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EXPLORING THE VIEWS OF NURSES REGARDING THE IMPLEMENTATION OF DIFFERENTIATED CARE FOR PATIENTS RECEIVING ANTIRETROVIRAL TREATMENT

by

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DECLARATION

I, Ramadimetja Sarah Monyela, declare:

That *Exploring the views of nurses regarding the implementation of differentiated care for patients receiving antiretroviral treatment* is my own work and has not been previously submitted to the University of Pretoria or any other tertiary institution for the purpose of obtaining an academic qualification, whether by me or any other person. The research study developed as follows:

The research proposal was developed following consultation with my supervisors. The proposal was submitted to the Ethics Committee of the University of Pretoria for review and approval. After receiving ethics approval, I then applied to Gauteng department of health (DOH) ethics committee for approval. Upon receiving Gauteng DOH approval, I presented the research proposal to the Tshwane health facilities managers who permitted me to start with data collection at their facilities, under the guidance of my supervisors. This research is my original work and the sources used have been fully acknowledged by means of referencing.

Ramadimetja Sarah Monyela 23 July 2021

DEDICATION

This dissertation is dedicated to God the Almighty for blessing me so abundantly, my late parents, Mr Frans, and Mrs Rebecca Monyela for loving me, supporting me in my basic education, during my first degree and believing in me. My three wonderful children, Thapelo, Tshepo and Letago. Mommy has made it and I hope this will serve as a great inspiration for you. I am also dedicating this achievement to my brothers, sisters and all my relatives. Lastly, to the community of Mmadiga Ga-Dikgale in Limpopo where I grew up, I owe my being to you all as you know it takes a community to raise a child.

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ABSTRACT

Introduction

South Africa has made significant progress in improving the provision of care for HIV-positive patients. With approximately four million people on Anti-retroviral therapy (ART), the country is faced with a congestion of patients at primary health care facilities. The differentiated care strategy was adopted from the World Health Organisation (WHO) in 2016 and it encompasses the whole of the HIV (Human Immunodeficiency Virus) treatment and care continuum. Differentiated care is a client-centred approach that ensures that HIV services across the continuum of care reflect the preferences and expectations of People Living with HIV (PLHIV), while reducing the HIV burden on primary health care facilities. The strategy is aimed at reducing congestion of patients at facilities so that health workers can pay more attention to patients who are in the most need of care.

Aim

To explore and describe the views of nurses regarding the implementation of differentiated care for patients receiving antiretroviral treatment.

Research design

A qualitative, descriptive, and explorative design has been used to explore and describe the views of nurses regarding the implementation of differentiated care.

Methods

Semi-structured interviews were used to collect data from nurses implementing differentiated care for stable ART patients in the Tshwane Health Sub- district. Eighteen registered nurses were sampled across the Tshwane Sub district using non-probability purposive sampling method. One-on-one interviews were conducted. Open-ended questions were asked, and the researcher used probing questions to reach an in-depth comprehension of the views of nurses regarding differentiated care. Interviews continued until data saturation was met at 14 participants but extended to 16 participants to ensure no information was missed. The researcher then transcribed data accurately and developed a category of schemes. Information was coded by the researcher and co-coded by an expert coder to arrive at an accurate analysis of the data gathered.

Results of the study

The study reveals that differentiated care has reduced patients' waiting times, reduced staff workload and congestion at primary health care facilities. Challenges impacting on differentiated care are mentioned and recommendations for improvement made by nurses implementing the strategy.

Conclusion

According to the results of the study, differentiated care is viewed by nurses as a strategy that is beneficial to both the patients and the health care workers.

Keywords: Antiretroviral treatment, Differentiated Care, HIV Continuum, Primary Health Care, South Africa, Views

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LIST OF ABBREVIATIONS / ACRONYMS

Abbreviation acronym	Meaning
AGL	Adherence Guidelines
ART	Antiretroviral Therapy
AIDS	Acquired Immune Deficiency Syndrome
DSD	Differentiated Service Delivery
HIV	Human Immunodeficiency Virus
HTS	HIV Testing Services
HCWs	Health Care Workers
IAS	International AIDS Society
LTFU	Lost to Follow up
NCDs	Non-communicable Diseases
NIMART	Nurse Initiation and Management of ART
PLHIV	People Living with HIV
SANAC	South African National AIDS Council
STI	Sexually Transmitted Infections
UNAIDS	Joint United Nations Programme on HIV/AIDS
UTT	Universal Test and Treat
WHO	World Health Organization
CCMDD	Centralised Chronic Medication Dispensing and Distribution

CHAPTER 1

OVERVIEW OF THE STUDY.

1.1 INTRODUCTION

Since the emergence of the Human Immunodeficiency Virus (HIV) in 1982, South Africa has made great strides in eradicating the pandemic. However, the battle is far from over. According to the Global AIDS update (2016:1), 17 million people had been initiated on antiretroviral therapy (ART) by 2015. South Africa enrolled 3.7 million patients on ART by the end of 2016 (National Strategic Plan on HIV, AIDS, STI and TB 2017-2022:6). At 22% of the global ART roll out, South Africa has the largest ART roll-out in the world followed by Kenya with nearly 900 000 people on ART(Global AIDS update 2016: 03). The high number of patients on ART places considerable strain on health care services in terms of resources (Adherence Guidelines for HIV, TB and NCDs 2016:7). Therefore, in 2016 South Africa adopted the differentiated care strategy which aimed at addressing patient congestion at health facilities (Differentiated care for stable patient's circular, 2016:3). To date, there has been no significant change noticed at healthcare facilities suggesting that the strategy is successful (Louw, Rantloane, Ngcobo et.al 2020:50).

Differentiated care is defined as an approach that is client-centred and ensures that HIV services across the continuum of care reflect the preferences and expectations of people living with HIV (PLHIV), while lessening the HIV burden on primary health care facilities. "By providing differentiated care, the health system can refocus resources to those most in need" (International AIDS Society 2016:5). According to the World Health Organisation (WHO 2016:240), there are four categories of patients with specific needs: Patients who present early with a high CD4 cell-count, because they need support to help them adhere to treatment and to be retained in care; patients coming to health facilities late when the disease has advanced as they need to be fast-tracked to care to prevent death and ill-health; patients who are already on ART but not stable as they need additional adherence support and switching to second-line ART regimens where there is treatment failure; stable patients who can be offered differentiated care to reduce the frequency of clinic visits and congestion at facilities. However, facilities remain congested with stable patients impacting on patients waiting times(South African electronic data system(TIER.net :2018).

According to a study conducted in Myanmar, patients' visits to facilities and the need for more health workers reduced with the implementation of differentiated care strategy (Mesic, Fontaine, Aye *et al.* 2017:07). This indicates that if the strategy is successfully implemented, facilities would be less congested and nurses' workloads would be reduced (Mesic, Fontaine,

Aye *et al.* 2017:07). However, if the strategy is not successfully implemented, healthcare facilities will continue to be burdened with a large number of patients which compromises the care given to acutely ill patients who need more urgent intensified measures (Prust, Banda, Callahan et al. 2018:1).

Based on the above observations, the researcher felt a need to conduct research to explore nurses' views regarding the implementation of differentiated care for patients receiving antiretroviral treatment in healthcare facilities.

1.2 RATIONALE

The HIV pandemic has posed a huge public health threat globally, with 37 million people diagnosed with HIV (WHO 2016: iii). South Africa accounts for 19% of the total HIV infections (7, 1 million cases) and has the highest number globally (National Strategic Plan for HIV, AIDS, STI and TB 2017-2022:6). The high number of HIV cases in South Africa reflects the adoption of the 90/90/90 strategy by the Joint United Nations programme on HIV/AIDS (UNAIDS) in 2014. The strategy encourages that 90 % of all people living with HIV should be diagnosed, 90 % of patients diagnosed should be started on ART and 90 % of patients on ART should be virally suppressed by 2020 (UNAIDS 2014:1). South Africa adopted the World Health Organisation (WHO) recommendation of universal test and treat in 2016. The recommendation was that all patients who tested HIV positive should be started on ART, regardless of their CD4 count or immunological status (WHO 2016:74). The South African government realised that there was a need for all health facilities to free up space through the implementation of differentiated care strategies (National Department of Health (NDoH) Universal Test and Treat (UTT) circular 2016:2).

Differentiated care strategies offer stable patients the opportunity to select how they want to receive their medication from three streams in the adherence guideline for HIV, TB and NCDs. The streams are facility pick up points, adherence clubs and external pick-up points (NDOH UTT circular 2016:3). The rationale of the current study is to contribute to closing the gap identified in research, as the strategy is new and was introduced by the international AIDS society in 2016. Much information is needed on how the implementers of the strategy view it. In addition, the study may indicate whether the strategy really benefits the health system in terms of reducing congestion and promoting patients' retention in care.

1.3 PROBLEM STATEMENT

The Sub-Saharan Africa (SSA) has a challenge of health facilities that are heavily congested with patients and long waiting times. The long waiting times are common and health workers suffer heavy workloads which impact on operations and quality of care (Zakumumpa, Rujumba & Kwiringira et.al 2020:02). South Africa has not been immune to the challenge and suffered severe congestion and long waiting times since the implementation of universal test and treat

(UTT) circular 2016:2). This led to patients complains and poor health care experience. The latest Gauteng Health Annual report states that 5291 patients were reported to have complained about issues around their care. Most of them claimed that waiting time and staff attitude were the main issues (Gauteng Annual Report 2016/17:29). Differentiated Service Delivery (DSD) is an innovation aimed at reducing congestion of patients and other service delivery challenges impacting on proper care. It is defined as 'a client-centred approach that simplifies and adapts HIV services across the cascade, in ways that both serve the needs of people living with HIV better and reduce unnecessary burdens on the health system(Joint International AIDS Society 2016:19). South Africa adopted DSD in 2014 and several countries like Kenya, Uganda and Malawi and Zambia to name a few, followed in 2017.The researcher worked in the Tshwane sub district as a differentiated care project manager, supporting health facilities in the City of Tshwane. It is during the researcher engagements with facilities that it was realised that even though DSD is implemented, facilities are still congested with patients. Waiting times was still more than three hours.

The researcher observed that many patients were offered the options, however no difference was noted in terms of the benefits expected. Patients who were offered differentiated care appear to be neglected as their yearly blood monitoring was not performed as per ART guidelines, and those who do show abnormal blood results were not managed. Most patients who were offered the differentiated care strategy returned with high viral loads which makes one wonder whether they had been sufficiently educated about it, before being offered the strategy (South African electronic data system,TIER.Net :2018). The researcher aims to explore and describe the views of nurses regarding the implementation of differentiated care for patients receiving antiretroviral treatment. The findings of the study will be shared with the Tshwane health district research committee as they recommended during ethics approval.

1.4. SIGNIFICANCE OF THE STUDY

The study is important as its going to play a significant role in the three elements being the nursing practice, the nursing education, and the nursing research. According to Macnee & McCabe (2008:271), knowledge development through research is a core element in the overall development of the nursing profession. The study intends to contribute to the nursing practice by improving the quality of care for the beneficiaries of care. in ways. By understanding the views of nurses regarding the implementation of the strategy we will be able to identify issues that serve as obstacles to good nursing practice that will benefits not only patients but also nurses and the department of health. Through this study, the researcher has had an opportunity to collect the nurses' views and to start working towards change management in collaboration with the nurses.

Looking at the significance of the study towards nursing education, a great impact can be seen as the views of nurses implementing the strategy will be shared with other categories within the health sector and as a results promote education of other cadres. The research has identified the amount of knowledge that registered nurses already have about differentiated care for ART patients and has gathered their views regarding differentiated care. The views that needed urgent attention have been shared with facility managers and the sub-district managers with the intention that they be attended to ,to avoid more frustration and improve the nurse morale. As the researcher is also working within the district, the study findings that impacted the program negatively, shall be addressed in the form of further training, and mentoring.

Nursing education evolves because of research. When the results are disseminated, students will have evidence-based information when searching journals and will therefore gain more knowledge about differentiated care. The other significance to research is that other researchers might decide to investigate further the views that will be described by the researcher as a way of unpacking the topic further to find out the whys and how's. The researcher intends to contribute to nursing education by providing in-depth knowledge about the implementation of the strategy, using research as evidence for practice.

1.5 RESEARCH QUESTION

What are the views of nurses regarding the implementation of differentiated care for patients receiving antiretroviral treatment?

1.6 STUDY AIM

The study aims to explore and describe the views of nurses regarding the implementation of differentiated care for patients receiving antiretroviral treatment.

1.7 CONCEPT CLARIFICATION

ART Antiretroviral therapy is a lifelong treatment given to patients to suppress the Human Immunodeficiency Virus (National Department of Health 2015:7). It is made up of three or more antiretroviral drugs In this study, the researcher talks of ART as medication given to HIV infected patients as a lifelong therapy**.**

Differentiated care is a strategy that is client-centred to ensure HIV care across the continuum. It reflects the preferences and expectations of people living with HIV (PLHIV), while decreasing the HIV care burden of health care facilities. In so doing, the health facilities can refocus resources to patients most in need (International AIDS Society 2016:5). A continuum of care in HIV context refers to all phases of care from testing, initiating treatment, monitoring treatment response, and reaching viral suppression. In this study, the focus is on differentiated care for patients who are older than 18, have been on the same treatment for at least a year,

have no opportunistic infections, are not pregnant and have had two consecutive suppressed viral loads.

Nurses are people who have been given the authority to practise as nurses or have been trained in basic nursing skills. They may be registered nurses, clinical nurse specialists, licensed nurses, auxiliary nurses, dental nurses, or primary care nurses (WHO 2016: xiv). In this study, the researcher refers to nurses as registered nurses who are trained in differentiated care and in implementing the strategy.

Registered person is a person who is registered or is liable to be registered under an Act (www.dictionary.com). In this study, a registered person is a nurse registered with the nursing council and employed by the Tshwane health district as a professional nurse or clinical nurse practitioner to provide primary healthcare services and who has been exposed to the implementation of differentiated care.

Implementation is the act of making something that has been officially decided start to happen or be used (Oxford Dictionary Online).For the purposes of this study, implementation refers to using the guidelines set out by the National Department of Health Adherence Guidelines for Human Immunodeficiency Syndrome (HIV), Tuberculosis (TB) and Non-Communicable Diseases: Policy and service delivery guidelines for linkage to care, adherence to treatment and retention in care is fulfilled or put into action .Patients who are stable on ART are offered the strategies outlined in the guideline.

Patient is a person who is receiving care or treatment (WHO 2017: x). In this study, a patient is a person who is HIV positive and has received antiretroviral treatment for more than a year and is not experiencing any opportunistic infections and is not pregnant. The patient should be older than 18 and have had two consecutive suppressed viral loads.

Continuum of care is a concept of an integrated system of care that guides and tracks clients over time, through a comprehensive array of health services spanning from screening for HIV, to diagnosis and management of HIV, to initiation of ART, retention in care and psychosocial support (National Consolidated Guideline for the Prevention of mother-to-child transmission of HIV, PMTCT and the Management of HIV in Children, Adolescents and Adults 2015:7). In this study, continuum of care refers to tracking an HIV patient through screening, diagnosis, treatment initiation, monitoring of treatment response and retention in care; and it includes offering stable patients differentiated care.

1.8 PARADIGM AND ASSUMPTIONS

A paradigm is a perspective that surrounds a set of philosophical assumptions and gives guidance to approaching an inquiry (Polit & Beck 2017:738). An assumption is a principle that is welcomed as being true, based on logic or reason without proof (Polit & Beck 2017:720). The research is based on a post positivism paradigm and constructivism as inductive

knowledge was developed by integrating nurses' views to generate a theory. The following are assumptions applied in this study: ontology, epistemology, and methodology. The assumptions were discussed in detail from 1.8.1-1.8.3.

1.8.1 ONTOLOGICAL ASSUMPTIONS

Ontology is a division of the school of thought that deals with the nature of reality (Van Rensburg, Alpaslan, Du Plooy *et al.* 2010:18). It poses the question of what the nature of reality is (Polit & Beck 2017:10). Ontological assumptions refer to what the researchers think existed and what is real. In the current research, multiple and subjective views are heard from registered nurses regarding the implementation of differentiated care with the intention of identifying the nature of what is really happening in the selected facilities. Participants' words and phrases are used to describe human reality regarding the implementation of differentiated care.

1.8.2 EPISTEMOLOGICAL ASSUMPTIONS

Epistemology is the division of philosophy that deals with the nature of knowledge (Van Rensburg *et al.* 2010:19). Epistemology answers the question, "how is the researcher related to participants" (Polit & Beck 2017:10). The researcher interacted closely with the participants during interviews and obtained an in-depth and rich understanding of their views regarding the implementation of differentiated care to stable ART patients. To avoid bias and influencing the direction of interviews, the researcher was empathetic and avoided being emotionally involved. She also observed participants and the activities around facilities to make more sense of the views of the registered nurses. Knowledge was gained through interaction and inductive reasoning by the researcher.

1.8.3 METHODOLOGICAL ASSUMPTIONS

Methodological assumptions answer how best to obtain evidence (Polit & Beck 2017:10). The researcher started by getting signed consent forms and she used the participants' lunch breaks to conduct interviews at their workplace. A natural setting, the participants' place of work, served as the venue for interviews as this allowed the participants to relax and helped the researcher to gain an understanding of the daily routines of participants at their facilities.

1.9. DELINEATION

The study was conducted in 16 Primary Health Care facilities in Tshwane Sub- District 1 in Gauteng province. It focused only on the views of nurses involved in the implementation of the differentiated care strategy for patients receiving ART. All 16 facilities were implementing differentiated care strategies and patients chose a stream that is convenient for them, in terms of saving time and money, to collect their medication.

1.10. RESEARCH DESIGN AND METHODS

Research designs and methods form a methodology that gives theoretical support to understanding which method, set of methods or best practices should be applied in a specific study. They include the theory and analysis of the body of methods and principles associated with a particular study division (Igwenagu 2016:4).

1.10.1 Qualitative research design

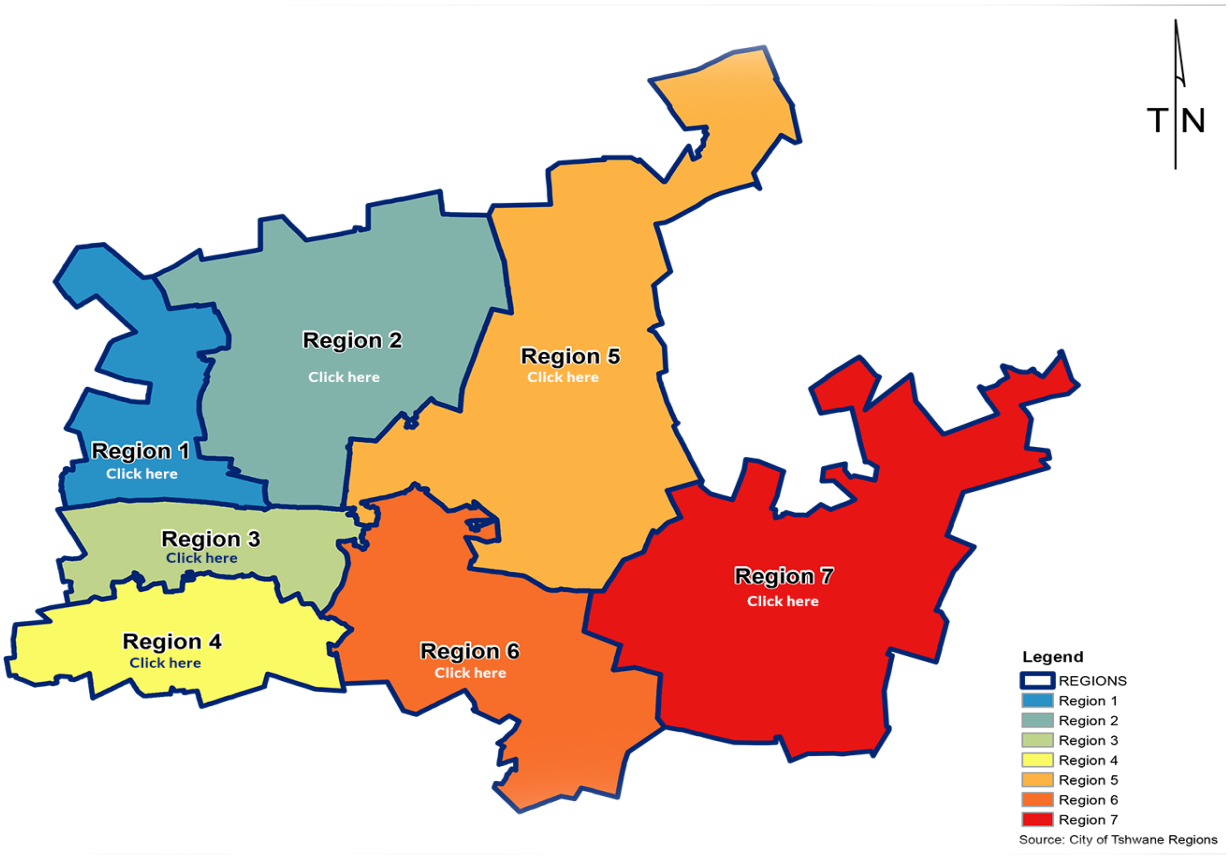
Qualitative research centres on meaning, experience, and comprehension. In this study, a qualitative research design was utilised to enable the researcher to interact with the nurses and to explore their views regarding the implementation of a differentiated care strategy for stable ART patients. (Van Rensburg *et al.*2013:136).

1.10.2 Type of qualitative research design

A research design is the plan that helps in answering a research question and the requirements for improving the integrity of the study. (Polit & Beck 2017:743). The researcher uses an explorative and descriptive research design. According Polit & Beck (2017:206), the purpose of a descriptive research is to observe, describe and document characters in situations as they naturally unravel. At times, it functions as a point of origin for generating a hypothesis or developing a theory. A descriptive design was warranted for the current study as the objective was to explore and describe the views of nurses regarding the implementation of differentiated care for patients receiving ART.

1.10.2.1 Study Context

The context of the study is part of the Gauteng province which is situated in the north-eastern part of South Africa and consists of five districts namely: Tshwane, City of Johannesburg, Ekurhuleni, Sedibeng, and West Rand. The Tshwane district was selected because it is where the researcher is employed and was convenient for the researcher to visit participants at various facilities to conduct interviews during their lunch times. The Tshwane Health district is made up of 7 sub-districts, regions 1, 2, 3,4,5,6 and 7. Please see the map below:



City of Tshwane by region 2018

Sub District 1 has 21 health facilities,.18 of which are managed by the Department of Health and three are managed by the local government. The researcher conducted the study at the government managed facilities as it was easier to obtain permission from one authority and satisfy the needs of one authority. By conducting the study at all 18 health facilities with around 60 000 patients on ART, the researcher had a better chance of acquiring enough knowledge to generalize the findings. Please see the declaration letter from the Tshwane district PHC manager, giving the researcher permission to access their facilities and staff. (Annexure 1)

1.10.2.2 Selection of participants / unit of analysis

Population

A population is a group of people that the researcher is interested in and would like to study (Polit & Beck 2017:739). The population targeted for the study was registered nurses employed at Tshwane Sub-District Primary Health Care facilities and who were implementing differentiated care for ART patients at the time of the study. The nurses were either trained or received in-service on differentiated care. The researcher chose registered nurses because they are the main drivers of service delivery at primary health care facilities. These are nurses who are responsible for implementing all government initiatives at primary health care facilities and they have made great strides in improving the health of communities.

Sampling method

The researcher used a non-probability purposive sampling method. According to Polit & Beck (2017:250), sampling is the action of choosing cases that will represent the entire population. Thus, registered nurses at selected facilities were sampled to represent the population being studied. The purposive sampling technique was relevant for this study as registered nurses trained in differentiated care and implementing the strategy were purposefully selected (Polit & Beck 2017:254). The researcher sampled 20 registered nurses. However, only 16 were interviewed as data saturation was met. The trustworthiness and validity ensured for the study contributed to information richness and the quality of analysis of this the sample size (Polit & Beck 2017:255).

In this study, the inclusion criteria were registered nurses of any gender who were fluent in English, since this is the medium of communication for the profession, employed at one of the 18 Primary Health Care facilities in Tshwane and implementing differentiated care. The nurses were authorised to write a six months' prescription. Participants had been implementing differentiated care for more than three months and were trained or in-service in differentiated care. Participants were not coerced to take part in the study and therefore, participation was strictly voluntary.

The exclusion criteria included registered nurses not trained in nor having received any information on differentiated care. Health workers that were not registered nurses were excluded from the study. Furthermore, registered nurses who had worked for less than three months at the selected facilities were not selected in this study. Health workers who were not interested in participating were excluded even if they did fit the criteria for inclusion. Registered nurses who were working at tertiary levels of care were excluded because they did not have full control of the programme. Doctors are the ones writing the scripts and nurses only support by giving education about the strategy.

1.10.2.3 Data Collection

Data collection is the act of assembling information to clarify the research problem under discussion (Polit & Beck, 2017:725).The researcher conducted semi formal face to face interviews with nurses working at Tshwane sub district one primary health care facilities. The researcher also had an assistant who focused on capturing information when the interview was conducted and any facial expressions they noted during the interaction. The interviews were conducted at the health facilities where participants worked. To avoid service interruption; interviews were conducted during participants' lunch breaks. The signed consent forms of each participant were kept in each participant's file together with letters of approval from the university post graduate ethical committee, Department of Health research

directorate and facility approval letters and were produced when required. As advised, the researcher hired an assistant who assisted in noting the participants' main points to improve the truthfulness of the content. Details of the data collection are elaborated upon in chapter 2. For details of the data collection tool, please refer to Annexure B.

1.10.2.4 Data organisation

For data to be safe and readily available when needed, every participant had a file created for them where all the interview notes, transcriptions and audio recordings were saved. The researcher read and organised data after transcribing it, to identify hidden views and grouped them to get the real meaning. These helped her form a strategy to classify and index data and to develop a qualitative category of scheme. Data was converted into small units that made it easy to recover and analyse them. The category scheme was based on the data analysed (Polit & Beck 2017:537).

1.10.2.5 Data analysis

According to Polit & Beck (2017:530), data is analysed to ensure that it is organised, has structure and that meaning is derived from it. The researcher used a thematic data analysis technique to analyse the data collected from individual interviews about the views of nurses regarding the implementation of differentiated care for ART patients. The researcher used six-phased thematic analysis which is detailed in chapter two of the study.

1.10.2.6 Data interpretation

The researcher read and re-read the data, analysed, interpreted, classified, and coded it to inductively develop thematic analysis and to consolidate the themes into a unified whole (Polit & Beck, 2017:549).A professional c- coder was hired to bring rich analysis and interpretation of the data. Please refer to annexure H to see the letter from the co-coder.

1.11 TRUSTWORTHINESS

Polit & Beck (201:7747) describe trustworthiness as the extent to which researchers have confidence in data collected. In this study, the researcher used the five methods of measuring trustworthiness: credibility, dependability, confirmability, transferability, and authenticity (Polit & Beck 2017:559). Details of trustworthiness are elaborated in chapter two..

1.12 ETHICAL CONSIDERATIONS

Ethical considerations are defined as the moral standards that the researcher should consider throughout the different stages of the research design (Polit &Beck 2017:139). To ensure that research ethics were maintained, the researcher obtained ethical approval from the University of Pretoria Research Committee and from the Tshwane Research Ethics Committee to

conduct the study. For details of the approvals please see annexure E and F on pages 76 and 77. Details of ethical considerations Rea given in chapter two.

1.13 OUTLINE OF THE STUDY

Chapter 1	Overview of the study
Chapter 2	Research design and methodology
Chapter 3	Presentation of study results
Chapter 4	Discussion of study findings
Chapter 5	Conclusions, recommendations and limitations

1.14 DISSEMINATION OF RESULTS

The study results have been shared with study participants and the rest of the facility staff during facility monthly meetings. The study findings were presented to the Sub - District and District during quarterly HIV, AIDS, STI and TB review meetings.

The researcher has published the dissertation on the UP website.

The findings will also be presented during conferences and published via accredited nursing journals. A signed declaration form is included in annexure A.

1.15 SUMMARY

Chapter one is the framework of the study. In this chapter, the researcher describes the background, rationale, problem statement, significance of the study, research question, aim and objectives. Concepts are clarified and physiological assumptions and the delineation of the study are explained. A brief description of the research methodology is outlined in this chapter. The way trustworthiness and ethical considerations were ensured is also explained in this chapter.

Chapter two focuses on the research design and methodology of the study.

CHAPTER 2
RESEARCH DESIGN AND METHODOLOGY

2.1 INTRODUCTION

Chapter two mentions the research design and methodology utilized in the study. The methods are structured as sampling methods, study population, inclusion and exclusion criteria, data collection, data analysis, ethical considerations, trustworthiness, and schedule.

The study design and methods used are explained in this chapter.

2.2 RESEARCH DESIGN

Research design is the overall plan for addressing a research question and includes ways of enhancing the study's integrity (Polit & Beck 2017:793). A qualitative approach is used to explore and describe the views of nurses and was conducted with nurses implementing the strategy.

Qualitative research approach

The qualitative approach is used as it is most appropriate to explore the views of nurses regarding the implementation of differentiated care. The researcher wanted to be involved in the field throughout the study and qualitative research provided such an opportunity. The research takes place in a setting where the participants are comfortable and that allowed the researcher to utilise her people skills to gain trust from participants. The approach also involves various data collection methods like interviewing, observing, probing, participating and reflection.

Research methodology

According to Polit & Hungler (2011:223), methodology refers to the systematic manner through which data is obtained, organized, and analyzed. In this study, methodology refers to the way the research is conducted and the logic behind the sequence. The main focus is to explore and describe the views of nurses regarding the implementation of differentiated care. Therefore, a qualitative research approach is used. Methodology involves the design, setting, sample, methodological limitations, the collection, and the analysis technique of a study. Qualitative research is the investigation of a phenomenon, typically in a holistic and in-depth manner, through the collection of rich narrative materials and using a flexible research design (Polit & Beck 2017:741). It offers insight into a research problem and assists in developing ideas for the study. A qualitative approach was used to explore and describe the views of nurses regarding the implementation of differentiated care.

Exploratory research

Exploratory research is a study that explores the dimensions of the phenomenon and that develops or refines the hypothesis about the relationship between phenomena (Polit & Beck, 2017:728). It investigates the "what of the matter" but seldom gives a final answer. In this study, the researcher had observed the congestion of patients and long queues at facilities and wanted to explore the nurses' views to gain clarity and greater understanding of the problem.

Descriptive research

Descriptive research usually has as its main objective to accurately portray people's characteristics or circumstances within which certain phenomena occur (Polit & Beck 2017:726). It tries to determine the "how and why "parts of a phenomenon. In this study, the researcher aims to identify specific details of nurses' views regarding the implementation of differentiated care, and to describe their views.

2.3 RESEARCH METHOD

Research method refers to gathering of data and includes sampling, the role of research, data collection methods, data analysis and ensuring rigor (Botma, Greeff, Mulaudzi & Wright 2010:199). In the current study, the researcher used a qualitative approach to explore the views of nurses regarding the implementation of differentiated care. Nurses implementing the strategy were interviewed. An audio tape was used by the researcher to record interviews while the research assistant captures field notes; any emotional expressions were noted. Interviews were conducted at Tshwane sub-district 1 Primary Health Care facilities. Data was analyzed by the researcher, using thematic analysis and coding techniques to provide a rich and meaningful description of the views. A co-coder also coded the transcripts and brought out the main themes and subthemes of the transcripts.

2.3.1 Population

According to Polit & Beck (2017:739), population is an entire set of individuals with common characteristics of interest to the researcher. The population of this study included nurses trained and implementing differentiated care strategy. The nurses were working at Tshwane Health Department primary health care facilities.

2.3.2 Sampling

The researcher uses a non-probability purposive sampling method. Polit & Beck (2017:250) describe sampling is the action of choosing cases that will represent the entire population.

Thus, registered nurses at selected facilities were sampled to represent the population being studied. A purposive sampling technique is relevant for this study as registered nurses who have been trained in differentiated care and who were implementing the strategy are purposefully selected (Polit & Beck 2017:254). The researcher sampled 20 registered nurses. However, 16 nurses were interviewed as data saturation was met. The trustworthiness and validity of the study contributes more to information richness and the quality of analysis than the sample size (Polit & Beck 2017:255).

2.3.4 Inclusion criteria

The inclusion criteria for this research study were registered nurses of any gender who were fluent in English, since this is a medium of communication for the profession, employed at Primary Health Care facilities in Tshwane and implementing differentiated care. The nurses were authorised to write multi months prescriptions. Participants had been implementing differentiated care for more than three months and were trained or received in-service training in differentiated care. Participants were not coerced to take part in the study and therefore, participation was strictly voluntary.

2.3.5 Data collection

Data collection is the act of assembling information to enable analysis of the research problem (Polit & Beck, 2017:725). In this study, the researcher used a semi-structured data collection tool for interviews. Polit & Beck (2017: 732) view interviews as a data collection method in which questions are asked either telephonically or face-to-face. The researcher conducted face-to-face interviews and used an audio recorder to capture the voices of both the researcher and the participants. To bring the participants on board with the topic, the researcher started by giving a brief description of differentiated care strategy. The data collection tool consisted of seven open ended questions which the researcher asked the participants and probed further to get more clarity on answers and to allow the assistant to capture defining moments. Field notes were also taken to capture non-verbal observations by the research assistance.

2.3.6 Data analysis

According to Polit & Beck (2017:530) data is analysed to ensure that it is organised, structured and that meaning is derived from it. The researcher used a six step thematic data analysis technique to analyse the data collected from the individual interviews about the views of nurses regarding the implementation of differentiated care. The process reflected below was followed by the researcher when analysing collected data (Nowell, Norris, White & Moules 2017:03):

To familiarize themselves with data , the researcher played the audio records and transcribed them word by word. The process was repeated to ensure accuracy in transcribing the data. The researcher then repeatedly read the transcripts to fully familiarise herself with the data. Items of potential interest were identified. Initial codes that were found relevant to the research questions were extracted from the sentences and applied to the data set to identify broader patterns of meaning. After that the main themes that emerged were highlighted and subthemes brought forward. Detailed analysis of each theme was done, themes reviewed and defined while irrelevant themes were discarded. To ensure trustworthiness the researcher appointed a professional coder to co-code the data. Finally, a report was developed bringing together the narrative and data segments. Letter from the co-coder in annexure H.

2.4 ETHICAL CONSIDERATIONS

Ethical considerations are the moral standards that the researcher should consider throughout the different stages of the research (Polit & Beck 2017:139). The researcher submitted a study proposal to the research ethics committee of the Faculty of Health Science at the University of Pretoria for approval. The committee approved the study and then the researcher forwarded the university approval certificate to the Tshwane Health District Research Committee requesting approval to conduct the study at the district Primary Health Care facilities. The study was approved by the Tshwane District Research Committee and the Primary Health Care Manager. The researcher then proceeded to approach health facilities to request permission to interview nurses from the facility managers; this was granted. Facilities were briefed of the intentions and benefits of the study. The three principles of the Belmont Report, namely beneficence, respect for human dignity and justice were used by the researcher (Polit & Beck 2017:139).

Before the researcher collected data relating to the views of nurses regarding the implementation of differentiated care for patients receiving ART in Tshwane Sub District 1 Primary Health Care clinics, the researcher wrote to the Tshwane Research Committee informing them of her intention to conduct a study and requesting consent. Permission was granted by both the Tshwane District Research Committee and the Tshwane Primary Health Care Manager. The researcher then presented the approval letters to the facility managers who also consented for their staff to participate in the study. See annexure D. When the researcher went to the facilities for the interviews, she presented herself to the facility operational manager and obtained permission to conduct interviews on that day. Every participant was asked to sign a consent form before the start of interview, after the interview process had been explained.

The three ethical principles of the Belmont Report, beneficence, respect for human dignity and justice were applied by the researcher (Polit & Beck 2017:139) as follows:

2.4.1 Beneficence

Beneficence is about the researcher's duty to ensure the safety of the participants and to maximise benefits (Polit & Beck 2016:139). The researcher protected participants from harm by keeping her promises and ensuring no harm would occur to the participants. No harmful emotions were triggered and hence, there was no need for a referral to a psychologist. Participants were given assurance that their information that emerged during interviews would not be used without their consent (Polit & Beck 2017:139). The researcher also did not overlook the fact that we are in a new era of Covid 19 and observed all protocols during the interviews. Social distancing was maintained during the interview, Mask was worn, and sanitizer used at the beginning and end of the interview. The table and chair was disinfected after every interview to ensure the next participant is safe. The application of beneficence is reflected below:

Right to freedom from harm

Participants were kept safe from any harm during the study, whether physical or psychological. It was the responsibility of the researcher to prevent any loss of employment because of the study and to keep participants' views private.

Right to freedom from exploitation

The researcher ensured that participants were not disadvantaged or exposed to situations that made them feel uncomfortable by being in the study. Participants were assured that the information they shared during interviews would not be used without their consent (Polit & Beck 2017:139).

Risk / benefit ratio

The researcher ensured that participants' benefits from taking part in the study outweighed any risks that might be involved. The researcher acknowledged that the risk should never exceed the potential benefits of the knowledge that professional nurses might gain from participating in the study (Polit & Beck 2017:140).

In this study, participants benefited by learning more about differentiated care. Interviews also served as a debriefing process for participants as they shared their views. The researcher also shared the findings with both participants and health facilities to improve health practices.

2. 4. 2 Respect for human dignity

According to Polit and Beck (2017:140), the principle speaks to the right to self-determination and the right to full disclosure. To ensure respect for participants they were addressed by their ranks and interviews conducted behind closed doors written interview in process. Time was respected as it impacted on the participants lunch time. The researcher thanked each participant after the interview and appreciated their time and cooperation as a token of respect. The researcher also applied self determination and right to full disclosure as stated below:

Self-determination

To ensure self-determination the researcher requested a morning slot at the facilities to present a study summary to the staff. By doing that the researcher provided each eligible staff member an opportunity to make an informed decision to participate in the study. Participants voluntarily chose to participate in the study, without experiencing any cohesion. The right to ask questions, to refuse to give information, to ask for clarification or to terminate their participation was explained. Participants were not subjected to any form of payment as a way of convincing them to take part in the study. (Polit & Beck 2017:140). The researcher ensured that all self-determination needs of participants were respected throughout the study period.

The right to full disclosure

Participants were presented with a research summary and full disclosure to assist them in making voluntary, informed decisions about their participation in the study. The researcher fully described the nature of the study, the person's rights involved, the responsibilities of the researcher and the risks and benefits involved, to ensure full disclosure. The researcher disclosed all relevant information before participants signed the consent form. If a need for further disclosure occurred during the study, the researcher was happy to disclose further (Polit & Beck 2017:140).

The right to respect

In this study, participants were respected as individuals, as professional and as participants. Participants were not deceived in any way and dignity was maintained throughout the study. Staff members who did not opt to participate were not reported to the supervisor or victimized as that would have shown disrespect to them.

2.4.3 Justice

According to Polit & Beck (2017:141) justice is when participants are given fair treatment and privacy. The researcher ensured that the interviews were conducted fairly, and that privacy was maintained throughout the research in the following ways:

Right to fair treatment

Participants were selected fairly and without any discrimination. The researcher respected cultural and other forms of human diversity. Participants who withdrew from the study were not unfairly treated. The researcher ensured that participants who might have encountered physical or psychological damage would be referred for appropriate professional assistance. The researcher treated all participants with courtesy and prudence (Polit & Beck 2017:141).

Right to privacy

The researcher ascertained that the study did not infringe on participants' right to privacy throughout the study. Participants' information was kept private either through anonymity or other confidential procedures. For example, consent forms were anonymous without the participants' names (Polit & Beck 2017:141).The researcher also ensured that the facility manager is not aware of staff members that participated to ensure privacy. The signed consent forms were kept with the researcher to protect participants .Even when the researcher went back to the facility to verify data participants were phoned for an appointment to avoid having to go to the facility and start searching for participants exposing that they participated in the study. Participants were informed that should they need to listen to the recordings again they are free to contact the researcher and do so to ensure control over personal information.

The researcher ensured confidentiality by obtaining information like name, address from participants only when mandated and attached their identity numbers, rather than other identifiers, to the data. Identifying information was kept in a locked file and access restricted to a small number of people. (Polit & Beck 2017:142).

Informed consent

Participants were fully informed about the nature of the research and the risks and benefits associated with the study to allow them to make informed decisions regarding participation. According to Polit & Beck (2008:15), informed consent is when participants have sufficient information regarding the research, can understand the information and have the freedom to choose to consent to or decline participation voluntarily. A copy of the consent form is attached in Annexure C .

2.4.4 Confidentiality

Participants' information was kept confidential either through anonymity or other confidential procedures. For example, consent forms were anonymous without the participants' names (Polit & Beck 2017:141).Each participant file having a consent and transcripts was marked confidential and shall be stored at the university archives. The issue of shared confidentiality

was discussed with participants as the researcher explained that the recordings and transcripts will be shared with the study supervisors or co-coders as part of validating the information and assisting the researcher with interpretation were necessary. Participants that were not comfortable with shared confidentiality were advised to refrain from participating.
The researcher ensured confidentiality by identifying participants as numbers and not by their names even though some participants did mention their names on the consent forms, example participant number 1,2 etc..

2.4.5 Informed consent

Prospective participants were fully informed about the nature of the research and the risks and benefits associated with the study to allow them to make informed decisions regarding participation. Consent forms were only signed after the explanation and questions had been answered. According to Polit & Beck (2008:15), informed consent is when participants have sufficient information regarding the research, can understand the information and have the freedom to choose to consent to or decline participation voluntarily. For detailed information on the consent form please refer to annexure A .

2.5 TRUSTWORTHINESS

Polit & Beck (2017:747) describe trustworthiness as the extent to which researchers have confidence in the data collected. In this study, the researcher used the five methods of measuring trustworthiness: credibility, dependability, confirmability, transferability, and authenticity (Polit & Beck 2017:559). These are described below:

2.5.1 Credibility

According to Polit & Beck (2017:559), credibility refers to the integrity of the data and its interpretations. In this study, the researcher ensured credibility through prolonged engagement.

Prolonged engagement

This is a significant step in establishing credibility in qualitative research; it is when the researcher invests enough time collecting data to fully understand the people under study, to test for misleading, twisted information and to ensure that key categories are well saturated (Polit & Beck 2017:561). The researcher had a home ground advantage as she spends most of her time interacting with the staff, she utilised all the available resources and time to engage with participants, build rapport and clear any misinformation.

Member checking

Member checking involves the researcher going back to the participants to see whether they recognise the findings (Streubert & Carpenter 2011:48). In the current study, the researcher revisited participants at their place of work to share the findings of the data analysis with them and to give them a chance to debrief and make input concerning accuracy, completeness, and the interpretations.

Co-coding

The researcher provided the interview transcripts to a professional coder who analysed the data and came up with an analysis which was in line with the researcher's own. This promoted trustworthiness of the work done by the researcher. Kindly refer to annexure H on page 79 for details of the co-coder.

2.5.2 Dependability

Polit & Beck (2017:559) define dependability as data being stable over time, regardless of situations that may arise during the study period. The researcher shared data that was collected with two researchers who checked to see whether the results correlated to ensure dependability.

2.5.3 Confirmability

Polit & Beck (2017:559) describe confirmability as data obtained objectively with the possibility of balancing between two or more independent people in terms of accuracy, relevance and meaning. The researcher avoided bias by ensuring that the findings reflected the participants' voices.

2.5.4 Transferability

Transferability speaks to the degree to which the study findings can be transferred to or be applied in other situations (Polit & Beck 2017:560). The researcher provided a detailed description of the type of study participants, the experience reported, and observations made by the researcher during the study to reach transferability. Sufficient data was provided to consumers to evaluate the applicability of the data to other settings (Polit & Beck 2017:560).

2.6 SUMMARY

Chapter two explains the research design and methods used in implementing the study. This is an important chapter that speaks to issues of compliance to the research principles and whether the researcher was ethical in her quest for answers to her questions. The chapter indicates whether the research will make a significant change to the way things are done and contribute to the body of knowledge in health sciences. In this chapter, concepts like sampling, population, data collection and analysis, ethical considerations and trustworthiness are fully engaged.

The study results are presented in chapter three.

CHAPTER 3

Presentation of study results

3 .1 INTRODUCTION

This chapter presents the study results. The objective of this study has been to explore the views of nurses regarding the implementation of differentiated care for patients receiving ART. The first part of the chapter focuses on the participants' demographic information, as illustrated in table 3.1.1. The aim of the table is to present the credentials of the professional nurses and to show that they are experienced and well trained in the nursing field as most of them either have a degree or have specialized in primary health care. This is to promote trustworthiness in the results as the nurses are actively implementing differentiated care and have in-depth knowledge of differentiated care. Data analysis and interpretation are also be included in the chapter.

Table 3.1.1 Participants' demographic information.

Participants	**Work Experience**	**Gender**	**Designation**	**Qualifications**
Participant No 1	5 years	female	Clinical Nurse Practitioner	Diploma in Nursing PHC diploma
Participant No 2	3 years	female	Professional Nurse	Bachelor of Nursing
Participant No 3	11 years	Female	Professional Nurse	Diploma in Nursing PHC diploma
Participant No 4	15 Years	Female	Professional Nurse	Diploma in Nursing PHC diploma
Participant No 5	7 Years	Female	Professional Nurse	Bachelor of nursing PHC diploma
Participant No 6	3 Years	Female	Professional Nurse	Bachelor of Nursing
Participant No 7	10 years	Male	Professional Nurse	Diploma in Nursing PHC diploma
Participant No 8	11 years	Female	Professional Nurse	Diploma in Nursing
Participant No 9	19 years	Female	Professional Nurse	Bachelor of Nursing

Participant No 10	8 years	Female	Professional Nurse	Diploma in Nursing
Participant No 11	5 years	Female	Professional Nurse	Diploma in Nursing PHC diploma
Participant No 12	20 years	Female	Professional Nurse	Diploma in Nursing
Participant No 13	12 years	Male	Professional Nurse	Bachelor of Nursing PHC diploma
Participant No 14	6 years	Female	Professional Nurse	Diploma in Nursing
Participant No 15	4 years	Female	Professional Nurse	Diploma in Nursing PHC diploma
Participant No 16	7 years	Female	Professional Nurse	Diploma in Nursing

The above tablet displays professional information about the participants. All participants stated above are registered nurses. They only differ in terms of further studied as professional nurses are trained nurses without specialty qualification and clinical nurse practitioner are professional nurse that did a one year post graduate diploma in primary health care.

3. 2 OVERVIEW OF STUDY RESULTS.

3.2.1 Data analysis process

According to Polit & Beck (2017:530), data is analysed to ensure that it is organised, structured and meaningful. The process of thematic data analysis was used in this study and includes the researcher familiarizing herself with the audio recorded material, transcripts, and field notes. Thus, data analysis is about identifying the relationship between categories and themes of data to enhance understanding of the analysed data by the researcher. The researcher also sought the assistance of a professional co-coder to ensure that data was analysed accurately and that any gaps that the researcher left during her analysis were closed. See annexure E.

3.2.2 Research themes and sub-themes

The collected data was analyzed keeping in mind the research questions and objectives of the study. Any data that was irrelevant was not considered. The findings were compared with existing literature which was used as a tool for validity. Three main themes emerged from the data and 13 sub-themes developed from the themes. Data analysis was undertaken, looking at both the themes and sub-themes. Thematic data analysis steps were followed by the

researcher and, for validity, a professional co-coder was brought in to assist in identifying and areas that the researcher might have missed during analysis. For details of the themes and the sub-themes refer to the table 3.2.1 below:

Table 3.2.1 Table of themes and sub-themes that emerged from the views of nurses regarding the implementation of differentiated care for patients receiving ART.

Themes	Sub themes
Benefits of differentiated care	Promotion of treatment adherence and retention of patients
	Differentiated care benefits patients who are working
	Differentiated care reduces shortage of staff and workload
	Differentiated care reduces patient waiting time
	Differentiated care reduces congestion of patients at facilities
	Differentiated care reduces unnecessary mistakes
Challenges related to implementation of differentiated care	Challenge related to shortage of medication at health facilities.
	Challenges related to patients' missing appointments
	Challenges related to insufficient pick-up points
	Challenges caused by covid-19 regulations
Suggestions for improving the implementation of the differentiated care strategy	CCMDD should be implemented across all provinces
	Employment of personnel to implement differentiated care
	Continuous workshops and in-service training for the nursing staff.

3.3 INTERPRETATION OF THE STUDY RESULTS

The results are presented sequentially according to the three themes and 13 subthemes as reflected in table 3.2.1 as follows: Benefits of differentiated care**,** Challenges related to implementation of differentiated care and Suggestions for improving the implementation of the differentiated care strategy. The sub-themes of the benefits of differentiated care are promotion of treatment adherence and retention of patients**,** differentiated care benefits patients who are working, differentiated care reduces shortage of staff and workload, differentiated care reduces patient waiting time, differentiated care reduces shortage of staff and workload, differentiated care reduces congestion of patients at facilities and differentiated care reduces unnecessary mistakes.

The sub-themes of challenges related to the implementation of differentiated care are challenges related to shortage of medication at health facilities, challenges related to patients'

missing appointments, challenges related to insufficient pick-up points and challenges caused by COVID-19 regulations.

The sub-theme of suggestions for improving the implementation of differentiated care strategy comprised the following sub-themes: CCMDD should be implemented across all provinces, employment of personnel to implement differentiated care and continuous workshops and in-service training for the nursing staff.

The abovementioned results of this study are addressed logically according to the different themes and subthemes as reflected below:

3.3.1 BENEFITS OF DIFFERENTIATED CARE

When the National Department of Health adopted differentiated care strategy in 2016, the main aim was for it to be beneficial to both healthcare workers and patients. Based on the utterances of the participants regarding differentiated care, the benefits are perceived as follows:

3.3.1.1 Promotion of treatment adherence and retention of patients

Patients' adherence and retention to treatment has been a great challenge within the health care sector especially since the implementation of universal test and treat which ensures that every patient that tested HIV positive be offered same day initiation. Differentiated care is one strategy that aims at improving adherence and retention of patients in care by rewarding those that are adhering well to treatment and stable with reduced number of clinic visits and an opportunity to choose a convenient place to collect their treatment. Below are the utterances of professional nurses at Tshwane Clinics regarding how they view the implementation of differentiated care in terms of promoting adherence to treatment and retention in care. They attested that differentiated care does promote adherence and retention in care and their direct quotes were as follows:

Participant No 1

"*Looking at data patients are really adhering to treatment as we have above 90% suppression and very low defaulter rate. So, I say it is promoting adherence and retention of patients".*

The participant view differentiated care as being beneficial to patients as their viral-load suppression is above 90% and patients are retained as the defaulter rate is very low. The majority of patients are retained in care as they do come back on time for review. The participant further affirmed that differentiated care is promoting patient's adherence and retention to treatment.

The researcher is of the same view as the participant as the reason for starting differentiated care was that patients can be motivated to adhere to treatment and not default. This is good news as the strategy is also promoting achievements of the 90/90/90 strategy which says 90% of patients on ART should remain virally suppressed.

The next participant also supported the voice of the first one who mentioned that patients are adhering to their return dates which is a sign of adherence and retention to treatment. Below is the expression voiced by the participant:

Participant No 4

"*For now, it's working well and our patients, like I said, just there and there but most of the patients are adhering to the dates and do get their medication on time".*

The researcher's take on the above statement is that there are still other patients who miss their appointments however majority is adhering, and patients are not defaulting. This utterance is in line with the participant No1 who also mentioned that 90% are adhering to treatment.

In addition to the quotes already made, the participant below stated that most of the patients adhere to treatment because they do not want to be to be shifted back to the monthly visits at facilities. Below is the participant voice:

Participant No 6

"Most of them are adhering to return dates because they know that if you come very late, you might be taken back to the monthly visit as honoring return date is one of the criteria for CCMDD".

In the quote that follows, the participant emphasized that adherence and retention has improved since the implementation of differentiated care as patients don't want to see themselves back at clinic queues every month due to poor adherence.

Participant No 8

"They adhere to treatment and do well because they don't want to be taken back to the monthly clinic visits, so they make sure that they take their medication, and their viral-load is suppressed in order to keep themselves away from the clinic. So, retention rate is good".

The researcher interprets the above two statements as a confirmation that differentiated care managed to improve patient's adherence because it is offered to patients who are adhering to treatment as a reward so as to maintain their adherence. So, patients ensure t return for their review on time and looking healthy so that they can be rewarded again with another 12 months' prescription. In that way, they are also retained in care.

Lastly, in support of the utterances made above, the participant declared that adherence was good as patients who are in adherence clubs are given the necessary information to stay healthy even when away from the clinic. The exact words are as follows:

Participant No 9

"Patients' adherence and retention is good because in clubs here we teach them about healthy lifestyles, eating well, use of condoms, contraceptives etc... We also encourage them to visit the clinic if they don't feel well and not wait for their review date.

The way the researcher understood the participant, the adherence clubs play an important role as healthy lifestyle is encouraged and patients know they can visit the clinic anytime when they are sick which promotes good health and keeps patients stable on their chronic treatment. That way patients are also retained in care.

Based on all expressions made regarding differentiated care, the researcher is convinced that adherence of patients to treatment and retention in care has improved since the implementation of differentiated care.

3.3.1.2 Differentiated care benefits patients who are working

A benefit of differentiated care that emerged from the interviews is that working patients benefit from the strategy, as evidenced by the following quotes:

Participant No 3

"People love it because they said, "You know what, it doesn't interfere with my work schedule, I don't have to go the clinic and stay for long and then have to get back to work at the same time."

The above statement was made by a participant, reminiscing about patients' expressions of gratitude towards differentiated care. According to the abovementioned nurse, patients love the strategy as they can collect their medication without waiting in long queues which means they can get to their workplaces on time.

The researcher's understanding of the statement is that the objective of differentiated care of reducing work absenteeism for patients on ART has been attained, as patients now can collect their medication at the clinic and go to work, no longer requiring a sick note.

The following remark by the participant attests to the above, as the participant is explaining that working patients no longer need to take a day off work to queue at the clinic for medication. They just go to the clinic pharmacy, collect their medication and leave.

Participant No 4

"*And then those that are collecting, those that their pickup point is here at the clinic, just come, collect and go, especially those that are working."*

The researcher's interpretation of the statement is that facility pick-up points benefit working patients as they can simply collect their medication and leave. This, to the researcher, means that a measure to assist workers do not take a day off work just for collection of medication is effective. The researcher views this as a great benefit for people working close to the clinic.

In support of the above utterances, the next participant reveals that most patients were very happy as they collected their medication at retail pharmacies near their workplaces, which is a great convenience. Below are the participant's exact words:

Participant No 5

"Most of the patients are very much happy because they choose Clicks, Shoprite where they are working which is convenient for them as well."

The researcher's understanding of the statement made by the participant is that differentiated care has benefitted patients as they collect at pick up points that are close to their workplaces saving themselves time and money for travel to the clinic. All the above statements led the researcher to believe that differentiated care was beneficial to working patients as they no longer required monthly sick-notes for the collection of chronic medication.

3.3.1.3 Differentiated care reduces shortage of staff and workload.

Reduced workload is a priority that the former minister, Dr. Aaron Motsoaledi, emphasized. According to the minister's five health priorities, reduced workload for staff reduces staff burnout and promotes positive staff attitudes. The number of patients' complaints also reduces when staff are not overworked. Differentiated care aims to reduce staff workload by reducing the number of patients' visits from twelve to two, or even one, a year. Below are direct quotes from various nurses about their views as to whether their workload has reduced:

The participant quoted below expresses her excitement about reduced workloads at their facility since the implementation of differentiated care at their facility:

Participant No 3

"Workload has reduced. Yooh, before that we would see like close to hundred patients per day just for HAST, but now you can see the clinic is empty because of CCMDD."

The understanding is that the participant really appreciates differentiated care as it managed to reduce the staff workload, particularly the scriptwriting as they now do electronic scripting, which is fast and accurate. The participant also highlighted that the clinic used to be filled with HIV, STI and TB patients but lately they were seeing very few of those patients due to differentiated care.

The next participant concurred with the above, as the participant mentioned that differentiated care has reduced the workload as they no longer write unnecessary prescriptions and that makes the workload lighter:

Participant No 9

"One other thing that is good about the strategy is that we don't have to write a lot of prescriptions unnecessarily and then it accommodates for shortage of staff.

The researcher's understanding of the participant's declaration is that differentiated care has managed to reduce staff workloads and assists with the staff shortages as fewer staff members are needed to attend to patients. This means that with differentiated care, health care workers find time to focus on acutely ill patients, as stable patients no longer have to present themselves to the clinic on a monthly basis.

Participant 14 was also very happy with differentiated care as it has reduced the workload and the number of chronic patients visiting the clinics has decreased:

Participant No 14

"Differentiated care for stable patients has reduced workload for us the staff, even our monthly headcount for chronic patients has gone down."

The above expression confirms that workload has reduced since the implementation of differentiated care and monthly visits for chronic patients has decreased.

Based on all the comments, the researcher's understanding of workload is that differentiated care has managed to reduce the workload of professional nurses at clinics. The aim of the strategy was to reduce the staff workload by having stable chronic patients collecting medication at convenient pick-up points. By collecting at nearby pick-up points, patients do not have to come to the clinics unless they are sick or due for script renewals. This happens after either 6 or 12 months, depending on the nurses' assessments. The researcher has also noticed that most facilities visited for data collection had just a few patients in the waiting areas. Nurses also confirmed that, since the implementation of differentiated care, the workload in

the chronic sections has drastically reduced and as a result, the shortage of staff is manageable.

3.3.1.4 Differentiated care reduces patients waiting times

Long waiting times at South Africa health facilities has been a long-standing challenge for both beneficiaries of care and health care providers. According to the South African National Policy on management of patient waiting time (2015:07), patient waiting time is the amount of time a patient spends waiting for services in a health facility. Patient waiting time has also been described in terms of the total amount of time spent by a patient from entry into a facility to exit. In the Gauteng annual report complaints about long waiting times by patients topped the list of complaints, followed by staff attitude.

The purpose of differentiated care is to reduce the long waiting times by providing stable patients with the option of choosing their preferred pick-up point for their chronic medication. In this study, a professional nurse claimed that differentiated care has led to the reduction of patients' waiting times at the clinics. This means that patients do not wait as long as they did before the implementation of the strategy in the selected clinics. Reduced waiting times is beneficial to the patients because by not spending a long time in queues, they can manage their time more efficiently as they can attend the clinics and still go to work afterwards. Reduced waiting times has the further positive outcome that the rate of complaints is reduced.

Participants of the study made the following statements in response to how they viewed differentiated care in terms of waiting times:

Participant No 1

"It is a good strategy and since it was being implemented, waiting times has reduced, since they just come with their cards and collect medication at the pharmacy like that. Unlike starting there, taking out the file and after that, the file is going to be written aah. so, it is fast queue."

The above participant praised differentiated care as she says it reduced patients' waiting time. She was talking about facility pick-up points where patients chose to collect their medication at the clinics because they were nearer to them than other pick-up points. This means that these patients do not t wait in queues, they just go straight to pharmacy, present their cards, and receive their medication. No file needs to be retrieved or written in, so nurses are not involved in the process.

The researcher's interpretation of the quote is that waiting time has reduced since the implementation of differentiated care because patients who are stable no longer have to wait to see nurses but can go straight to a pharmacy and collect their medication.

Another participant claimed:

Participant No 4

"I think it's working; we have seen more patients going to collect their medication at the pick-up points and that has reduced waiting times here at the clinic. Also, those patients that are collecting at internal pick-up point (here at the clinic) just come, collect and go."

The participant above maintained that differentiated care reduced patients' waiting times at the clinics because nurses no longer had to see patients every month. Patients collected their medication outside the clinic and even those who chose to collect at the clinic still did not have to wait as they just collected their medication and went home or back to work without waiting in queues.

The researcher's inference from the above quote is that by offering external pick-up points to patients as part of differentiated care, waiting times at facilities reduced as patients can their medication outside the clinics. The participant further stated that even patients who collected at the facility pick-up points (the clinic) contributed to reduced waiting times at the clinic as they could go to the pharmacy to collect and go.

Participant No 5

"*Differentiated care strategy is working well and it's very good for us as health care personnel as well as patients because patients no longer come here and wait for long. They just come and pick up their medication.****"***

The participant quoted above sees differentiated care positively and mentions that the strategy benefits both patients and staff. She continued to say that patients no longer waited for a long time at facilities because of differentiated care as they come, collect, and go.

This illustrates that differentiated care is beneficial when it comes to reduced waiting times; stable patients just collect their medication without retrieving a file or consulting a nurse. This is impressive, as waiting time used to be a scourge in the health care facilities.

A further aim of differentiated care is to provide patients with the opportunity to collect their medication near their homes or workplaces and thus to reduce the long waiting times at the clinics. Participant 7 comments as follows:

Participant No 7

"Most of the patients are very much happy because they choose Clicks, Shoprite and other prominent areas where they are working which is convenient for them and that reduced waiting times at the clinic as we don't have a lot of patients."

The researcher's understanding of the above statement is that differentiated care has pleased patients as they now have the autonomy to choose where they want to collect their chronic medication. The participant also mentioned that, as a result of stable chronic patients collecting medication outside the clinic's, waiting time has reduced as most of the patients visiting the clinics are now chronic patients. The reduced waiting times has also reduced patients' complaints as the long waiting time was one of the longstanding problems patients complained about.

The researcher's understanding of the quote is that most patients no longer go to clinics as they collect their medication at external pick-up points, like retail pharmacies, doctors' surgeries, etc. The strategy has resulted in reduced waiting times in clinics as patients collect their medication at places that are convenient for them.

3.3.1.5 Differentiated care reduces congestion of patients at facilities

Congestion of patients at health facilities has been a thorny issue since the advent of HIV in South Africa. Management teams at various levels tried many ways of decongesting facilities with very little success. The differentiated care strategy is the one strategy that professional nurses view in a positive light as they have identified that the strategy can reduce congestion at the clinics. They concurred with each other to stress this point as is seen in the following statements:

Participant No 9

"Differentiated care is a good strategy because the objectives that were mentioned, reducing patient's waiting times, reducing overcrowding of patients in the clinic, are happening. Also, by reducing overcrowding of patients at the clinic, it also reduces nosocomial infections especially now with COVID-19."

The participant above indicates that the congestion of patients at facilities has reduced since the implementation of differentiated care. The same participant further stated that by reducing overcrowding, they also reduced nosocomial infections at the clinic, especially now that COVID -19 infections are looming.

The researcher 's interpretation of the statement is that differentiated care has benefited both patients and health care workers by reducing congestion. In addition, the chances of patients contracting other infections like COVID -19 are slim as social distancing is possible with less crowding. This reduces the burden on the health care workers.

Participant No 12

"It's a very good system, if we follow it, it does help with decongestion of patients at our facility."

The participant above clearly states her opinion that differentiated care reduces congestion of patients at the facilities. Furthermore, the participant notes that the strategy works very well if implemented correctly. At the beginning of its implementation, health workers were frustrated because of the mistakes made, like incorrect scripting, resulting in patients not receiving their medication at pick-up points. However, with electronic scripting, mistakes are corrected right away and when patients leave the facility, they already have confirmation that they will their receive medication at their chosen pick-up point.

The researcher's grasp of the above statement is that differentiated care is a very good system, especially if implemented correctly, and it helps decongest facilities as patients are spread when going to the pick-up points every 2 months for the collection of their medication and this provides health workers the opportunity to focus on really sick patients.

In addition to the above quotation, professional nurses clearly stated the reason they felt that offering differentiated care for patients receiving antiretroviral treatment has brought relief to both nurses and patients by reducing congestion at facilities:

Participant No 14

"Differentiated care is really reducing congestion of patients at our facility, we are really seeing a smaller number of patients in the clinic, and this helps in controlling the flow of patients, it's really manageable now due to the differentiated care."

The participant above is confident that differentiated care has reduced patient congestion as the clinics now see fewer patients daily and are easily able to control the flow of patients. This is a benefit to the health care workers.

The researcher's understanding of the participant's utterances is that since the implementation of differentiated care, fewer patients are seen at the health facilities and that benefits both staff and patients, as they can manage the flow of patients and patients' experience of the system is positive.

To further substantiate, the above statements, another participant's view of differentiated care reducing congestion of patients is quoted as follows:

Participant No 15

"*Yes, to me differentiated care is a solution to decongesting facilities aah… It is working although not 100% as planned because we have challenges of patients."*

The statement above attests to the opinion that differentiated care does reduce congestion of patients at clinics as clients are offered a choice of where they want to collect their medication.

The participant, however, also mentions that there remain unexplained challenges with patients.

The researcher's understanding of the statement is that differentiated care reduces congestion at facilities. However, for the strategy to be 100% effective, other challenges with patients need to be addressed.

The researcher confirms the utterances of the participants that underline the fact that differentiated care has reduced congestion of patients at health facilities. The decision to support participants was based on the researcher's observations during data collection. Facilities that were always known to have been crowded with patients from morning until noon were seen to have far fewer patients, particularly in the chronic sections. Furthermore, the issue of increasing external pick-up points near to the clinics is supported by the researcher as that reduces congestion at clinic pharmacies as patients collect their medication outside the clinics but still near their homes or workplaces.

3.3.1.6 Differentiated care reduces unnecessary mistakes

Writing a prescription was challenging as, before the implementation of differentiated care, scripts for chronic patients were reviewed every 6 months by the doctors only. Nurses were not allowed to write repeat prescriptions for any chronic patient. If a prescription had errors, there was no-way of noticing the mistakes until the patient came to the clinic to collect medication only to find that the medicines had not been sent by the hospital pharmacy because of mistakes. Now, with differentiated care, nurses can write repeat prescriptions electronically. The participants expressed their appreciation of differentiated care as mistakes made during electronic scripting are now corrected before a script is uploaded, making life easier for the patient and the health care workers Participants say:

Participant No 3

"*Now they introduced this computer thing, it works so well as it just corrects you immediately, you don't have to send a wrong script or script with faults.*"

The participant mentions that electronic scripting is beneficial in that no faulty prescription can be sent to the service provider as the system picks-up the error and prompts the nurse to correct it before uploading the script. In this way, mistakes in scripting are alleviated.

The researcher's understanding of the perceptions of the participants is that the introduction of electronic scripting in differentiated care in South Africa has improved nurses' writing of prescriptions due to prompt error corrections. This prevent unnecessary mistakes and, as a result, the benefits of differentiated care are even more apparent.

Concurring with the previous participant, the one following explains that the electronic prescription system alerts whether the script has been rejected or accepted and that offers an opportunity to correct any errors that might have been missed. The aforementioned participant further notes that, because of this, they no longer have patients who are turned away from pick up points because of the unavailability of their treatment due to errors in the scripts. The only time a patient may have issues is if they are outside the province as currently CCMDD scripting does not cross provincial borders. The words of the participants are:

Participant No 5

"*The system already it tells you the script is successful or rejected unlike with the paper. It corrects it right there, so you don't have to have this returns, unnecessary returns unless if a patient says I was in Limpopo, I went home*."

The researcher interprets the above quote as indicating that electronic scripting of differentiated care is of great benefit as it alerts mistakes that may later affect the patients' experience of health care services.

Lastly, a participant describes the benefit of differentiated care as follows:

Participant No 15

"It's better now that it's not paperwork anymore, we no longer do manual, where you have to fill in forms, its much quicker with electronic enrolments and mistakes are less."

The above participant is saying that they no longer do manual work in differentiated care and that reduces mistakes.

The researcher's understanding of the statement is that electronic systems have alleviated mistakes because writing manually may come with errors in either the dosages or names of medications.

3.3.2 CHALLENGES RELATED TO IMPLEMENTATION OF DIFFERENTIATED CARE

Challenges may sound very discouraging but are crucial in every discussion as they bring insight and make room for improvement. In the current study, challenges emerged from the study findings. Participants' faces lighted up when they were talking about the benefits of differentiated care, but their expressions quickly changed when they lamented about the challenges related to the implementation of differentiated care. This is evident in the statements below:

3.3.2.1 Challenge related to shortage of medication at health facilities

Differentiated care's other purpose is to reduce the shortages of medicines, as medication for stable chronic patients is packed and distributed by a service provider and not the health facility. In that way, the stock at facilities is used for acutely ill patients and chronic patients who do not yet qualify for differentiated care. However, if a patient is supposed to be collecting medicines at a pick-up point and for some reason does not get it, he or she goes back to the facility and are then given facility stock. This causes an imbalance in stock and subsequently, shortage. Participants mentioned shortages of drugs in healthcare facilities as follows:

Participant No 4

"Shortage of drugs is a problem, if patients encounter problems at their pick-up point and not receive medication, we have to give them the clinic supply, but we have limited stock."

According to the researcher's understanding of the above utterance, there are shortages of stock at the facilities which are usually caused by the fact that stable patients supposed to be collecting medication at pick-up points no longer used facility stock. However, if they met challenges while collecting their medication at external pick-up points, they came back to the facility for their medication and then received facility stock which resulted in stock imbalances. The limited stock at facilities is because the stock is only meant for unstable, newly diagnosed patients or patients coming for treatment reviews.

Coinciding with the above, the speaker below suggests that shortages of medicine were still a challenge. The speaker further mentions that, due to the shortage of medication, patients end up not receiving the required two months' supply as per the guideline. The speaker's exact words are as follows:

Participant No 11

"The only challenge that we are having is that we have limited supply of medication, shortage of medicines at pharmacy results in patients not given 2 months' supply at the clinic."

The researcher's understanding of this statement is that there is a limited supply of medication at the facilities which affects the implementation of differentiated care as on their enrolment for treatment, clients have to receive the first two months' supply of medication from the clinics and then continue to collect their further supplies from the chosen pick-up points. In cases where patients are given one month's supply instead of two months', it defeats the purpose of differentiated care as the patient must return to the clinic after a month to collect another month's supply before he or she can collect their medication at their chosen pick-up point.

The next participant echoes the sentiments of the previous one and states that due to shortages of medication, they have to give patients one month's supply instead of two months' and that that defeats the purpose of the differentiated care as clinic visits increase as patients come for another month's supply:

Participant No 13

"Shortage of drugs is our main challenge because when we prescribe the patient has to get two months from the clinic and continue to collect the rest from the chosen pick-up point but sometimes, we prescribe for the patients to get first two months only to find that the patient is given one-month supply and requested to come back to the clinic for another one-month supply, that then defeats the purpose as clinic visits increases."

The researchers understands the statement to indicate is that shortage of drugs at the facilities negatively affects the implementation of differentiated care. The aim of differentiated care is to reduce stable patients' numbers of visits to the facilities, however, patients find themselves having to return to the facilities after one month just to collect the medicines that should have been provided during the review.

3.3.2.2 Challenges related to patients missing appointments.

One of the objectives of differentiated care is to avoid patients' missing appointments. However, some of the nurses are concerned that some patients miss their appointment days for review and collection of medicines; this results in medication being returned to the suppliers from the pick-up points. In such cases, patients return to the clinics to receive their treatment, causing long queues. The quotes below are from participants who were concerned about the missed appointments of patients offered differentiated care.

Participant No 4

"*There are those patients that do not go to the pickup points on time and as the medicines are kept for only seven days, they get returned back to the depot. then those patients come back to us, and we have to assist them."*

The participant quoted above raises a concern that some patients still missed appointments as they delay going to the pick-up points, only to find that their medicine parcels are no longer there as they are returned to the depot 7 days after the collection date. These patients then go to the clinic for their medication but, as they were not supposed to be there, that defeats the purpose of collecting from the pick-up points.

The researcher's take on missed appointments is that such patients had not adhered 100% to their medication and that the late collection of medicines exposed them to risks of developing

complications. This challenge poses a risk to the strategy and suggests that only patients who adhere to their given return dates and whose symptoms are suppressed should be offered the strategy.

The above participant further reiterated that when patients do not honor their return dates, they have a strategy to alleviate the challenge and the staff focuses on patients who honored their review dates and they attend to those who came after their appointment date later in the day:

Participant No 11

"They don't honor their return dates so now; we have a strategy that will motivate them to come on their return date. If you didn't come your set date, we take you at the back of the queue and those that came on their return date are assisted first."

The researcher's understanding of the above speaker is that patients do not honor their return dates and as a result, the clinic has come up with a way of reducing missed appointments by penalizing the clients, making them to wait for hours until they have finished with patients who were punctual for their follow-up treatment. The researcher was not convinced about the strategy used. However, it seemed work for the clinic in terms of reducing missed appointments. The researcher thought that early reminders should be sent to the patients at least two days before the return date and, in cases where the patients felt they could not make the appointment, they should reschedule it, taking into consideration the amount of medication they had left.

Lastly, the participant quoted below was very frustrated and mentioned that missed appointments were a very serious challenge:

Participant No 12

"Missed appointment is a serious, serious challenge, they don't honor the return dates, they don't!"

The participant's utterances emphasizes that missed appointments are a serious problem. Missing an appointment is one of the danger signs of drug resistance, identified by the WHO. It is clear that in the case of missed appointments, the patient is no longer taking their medication as prescribed and that should warrant an investigation into the reasons for the sudden non-adherence to treatment as the strategy is offered to patients who are adhering to treatment as a form of a reward.

The fact that patients miss appointments is clearly defeats the purpose of differentiated care which ensures that patients collect their medication at a convenient place to save time to avoid

taking sick leave just for the collection of medication. Since good adherence is also one of the criteria for differentiated care, patients should be encouraged to honor their return dates and avoid being taken back into the mainstream due to non-adherence.

3.3.2.3 Challenges related to insufficient external pick-up point.

Differentiated care strategy offers clients a choice between two pick up points: internal pick-up points (adherence clubs and facility pick-ups) and external pick-up points (retail pharmacies, doctors' rooms, post office etc.). Internal pick-up points do not really serve to decongest facilities as patients still arrive at the facility for collection of their medication. However, external pick-up points are effective as patients do not go to the facility for collection. Not having enough external pick-up points sometimes impacts negatively on differentiated care, as patients are compelled to choose an internal pick-up point due to the distances from their homes or the clinics which most patients reside closer to. Below are quotations from participants regarding the scarcity of external pick-up points.

Participant No 6

"Patients also love it and if government can increase the pick-up points patients will have more options as currently majority is on space fast lane."

The participant quoted above explains that patients love differentiated care and if the government were to increase the number pick-up points, patients would have different choices of venue to make. The participant also mentioned that most of the patients collect their medication from the clinic pharmacy (spaced fast lane) and, as a result, movement to the clinic is not reduced.

The writer's understanding of the statement is that patients welcomed the strategy. However, the limited number of places to collect medication outside the clinic was a challenge. The dearth of pick-up points negatively impacted the objective of differentiated care to provide patients with an opportunity to choose a convenient place to collect their medication without having to travel long distances.

The participant quoted below supports the perception of the colleague who indicated that the number of external pick-up points should be increased within townships and should not only be in shopping centers as unemployed patients might struggle to travel to the malls/shopping centers to collect their medication. At times, a lack of external pick-up points near to the patients' homes forces them to choose a health facility pick-up because they can walk there for collection and need not spend the little money, they have to reach external pick-up points:

Participant No 13

"I would like that pickup points be increased around here because our patients are poor so sending them to Soshanguve to collect medication cost them money they don't have. That's why most of them are collecting at the clinic because it's a walking distance for them."

The researcher's understanding of the above quote is that the participant was worried about the lack of external pick-up points near to patients, within their community. Patients who chose to collect their medication at external pick-up points have to travel to the nearest shopping centers to get their medication. This then becomes a challenge for patients who are unemployed, and they end up choosing a facility pick-up point and collecting their medication from clinics.

Having an inadequate number of pick-up points is a challenge as the main objective of differentiated care is to decongest the health facilities by allowing patients to collect their medication outside the facilities and not come to them. The situation defeats the purpose of differentiated care although it aims to bring medication closer to communities and save on travel costs and travelling time.

The next statement refers to in the insufficient number of external points:

Participant No 10

Yes, it's working but the only problem at our facility is that there are no pickup points nearer to the clinic. Most of the patients come to collect medication at our clinic. They still come here for CCMDD but if there was a pickup point around, they will no more be congestion because they will collect outside the clinic but because of that still more congestion."

In the above extract, the participant was concerned about lack of pick-up points near the clinic. The participant highlighted that differentiated care is working however congestion was still seen at other facilities because patients still collect their medication at the clinic due to lack of pick-up points near their homes.

The researcher is that there needs to be external pick-up points near the clinics as most patients live close to the clinics and it is not cost effective for them to leave the clinic and travel to the nearest shopping Centre to collect their medication. The inadequate number of external pick-up points leads to congestion shifting from the consulting rooms to the pharmacy, as patients who collect medication from the clinic go straight to the pharmacy.

3.3.2.4 Challenges related to COVID-19 regulations.

As COVID-19 infections loom, the National Command Council has had to bring in measures to limit the pandemic. Lockdown has been one of those measures and, depending on its levels, some of the patients were heavily affected in terms of movement and loss of jobs. The

regulation that no interprovincial travel was allowed became a challenge to patients offered differentiated care as they often were stuck in different provinces and not able to move around. The statement below shows that with lockdown most of the patients went back to their homelands as the economy was closed. This meant that they could not access their medication during that period because the CCMDD programme is not interprovincial:

Participant No 4

"Like now with lockdown most patients went back to their homes outside Pretoria and they cannot get their medication."

The researcher's interpretation of this situation is that the CCMDD programme needs to be flexible in terms of where patients can collect their medication. Currently, if a patient chooses a particular pick-up point, he or she cannot change the place until the script is reviewed. With COVID-19, health care providers have noticed with concern that clients' medication held up at the pick-up points as patients could not access them either due to restricted movement or job loss. It is therefore important that flexibility, in terms of collecting medication, be addressed to promote full access to treatment at all times.

As a nurse, the researcher understands that the aforementioned challenges are not compounded by differentiated care but that they do threaten the success of the strategy. A root cause analysis of the challenges needs to be carried out so that solutions can be identified, and gaps closed to avoid unnecessary disturbances to the strategy.

3.3.3 SUGGESTIONS FOR IMPROVING THE IMPLEMENTATION OF DIFFERENTIATED CARE

3.3.3.1 CCMDD should be implemented across all provinces

The aim of differentiated care is to make life convenient for patients who are stable on treatment. Not having the CCMDD programme available inter- provincially, restricts patients' access to medication at external pick-up points and may contribute their poor adherence if the patients struggle to get treatment after moving to another province. The participants' views regarding differentiated care are that CCMDD should be available to patients regardless of where they are in South Africa. If patients visit another province and their date for collection comes while they are there, they should be able to get their medication without travelling home simply to get their medicines.

The statements below reflect participants' views:

Participant No 4

"*The recommendation that I have is that CCMDD should be accessible for patients across provinces."*

The researcher's interpretation of this statement is that there needs to be a system that allows patients to access their medication anywhere in South Africa to promote uninterrupted access to treatment.

The view above was corroborated by another participant who stated that many patients chose to pick-up their medicines at places convenient to them and that it should not matter which province they are in at any particular moment as long as it is within South Africa:

Participant No 5

"A lot of patients choose pick-up points whereby they would go in their own time when they are available, it should not matter where you are in South Africa.".

The researcher's impression of this statement is that differentiated care is there for the convenience of the patients and the issue of patients not being able to access their medication at their own time should be addressed; technological ways of decentralizing the pick-up points should be initiated to ensure that CCMDD is interprovincial.

3.3.3.2 Employment of personnel to implement differentiated care

Differentiated care is a new strategy and most patients are not yet clear about it. Patients need information about how it works, the available pick-up points and the criteria for enrolment. There is a need for continuous information sharing at the clinics. One participant suggested:

Participant No 1

"I think they still have to send people here neh! to the facilities, to educate people because even us the health workers do have a lot of work. Sometimes you do it in the morning, those patients are not yet here at the clinic, when they come its already late you can't start again at twelve o'clock to educate them again. If they can appoint one person who will come do that during the day and explain to the patients what is happening about the collection points."

The researcher's take on the above view is that there should be a person at the clinic solely responsible for providing relevant information to patients throughout the day. As the participant has already stated, information is given in the morning and due to other commitments, it cannot be repeated during the course of the day and patients that come to the clinic after the morning talk miss out on important information. Therefore, there is a need to have a special person dedicated to providing information throughout the day about all programmes offered at the clinic.

The participant quoted below suggests that people should be hired to draw blood and be responsible for collecting blood from all patients in the facility. That would save time and increase the uptake of differentiated care as blood results form part of the criteria for enrolment.

Participant No 11

"*Remember when you send someone to CCMDD you need blood to see if they are stable and if they are not stable, you can't send them to CCMDD. So, the problem that we are having is that we don't have a phlebotomist. I suggest that in the future we get a phlebotomist to take bloods for us."*

The researchers understands that a phlebotomist is needed to assist with drawing blood for patients who are due for blood monitoring, according to their cohort for purposes of monitoring their response to treatment, enrolling them on differentiated care and reviewing those already on differentiated care.

In support of the above, the participant below maintains that the clubs need to have a nurse to oversee their running as club facilitators need support to provide quality care to the patients. Below is the participant comment:

Participant No 12

"We wish if we had somebody running the clubs, the nurse because club facilitators are not professionals and cannot do all the services that a nurse can provide like attending to a minor ailment during club visit."

The researcher's view in the light of the above is that differentiated care was introduced with the aim of reducing of staff workload, and that has been achieved. However, there comes a time when patients who are collecting their medication elsewhere must return to the clinic for a 12-month review. The review entails a head-to-toe check-up and blood workouts to determine whether the patient is still stable and fit to be given another 12 months away from the clinic. Having a nurse dedicated to the clubs may alleviate the burden that comes when patients return to the clinic for their 12-month reviews.

3.3.3.3 Continuous trainings and workshops

Training and development of staff is the responsibility of every employer. Since differentiated care is a new strategy, adequate training is required to ensure all staff are up to date with the programme. The following statements were made by participants as recommendations about training and development:

Participant No 6

"*I think they must do more in-service training, I think in-service training is more needed."*

The participant suggests that more in-service training should be provided so that all staff members are brought to book with the strategy.

The way the researcher understands this statement is that the participant is calling for more information dissemination from colleagues who know more about the strategy so that all staff members have the same information. In-service training is good as it refreshes the memory and provides improvement of service through knowledge.

The participant recommends that an ART module be part of basic nursing training to ensure that students are equipped with relevant information for the era in which we live. She further added that training that occurs within the HAST programme should cover all nurses and not only the NIMART trained nurses. The precise words of the participant were as follows:

Participant No 9

"Trainings of minor things like NIMART, changing policies especially HAST programmes, they should allow many people to go those NIMART trained. ARV management should be included in the nursing curriculum so that even newly qualified nurses can know what to."

The researcher gathers from statement is that more formal training programmes are needed to ensure that quality HIV services are provided. Since HIV cuts across all ailments, it is important that all nurses in the clinic are exposed to the training so that they can manage patients adequately.

Lastly, the participant quoted below supports the issue of training and suggests that programme managers should come and train them every time there is any new policy / strategy that needs to be implemented:

Participant No 14

"They should come and train us if there is anything new. "

The researcher understands that there is a need for more training as suggested above. The training should be continuous and cover all new strategies that are implemented. That way, more buy-in from the staff is promoted and the training alleviates challenges that accompany the introduction of anything new.

3.4. SUMMARY

This chapter addresses the results of the study. Two themes and their subthemes are presented and quotes from participants support the themes. The researcher also comments

on how she understands participants' views in an attempt to provide a clear description of the themes and subthemes.

In the following chapter the study findings are discussed and supported by literature to provide a rich understanding and description of the study findings.

CHAPTER 4

Discussion of study findings

4.1 INTRODUCTION

Chapter three looks at the findings of the study. In chapter four, the researcher looks at literature that supports or refutes the results identified in chapter three. In the results, three themes: benefits related to differentiated care, challenges related to the implementation of differentiated care and suggestions for improving the implementation of differentiated care identified, 13 subthemes emerge and each is discussed separately below:

4.2 BENEFITS RELATED TO DIFFERENTIATED CARE.

In this study, the participants viewed differentiated care as a strategy beneficial to nurses and to the beneficiaries of their care. They mentioned that the quality and efficacy of service has improved since the implementation of differentiated care. From their perspective, not only do health professionals benefit from the strategy but patients appreciate it for its positive aspects. The participants.' view is supported by a study conducted in Uganda and Kenya which looked at differentiated care to see whether it could improve quality and efficiency of care. In that study, it was found that differentiated care has the potential to drive significant improvements in health outcomes and may lead to increased efficiencies (Kandasami, Shobiye, Fakoya *et al.,* 2019:02).

The benefits of differentiated care are further acknowledged in a study conducted in South Africa, Uganda and Zimbabwe about barriers and enablers of differentiated care. The findings in Uganda were that high quality of care was possible when clinicians had more time for holistic service provision including counselling; in Zimbabwe it was found that differentiated care improved the management of both acutely ill and chronic patients (Duffy, Sharer, Davis *et al*. 2019: 06).

The nurses in Tshwane support this notion as they also view differentiated care as a strategy that improves efficacy and quality of health care delivery in their city.

The following source further elicits participants' views of differentiated care. The study took place in Malawi and health providers were interviewed about their experiences in differentiated care. It was established that differentiated care yielded key benefits which include reduced patients' travel and visit time, decongestion of facilities and enhanced social support. Participants suggested that these benefits could lead to improved HIV treatment outcomes for patients (Prust *et al.*2018:01).

This information supports the Tshwane participant nurses who mentioned in the interviews that differentiated care reached its main objectives of reducing congestion and waiting time in health care facilities.

Based on the Tshwane PHC professional nurses' views and corroborating literature from previous studies, the researcher is convinced that the implementation of differentiated care has yielded positive outcomes for these professional nurses.

4.2.1 Promotion of treatment adherence and retention of patients

The success of programmes for HIV and other chronic diseases is dependent on patient's adherence to treatment. Good adherence also positively impacts on retention in care, as the patients remain within the system and can be counted as alive. Professional nurses in Tshwane assert that differentiated care improves patient adherence and retention in care. Looking into the literature, the following extracts were identified from different studies:

In Yangon, Myanmar a study which looked into the implications of differentiated care found that treatment outcomes were good with aggregated rates of retention in care for stable patients at 98.4% , a low death rate of 0.4%, LTFU of 0.9%, clinical or immunological failure patients had excellent outcomes and 98.7% remained in care (Mesic *et al.* 2017:06).The above extract supports the professional nurses' views that patients' adherence and treatment has increased since the implementation of differentiated care in Tshwane and that there was also a marked improvement in patients outcomes.

According to Alcorn (2016:03) only 3% of patients who were enrolled to six-monthly appointments were lost to care, compared to 35% of those who were never enrolled on differentiated care. This shows that through differentiated care, retention in care is improved, as only 3% were lost compared with the 35% of patients who were not offered differentiated care.

The above literature supports the expressed opinions of the Tshwane Professional nurses interviewed; they also mentioned that the defaulter rate for patients offered differentiated care is very much lower than patients who are not enrolled in differentiated care. The literature prove that differentiated care does improve adherence to treatment and retention in care.

Another study carried out in South Africa, Uganda and Zimbabwe considering the benefits of differentiated care found high levels of adherence and retention in care for patients. In all three countries, patients experienced increased motivation for self-care and improved resilience as

the responsibility for individual health was transitioned from health care providers to patients (Duffy, Sharer, Davis *et al*. 2019:6). The study found that adherence and retention in care improved once differentiated care was implemented in all three countries.

The researcher found the literature relevant as retention in care for patients on ART has improved since the implementation of differentiated care. According to the Gauteng Annual Health Report (2018/2019:34), retention in care has improved with a total of 94% of ART patients remaining in care. This means that 94% of patients on ART are still alive and in care; this is what differentiated care aimed to achieve.

4.2.2 Differentiated care benefits patients who are working.

One of the reasons cited by participants in a study in Malawi for defaulting treatment was the issue of employment. Patients stated that they failed to collect medication due to employment (Chirambo, Valeta, Banda-Kamanga et al. 2019:1). The fact that participants in South Africa maintain that differentiated care benefits working patients is a clear indication that treatment defaulter rate due to employment is eradicated as employed patients also benefit from the strategy. A study in Malawi further confirmed that differentiated care does benefit the workers.

To support the study finding regarding differentiated care benefiting employed patients, an article assessing the CCMDD programme in South Africa states that differentiated care has been successful in reducing disruption to other aspects of patients' lives, such as employment (Dorward, Msimango, Gibbs *et al.* 2019 :1).The researcher's understanding of the above is that the disruption of patients' lives due to being on chronic medication and having to visit a facility every month and queue for many hours to get medication has been burdening patients and the health system. However, since differentiated care came into effect, patients are no longer requesting sick notes as they collect their medication at places and times convenient to them.

According to Health e-news report (2018), A female patient from Ermelo was quoted as saying: "*Before the CCMDD implementation, with my hours at work, I use to pay people to collect my medication at the clinic. But sometime the nurses would refuse to allow this and if that would happen I would sometimes go days without medication. This has caused me to default twice but now, with the CCMDD programme the defaulting days are over. I don't stress myself anymore because my time is flexible, and it takes less than 20 minutes for me to get to a Clicks pharmacy to collect my ART and go back to work."*

The above statement attests to the fact that patients who are working are benefiting from differentiated care as they no longer have to miss work or pay other people to collect their medication at the clinic. This is a breakthrough, as previously, patients suffered just because

they lived with a chronic condition that required lifelong treatment. Now they were at last able to continue with their lives just as any other citizen in the country.

4.2.3 Differentiated care reduce shortage of staff and workload.

Workload is a major contributor to high staff turnover and also contributes to negative health care service delivery experiences by patients. Heavy workloads contribute to staff burnout and high turnover. In this study, professional nurses expressed mixed views about differentiated care reducing workloads; not all of them agreed on the subject, However, literature reflects a different viewpoint as it emphasizes that differentiated care reduces staff workloads. Studies that indicate that differentiated care reduces staff workload are as follows:

A study in Malawi investigating health workers' experience of differentiated care established that multi months' scripting, a differentiated care strategy, helps to reduce the workload of staff at health facilities and that it allows staff time to provide appropriate levels of care for patients (Prust *et al*. 2018:6). This extract attests to the objective of offering stable patients differentiated care to reduce staff workloads by providing multi months prescriptions and thereby reducing patients' visits to the facilities. This results in reduced staff workloads. The Tshwane nurses praised differentiated care by saying workloads have decreased. They further mentioned that patients seen at facilities were those who do not qualify for differentiated care and those coming to collect medication from clinic pharmacies.

A study in Zimbabwe evaluating the roll-out of community ART refills, a differentiated model, reveals that there is broad consensus among Healthcare Workers (HCWs) that community ART refills reduced their workload and improved the work environment at the clinics. A few HCWs described a temporary increase in workload when the strategy was first implemented, as both HCWs and community members had challenges correctly completing forms and aligning all members' ART pick-up dates. After the initial challenges, however, HCWs noted that services were easier and faster. HCWs described how the reduced workload freed up time, allowing them to complete other clinic tasks (Bochner, Meacham, Mhungu *et al*. 2019:04).

The finding relates to the views of the professional nurses interviewed as they, too, stated that at the beginning of implementation, a workload decrease was not apparent due to the incorrect completing of forms which led to patients having to return to the clinics for corrections. The nurses further stated that the use of electronic scripting which detects mistakes immediately has contributed to reducing the workload at facilities.

In Uganda and Zimbabwe, providers mentioned reduced health facility congestion and workload as benefits of offering differentiated care (Duffy *et al*. 2019:6). By reducing congestion at facilities, workload automatically reduces which is what the nurses in Tshwane

listed as a benefit of differentiated care. One participant went as far as saying: "*differentiated care accommodates issues that comes with shortage of staff.*"

Lastly, a study in Khayelitsha South Africa, further confirms that differentiated care does reduce workload. A HCW's words were: *"Increasing the refill interval within the facility resulted in reduced workload overall: Personally, it has helped me a lot because it reduces the workload… So that gives me a little relief."* HCWs report that the additional time created by seeing patients less frequently is used to manage other activities that were previously neglected or were more stressful due to high patient volumes. These include administration and management of ad-hoc tasks in the clinic (Keene, Zokufa, Venables *et al*. 2020:07).

The above citation is congruent with the aim of differentiated care to offer stable patients multiple refills and to allow health workers an opportunity to focus their time and attention on acutely ill and unstable patients. Tshwane professional nurses agreed with the literature when they mentioned that the headcount for chronic patients has decreased and that that gives them more time to focus on other patients and control the flow at clinics.

4.2.4 Differentiated care reduce patients waiting times.

Long waiting times are a major source of dissatisfaction for patients attending public healthcare facilities in South Africa. The National Department of Health has identified this as one of six priority areas for improvement. Health System-Strengthening (HSS) interventions to improve patient waiting time are being implemented in public health facilities across South Africa as part of the 'Ideal Clinic' model (Egbujie, Grimwood & Mothibi-Wabafor 2018:02). Long waiting times have also been identified as a structural barrier to patients' linkage, adherence, and retention in care in South Africa (NDoH, 2016:14). The need for strategies to reduce long waiting times at health facilities became imperative and differentiated care is one of those game-changing ideas to try and curb the challenge.

Professional nurses in Tshwane claimed that waiting times at facilities have reduced since the implementation of differentiated care. Looking into available literature, the professional nurses' views are confirmed by the following citation:

"*Giving an eligible chronic stable patient the opportunity to collect his or her medication from a convenient pick-up point enables the facility to focus on the unstable chronic patients, as well as the acute and mother and child patients."*

As a result of less foot-traffic in health facilities, waiting times for visiting patients are shortened. "*Reducing the burden on healthcare workers in this way improves the quality of care at the health facility"* (Health Systems Trust 2019:1).

Further literature supporting the professional nurses' views in a study conducted in Uganda to assess Strategies for Optimizing Clinic Efficiencies for Clients on ART found that the waiting time for stable patients was long, prior to the implementation of differentiated care. However, the time reduced drastically from 102 minutes to 20 minutes after implementation of the strategy and the overall reduction in waiting times at the clinic went down from a median time of 206 minutes to 85 minutes (Alamo , Wagner, Ouma *et al.* 2014:05).
Another investigation that sustained professional nurses' views is the study conducted by Magadzire, Marchal & Ward in the Western Cape in South Africa, where they state that the available evidence shows that differentiated care has to some degree reduced the long waiting times at the health facilities (Magadzire, Marchal & Ward 2015:06).

Lastly, literature that supports professional nurses' views is found in a study that was caried out in Malawi about health workers' experience of differentiated care. In the study, a health worker is quoted saying, "P*reviously, patients had to wait for long period to see the clinical health workers, but now received services at some appointments from other cadres of health workers with reduced waiting time"*. (Prust *et al.* 2018:08). The above participants' comments support the premise that differentiated care has brought positive results to the nursing environment.

The researcher supports the literature used in this study as it depicts that the differentiated care strategy is winning the battle against long waiting times which prompts patients to complain and also causes burn-out for health workers. The decreased waiting times also contribute to improved patients' outcome as most patient defaults from the long clinic waiting queues have decreased significantly.

4.2.5 Differentiated care reduces congestion of patients at facilities.

Congestion of patients at health facilities in South Africa became evident when nurses were trained in NIMART (Nurse Initiated Management of ART) and the responsibility of initiating HIV patients in ART shifted to nurses in 2010. The challenge was further compounded by the adoption of UNAIDS 90/90/90 strategy in 2014 and UTT in 2016. Government realised that there was a need for all health facilities to free-up space through the implementation of differentiated care strategies (National Department of Health (NDoH) Universal Test and Treat (UTT) circular 2016:2).

The professional nurses in the sub-district of Tshwane who participated in the study were adamant that the congestion of patients at facilities decreased after the implementation of differentiated care. Literature that supports the nurses' views is considered below:

In a study conducted at eThekwini analysing the factors affecting health workers involved in CCMDD, as a differentiated care strategy, reveals a visible decrease in the congestion of patients at the healthcare facilities implementing CCMDD. Congestion decreased from 200 patients to 107 per day, thus making it easier for healthcare workers to focus on other patients (Maharaj 2016:52).

The above finding coincides with the nurses' views in Tshwane who agreed that the implementation of differentiated care led to fewer patients visiting the facilities and even reduced the headcount.

In another study in South Africa, Zimbabwe, and Uganda by Duffy *et al*. (2019: E137), in all three countries, all categories of respondents stated that differentiated care served as an enabler for reduced patient loads and clinic decongestion. This supports the nurses' views that differentiated care has greatly reduced congestion of patients at facilities; this has the added benefit of reducing clinic-acquired infections.

To further support the participant's reflections, the then minister of health in KwaZulu Natal, MEC Dhlomo, is quoted saying the following about CCMDD: *"We are very pleased with the success of this programme. It means that our fellow compatriots who are hypertensive or diabetic or those who have arthritis HIV and other ailments only must come to a health facility once after three months to collect their medicine. Otherwise, they are fetching it closer to their homes, at libraries, community halls, tribal courts, and other local amenities. The medication is pre-packaged, and all looks the same, which helps eliminate stigma because no-one can tell what the medication is for. The CCMDD programme has reduced congestion at our facilities; it has the potential and impact to reduce long queues when we see patients once every 90 days."*

A study in Kenya and Uganda investigating HIV programmes identified that the differentiated care strategy of giving stable patients six-month prescriptions decreases congestion at facilities, improves waiting time and promotes client satisfaction (Kandasami *et al.* 2019:2).

The findings support the nurses' views regarding differentiated care in Tshwane, as indicated by their declarations that congestion and waiting times have reduced since the implementation of differentiated care. Patient satisfaction has also improved as patients no longer visit facilities in the early morning just to be seen late in the day.

The researcher also observed a marked decrease of patients, especially chronic patients, in most of the clinics she visited at the time the study was conducted and that, together with the reviewed literature, convinced the researcher that indeed differentiated care reduced congestion of patients at health care facilities in the chosen district.

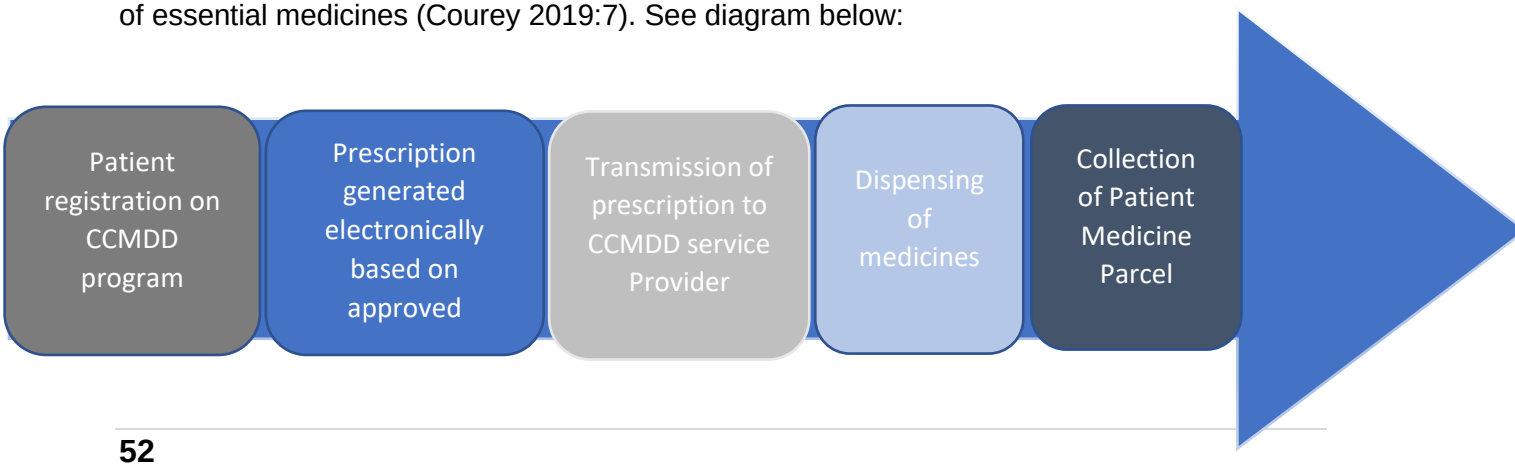
4.2.6 Differentiated care reduces unnecessary mistakes.

Writing a prescription has always been a challenge and pharmacists struggle with either making sense of the handwriting or having to fix spelling, amounts, strengths, schedule types or duration. The mistakes found in prescriptions negatively impacted patients either by delaying treatment or through medication errors. A study conducted in the United States of America about ART errors reveals that the most common errors resulted from incomplete regimens, incorrect dosages, or wrong scheduling. Antiretroviral therapy (ART) medication errors can lead to drug resistance, treatment failure or even death (Yehia, Jimish , Mehta *et al.* 2012:593). Below are references to articles that prove that medication errors were occurring:

An article in the South African Medical Journal analysed the ARV prescriptions with potential for drug-to-drug (DDI) interaction and revealed that ARV prescriptions from General Practitioners with potential DDIs and incorrectly prescribed daily dosages (PDDs) increased from 12.33% in 2005 to 24.26% in 2007; those of specialist doctors increased from 15.46% in 2005 to 33.16% in 2007 (Katende-Kyenda, Lubbe, Serfontein *et al*. , 2011:322).Participants in the study admitted that before the electronic scripting was introduced in differentiated care there used to be a lot of mistakes and that that negatively impacted on patients. However, they no longer experience the same challenges with differentiated care; the scripts are automatically corrected for any errors before they can be uploaded.

The CCMDD programme uses electronic scripting which nurses and doctors' access to prescribe for patients offered differentiated care. According to participants, the scripting system reflected in this paragraph has reduced prescription errors and improved patients' experience of care at the clinics.

Below is a presentation by the Health Systems Trust detailing how mistakes in prescriptions are avoided for differentiated care patients. The web system is designed to improve process flows and transparency of the CCMDD programme, to ensure compliance to standard treatment guidelines, monitor medicine collection status and promote the rational prescribing of essential medicines (Courey 2019:7). See diagram below:



The diagram above clearly describes the flow of prescriptions for differentiated care patients; this has been the solution to errors identified when prescriptions were written by hand. The researcher has seen the effectiveness of the system and believes that the same system should be utilised for all patients and not only differentiated care patients. This might eradicate the problems accompanying manual prescriptions and thus improve the patients' health care experiences.

4.3 CHALLENGES RELATED TO THE IMPLEMENTATION OF DIFFERENTIATED CARE

4.3.1 Challenges related to shortage of medicine at the facilities

According to Zakumumpa, Kiweewa, Khuluza, & Kitutu, (2019:02), medicine stock outs related to supply chain management bottlenecks are common in Sub-Saharan Africa and for patients on ART to achieve viral suppression, there should be no interruption in their supply of ARVs. Interruptions in supplies of ARVs have been associated with HIV drug resistance and treatment failure, as well as with mortality in patients enrolled in care Professional nurses in Tshwane lamented the shortage of medicine and saw it as the main challenge when implementing differentiated care. Below are claims from previous studies that support Tshwane professional nurses' views.

Shortage of drugs was named as the most common challenge by the health workers in Malawi, whilst it was not clear if differentiated care influenced stock security, participants frequently pointed out that limited drug availability prevented full implementation of differentiated care (Prust *et al.* 2018:07).

The above view taken from a study in Malawi notes the challenge of inadequate drug supplies. Health workers in Malawi do not claim that differentiated care causes shortage of drugs but they do say that the shortages affect the implementation of differentiated care. The statement is congruent with the views of nurses in Tshwane who also stated that drug shortages negatively affect the implementation of differentiated care.

"There are reported low stock of NCDs treatment and ARVs or disruptions in the medication supply and this could lead to more related deaths. While there is no cure for HIV and NCDs, access to treatment can control morbidity and mortality". (NDoH Presentation 2020:11).

This presentation was made by the NDoH when revising adherence guidelines for HIV, TB and NCDs and acknowledges that there i a shortage of medicines, especially for chronic patients. The statement supports the perception that drug shortages are a problem and affect the implementation of differentiated care at health care facilities.

A study conducted in South Africa, Uganda and Zimbabwe exploring enablers and barriers to differentiated ART distribution found that an inadequate drug supply was a barrier to successful implementation of differentiated care (Duffy *et al.* 2019:7). According to the study, differentiated care benefits both staff and patients, however, a shortage of medicines was a serious barrier which negatively affects service delivery outcomes and patients' adherence and retention in care.

Based on the statements regarding the shortage of drugs, the researcher noted that the issue of shortages of drugs stems from inadequate stocking and preparation for clients who are offered differentiated care. In South Africa, when a client is stable and offered differentiated care, the first two months' treatment supply comes from the health facility stock and the rest of the prescription is collected from the service providers. The shortage is therefore not compounded by differentiated care but is a result of having an insufficient drug supply at the facilities. It is therefore important that the challenge be addressed in order to improve patients' health experience of care. Further research is needed to establish the extent of the shortage of medicines at facilities in relation to service providers, patients, and health care providers.

4.3.2 Challenges related to patients' missing appointments.

Missed appointments is a challenge that affects patients' adherence and retention in care. It is also regarded as an early warning sign of drug resistance by the World Health Organization. Differentiated care aims to motivate patients to honor their return dates by rewarding stable patients with an opportunity to choose where they can collect their medication at their own convenient times. The study reveal that there are still patients who miss appointments, even when offered differentiated care. The researcher has consulted other studies to ascertain whether the statements of some of Tshwane nurses regarding missed appointments are supported or refuted.

In Malawi, a study probing the healthcare worker and patients' experience of differentiated care was conducted. Here follows a quote from a healthcare worker interviewed:

"There is an increase in the number of defaulters. . . because the patients are given a lot of drugs and they end up forgetting their appointment date." Health worker, Southern Region.

The health care worker quoted above, shares the experiences of the Tshwane nurses. The health care worker mentioned that multiple month's scripting, which is a differentiated care strategy, causes patients to be more likely to miss appointments because of the long period of time between appointments. According to the health care worker, patients end up forgetting the return date because they have not been to the clinic for a long time (Prust *et al*.2018:07).

The extract supports the study findings and to the researcher, it mean that more care needs to be taken of patients receiving multiple prescriptions to ensure that they do not regress and end up joining the acutely ill patients because differentiated care is a reward for patients who respect return dates and take their medication well.

In another study, reviewing differentiated care, it was discovered that the adherence club (AC) model effectiveness has recently been complicated by reports of high LTFU and sub-optimal meeting attendance. Observational analyses in South Africa and Kenya report 36-month LTFU from ACs as high as 26% [27–29]. Meeting non-attendance with failed drug pick-up was the most common reason for club dismissal (Roy, Moore, Sikazwe *et al*. 2019:326).

The above finding supports the Tshwane nurses' views that some patients miss their appointments and that brings doubt about their adherence to their treatment.

4.3.3 Challenges related to insufficient external pick-up points.

In South Africa external pick - up points are retail pharmacies, doctors' rooms, or any accredited place for medication storage where patients can collect their medication without going to a clinic. The aim of having external pick-up points is that patients can collect their medication at places near their homes or workplaces. In that way, patients save money and time spent travelling to the clinic. The issue of having insufficient external pick-up points near the clinics, defeats the purpose of decongesting the clinics because patients still go to the clinic to collect medication as they cannot travel as far as the external pick-up points when they can just walk to the clinic and collect their medication there.

In a study conducted in the Vhembe district of Limpopo by (Muthelo, Nemagumoni, Mothiba *et al.* 2020:480), the professional nurses raised a concern that the lack of pick-up points in the areas closer to the patients' home is one of the challenges that the patients experience. They further noted that if the external pick-up point is far away, patients end up collecting medication at their local clinic anyway:

"*Patients are collecting their medication at external pick-up points, such as private clinics and pharmacies, which are far from their homes and they end up coming to the clinic, which is closer to their homes, for collection of medications."*

In support of the above statement, nurses maintained that differentiated care is more beneficial to patients working in town or those who frequently visit town as there are no pick-up points in the rural areas. This means that if a patient is not working, they will still collect medication in the clinic and as a result decongesting the clinic becomes difficult as patients just shift from consulting rooms to pharmacies. Below are quotes from nurses:

"I think this program is benefiting mostly patients who are working in town or those who frequently go to town only because here in the rural area there are no pick-up points."

"Patients who are living in rural areas have to travel long distances to health facilities to collect their monthly treatment due to lack of pick-up point near their homes. Community halls and churches should also be used as pick-up points for CCMDD medications."

4.3.4 Challenges related to covid-19 regulations

Further negative effects of the COVID-19 epidemic on access to health services have begun to emerge. A survey of people living with HIV conducted by the Human Sciences Research Council in South Africa, via a social media platform, found that 13% of people said they did not have access to their chronic medication during lockdown (Jewell, Mudimu, Stover *et al.* 2020:1). This supports the view of the challenge that participants raised during interviews that lockdown has affected their access to medication. According to the same report in May 2020, only 30-50% of patients were collecting their medication. This raises a grave concern as to how their health status will be impacted.

The challenge is not peculiar to South Africa. In Zimbabwe, a rapid survey assessment performed in April 2020, found that 19% of people with HIV who attempted to get antiretroviral drug refills had not been able to because of Covid 19 restrictions and those who managed to get to facilities only got partial refills as the delivery of stock had been disturbed (Jewell *et al.* 2020:2)

In addition to the above challenge, the head of CCMDD at the National Department of Health (NDoH) has been quoted saying: "*The biggest fear from patients has been that the facility where they usually pick-up their medicines will be closed due to the lockdown, so we did see people flocking to some of their collection points after the president's announcement."*

Most of the f outlets were closed during lockdown and that affected access to medication. Places like post offices were listed as pick-up points but lockdown forced patients who were collecting at post offices to go to their clinics for medication, resulting in congestion and patients' being at risk of exposure COVID-19 infections.

Furthermore, a study conducted in the Tshwane district health services about reducing congestion identified that during the lockdown many patients who were taking chronic treatment had stopped visiting the health care facilities to avoid getting infected with covid 19 (Louw, Rantloane, Ngcobo *et al.* 2020:50)

In general, Covid 19 has impacted negatively on differentiated care as it threatens the progress already made in ensuring that facilities are decongested and that waiting times and foot traffic in the clinics are reduced. The issues of job losses for patients and the closure of

non-essential places have also contributed to patients returning to the clinics as they could not manage to travel closer to workplaces for the collection of their treatment.

4.4 SUMMARY

Chapter four revolves around the discussion of the study findings and comparing them to available literature to see whether the findings are supported or refuted by literature. The literature that was found to support the study findings of research carried out in Tshwane regarding differentiated care. The intentions of the National Department of Health when adopting the strategy have met as patients waiting times have reduced, adherence to treatment improved and patients are retained in care. The workload for staff has reduced and facilities are less congested. Moreover, the challenges identified can be used to improve service delivery and promote the dignity of the department and its employees.

CHAPTER 5

Conclusions, recommendations, and limitations of the study.

5.1 INTRODUCTION

Chapter five identifies the conclusions drawn from the study findings and discussions which have been supported by relevant literature. Conclusions are based on the themes and sub-themes discussed. Recommendations are made for the nursing profession, nursing research and future research. Limitations of the study are also noted.

5.2 CONCLUSION OF THE STUDY

This is a descriptive exploratory study aiming to explore the views of nurses regarding the implementation of differentiated care for ART patients. Participants were interviewed and based on their responses to the research questions and the supporting literature, the following conclusions were reached:

5.2.1 Benefits related to the implementation of differentiated care

The researcher concludes that differentiated care is an effective strategy that benefits patients, nurses, and the Department of Health. The conclusion is based on the views of nurses who unanimously agreed that the strategy was beneficial to all.

5.2.2 Promotion of adherence to treatment and retention in care

The main aim of the strategy has been to ensure that patients adhere to their treatment and stay alive and in care. Based on the views of nurses, the researcher has reached the conclusion that offering differentiated care to stable patients does motivate them to adhere to treatment and keep returning for care.

5.2.3 Differentiated care benefits patients who are working.

The researcher concludes that the implementation of differentiated care in Tshwane is of benefit to employed patients by reducing disruption of their work lives. The 12 sick notes every year which patients had to have to collect their medicine has been reduced to only one as they go to the clinic only once a year for their review.

5.2.4 Differentiated care reduces staff workload.

In terms of differentiated care reducing staff workload, the researcher concludes that the implementation of differentiated care at health care facilities has significantly reduced staff workloads by moving the responsibility for fulfilling their prescriptions to other stakeholders, outside the health facilities. Staff are now able to focus on acutely ill patients as queues are no longer as long as they were previously.

5.2.5 Differentiated care reduces patient waiting times.

The researcher concludes that differentiated care has reached its intended purpose of reducing patients waiting times at health care facilities. This conclusion was motivated by the results of the data analysis and the researcher's observations during data collection at the health facilities.

5.2.6 Differentiated care reduces congestion of patients at facilities.

Evidence regarding the decongestion of health facilities is clear to the researcher. Hence, she had concluded that the differentiated care strategy has cleared the overcrowding at health care facilities. Although some facilities appeared congested during data collection, the researcher managed to establish that that was due to the admission of acutely ill, and not chronic, patients.

5.2.7 Differentiated care reduces unnecessary mistakes.

The researcher is convinced, based on the utterances of the participants and the relevant literature, that differentiated care has reduced mistakes in prescriptions. The finding results from the electronic scripting which alleviated errors in dosages, drug interactions and return dates. Patients are no longer surprised when they go to pick-up points to collect medication to receive news that their medication is not there.

5.3 CHALLENGES RELATED TO IMPLEMENTATION OF DIFFERENTIATED CARE.

5.3.1 Challenges related to shortage of medication.

A further aim of differentiated care is to reduce shortages of medicines at health care facilities by having stable patients' medicine packed and distributed by external service providers. From the views raised by the nurses, the researcher has concluded that even though differentiated care does not directly cause shortages of medicines, it does contribute to shortages when patients who are expected to collect their medicine outside the health facility return to the facility to be given medicine that was meant for unstable patients. Therefore, differentiated care has not been able to reach its goal of reducing medicine shortages at facilities.

5.3.2 Challenges related to patients missing appointments.

Differentiated care strategy serves as a reward for stable patients who honor their appointments. The views of nurses that some patients miss appointments has led to the researcher to reach the conclusion that having multiple scripts encourages patients to forget their appointment dates. The researcher further concludes that patients who miss appointments are not necessarily confused but just do not come on time for collection of medication.

5.3.3 Challenges related to insufficient external pick-up points.

The researcher concluded that South Africa needs to increase the number of pick-up points in townships and rural arears; most pick-up points are in malls. The inadequate number of external pick-up points results in patients' continuing to collect their medication from the clinics. This distorts the real picture of differentiated care.

5.3.4 Challenges related to COVID1- 9 regulations.

The COVID-19 pandemic has disrupted everything, including differentiated care. The researcher makes this claim, based on literature that has surfaced regarding lack of access to treatment due to lockdown. This is, however, a temporary challenge which the Department has already started working to fix.

5.4 STUDY RECOMMENDATIONS

The recommendations for future researchers are made based on the study findings. They are categorized into three sections, i.e., for the nursing profession, nursing education and for future research.

5.4.1 Recommendations to the nursing profession

The nursing profession has been inundated with complaints and the differentiated care strategy can assist in alleviating these complaints. Based on the findings of the study, the researcher recommends that the number of consulting rooms with computers be increased to speed up services. The researcher, during data collection, realized that the lack of resources like consulting rooms with computers was a problem which made nurses look as if they were loitering around when, in fact, they were going from room to room trying to locate a computer to enroll clients on CCMDD. Too few consulting rooms results in two or three nurses sharing rooms which dilutes their professionalism and threatens patient confidentiality.

A further recommendation is for the Department of Health to employ phlebotomists to assist nurses to draw blood for patients coming for their review. The researcher observed that nurses struggle during patient reviews, as they had to draw blood and also carry out a comprehensive assessment to determine whether the patient was still eligible for differentiated care.

5.4 .2 Recommendations to nursing education

Nursing education is evolving with technology and research. The researcher therefore recommends that advanced computer skills be part of nursing education at the nursing institutions. The recommendation may help in producing nurses who are techno savvy and

will not struggle with computer programmes like electronic CCMDD and other computer-based health programmes.

A second recommendation is to include HIV, AIDS, STI and TB programmes like NIMART, MDR-TB in the basic nursing training curriculum**.** That way, newly qualified nurses will have a head start and will not have to be removed for training, thus contributing to staff shortages.

A study conducted in South Africa by Makhado & Davhana-Maselesele (2015:7) reiterates that nursing education regarding HIV and AIDS needs an improved approach for nurses to become better capacitated and supported in their role as HIV and AIDS patient caregivers. The abovementioned statement confirms the need for HIV to be part of the curriculum for undergraduate nursing training.

5.4.3 Recommendations for future research

Based on the study findings, the researcher recommends that more research be done into the reasons patients miss appointment even after receiving the multi-months' prescription as a reward for adherence to care.

Further future research could focus on the factors affecting the shortage of medicine at health facilities.

It would be relevant to conduct research into the experiences of patients collecting medication at adherence clubs, facility pick-ups and external pick-up points

Furthermore, a quantitative study of the number of patients offered differentiated care with viral-load suppression of below 50 compared to patients in the mainstream, would be useful.

Finally, research into the sustainability of CCMDD in terms of its costs to the Department of Health would be beneficial.

5.4.4 Recommendations to the Department of Health

The following recommendations relate to the Department of Health:

- To include HAST programmes like NIMART in the basic nursing training curriculum.
- To increase in the number of consulting rooms at the clinics with computers to speed up service delivery.
- To allocate a phlebotomist who will be responsible for blood collection at each clinic.
- To Increase external pick-up points around townships and rural arears to reduce the number of patients collecting medications at facilities.
- To assign health promoters to inform patients about health strategies like differentiated care throughout the day.

- To have a system that allows a patient on central chronic medication distribution and delivery (CCMDD) to collect their medication at any pick-up point across the provinces. For example, if patients usually collects medication at a local Clicks pharmacy, they should be able to collect at any Clicks pharmacy nationally.

5.5 STUDY LIMITATIONS

During the study, the researcher identified the following flaws and shortcomings as limiting the study:

There were limitations in terms of scope as the study was only carried out in Tshwane Sub-District 1 and not in other districts. This means that the findings cannot be generalised to other districts and therefore might not be able to adequately influence policies.

Another limitation is that the study was limited to primary health care facilities and hospital personnel views are not included. This then limits the findings to PHC services.

Lastly, only professional nurses were interviewed which limits views to them only, whereas other staff members like admin clerks, pharmacists, doctors, and other nursing categories could have contributed their views about the strategy.

5.6 SUMMARY

In this chapter, the researcher's conclusions regarding the views of nurses have been described and recommendations for the nursing profession, nursing education, future research and the Department of Health made, based on the findings of the study. The study has some shortfalls which are mentioned in an effort to place the findings in context.

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LIST OF ANNEXURES

Annexure A	Declaration regarding Plagiarism
Annexure B	Draft of data collection
Annexure C	Participant consent form
Annexure D	Letter requesting Permission to conduct the study in the Tshwane District
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Annexure H	Letter from Co-Coder
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ANNEXURE A: DECLARATION REGARDING PLAGIARISM

UNIVERSITY OF PRETORIA

Faculty: Health Sciences

Department: Nursing science

The Department of **Nursing Science** places specific emphasis on integrity and ethical behaviour regarding the preparation of all written work to be submitted for academic evaluation.

Although academic personnel will provide you with information regarding reference technique techniques as well as ways to avoid plagiarism, you also have a responsibility to fulfil in this regard. Should you at any time feel unsure about the requirements, you must consult the lecture concerned before you submit any written work.

You are of plagiarism when you extract information from a book, article or web page without acknowledging the source and pretend that it is your own work. In truth, you are stealing someone else's property. This does not only apply to cases where you quote verbatim, but also when you present someone else's work in a somewhat amended format (paraphrases), or even when you use someone else's deliberation without the necessary acknowledgement. You are not allowed to use another student's previous work. You are furthermore not allowed to let anyone copy or use your work with the intention of presenting it as his/her own.

Students who are guilty of plagiarism will forfeit all credit for the work concerned. In addition, the matter can also be referred to the committee for student's discipline for a ruling to be made. Plagiarism is considered a serious violation of the university 's regulations and may lead to suspension from university.

For the period that you are a student at the department of **Nursing Science**, the under-mentioned declaration must accompany all written work to be submitted. No written work will be accepted unless the declaration has been completed and attached.

I (Full Name)	**Ramadimetja Sarah Monyela**
Student number	**18181709**
Subject of the work	**M.CUR Dissertation**

Declaration

1. I understand what plagiarism entails and am aware of the university's policy in this regard.
2. I declare that this **proposal** is my own original work. Where someone else's work was used (whether from a printed source, the internet, or any other source) due acknowledgement was given and reference was made according to departmental requirements.
3. I did not make use of another student's previous work and submitted it as my own.
4. I did not allow or will not allow anyone to copy my work with the intention of presenting it as his/her own work.

Signature: Ramadimetja Sarah Monyela.

ANNEXURE B: DATA COLLECTION TOOL

Differentiated care for stable patients (commonly known as CCMDD) was introduced by the South African Department of Health in 2016.The aim of the strategy was to reduce patient congestion at health care facilities, to reduce long waiting times and to reduce the shortage of medicines at facilities. As a person implementing the strategy, what is your view regarding the implementation of differentiated care?

How has differentiated care impacted on staff workload?

Since implementing differentiated care, how has the strategy impacted on congestion of patients at the facility?

In your view as a nurse, how has differentiated care impacted on patients' waiting times?

How is patient's adherence to treatment? Are they honouring their return dates? And how is their performance in terms of viral load suppression for ART patients?

In terms of patients, has the strategy managed to reduce their visits to facility or do patients still come to facility as before?

How have you found government support, especially in terms of training and mentoring when the strategy started?

In conclusion, are there any recommendations/areas that need improvement regarding the strategy or how policies are introduced to the health facilities by the Department of Health?

ANNEXURE C: INFORMED CONSENT

PARTICIPANTS' INFORMATION & INFORMED CONSENT DOCUMENT

STUDY TITLE:

EXPLORING THE VIEWS OF NURSES REGARDING THE IMPLEMENTATION OF DIFFERENTIATED CARE FOR PATIENTS RECEIVING ANTIRETROVIRAL TREATMENT

Sponsor: ----------Self-sponsored

Principal Investigation: ----------Ramadimetja Sarah Monyela

Institution: ----------University of Pretoria

DAYTIME AND AFTER-HOURS TELEPHONE NUMBER(S):

Day time number/s: ----------082 598 2282

After hours' number: ----------082 598 2282

DATE AND TIME OF FIRST INFORMED CONSENT DISCUSSION:

			:	
Date	Month	Year	Time	

Prospective Participant

Dear Mr. / Mrs. / Ms.----------

1) INTRODUCTION

You are invited to volunteer for a research study. I am doing research for a master's degree at the University of Pretoria. The information in this document is to help you decide whether you would like to participate. Before you agree to take part in this study, you should fully understand what is involved. If you have any questions, while reading this document, please do not hesitate to ask the researcher. You should not agree to take part unless you are completely happy about all the procedures involved.

2) THE NATURE AND PURPOSE OF THIS STUDY

The aim of this study is to explore the views of nurses regarding the implementation of differentiated care for patients receiving antiretroviral treatment. By so doing we wish to learn more about how nurses view the strategy and whether the objectives of the strategy have been met,.

3) EXPLANATION OF PROCEDURES AND WHAT WILL BE EXPEXTED OF PARTICIPANTS.

This study involves answering questions regarding how nurses' view the differentiated care strategy and describing those views.

4) POSSIBLE RISKS AND DISCOMFORT INVOLVED

There are no medical risks associated with the study. The only possible risk and discomfort involved could be emotional, as nurses will share their views which might unleash strong feelings.

5) POSSIBLE BENEFITS OF THIS STUDY

The study results may help improve the quality of care provided to patients who are offered differentiated care at health facilities.

6) COMPENSATION

You will not be paid to participate in this study, and neither will you be expected to pay for anything related to the study. The costs of the study are entirely met by the researcher.

7) YOUR RIGHTS AS A RESEARCH PARTICIPANT

Your participation in this trial is entirely voluntary and you can refuse to participate or stop at any time without stating any reason.

8) ETHICS APPROVAL

This Protocol was submitted to the Faculty of Health Sciences Research Ethics Committee, University of Pretoria, telephone numbers 012 356 3084 / 012 356 3085 and written approval has been granted by that committee. The study has been structured in accordance with the tenets of the Declaration of Helsinki (last update: October 2013), which deals with the recommendations guiding doctors in biomedical research involving human/subjects. A copy of the Declaration may be obtained from the investigator should you wish to review it.

9) INFORMATION

Should you have any questions concerning this study, please contact:
Dr Jiyane PM at land line 012 356 3175 or cell: 073 435 7949

10) CONFIDENTIALITY

All information obtained during the course of this study will be regarded as confidential. Each participant that is taking part will be allocated an alphanumeric coded number e.g. A001. This will ensure confidentiality of information collected. Only the researcher will be able to identify you as a participant. Results will be published or presented in a manner that participants remain unidentifiable. The hard copies of all your records will be kept in a locked facility at Health Science Department, 8th floor, University of Pretoria.

11) DURATION OF THE INTERVIEW

The interview is scheduled for 15 minutes from commencement of questions.

12) CONSENT TO PARTICIPATE IN THIS STUDY

I confirm that before signing the consent form I:

- have read and understood the above written information about the study.
- have had adequate time to ask questions and have no objections to participating in this study.
- am aware that the information obtained in the study, including personal details, will be anonymously processed, and presented in the reporting of results.
- understand that I will not be penalized in any way should I wish to discontinue with the study.

- am participating willingly.
- have received a signed copy of this informed consent agreement.

_____	_____
Participant's name (Please Print)	Date
_____	_____
Participant's signature	Date
_____	_____
Researcher's name (Please Print)	Date
_____	_____
Researcher's signature	Date

ANNEXURE D: Request for permission to conduct the study

Annexure 1

13 Breekhout Street
Karen Park
Akasia
0182
13/05/2019

Attention:
Provincial Research & Ethics Committee
Gauteng Health Department
Address

RE: Permission to conduct research

I, Ramadimetja Sarah Monyela a student at the University of Pretoria, hereby apply for permission to conduct a research study in one selected sub-district in Tshwane Gauteng Province. The title of my study is: To explore and describe the views of nurses regarding the implementation of differentiated care for patients on antiretroviral treatment.

Details of the research process will be discussed in the enclosed information leaflet and the consent to participate in the study.

I wish my request reach your utmost consideration.

Thank you.

Name: Signature: Monyela Date: 16/08/19

ANNEXURE E: APPROVAL LETTER FROM TSHWANE RESEARCH COMMITTEE

GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

Enquiries: Mpho Moshime-Shabagu
Tel: +27 12 451 9036
E-mail: Mpho.Moshime@gauteng.gov.za

TSHWANE RESEARCH COMMITTEE: CLEARANCE CERTIFICATE

DATE ISSUED: 20/01/2020
PROJECT NUMBER: 04/2020
NHRD REFERENCE NUMBER: GP_201911_020

TOPIC: Exploring the Views of Nurses Regarding the Implementation of Differentiated Care for Patients Receiving Anti-Retroviral Treatment

Name of the Researcher:	Ms Ramadimetja Sarah Monyela
Name of the Supervisor:	Dr. P. Jiyane Mrs N. V. Sepeng
Facilities:	Tshwane District Health Facilities
Name of the Department:	University of Pretoria

NB: THIS OFFICE REQUEST A FULL REPORT ON THE OUTCOME OF THE RESEARCH DONE AND

NOTE THAT RESUBMISSION OF THE PROTOCOL BY RESEARCHER(S) IS REQUIRED IF THERE IS DEPARTURE FROM THE PROTOCOL PROCEDURES AS APPROVED BY THE COMMITTEE.

DECISION OF THE COMMITTEE: APPROVED

.....
Dr. Mpho Moshime-Shabangu
Acting Chairperson: Tshwane Research Committee

Date: 20/01/2020

.....
Mr. Mothomone Pitsi
Chief Director: Tshwane District Health

Date: 2020.01.24.

ANNEXURE F : APPROVAL LETTER FROM THE UNIVERSITY OF PRETORIA ETHICS COMMITTEE

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences

The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.

- FWA 00002567, Approved dd 22 May 2002 and Expires 03/20/2022.
- IRB 0000 2235 IORG0001762 Approved dd 22/04/2014 and Expires 03/14/2020.

6 November 2019
Approval Certificate
New Application
Ethics Reference No.: 685/2019

Title: EXPLORING THE VIEWS OF NURSES REGARDING THE IMPLEMENTATION OF DIFFERENTIATED CARE FOR PATIENTS RECEIVING ANTIRETROVIRAL TREATMENT

Dear Ms RS Monyela

The **New Application** as supported by documents received between 2019-09-20 and 2019-11-06 for your research, was approved.
by the Faculty of Health Sciences Research Ethics Committee on its quorate meeting of 2019-11-06.
Please note the following about your ethics approval:
· Ethics Approval is valid for 1 year and needs to be renewed annually by 2020-11-06.
· Please remember to use your protocol number (685/2019) on any documents or correspondence with the Research
Ethics Committee regarding your research.
· Please note that the Research Ethics Committee may ask further questions, seek additional information, require further
modification, monitor the conduct of your research, or suspend or withdraw ethics approval.
Ethics approval is subject to the following:
· The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted
to the Committee. If a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.
We wish you the best with your research.
Yours sincerely

Dr R Sommers
MBChB MMed (Int) MPharmMed PhD
Deputy Chairperson of the Faculty of Health Sciences Research Ethics Committee, University of Pretoria
The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of
Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African
Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes, Second Edition 2015 (Department of Health)

ANNEXURE G: DECLARATION FROM PHC MANAGER

Annexure 1

GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

DECLARATION OF INTENT FROM THE PHC MANAGER FOR TSHWANE PROVINCIAL CLINICS

I give preliminary permission to **Ms Ramadimetja Sarah Monyela** to do his or her research on **"Exploring the Views of Nurses Regarding the Implementation of Differentiated Care for Patients Receiving Anti-Retroviral Treatment."** in **Tshwane District Health Facilities**

I know that the final approval will be from the Tshwane Regional Research Ethics Committee and that this is only to indicate that the clinic/hospital is willing to assist.

Other comments or conditions prescribed by the PHC Manager to the Researcher are

The researcher to have an entry meeting with potential facilities before starting with the data collection.

Ms. M MEKGOE
ACTING PRIMARY HEALTH CARE: TSHWANE
Date: 2020.01.14

ANNEXURE H : LETTER FROM A PROFESSIONAL CODER

P.O. Box 1416

Mafikeng

2745

28 June 2021

To whom it may concern,

Co-coding for a Research conducted by Ms Sarah Monyela (Masters in Nursing Science)

I Professor Leepile Alfred Sehularo, confirm and certify that I was requested by Ms Sarah Monyela to act as a co-coder and that I co-coded data collected in the study entitled "**Exploring the views of nurses regarding the implementation of differentiated care for patients receiving antiretroviral treatment**"

I am an experienced qualitative researcher with more than 30 publications. The views and research procedures detailed and expressed in the dissertation remain those of the researcher(s).

Yours sincerely

Prof LA Sehularo (PhD, MNSc, BNSc, PGDip Labour Law)

Associate Professor: Mental Health and Research

Tel: 0183892642 Cell: 0603470183

Email: Leepile.Sehularo@nwu.ac.za

This letter is issued without alteration or erasure of any kind.

ANNEXURE I : LETTER FROM A LANGUAGE EDITOR

S E Matthis (B A Hons)

1 Oden Place Johannesburg 2191

Email:suematthis@gmail.com

Cell: 0837817646

14 September 2021

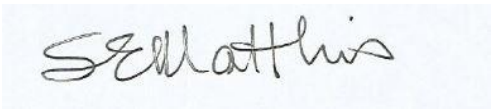
TO WHOM IT MAY CONCERN

This serves to confirm that I have proofread, and language edited the following thesis:

EXPLORING THE VIEWS OF NURSES REGARDING THE IMPLEMENTATION OF DIFFERENTIATED CARE FOR PATIENTS RECEIVING ANTIRETROVIRAL TREATMENT

by

Ramadimetja Sarah Monyela



Mrs S E Matthis

14 September 2021