents. Yes,

Interviewer: And when you talk to them is there an improvement?

Interviewee: Some (yes) some you can see there is improvement. Mmmh but some……..

Interviewer: So the ones who fail to improve what do you do?

Interviewee: Aah actually there are some that are being referred to……okay, first of all, we call like on my behalf, first of all, if I'm failing I call the health assistant who is more……. the one who knows them very very well and they are open to her very very much. Then I also inform the supervisor, okay, but then on the supervisor part, she is just like me

Interviewer: Mmmh she is just like you in what way?

Interviewee: (Laughter), when I, when it comes to this ….

Interviewer: When it comes to what? When it comes to paediatric ART

Interviewee: Yes one thing that I noticed, the challenges which I face, like which am… the area where I struggle, (Yeah), I tried to ask but then I noticed that we are on the same page, we struggle (Ooh). So it's quite hard but then we always try to get someone I can talk to, even social worker, that one we will refer to a social worker. Oh, yeah, our mentors also (ok).

Interviewer: Ok, and you get help from….. Let's start with the social workers. When you refer these parents to the social worker. Do you get the issue resolved?

Interviewee: Yeah

Interviewer: You get it resolved? (Mmmh) Okay, when you call the mentors, do you get the issues resolved?

Interviewee: Yeah, the mentors are always there once you call you will get help

Interviewer: So you say for the mentors there are no issues?

Interviewee: No

Interviewee: Okay. Two people have come in here. You've talked about your supervisor and you feel like your supervisor is also struggling with paediatric ART just the same way as you are. (Yes) Okay, and now you brought in the issue of the Mentors. Let's talk briefly about the mentors.

Interviewee: Yeah, mmmh for mentors, like for me, let me talk on my part, I usually used to get help. I don't see any anything like wrong from my mentor (Okay). Because they are mostly not there, but then yeah, there is another way of getting to them. You can call because due to the situation, they have…..there are a lot of facilities whereby they are also mentoring (okay). You find that one Mentor is attending to 3 or 4 facilities, so it's quite a challenge for them. So but once you call you get the help. Or sometimes you call, you will be told like let this patient sit, by this time I will be there. By exactly that time the person will be …the person will show up.

Interviewer: Okay (Yes) ooh that's good to know. All right, so anything else you'd like to add on that?

Interviewee: Ahah ahha no

Interviewer: No. Alright, okay, then I'll move to the next question and this question pertains to the institution. So we are talking about the institutional factors. We talked about the setting of this Clinic. The ART site where you provide paediatric ART. Yeah, we talked about the setting of that place. We are we talking about staffing and workload from your on your side and we're talking about things like resources availability of resources or lack of resources. Yeah. Can you explain how these factors facilitate or humper your performance in the provision of paediatric ART services? We can….. Let's talk about the setting, describe your setting.

Interviewee: Mmmh Our setting aahhh tatata. It's not really at the standard.

Interviewer: It's not up to standard

Interviewee: We are using a container (okay), this container is very small.

Interviewer: The container is small.

Interviewee: Yes you find like in the room where I work, in one room you find like five people there. It's me, TCE, people that are working in the community, plus now you also find the health assistant (health assistant) 5 or 4 sometimes in the room, which will make it ooh... hard for patients to open up because they feel like there's no confidentiality. Or there's no privacy at all. (Yes) and also where this container is located, (yes) like we've said, everyone that comes to the clinic knows that patients that are going to….. People that are going to that site, they that have…. they are HIV positive. Which is….. (Laughter)

Interviewer: Okay, so now how did people get to know the people going to that container, they've got something related to HIV? How did they know that?

Interviewee: (Laughter) coz normally when we are sending patients for testing, (okay) the testing room is also at the same direction,

Interviewer: Same direction with the ART room

Interviewee: Yeah. Coz there are three containers there, one for testing, the TB then the consultation room whereby we are seeing patients, which is actually on one area (Yes). When we are sending these people for testing they are going that side.

Interviewer: Everyone knows that the HIV testing room is that side?

Interviewee: Yes, people that are coming for PrEP, they are going that side

Interviewer: They are going that side

Interviewee: And now the normal patients, they are going that other side.

Interviewer: They're being directed to a different site.

Interviewee: Yes. There was this time whereby patients came. They came to ask me people that are coming to this side, what are they coming to do? (Ooh Okay), is it like HIV patients? Then I said ….It was hard for me say, then I said no, at our clinic, we integrate services (Okay). So it

doesn't mean that the person who are coming here have HIV. No, there other things that we can do here. People that are being seen inside, they are the same people that can be referred here

Interviewer: That can be referred here

Interviewee: Yes. So there are a lot of things that are being done here, not HIV

Interviewer: It's not specifically HIV

Interviewee: Yes. It doesn't mean that when you see someone coming to this container, he's HIV positive.

Interviewer: Aah okay, alright.

Interviewee: So patients that are being seen now at our site, they are scared of stigma. (Yes). Yes. Yeah, even when you send them like go inside the Pharmacy. There are some that actually complain.

Interviewer: Okay children zero to 14 years of age, now that you've talked about stigma in that setting. Have you heard…… what can you say about stigma in that setting when it comes to them?

Interviewee: When it comes to kids, kids are not like us. They are not like adults (yes).aaaah actually, how will I put it now? Like these are the people that are unable to talk for themselves

Interviewer: Ooh they are unable to speak expressed themselves.

Interviewee: Yes, they are unable to express themselves. So it's hard to get it. Unless through, it's through their parents or people that are taking care of them. Which is really hard to tell. But then like let me give an example from 11 there to 14 (yes), these ones, at least they can talk. (Yes). They are afraid that their colleagues from school …..(okay Yeah). Like once they notice they are always go into the container…..

Interviewer: To that container...

Interviewee: In school now, they will be labelled by their colleagues, which also I think is contributing to poor adherence, which leads to defaulting

Interviewer: Defaulting treatment, ooh Okay. Okay, I get that one. All right. Talk about the workload and the Staffing that side

Interviewee: Just like I mentioned earlier, you'll find one nurse, NIMART trained nurse attending to 40-45-50 patients. So the work load is really killing. It's too much.

Interviewer: It's too much.

Interviewee: Yes. (Okay) one person you have to do everything. Starting from the vital signs, blood pressure, you have to take blood, you have to see the patients, (Yes), you find these patients which are defaulting, you have to give health education, counselling a bit, and then you take the baseline blood, is quite a challenging task.

Interviewee: Okay (Yeah). All right. So you feel like the workload is a lot and there's only one nurse

Interviewee: Yeah, we need staff,

Interviewer: You need staff?

Interviewee: Yes (Laughter)

Interviewer: Alright. Okay. Talk about resources.

Interviewee: Aahaaah when it comes to resources, it's a problem,

Interviewer: It's a problem

Interviewee: mmmh

Interviewer: Okay, tell me what the problem is.

Interviewee: We always run out of stocks.

Interviewer: Stock…What stock?

Interviewee: Just let me start with….. Let me start with the equipment that we need

Interviewer: Equipment. Okay, what equipment?

Interviewee: For instance there are some times whereby viral load tubes are out of stock.

Interviewer: Okay, viral load tubes

Interviewee: Like when it comes to viral load tubes, what I have noticed, after maybe like two to three months you will hear that viral load tubes no stock.

Interviewer: Not in stock

Interviewee: Sometimes like ordering forms, the ones for NIP. Yeah, they're requesting forms for blood

Interviewer: Ooh the blood test request forms

Interviewee: Yes (okay). There was a time we were told they are not in stock. It's only one in the clinic. You have to try by all means to go make copies. Sometimes you have to use your own money to go outside to go make copies.

Interviewer: Ooh you don't have a photocopy machine in the facility?

Interviewee: No, We have one, but then ink…

Interviewer: There is no ink?

Interviewee: …..Papers? (Okay) the reason that we get the government is broke.

Interviewer: The government is broke. There is no money

Interviewee: The government is broke, there is no money

Interviewer: Mmmh.,okay, so you end up using your own money (yes yes) to make copies

Interviewee: You have to try to make an effort on your own, for you to get the copies.

Interviewer: Mmmh. Now what will happen if you don't have money to make copies?

Interviewee: Then there's nothing you can do

Interviewer: What do you do with the patient's?

Interviewee: With the patients, you try like….. I try to offer what they came for but then for blood…..

Interviewer: yes for blood

Interviewee: Sometimes we ask from other health facilities whereby, I used to inform my supervisor. She usually used to call from other health facilities. But then you have to tell the patients. You have to let the patient understand for them to wait for a certain time.

Interviewer: They have to wait

Interviewee: Yes.

Interviewer: And if you don't receive stock on the same day?

Interviewee: We inform the patients to come the next day

Interviewer: The next day.

Interviewee: Yes.

Interviewer: Okay, so aaaha, you've talked about viral load tubes you have talked about blood request forms, you've talked about lack of ink and the photocopy papers aha, (Yes) any other issue?

Interviewee: Sometimes the blood pressure machine

Interviewer: Okay. Okay, but now we are talking about children. Do you take their blood pressure? Okay, let's talk about the children. Yeah.

Interviewee: (Laughter). Okay, we usually used to weigh these children

Interviewer: To weigh the children

Interviewee: So the scales!

Interviewer: So the scale

Interviewee: Aha, we always run out of batteries (batteries). Yes. Coz they normally provide like….. They used to provide us with batteries

Interviewer: Yes, who provides?

Interviewee: We used to get from the region

Interviewer: From the region meaning the government is supposed to provide?

Interviewee: Yes. So we normally used to get once in two months, or three months. So this thing does not last. These batteries they don't last. But yeah, sometimes we will contribute

Interviewer: So you still contribute money to buy the batteries?

Interviewee: Yes. Sometimes you ask for contributions, no one gives. So you have to sacrifice to get the batteries.

Interviewer: When you don't have money to buy the batteries, what do you do with your children?

Interviewee: (Laughs).We just provide the care they came for.

Interviewer: Care…okay. I need to understand the care you will provide on that day. There are no batteries. So you can't take the weight of this child

Interviewee: No, there is another way whereby we let… oh actually they come with someone. Okay, we use... use the like the adult scale. Whereby we tell the guardian to hold the baby or the person that they came for to go on the scale. From there we let them….. We will take the baby and let the mother alone or the guardian alone to stand. And then from there you subtract you get the weight

Interviewer: You subtract, you get the weight

Interviewee: Yes. Yes,

Interviewer: Okay, you trust that weight? The weight that you get?

Interviewee: Laughter) Yeah, somehow

Interviewer: Laughter) It's somehow okay! Alright, okay. Anything else? So you talked about the scale now. On resources again?

Interviewee: Human resources

Interviewer: Okay human resource. Okay we have already discussed this touching issue

Interviewee: Yeah.

Interviewer: Okay that's fine. Anything else you would like to add on resources?

Interviewee: Aaah, I think resources it's always a problem, but yeah, it cannot hinder services.

Interviewer: It cannot hinder your provision of services somehow (yes) Okay. Alright, let's move to the next question. We're going to discuss the community where your patients come from. The location where they come from. So tell me. This places where your patients come from, how does it influence the overall care and outcome of the services you provide? So I'm talking about where they live. Is it far from the clinic? Talk about aah do they have all the resources in the community? Yeah, their basic amenities. Do they have that? Yes. Yeah say something

Interviewee: Most of our patients live here in [redacted] in an informal settlement (yes)[redacted]

Interviewer: In the informal settlement

Interviewee: Actually these are informal settlements, you know [redacted] (yes) so whereby you find in one room, they are ten or seven people they are sharing. Which is hard. Water (Okay), it's quite a challenge for them (yes). Sanitation toilets (Yes) which are not there. You find like the whole informal settlement sharing one community toilet which is ….

Interviewer: The whole informal settlements sharing one Community toilet?

Interviewee: Yes, I've seen it in in [redacted], (okay) which is really hard. This also…. this also affects their health when it comes to provision of quality health Care.

Interviewer: Yes, in what way does it affect?

Interviewee: Let me say the patient comes to the health facility you provide everything which the patient needs. But then first of all the health of that person plays a role in everything. Yes, no matter how that person will be getting treatment, (yes) but then that person lives there somehow, (yes) the person is exposed (yes) , I don't think it will be any improvement, even if there would be any improvement, but it will still be a problem.

Interviewer: Okay. So what are some of the effects like you are calling them effects of where they stay?

Interviewee: Okay. Poor hygiene, let me say poor hygiene. Which led to like ….previously we were having a problem of hepatitis A

Interviewer: Hepatitis A,

Interviewee: Which was really affecting them. So I cannot now describe these.

Interviewer: Okay you've talked about hepatitis A, anything else?

Interviewee: These people they always come with running stomachs. They are more exposed to….like the air that we breathe in out, the air is dirty. They are not prone to tuberculosis, to TB (yes), which is….. when it comes to TB now and the person is infected and is having TB actually it …it's like it hampers or it slows down their immune system. The person is supposed to be on ART only ,now they have to take another ….. They have to share the attention with TB now

Interviewer: With TB treatment

Interviewee: TB treatment. So this person instead of getting one or two tablets, now will be on like….will be having a lot of medicine which also sometimes will discourage him, which leads to defaulting, unless there is enough support, whereby you're to encourage them every day. Yes.

Interviewer: Okay. Okay, I get that. I get what you are saying. So the informal settlements you are talking about are just around the clinic?

Interviewee: Yes,

Interviewer: Do you have children who come from Far? Further than the area around the clinic?

Interviewee: [redacted]?

Interviewer: Ahha

Interviewee: Aaaah, no, mmhmmmh (shaking his head)

Interviewer: Alright Okay, so that is fine

Interviewee: Unless the ones who come in transit

Interviewer: Ooh the ones who come in transit and they go. So those are basically not your patients. (Yes) Okay, that's fine then. Okay. Let me go to the next question. And so this one now, we're going to discuss policies. Okay, so basically strategies that the government of Namibia has put in place to try and combat HIV. Yes the HIV pandemic in Namibia, Okay. So they've come up with a lot of strategies. Yes NIMART is one of them… (Is one of them).NIMART is one of them (Yes). [redacted] clinic providing paediatric ART care is another one through decentralization. Yes. Okay, then there are many more.

Interviewee: Yes.

Interviewer: So now I want you to talk about those ones. How do you think these strategies enhance or hinder the way you provide paediatric ART care?

Interviewee: Aaah these strategies.

Interviewer: let's talk….. Mention one then we talked about it.

Interviewee: Like let me mention to start off with this one of treating all

Interviewer: Treat all yes. Okay test and treat or treat all

Interviewee: Yes the person is tested today and he has to be started today. Completely today.

Interviewer: Yes,

Interviewee: It's a challenge. It's quite really a challenge.

Interviewer: Yes

Interviewee: When it comes to this one. Okay, coz mostly the patients that actually come for testing, they come in the afternoon. (Okay) The majority of them. Yes, maybe a person will show up at two at the testing site, the person will be tested. The person needs counselling, and it needs confirmatory test. By the time they reach like at my site now, where… my consultation room, (Yes), it's around three. Around 3, there is pressure from NIP whereby you have to take blood before four.

Interviewer: Okay, so that's the lab now.

Interviewee: Yes. You have to let these patient ……like you have to let this patient understand the importance of the treatment and you have to assess the vital signs. It actually takes time.

Interviewer: It takes time.

Interviewee: It takes time. We are supposed to knock off at five. Sometimes you can go beyond that for you to provide full care the patient needs. (Yes). Coz in health care there is no shortcuts for people that are starting. It's hard because you have to make sure that you provide everything that the patient needs to prevent this patient from defaulting. Cause at the beginning there, yes the person might seem to accept but then to get used to it, it will take sometimes. Yes.

Interviewer: Okay. So this… let's say it's a child who's been tested. So how is that now?

Interviewee: For a child it even takes more time

Interviewer: It takes more time

Interviewee: More than an adult. Especially, let me say, let me give an example of drawing blood. (Yes) that one …..

Interviewer: Describe your skills in drawing blood in paediatric patients.

Interviewee: (Laughter) no no no, for me I always... I always struggle when it comes to this

Interviewer: You always struggle

Interviewee: Yes. (Okay) so but now here and there, there are some I manage, but some, you will try here there is nothing, you try….. Especially when the baby starts crying now it will also make you….. Like it also affects you. It makes you panic because you don't….it's like you are hurting someone. Yeah. We usually call [redacted] , the old nurse, whereby there are some days she tries but nothing comes out. She tries here, she tries on the other leg we go on the arms, mm and also the tubes. Today okay, we managed to take the blood. You send to the lab. When the results come, CD4 blood was insufficient, viral load insufficient, you take, you send

Interviewer: You have to repeat

Interviewee: You have to repeat, you send. The same thing

Interviewer: You get the same results?

Interviewee: Yes, so I don't know now when it comes to that it's really a challenge.

Interviewer: It’s a challenge. Okay. Alright so you were talking about the initiating paediatric ART. Continue with that.

Interviewee: (Laughs) Yeah, so when it comes to Paediatric initiating it's tough. It's tough.

Interviewer: It's tough. What is tough there?

Interviewee: The assessment

Interviewer: The assessment. What is tough on the assessment?

Interviewee: First of all, you have to assess to see this….. The condition the patient is in, the nutritional assessment, is it malnutrition? (Yes), you have to do the height, MUAC, the weight, and also you have to like…. oooh….. On the TPT now, TPT part.

Interviewer: TPT initiation?

Interviewee: Yes, this this kids, they are unable to talk for themselves, like to tell by themselves. So it's quite a challenge when it comes to that. Yes, even when it comes to starting TPT, it's not like for adults.

Interviewer: It’s not like for adults

Interviewee: It's a challenge. Yes, sometimes whereby you have to call for you to be able to initiate TPT.

Interviewer: Call who now?

Interviewee: Call the mentors. For me I call the mentors

Interviewer: Oh you mean the mentors

Interviewee: Yes

Interviewer: Okay alright

Interviewee: So one thing I forgot to also when it comes to paeds. The patient is exposed. You have to provide a report on how this patient came to be exposed, how did this person come to get the virus

Interviewer: What are the factors that led to this baby getting infected?

Interviewee: Mmmmhhhh. Whereby you have to go through the mothers ANC records, What happened, the viral load, how did this person…..like adherence to treatment, labour history like was the delivery was it NV was it like normal or caesarean section done, Any tests done at birth, if nothing, Where was it conducted? It's quite a challenge.

Interviewer: It's a challenge.

Interviewee: It's a challenge.

Interviewer: Why do you require this information?

Interviewee: Why do we require like?

Interviewer: Why do you require all that information you're talking about? Like the factors that led to this child testing positive.

Interviewee: Yes, actually if everything was okay this baby could not be exposed

Interviewer: Could not have tested positive?

Interviewee: Yes so you have to find like what aspects or what led to like to the exposure of the baby. And also for statistical purposes (Okay), we have to provide to our mentors. Mentors will come in because we are here to provide care. Like our target now in our country which is to ……..is it zero what? How do I say it?

Interviewer: On what?

Interviewee: Our goal is we don't want an increase in HIV

Interviewer: Okay you don't want an increase in HIV

Interviewee: Yes that's our battle, we don't want like small ones to get new ones that are HIV positive

Interviewer: So we are aiming at eliminating new HIV infection in children.

Interviewee: Yes, so mentors will always be there now. They want to know what happened since it's you that is attending to the patient or that has been attending to the mother, what led to…. so I have to provide the report to them to my mentor.

Interviewer: To the mentors

Interviewee: Yes

Interviewee: Whereby the mentor has to report it in.

Interviewer: Yes Okay, I get that part mmh. Okay that was treat all. Any other policy you would like to talk about? Any other strategy? Let's call it a strategy.

Interviewee: About NIMART. NIMART is a strategy

Interviewer: Oh NIMART yes.

Interviewee: Yeah, yeah It seems to be …… by hearing the word NIMART it seem s to be like an easy thing or maybe…….

Interviewer: Sounds easy

Interviewee: Yeah, but the things which are there they are a lot of things

Interviewer: A lot of things

Interviewee: Whereby a nurse, you're covering things which supposed to be done ……which is supposed to be done by the doctor.

Interviewer: Okay. What are some of these things that you feel like they're supposed to be done by doctors?

Interviewee: When it comes to the management ….like the treatments, (okay), this is supposed to be done by the doctors, but then maybe the doctors are not a lot (Yes). So that's why they brought it to us. But then when it comes to training they have to train more also, so that we will be sharing the responsibilities instead of one, let them be three or two at least

Interviewer: Nurses? NIMART nurses?

Interviewee: Yes. Then it will work. Because with NIMART, I found the workload it is tough, it's a lot because there are some days if you are not there, patients will not be seen because you are the only one who's available there. Or unless you are two then it's better.

Interviewer: Okay. Alright okay. Any other strategy would like to talk about?

Interviewee: Maybe I will also talk about elimination of mother-to-child …..

Interviewer: Okay, elimination of mother-to-child transmission.

Interviewee: Yeah, EMTCT. This EMTCT is actually helping. It's helping us. It's not like back then. Even the when it comes to the transmission now from mother to their kids, it's really at a lower rate

Interviewer: It's at a lower rate

Interviewee: Yes. Nowadays, it's hardly like to find a baby who was infected. You might find here and there one but then not like every month

Interviewer: Meaning that the ones who test positive are very few

Interviewee: Yes

Interviewer: So EMTCT you feel like it's working well.

Interviewer: Yes.

Interviewer: Okay, alright. That's good

Interviewee: I think that's it……..

Interviewer: That's what you want to talk about. (Yes) Okay. All right, my final question. What suggestions do you have that you feel like would be beneficial to the paediatric ART programme in Namibia?

Interviewee: For me first of all, the NIMART nurses, they have to be trained in paediatric management. When it comes…as far as HIV is concerned. Let them be more equipped in that area. Like me am interested, am more interested in paediatrics. (Yes). The problem is I have little knowledge.

Interviewer: You have a little knowledge in paediatric ART

Interviewee: Yes. I want more

Interviewer: Okay, alright. So what else? Anything?

Interviewee: Ah I think So far we have discussed a lot. I think that's all

Interviewer: So you for you basically just need to training on paediatric ART

Interviewee: Yes

Interviewer: You have interest in paediatric ART but you feel like your knowledge is very limited?

Interviewee: Knowledge and skills also.

Interviewer: And skills

Interviewee: Yes

Interviewer: Okay. Alright okay. I guess that is fine. So if you ….. You want to add something?

Interviewee: No everything is perfect

Interviewer: Okay that is fine. Thank you so much. Okay

Interviewer: I also appreciate

Interviewee: You've given me a lot of information, I'll go through the information. I will put it down in writing. If I have any questions, I'll call you just to seek clarification.

Interviewee: Okay, ma'am.

Interviewer: Yeah. Thank you so much.

Appendix 9: Declarations by language editor

Lona's Language Services

English/Afrikaans
Afrikaans/English

3 Beroma Crescent Beroma Bellville

Cell 0782648484
Email illona@toptutoring.co.za

* Translations * Editing * Proofreading
* Transcription of Historical Docs
* Transcription of Qualitative Research
* Preparation of Website Articles

TO WHOM IT MAY CONCERN

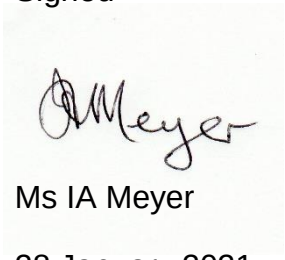
This letter serves to confirm that the undersigned

ILLONA ALTHAEA MEYER

has edited and proofread the **thesis of Peris Muthoni Gichuhi Maronda** for language correctness.

TITLE: The experiences of NIMART-trained nurses providing care to children living with HIV at ART clinics in the Windhoek District of Namibia

Signed



Ms IA Meyer

28 January 2021

Appendix 10: Declarations by technical formatter

Lize.net
COMMUNICATION (Pty) Ltd
Company registration: 2019/050723/07

To whom it may concern

This letter serves as confirmation that I, Lize Vorster, performed the language editing and technical formatting of Peris Muthoni Gichuhi Maronda's thesis entitled:

The experiences of NIMART-trained nurses providing care to paediatric HIV patients at ART clinics in the Windhoek District of Namibia

Technical formatting entails complying with the Stellenbosch University's technical requirements for theses and dissertations, as presented in the Calendar Part 1 – General or where relevant, the requirements of the department.

Yours sincerely

Lize Vorster
Language Practitioner

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