

**PERCEPTIONS OF MIDWIVES AND PREGNANT WOMEN OF THE PREVENTION OF  
MOTHER-TO-CHILD TRANSMISSION OF HIV PROGRAMME AT THE ANTE-NATAL CARE  
UNIT AND MATERNITY WARD AT THE JOHAN HEYNS COMMUNITY HEALTH CENTRE IN  
THE SEDIBENG DISTRICT, GAUTENG.**

**by**

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## **DEDICATION**

This is dedicated to all midwives and pregnant women who are giving their best to the PMTCT programme and contributing towards achieving the goal of a HIV-free generation. I also dedicate this to my husband, Mr Kivit Thithi, with love and appreciation.

## **ACKNOWLEDGEMENTS**

A special word of gratitude goes to the Almighty God for His grace and Devine wisdom throughout this process.

A special word of gratitude goes my supervisor, Dr B Mbatha, for his undivided support, supervision, dedication and guidance throughout the research study.

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Above all, a very special and heart felt thank you to the midwives and pregnant women who voluntarily participated in the study, if it was not for them, it would not have been possible to complete this research.

## DECLARATION OF AUTHENTICITY

I declare that **THE PERCEPTIONS OF MIDWIVES AND PREGNANT WOMEN OF THE PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV PROGRAMME IN THE ANTENATAL CARE UNIT AND MATERNITY WARD AT THE JOHAN HEYNS COMMUNITY HEALTH CENTRE IN THE SEDIBENG DISTRICT, GAUTENG** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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SIGNATURE  
(MRS P E THITHI)

28 February 2014  
DATE

## **ABSTRACT**

The study reports on the perceptions of the midwives and pregnant women of the PMTCT of HIV programme at the antenatal care and maternity ward at the Johan Heyns Community Health Centre. A qualitative approach was adopted to conduct the study.

Purposive sampling was used to select participants and was informed by social behavioural theories. Data was collected using interviews and analysed using thematic categorisation. The findings show that at the first PMTCT encounter participants had little to no knowledge of the PMTCT programme, generally displayed a lack of interest, experienced emotional distress, and fear at the thought of having to disclosing their HIV-positive status to their partners/family and had certain trepidations about participating in the PMTCT programme. The participants perception on their roles was that their roles were interlinked, midwife needs the recipients (pregnant woman) and pregnant woman needs the provider (midwife) therefore one cannot do PMTCT without the other. The study recommends that the capacity building of pregnant women be optimised, that PMTCT awareness campaigns for women of childbearing age should be a priority and PMTCT skills to be prerequisite for midwives deployed to ANC clinics and maternity ward units.

**Keywords:** midwives, women pregnancy, women and HIV, HIV prevention, mother to child transmission, HIV transmission, antenatal care, maternity ward

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

3TC	Lamivudine
ANC	Antenatal Care
AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral therapy

ARV	Antiretroviral
AZT	Zidovudine
BF	Breastfeeding
CD4	Cluster of differentiation 4
CHC	Community health centre
DNA PCR	DNA polymerase chain reaction
EBF	Exclusive breastfeeding
EID	Early Infant diagnosis
EFF	Exclusive formula feeding
EFV	Efavirenz
FDC	Fixed-dose combination
FTC	Emtricitabine
HAART	Highly Active Antiretroviral Therapy
HCT	HIV counselling and testing
HIV	Human Immunodeficiency Virus
MTCT	Mother-to-child transmission of HIV
NSP	National Strategic Plan
NVP	Nevirapine
PHC	Primary health care
PMTCT	Prevention of mother-to-child transmission of HIV
PNC	Post-natal care

SCT	Social Cognitive Theory
Sd	Single dose
SET	Social Ecology Theory
SNT	Social Network Theory
TDF	Tenofovir
UNISA	University of South Africa
VCT	Voluntary Counselling and Testing
WHO	World Health Organization

# CHAPTER ONE

## INTRODUCTION

### 1.1 Introduction

This chapter presents the background to the study, which is to assess the perceptions of midwives and pregnant women of the Prevention of Mother-to-Child Transmission (PMTCT) of HIV programme at the facility level. This chapter also provides a detailed history of the PMTCT intervention programme, from the adoption of the PMTCT programme in South Africa in 2000 to its implementation at health facilities, including the changes and amendments to the PMTCT policy guidelines. In this chapter the following will also be discussed: the rationale for this research, the problem statement, the aim of the study, the research questions, the delimitations/limitations of the study and definitions of key terms of the study.

### 1.2 Background to the study

The Prevention of Mother-to-Child Transmission (PMTCT) of HIV programme is an initiative introduced to prevent vertical transmission of HIV from a pregnant woman to the unborn child. The service is initiated at the antenatal care clinic, continues to the maternity ward, when the mother-to-be is in labour, and extends to the baby, post-delivery. The execution of the intervention programme is guided by policy guidelines that are followed by midwives, who are the service providers, and the end-users of the programme are pregnant woman. Both these groups form part of the population that will be studied in this research. The National goal of the PMTCT programme is to reach 100% coverage of all women who need the PMTCT services. The coverage of the PMTCT programme at public health facilities and antenatal clinics was indicated at 95% in 2008 (*South Africa: Country Progress Report on HIV/AIDS 2010:15*).

The mode of transmission of HIV to new born babies is through the mother and the goal of achieving a HIV-free generation and zero new infections from vertical transmissions rely on the effectiveness of the PMTCT programme. The policy guidelines have since its introduction, been changed frequently from a mono-therapy regime to a dual- and a triple-therapy regime. The service providers, who are the midwives, are the ones

responsible for implementing the changes and the end-users are the pregnant woman. The study focuses on the midwives (providers) and the pregnant women (recipients), who will be interviewed to ascertain what their perceptions are of the PMTCT programme at the facility level.

The theories that relate to health behaviour change inform the study these include the social ecological theory (SET), social cognitive theory (SCT) and social network theory (SNT). The previous studies show that mothers who were on the PMTCT programme in Malawi have had a negative experience with the programme (Kasenga 2008; Hurtig 2008; Emmelin 2008). However, this study will be conducted in an urban area in South Africa, hence; the focus is on perceptions about the whole PMTCT programme. Previous research about pregnant women's attitude towards the Prevention of Mother-to-Child Transmission programme shows a negative attitude (Mtshali 2009).

Since 2009 the PMTCT policy has been changed four times, that is, twice in 2010, and then more changes were applied in 2012 and again in 2013.

These changes translate into changes in experiences and attitudes, on the part of both the pregnant women and the midwives and this is what the study seeks to assess. Research (Nguyen 2009; Oosterhoff 2009; Pham 2009; Hardon 2009; Wright 2009) about the views of general health workers on the quality of the PMTCT programme and postnatal care for HIV-infected women and their children also reflect the negatives only. However, this study specifically looks at the views of the midwives (PMTCT service providers) and the mothers (PMTCT service recipients).

An investigation into the factors affecting the utilisation of mother-to-child transmission services by women who are infected with the Human Immunodeficiency Virus in Onitsha, Anambra state, in Nigeria, (Nnamdi-Okagbue 2009) also revealed the negative factors that contribute to the impact of PMTCT services. Characteristics of pregnant women attending the prevention of mother-to-child transmission (PMTCT) of HIV

programme at the Bulawayo city clinic, in Zimbabwe, (Sibanda 2008) focused on pregnant mothers only.

This study focuses on midwives who are providing services at antenatal care clinics and in the maternity wards and pregnant women who make use of these services. In South Africa, access to health care services, including reproductive health care, is a basic right and it is enshrined in the constitution (Constitution of Republic of South Africa, Act 108 of 1996). Midwives and pregnant women are the key role players in the Prevention of Mother-to-Child Transmission intervention programme. The study covers both the strengths/positives and weaknesses/negatives from the participants' point of view. The study seeks to identify the views of both parties through interviews. Ethical considerations cover both groups of participants.

### **1.3 Problem statement**

The purpose of this study is to assess the perceptions of midwives and pregnant women of the Prevention of Mother-to-Child Transmission of HIV programme at the facility level by describing the activities associated with and their experiences of the programme during the three phases of pregnancy, that is, antenatal care, labour and delivery and postpartum care. This study was at the Johan Heyns Community Health Centre (CHC) in the Sedibeng District and it started by focusing on the antenatal care centre and progressed through to the maternity (labour) ward. The PMTCT programme is a prophylaxis treatment given to mothers living with HIV, who are not eligible for lifelong HAART (highly active anti-retroviral therapy).

PMTCT stands for the prevention of mother-to-child transmission of HIV. It aims to prevent HIV-positive women from transmitting the virus to their unborn children during pregnancy, labour and breastfeeding. The Department of Health's PMTCT guidelines (2010: V) state that this can be called 'reduction or elimination of vertical transmission of HIV+', where the mother is seen as an index case/source of HIV. However, this does not mean that the mother is held accountable for putting the child at risk; it means that

this is the only way a newborn baby is exposed to HIV. Thus pregnant women need to start the ARV early during pregnancy to protect their unborn babies.

The PMTCT programme, if effectively implemented, can result in zero new infections due to vertical transmission, as outlined in the Department of Health's NSP (2012:12). However, the people who are responsible for the success of the programme are pregnant women themselves and the midwives who assist them. The Department of Health plays its part by making available policy guidelines, through the provision of training, supplying health institutions with ARVs and ensuring that there are budget allocations every financial year to achieve the desired results.

Because the PMTCT programme is regularly researched, with new findings and recommendations, there are constantly changes to the policy that need to be implemented. The policy guidelines have changed several times and, therefore, midwives, as well as pregnant women, need to be up to speed with these changes.

**Table 1.1 PMTCT guideline changes in South Africa:**

PMTCT entry point	HIV counselling and testing (HCT) at the antenatal care clinic Routine offered (provider initiated counselling and testing)	
YEAR	PMTCT ACTIVITIES	LEVEL OF CARE
2000	Conceptualisation of monotherapy NVP single dose(sd)	Given at antenatal care clinic from 28 weeks of pregnancy to be taken when labour is established
2001	Pilot study of monotherapy	Antenatal care clinic
2002	Court of law ordered the implementation	Antenatal care clinic
2005	Due to side effects of Nevirapine (NVP) dual therapy was started	Antenatal care, NVP sd when labour is established and Zidovudine (AZT) still at 28 weeks



2010 first edition	AZT 12 hourly starting at 14 weeks of pregnancy	Antenatal care
	NVP sd	In the labour ward
	AZT 3 hourly until delivery	In the labour ward
	Truvada sd	Post-delivery
2010 second edition	Truvada sd move to in labour and added to other treatment in first edition	In the labour ward
2012	Exclusive breastfeeding declaration	In the labour ward
2013	Fixed dose combination (FDC) TDF,FTC/3TC,EFV	Antenatal care Labour ward

Adapted from the National Department of Health policy guidelines for the Prevention of Mother-to-Child Transmission (PMTCT) programme (2013).

All these changes to the PMTCT programme, from 2000 to 2013 as indicated in table 1.1 above, impacts on both the service providers (midwives) and recipients (pregnant women) in terms of the execution of the programme, because they need to be well informed to ensure that the intended results of the PMTCT programme is achieved. However, despite the availability of the PMTCT services, one still observes that pregnant women do not attend antenatal care clinics for HIV screening and early detection of other conditions during pregnancy; they do not know their HIV status and other pregnancy-related conditions.

The new regimen of fixed-dose combination (FDC) of ART in 2013, which is noted in table 1.1, was introduced to assist in curbing the challenges health care workers are faced with when pregnant women would start the PMTCT programme at the antenatal care clinic, never present themselves for the follow-up visits but would then show up at the maternity ward in an advanced stage of labour. This compromises the safety of the newborn. Since the ART clinics are still enrolling newborn babies to receive the highly active anti-retroviral therapy, it can be deduced that the PMTCT programme has not been well implemented at the facility level. This study would like to suggest that other

stakeholders, like health promoters, be consulted to address the gaps per area of origin as an alternative to general health education.

The researcher believes that if health facilities can be assessed, based on the input given by midwives and pregnant women on the PMTCT programme, and if the impact of the programme in that area can be measured, then the study can be used as a model and applied in other areas and eventually across the entire province and, maybe, other provinces would follow. In this way, gaps can be identified and addressed, good practices can be documented and emulated and recommendations shared.

#### **1.4 Aim of the study**

The study seeks to assess the perceptions of midwives and pregnant women of the Prevention of Mother-to-Child Transmission (PMTCT) of HIV programme in the antenatal care (ANC) unit and Maternity wards at the Johan Heyns Community Health Centre, in the Sedibeng district, Gauteng.

#### **1.5 Objectives**

To realise the aim of the study, the following research objectives are addressed:

- to describe the perceptions and experiences of the service providers (midwives) and recipients (pregnant women) in the implementation of the Prevention of Mother-to-Child Transmission programme at the facility level
- to establish the views of the midwives and pregnant women with regard to the value of the Prevention of Mother-to-Child Transmission programme at the facility level
- to determine whether the Prevention of Mother-to-Child Transmission programme is working effectively for both pregnant women and midwives at the facility level
- to identify the strengths and weaknesses of the prevention of mother-to-child transmission programme implementation process at the facility level

## **1.6 Rationale**

Learning more about how pregnant women and midwives experience the PMTCT programme will help to identify the strengths and weaknesses in the implementation of the programme. The country's commitment to provide treatment is reflected in the policy guidelines; however, the effectiveness of the PMTCT programme depends on the midwives and pregnant women (main role players) at a particular facility.

This study unveils new information about the PMTCT programme from the perspective of two different groups of people, that is, pregnant women and midwives, as well as their views and experiences, from the time that PMTCT services were introduced up until the present. The two groups of participants are the key role players in the PMTCT programme and they have more insight about the programme than anyone else (in the researcher's work experience). Based on the above, it was very important for this research to be conducted. The PMTCT policy guidelines are available at all health facilities across the country; however, the effectiveness of the PMTCT programme depends on the team involved in the programme at a particular health facility and the community that it caters for.

## **1.7 Research questions**

The study seeks to answer the following research questions:

- What are the perceptions and experiences of the service providers (midwives) and recipients (pregnant women) in the implementation of the prevention of mother-to-child transmission programme at the facility level?
- What are the views of the midwives and pregnant women regarding the value of the prevention of mother-to-child transmission programme at the facility level?
- How effective is the prevention of mother-to-child transmission programme, in other words, is it working for the pregnant woman and practical for the midwife at the facility level?

- What are the strengths and weaknesses of the prevention of mother-to-child transmission programme implementation process at the facility level?

### **1.8 Definitions of terms**

For the purposes of the study and to ensure a better understanding of the content, a definition is provided of the following key terms:

**Adherence:** The degree to which a client (pregnant woman) accepts an active role in following the suggested treatment regime which has been designed in a consultative partnership between the pregnant woman and the midwife (Department of Health 2010:85).

In this study, adherence counselling refers to counselling given to all pregnant women with regard to the PMTCT programme, including ARVs, so that they accept that they will have to play an active role in the PMTCT treatment beyond the Health facility.

**Ante natal care:** Refers to the care that is given to a pregnant woman from the time that conception is confirmed until the beginning of labour (*Fraser, Cooper & Nolte 2006:237*).

In this study, antenatal care included all services provided to pregnant women at Johan Heyns CHC, whether they are infected with HI virus or not, inclusive of HIV/AIDS testing, counselling and treatment.

**Antiretroviral (ARV) drugs:** ARV drugs are medicines that inhibit HIV replication.

In this study the ARV drugs described are:

- AZT . Zidovudine
- NVP . Nevirapine
- Truvada
- Fixed-dose combination . Tenofovir, Emetracitabine, Efavirenz

In this study, ARVs were discussed because they form part of the treatment in the PMTCT programme offered at Johan Heyns CHC.

**Child:** All individuals under the age of 18 years (Constitution of Republic of South Africa, Act 108 of 1996:14).

In this study, the term %child+ was mentioned in the pregnancy-related discussions with the pregnant women.

**DNA PCR test:** An HIV test is used to diagnose infection in a case where antibody tests are not sufficiently reliable (Department of Health 2010:88)

In this study, PCR is mentioned as it is the test used at Johan Heyns CHC on babies under the age of 18 months that have been exposed to the HI virus.

**Human Immuno-deficiency virus (HIV):** The virus that causes suppression which leads to destruction of the human immune system (Department of Health 2010:88).

In this study, HIV was discussed in the context of the PMTCT programme and is specifically mentioned as a voluntary test offered to all pregnant women when they first visit the ANC and when HIV has been identified.

**HIV counselling and testing (HCT):** An umbrella term used to describe services that combine HIV counselling and testing (Department of Health 2010:88)

In this study, HCT was discussed as a comprehensive service offered to pregnant women particularly in relation to HIV/AIDS and ARVs at Johan Heyns CHC antenatal care clinic.

**HIV exposed infant:** a baby born to an HIV-infected mother, whose own (baby's) status has not yet been established (Department of Health 2010:88)

In this study, %HIV exposed infant+refer to a baby born from a HIV-positive mother.

**Infant:** A person from birth to 12 months of age (Department of Health, 2010: v)

In this study, the term %infant+is used to refer to a child who is less than a year old and who was either HIV-positive, following exposure to HIV, or HIV negative, following PMTCT intervention.

**Maternity:** Means a place for women in pregnancy or childbirth.

In this study, %maternity+was used to refer to a subject area and to the place where the participants deliver babies with the help of the midwives. This is also known as the %labour ward+in the study.

**Midwife:** Means a registered nurse with specialised training in midwifery who provides health services in terms of the Nursing Act 33 of 2005 (*Oxford concise medical dictionary 1996:193*).

In this study, a midwife indicates a person offering PMTCT services and the person who was always in contact with the pregnant women from the first visit until the delivery. These midwives were employed at Johan Heyns CHC during the period of the study.

**Midwifery:** Means the profession of providing assistance and medical care to women undergoing labour and child birth (*Oxford concise medical dictionary 1996:414*).

**Pregnancy:** Means a period during which a woman carries a developing foetus, normally in the uterus (*Oxford concise medical dictionary 1996:530*). Bailliere's Nursesq Dictionary (2005:314) defines %pregnancy+ as the condition from conception to the expulsion of the foetus.

In this study, pregnancy was discussed to distinguish women from non-pregnant women in the context of PMTCT.

**Pregnant women:** Are regarded as adult women that have a developing foetus in their uterus.

In this study, **pregnant women** is mentioned to distinguish them from non-pregnant women.

**Prevention-of-mother-to-child-transmission:** Any intervention that aims to reduce the spread of the HI virus from an HIV-positive mother to her child (Department of Health 2010:91).

In this study, this forms part of the topic and was frequently mentioned as PMTCT, Johan Heyns CHC offered the pregnant women living with HIV PMTCT treatment.

### **1.9 Delimitations and limitations**

The delimitations in this study are that the doctors and staff nurses working at the antenatal health facility and in the maternity ward are not part of the study, because the midwives are the main role players in the process of pregnancy monitoring; they do the screening tests and provide prevention of mother-to-child transmission treatment during antenatal care (ANC) and also during the delivery of the baby including postnatal care. The partners of the pregnant women are not part of the study, because many of participants partners did not attend ANC clinic visits with them. HIV information was not required from the participants, however, it was expected that it may be mentioned during the interview session. Because midwives are employed at the clinic up until the retirement age of 65, some of them are over the age of 40; however, the age of the pregnant women is strictly limited to between 20 and 40 years.

The results of the study, based on the restrictions mentioned above, cannot be generalised to include the whole facility or the surrounding community. The experience of the midwives may not necessarily indicate the general view of the entire staff however; it may give an indication of the situation at this facility.

### **1.10 Dissemination of results**

According to UNISA's policy on research ethics (UNISA 2007:5,6), the abstracted facts may be shared, if necessary, before the publication of the study among the researchers, peer reviewers and it may also be made available to the public. Upon approval by UNISA, the research findings of this study will also be disseminated to research conferences and scientific journals.

### **1.11 Summary**

This chapter briefly described the background to the study, outlined the objectives and rationale for the study. Key concepts were also defined and delimitation in terms of participant's selection including generalisation of the findings was also addressed.

Chapter two addresses the literature review, including the theoretical framework that informs the study.

### **1.12 Outline of chapters**

The dissertation is organised in the following manner:

1. Chapter One: Introduction and background of the study
2. Chapter Two: Literature review
3. Chapter Three: Methodology
4. Chapter Four: Findings
5. Chapter Five: Summary



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

According to Neuman (2007:369), a literature review is a systematic examination of previously published studies on a research question, issue or method that a researcher is undertaking and which is integrated in preparation for conducting a study or to bring together and summarise the state of the field.

The background and the aim of this study was to assess midwives and pregnant women's perceptions of the prevention of mother-to-child transmission of HIV (PMTCT) programme in the antenatal care (ANC) and maternity wards at the Johan Heyns Community Health Centre in the Sedibeng District, Gauteng. In this chapter the literature review will be discussed, based on the aim and the objectives of the study, as indicated below:

- to describe the perceptions and experiences of the service providers (midwives) and recipients (pregnant women) of the implementation of the Prevention of Mother-to-Child Transmission of HIV programme at the facility level
- to establish the views of the midwives and pregnant women on the value of the Prevention of Mother-to-Child Transmission of HIV programme at the facility level
- to determine whether the Prevention of Mother-to-Child Transmission of HIV programme is working effectively for both pregnant women and midwives at the facility level
- to identify the strengths and weaknesses on the Prevention of Mother-to-Child Transmission of HIV programme implementation process at the facility level

#### **2.2 The PMTCT programme rollout in South Africa**

The prevention of mother-to-child transmission of HIV intervention programme is a strategy to prevent the vertical transmission of HIV from the mother to the unborn child and it was implemented as a pilot study in South Africa in 2001 (Department of Health

2008:4). Nevirapine (NVP) monotherapy (a single drug) was used and the South African government hesitated to implement the programme due to the complications that may arise due to the toxicity of the medication and limited knowledge of its long-term impact, but the court ordered the South African government to roll-out the programme, despite researchers' recommendations that more research is needed. In 2002 the policy was implemented at all health facilities. In 2005 an evaluation of the PMTCT programme was done post-implementation and some factors, among others, were revealed such as safe breastfeeding practices and resistance to Nevirapine (NVP) challenges (Department of Health 2008:4).

The Department of Health (2008:4) then introduced dual-therapy to counter to monotherapy resistance and then NVP/AZT (Zidovudine) drugs were issued to pregnant women, AZT at 28 weeks of gestation and NVP with the onset of labour. These drugs have to be prescribed by health professionals (midwives), who have been trained on aspects such as when the mother-to-be should start on the programme, the correct dosage and frequency; they also have to be informed about the side effects after administration of treatment. In addition, they have to provide on-going counselling to the pregnant women living with HIV about the importance of adhering to their treatment and taking their treatment as prescribed.

In 2010, the Department of Health revised the PMTCT guidelines as follows: AZT 300 mg, 12 hourly at 14 weeks gestation and NVP 200 mg, single dose (sd), in labour then AZT 300 mg, 3 hourly until delivery and after delivery, Truvada, single dose (sd), (Department of Health 2010:3). That same year, a second review was done and the Truvada, sd, was changed to during labour given at the same time as NVP, sd, (Department of Health 2010:4).

In 2013 the Department of Health further revised the antiretroviral guidelines, including the PMTCT guidelines, to a fixed-dose combination (FDC) for newly diagnosed HIV-positive women during pregnancy and a FDC (TDF, FTC, EFV) was also introduced for pregnant women who are eligible for this regimen in the ART guideline (Department of

Health 2013:16). The term 'eligible' in the context, refers to women who fall within the following categories: pregnant women who have a CD4 count of above 350; creatinine level that is below or equal to 85µmol/l; women who fall into the World Health Organisations (WHO) clinical stage 1 and 2, and who have no confirmed psychiatric illness. These women will be initiated on the FDC prophylaxis, not lifelong highly active antiretroviral therapy (HAART). However, the pregnant women who are eligible for lifelong HAART, are who have been identified as WHO clinical stage 3 and 4, have a CD4 count below 350 and where the creatinine level is below or equal to 85µmol/l (Department of Health 2013:16).

The PMTCT intervention programme, roll-out plan, was implemented in 2002 that was 11 years ago (Department of Health 2008:4). Some of the midwives started with programme from first implementation even if it was not in the maternity wards in the Johan Heyns Community Health Centre in the Sedibeng District, Gauteng.

The gestation period is 9 months; however, treatment in the PMTCT programme is extended to include labour and it continues post-delivery (Department of Health 2010:20). The PMTCT programmes started in 2002 and have undergone various changes; thus, the pregnant women who participated in this study have different experiences of the programme depending on when they participated in it and the number of times they had to register for the programme, that is, according to the number of pregnancies. The midwives' experiences and involvement in the PMTCT programme differ according to their years of service in the maternity or antenatal ward, because the midwives are the implementers of the PMTCT interventions.

### **2.3 PMTCT progress in South Africa**

The Global treatment report (2013), provide the following information about the status of the PMTCT programme with regard to pregnant women and children in South Africa in 2011:

**Table 2.1 PMTCT progress**

<b>IN 2011 PREGNANT WOMEN</b>	<b>IN 2011 CHILDREN</b>
The number of pregnant women living with HIV and receiving antiretroviral medicine for PMTCT was 250072	The number of children receiving antiretroviral (ARV) medicine in December 2011 was 151860
The number of pregnant women living with HIV needing antiretroviral medicine for PMTCT was 270000	The estimated number of children eligible for antiretroviral medicine was 210000
Antiretroviral coverage among pregnant women living with HIV was 95%	Antiretroviral coverage among children living with HIV in December 2011 was 71%

Adapted from Avert.org (2013)

The Global treatment report (2013), on the status of the PMTCT programme for pregnant women and children in South Africa in 2012 provides the following information:

**Table: 2.2 Global treatment report**

<b>IN 2012 PREGNANT WOMEN</b>	<b>IN 2012 CHILDREN</b>
The number of pregnant women living with HIV receiving antiretroviral medicine for PMTCT was 234168	The number of children receiving antiretroviral (ARV) medicine in December 2012 was 140541
The number of pregnant women living with HIV needing antiretroviral medicine for PMTCT was 268000	The estimated number of children eligible for antiretroviral medicine was 210000
Antiretroviral coverage among pregnant women living with HIV was 87%	Antiretroviral coverage among children living with HIV in December 2012 was 67%

Adapted from Avert.org (2013)

The data reflect high numbers of women living with HIV and it is, therefore, an indication of the high demand for PMTCT services for prevention of new infections due to vertical transmission, as confirmed in South Africa in National Strategic Plan on HIV, STIs, and TB 2012-2016(2012:12). Articulated in tables 2.1 and 2.2 are the number of pregnant women who required ARV treatment in 2011 and 2012. The numbers gives an indication of how challenging it is to ensure implementation of the PMTCT programme as well as coverage of less than 100%, this include the children needing ARV and coverage for children was less than 75% in both 2011 and 2012. These reports clearly indicate a need for current study to be conducted, to be able to reveal the real challenges from the main role players.

#### **2.4 PMTCT progress in Gauteng**

National reports indicate that the mother-to-child transmission of HIV has declined from 8.5% in 2008 to 3.5% in 2010; this is an indication of the direct impact that the accelerated programme had on the goal to eliminate vertical transmission (Department of Health, Global AIDS Response Progress Reports 2012:2). In 2010, mother-to-child transmission (MTCT) in Gauteng was 2.5%, out of 30.4% exposed babies (Department of Health, Global AIDS Response Progress Reports 2012:62).

The health facility where this study was done is one of the facilities that have contributed to the success of the PMTCT programme in the Gauteng province meaning that the provincial PMTCT decline or increase depends on the pregnant women and the midwives at the facility level. PMTCT coverage in the public health facilities, antenatal clinics was at 95 in 2008 (Department of Health, Country Progress Report on HIV/AIDS 2010:15).The impact of the PMTCT programme in terms of the outcome of mother-to-child transmission (MTCT), still indicates that strengthening PMTCT services will lead to the elimination of mother-to-child transmission of HIV. The midwives, who are executing the programme, and the pregnant women, who are on the receiving end of the intervention, are the most equipped and informed about the strengths and weaknesses of the PMTCT services.

## **2.5 HCT in the context of PMTCT**

HIV counselling and testing (HCT) is the entry point to the PMTCT services. All pregnant women who present themselves at the antenatal clinic are given the option to participate in a group information session about HIV testing and the PMTCT programme. This is followed by a one-on-one individual information session, where information about routine HIV counselling and testing (HCT) procedures are shared and where they are offered the HIV test. At this stage, verbal and written informed consent is obtained, then the HIV test is done. A rapid test is done, followed by a second rapid test. This is done to confirm the accuracy of the results in case of a positive result. When the results are positive the PMTCT programme begins. After counselling, the mothers-to-be are given the opportunity to opt-out; however, all the mothers-to-be who opted-out are routinely offered the HIV test with every ANC visit and those who tested negative are retested at 32 weeks of gestation (Department of Health 2010:10).

All the pregnant women who tested HIV negative, will usually be offered the HIV test every three months (Department of Health 2013:21). The midwives, in their capacity as service providers, and the pregnant women, as the recipients of the service, will undergo the whole process of testing, counselling and testing. How this part of the process is experienced differs from person to person; hence, this study needs to be undertaken. According to the researcher's experience as a professional nurse, a lot of mothers-to-be get to hear about their HIV status for the first time when they are pregnant.

The Global AIDS Response Progress Report (Department of Health 2012:49), gives an indication of the uptake after a HIV counselling and testing (HCT) campaign was launched; HCT testing data for June 2011 revealed that Gauteng achieved a testing rate of 98%; the target achieved 93% with a positivity rate of 19%. This has also increased the uptake in the number of pregnant women testing for HIV, however, the enrolment for the PMTCT programme and perceptions about PMTCT programme will be revealed by the study.

In the context of PMTCT process, after the information session, the pregnant woman will have to make a decision about whether to take the tests for HIV or not and the midwives will encourage woman to do the tests. Pre-test counselling , testing and post-test counselling is the entry point for the PMTCT programme.

## **2.6 Mode of transmission in the context of PMTCT**

Vertical transmission of HIV from mother-to-child can happen during pregnancy, at birth and through breastfeeding (Department of Health 2010:V). The mother-to-be is the only source of HIV to her unborn baby; hence, the target population in this study are pregnant women. According to the Global AIDS Response Progress Report (Department of Health 2012:30), mother-to-child transmission is the main infection route, after heterosexual intercourse. The mode of transmissions requires intervention at various phases of the pregnancy, during labour and post-delivery.

The pregnant women make decisions that favour their unborn babies in terms of MTCT prevention by adhering to PMTCT interventions. Most pregnant women tests for the first time on their first visit to the antenatal care facility. Many are there without their partners when they are informed of their status; they are then faced with the dilemma of either disclosing or not to disclose their HIV-positive status to their partners and family. Should the mother-to-be choose not to disclose her status, the midwives should be there to support her with every clinic visit, until the decision is made to disclose. The experience of the participants at the facility level cannot be under-estimated.

## **2.7 Transmission rate in the context of PMTCT**

The prevalence of HIV among women in the age group 30-34 years, in South Africa, remains high. Statistics show that the figure was at 42.6% in 2010, an increase of 3.3% since 2007. However, the prevalence of HIV among women below 30 years has declined gradually since 2006, while the prevalence among those above 30 years continue to increase (Department of Health, Global AIDS Response Progress Report 2012:31). These are the women who, at some point pregnant are likely to be pregnant

and who would need the PMTCT services provided by midwives; hence, the study focuses on this age group.

## **2.8 Breastfeeding in the context of PMTCT**

The feeding options for the babies in the first 6 months suggested by Department of Health (2008:36) are either to exclusively breastfeed or to exclusively use formula milk. All HIV-positive mothers are encouraged to continue breastfeeding for at least 2 years. AFASS criteria were used by the Department of Health to assist mothers living with HIV with regard to infant feeding choices.

The acronym, AFASS, stand for

- Acceptable - no barriers,
- Feasible . mother has adequate time, skills and knowledge to prepare milk and feed infants,
- Affordable . mother and family can afford to pay for purchase,
- Sustainable . availability of continuous and uninterrupted supply of milk
- Safe . formula milk is prepared with clean hands, on a clean surface and with clean safe water.

The pregnant woman is the main role player with regard to which feeding option to choose, though the decision is done in collaboration with the midwife and is based on the midwifes knowledge of the PMTCT feeding options. The policy guidelines clearly state the options of exclusively breastfeeding (EBF) or exclusively formula feeding (EFF); however, each woman is treated as an individual.

## **2.9 HIV prevention strategies in South Africa in the context of PMTCT**

An estimated 63 000 children were infected with HIV in South Africa in 2011; an indication that the Prevention of Mother-to-Child Transmission (PMTCT) programme has not been effectively applied and in addition, a national survey conducted in 2009 revealed that around 30% of pregnant women in South Africa were HIV-positive, demonstrating the need for South Africa to deliver an effective PMTCT programme (Department of Health 2012). The South African guidelines for PMTCT, issued in 2008, were heavily criticised for not meeting the WHO recommendations, which support a



cover-the-tail-strategy+ that requires the use of the antiretroviral drugs, AZT and 3TC, for the mother-to-be during labour and in the post-partum period in order to reduce the risk of HIV transmission and drug resistance.

In 2010 South Africa released new PMTCT guidelines that were in line with World Health Organization (WHO) recommendations. According to these guidelines, HIV-positive pregnant women are advised to start treatment when their CD4 count drops to below 350 and all pregnant women who tested HIV-positive, will begin receiving treatment at 14 weeks (Department of Health 2010:3). The National Strategic Plan for HIV, STIs and TB of 2007-2011's results review indicated that there has been progress, where new policies have been implemented to increase access to antiretroviral therapy and where the target was to reach all pregnant women, who are infected with HIV, and all infants born to mothers who are HIV positive, the report was released in 2012 (Department of Health, Global AIDS Response Progress Report 2012:2)

The overall national HIV prevalence among antenatal women aged 15 . 49 years was 29.3% in the ANC survey done in 2008 and results released in July 2009 (Department of Health, Country Progress Report 2010:10), while in 2010 the HIV prevalence among surveyed pregnant women was now 30.2%. The HIV prevalence among women aged 30. 34 years has, since 2007, remained the highest; in 2010 it stood at 42.6% (Department of Health, Global AIDS Response Progress Report 2012:30). This means that the women of child-bearing age are the ones who are most likely to be infected by HIV and they would be the cohort that would benefit the most from the Prevention of Mother-to-Child Transmission (PMTCT) programme. The latter document further indicates that PMTCT services have scale up and uptake has increased since the programme was introduced in 2004 (Department of Health, Global AIDS Response Progress Report 2012:30). PMTCT is now almost universally available at public primary health care facilities and in 2008, the NSP target of 95% coverage in the public sector, at antenatal service facilities, was achieved (Department of Health, Global AIDS Response Progress Report 2012:60). According to Department of Health, Global AIDS

Response Progress Report (2012:60) in 2010, PMTCT services were offered at 98% of all public Health facilities.

South Africa's political commitment, in terms of policy guidelines and provision of ARVs, has been noted and policy guidelines have been revised to meet the needs of pregnant women and children, this has also been noted in the NSP 2012. 2016 budget allocation. However, the main role players in the PMTCT programme are midwives and pregnant women, since they have directly contributed to the success of the PMTCT programme by achieving the desired results, which is 100% coverage. This current study will reveal the views of pregnant women and midwives with regard to this programme. To further underscore the importance of the study to be under-taken the ANC survey revealed the need for an effective application of the PMTCT programme, progress made in 2010 and in 2011 percentage of HIV positive pregnant women who received antiretroviral treatment to reduce the risk of mother-to-child transmission (MTCT) was 87.3% in 2010 and 87.1% in 2011 not 100% (Department of Health, Global AIDS Response Progress Report 2012:28). It is important to assess the effectiveness of the PMTCT programme at the facility level and to do this, the views of the main role players, namely pregnant women and the midwives, have to be gauged.

The National Strategic Plan (NSP) on HIV, STIs and TB 2012-2016 (2012:40) indicated that the aim is to reduce mother-to-child transmission (MTCT) to less than 2% at 6 weeks after birth and to less than 5% at 18 months by 2016. This can only be achieved when midwives manage the PMTCT programme effectively and if pregnant women access the programme at antenatal care (ANC) clinics, during labour and postnatal. The NSP on HIV, STIs and TB 2007-2011, reviewed in 2010, found that the rate of transmission from mother-to-child at 6 weeks after birth has been reduced to 3.5%. The way the objectives are stated in the NSP for HIV, STIs and TB 2012-2016(2012:40) shows the commitment to ensuring the success of the programme and an acknowledgement that there are challenges with regard to the PMTCT programme, especially with the fact that it has not yet been fully implemented nationally; hence, target of 2% at 6weeks and 5% at 18 months, postpartum. The country's vision of zero

new infection due to vertical transmission not stated boldly without 2% and 5% reduction NSP for HIV, STIs and TB 2012-2016 (2012:40).

According to the NSP 2012-2016 (2012:23), one of the biological determinants on mother-to-child transmission is to strengthen the implementation of the four prongs of the PMTCT programme, which are:

- half the incidence of HIV infection in women
- reduce the unmet needs for family planning
- provide the antiretroviral prophylaxis to prevent HIV transmission during pregnancy, labour and delivery and breast-feeding
- provide care, treatment and support for the mother and their families

The last two prongs mentioned above indicate that to achieve zero new infections due to vertical transmission of HIV, midwives need to provide treatment and support to pregnant women and their families. All women living with HIV need PMTCT services to protect their unborn babies. A mother will do whatever it takes to protect her child hence the willingness to be tested with first visit to the antenatal care. The midwives are the ones who have the mandate to provide antiretroviral (ART) prophylaxis and support to the mothers-to-be throughout the pregnancy.

## **2.10 Political leadership and commitment**

The Department of Health (2012:36) states that the costs of antiretroviral (ARV) have been reduced by 53% and TB treatment by 15% due to political commitment and leadership and that they supported the move towards the manufacturing of ARVs as outlined in the Global AIDS Response Progress Report. During the period of the NSP 2007-2011, a number of developments took place, indicative of a High level of political commitment, which included changing the CD4 threshold and, thus, expanding the number of people on treatment; TB/HIV collaboration strengthening meaning if HIV-positive screen for TB and if TB positive offer HIV test, strengthening HIV responses at municipal level (AIDS council forums), mainstreaming of HIV across all sectors meaning intersectoral collaboration (Department of Health 2012:36) and there was also a shift,

from voluntary counselling and testing (VCT) to HIV counselling and testing (HCT) (Department of Health, Global AIDS Response Progress Report 2012:36).

The objective of the South African government is to eliminate MTCT of HIV by 2015 and to substantially reduce AIDS-related maternal deaths (Department of Health, Global AIDS Response Progress Report 2012:28). The progress made as far as the above target is concern was percentage of HIV positive pregnant women who received antiretroviral treatment to reduce the risk of mother-to-child transmission (MTCT) was 87.3% in 2010 and 87.1% in 2011 and the percentage of infants, born to HIV positive women, who undergone virological tests for HIV within a period of 2 months after birth, was 39.2% in 2010 and 54.4% in 2011. However, the percentage of children infected by HIV positive women delivering in the past 12 months was 3.5% in 2010 (Department of Health, Global AIDS Response Progress Report 2012:28).

### **2.11 achievements and key challenges in the context of the PMTCT programme**

There has been a 3.5% reduction in mother-to-child transmission (MTCT) of HIV, an increase in the number of people testing for HIV due to the strengthening of provider initiated HIV counselling and testing (HCT) and an increase in the coverage of ARVs as a result of the change to the CD4 threshold (Department of Health, Global AIDS Response Progress Report 2012:37). Since 2008 South Africa has rapidly scaled up its PMTCT services and early infants diagnosis (EID) programmes (Department of Health, Global AIDS Response Progress Report 2012:60). By 2010, 98% of all health facilities were offering PMTCT services, the HIV counselling and testing (HCT) campaign roll-out increased the number of pregnant women testing for HIV by 2011. In 2010, PMTCT policy guidelines were revised by the South African government to strengthen the PMTCT programme and as a consequence, the CD4 cell count threshold changed from 200 to 350 which increased the number of pregnant women accessing highly active antiretroviral therapy (HAART) (Department of Health, Global AIDS Response Progress Report 2012:60).

Much has been achieved; however, there is still a long way to go, because MTCT of HIV has not yet been reduced to zero. In an endeavour to achieve this, the National Strategic Plan (NSP) 2012-2016 embarked on a combination approach and ensured full political commitment in all provinces, including addressing the issue of lack of effective implementation in some rural areas (Department of Health, Global AIDS Response Progress Report 2012:37). To add to these challenges there is a lack of male engagement in the PMTCT programme (Department of Health, Global AIDS Response Progress Report 2012:38). The targeted population are the main role players at the facility level and, thus, they are the most suitable sample to give their views of the effectiveness of the PMTCT programme and how they experience the process.

## **2.12 The perceptions and experiences of the midwives and pregnant women with regard to the PMTCT programme**

Midwives are the PMTCT service providers and pregnant women are the PMTCT service recipients, therefore, they have personal experience of how the PMTCT service is delivered and experienced, which can either be good or bad depending on the day and time of the service. Experiences are generated from interactions with other individuals or the environment, according to the social ecological theory (Taylor & Decosas 2002).

A previous study on HIV-positive women's experiences of a PMTCT programme in rural Malawi, conducted by Kasenga, Hurtig and Emmelin (2008), reflected the common elements of the PMTCT programme experiences generally similar in most health facilities (the researcher's work experiences). The aforementioned study was a qualitative study (in-depth interviews) and established the following findings: firstly, a wish to confirm their HIV status and protect their unborn babies refers to women's motivation to decide to take HIV test; secondly, a revelation motivations for action is an illustration of how the testing may be part of an empowerment process; thirdly a dilemma faced by pregnant women, silence (not to disclose) and openness (disclose) their HIV-positive status to partner and others; and lastly their existing traditional

challenges that prevent women from delivering at hospitals to complete their PMTCT programme (Kasenga, Hurtig & Emmelin, 2008).

The findings of the study above underscores the need to investigate the PMTCT services, in South Africa, which have been amended several times and, therefore, the experience might differ from that of the Malawian women. The conclusion and recommendations made by Kasenga et al (2008), indicated that the PMTCT programme influences women's health profoundly, their findings were that women are the one faced with decision to take test, start treatment and dilemma that women facing in their decision to disclosing HIV-positive status to partner or to remain silent. The importance of the availability of quality counselling services and of strengthening male involvement in antenatal care was another recommendation. The couple counselling in the context of PMTCT is not indicated in the ANC surveys, because it is mainly women who attend antenatal care like in this South African 2008 antenatal survey report released in July 2009, indicated that the overall national HIV prevalence among antenatal women aged 15. 49 years was 29.3% in the ANC survey done in 2008 and results released in July 2009 (Department of Health, Global AIDS Progress Report, 2010:10). In other words, women of childbearing age have the highest HIV infection rate and many of them need or are participating in the PMTCT programme (Department of Health, Global AIDS Progress Report 2010:10).

In another study, undertaken by Okagbue (2009) in Nigeria, the factors that contributed to HIV-positive pregnant women accessing mother-to-child transmission services were investigated. He concurs with Kasenga et al (2008), that the training of health workers must be on-going in order for them to be in the position to give quality counselling to pregnant women. Okagbue (2009) also indicates that some of the factors that impact on the decision to utilise PMTCT services, among others, was the negative attitude of health workers towards HIV-positive women and the fact that HIV-positive, pregnant women did not know the mode of transmission of HIV from mother-to-child, in fact they only found out about-it when they fell pregnant.

The study undertaken by Peltzer, Phaswana-Mafuya and Ladzani (2010) in Cacadu District in South Africa assessed the implementation of the national programme for PMTCT of HIV and they support the finding reported in the above-mentioned studies; this, despite the fact that these studies were conducted in different countries. Peltzer et al (2010) identified some short comings in the implementation of the PMTCT programme, like the requirement for a health system that is functioning effectively, health facilities that are adequately staffed; staff that is trained; a reduced staff work load, where, empowerment of PMTCT clients is prioritised and where there is a commitment to improved patients follow-up, including a strong leadership. If these issues could be addressed, both pregnant women and midwives will have a better chance of ensuring that the PMTCT programme is a success, regardless of where in the world the programme is administered.

The above-mentioned studies indicate the need for a similar study to be conducted, especially taking into consideration the changes that have been made to policies to improve the PMTCT services at health facilities in South Africa. Thus the experience of pregnant women and midwives in the years 2002 to 2009 should be different to that of the pregnant women and midwives in 2013. The knowledge gap of PMTCT services between the pregnant women and their partners, if it could be closed the PMTCT services could be acceptable and fully utilized by both pregnant women and partners and active participation of male in a PMTCT programme was of Importance because currently the pregnant women get the information alone at the first ANC visit (Sarker, De Allegri, Sanou, Pale, Show, & Bohler 2005).

### **2.13 PMTCT service and the recipients (pregnant mothers)**

According to the Country Progress Reports on HIV/AIDS (Department of Health 2010:10), the overall national HIV prevalence among women aged 15. 49 years, attending antenatal care, was 29.3%. Based on this information all pregnant women should be encouraged to register early at an antenatal care clinic and even if they opt out, they should routinely be offered HIV testing. Those who have tested negative for HIV still offered HIV counselling and testing (HCT) every 3 months (Department of

Health 2013:21). The mothers-to-be should be encouraged to involve their partners to participate in antenatal care. If they are HIV-positive; they should be informed of the need to disclose their HIV-positive status to their partners and they should be counselled, among other things, about safer sex, including condom use. The counselling must include postnatal care of the new-born and preferable feeding option of the infant, as outlined in PMTCT guidelines (Department of Health 2010:7). The midwives are mandated to impart this information to pregnant women so that the outcome of 100% PMTCT coverage is achieved.

#### **2.14 The views of the midwives and pregnant women in the context of PMTCT**

The main role players' view regarding the PMTCT programme could play a major role in terms of monitoring and evaluation of the PMTCT service at the facility level. The views of the participants are based on current and/or previous experiences of the PMTCT intervention programme. The knowledge of the midwives and the results they have achieved with other women will reflect their point of view. The same applies to the pregnant women; their experience with a previous PMTCT service provider and their current experience will influence their view point. The Social ecology theory (SET) developed by (Taylor & Decosas 2002) indicates that the environment have an impact on the individuals' attitude, knowledge, behaviour and skills which can be negative or positive meaning that the previous experiences of pregnant women, if it was negative, this can impact on the current exposure negatively.

#### **2.15 Effectiveness of the PMTCT of HIV programme**

Midwives and pregnant women embark on the PMTCT programme with the expectation that the HIV exposed baby will be born HIV free or HIV negative. The pregnant women want to protect their babies and the midwives want to see negative results on the baby's test. The PMTCT of HIV programme is a programme aimed at preventing vertical HIV transmission from a pregnant woman to her unborn baby. The national goal is to have 100% coverage of PMTCT to all women and children needing the service (South Africa: Country Progress Report on HIV/AIDS 2010:15).



PMTCT services starts at the antenatal care clinic, where pregnant women are offered HIV counselling and testing. When the mother is HIV-positive, the eligibility assessment is done using the World Health Organization's (WHO) clinical staging (1 to 4) and CD4 count test results and the decision is made, based on the assessment, whether the woman should be registered for the PMTCT prophylaxis or lifelong highly active anti retro viral therapy (HAART) (Department of Health, PMTCT guidelines 2010:17).The gestation phase determined the way forward as far as treatment initiation for the pregnant woman is concerned. If the woman is at 14 weeks and above then AZT (Zidovudine) 300 mg 12 hourly is prescribed. This will continue until the onset of labour, when another set of treatment is given when in the labour, the treatment changes to Nevirapine (NVP) and Truvada, single doses, followed by AZT, changed from 12 hourly to 3 hourly as outlined in the Department of Health PMTCT guidelines (2010:17) and fixed-dose combination (FDC) ART as outlined in Department of Health Antiretroviral treatment guidelines (2013:12).

The National Strategic Plan (NSP) on HIV, STIs, and TB 2012-2016 (2012:40) indicated that the aim of the plan is to reduce MTCT to less than 2% at 6 weeks after birth and to less than 5% at 18 months by 2016. This can only be achieved if midwives effectively implement the PMTCT programme and pregnant women participate in the PMTCT programme at the ANC clinic, during labour and post-delivery. The NSP on HIV, STIs and TB 2007-2011 review in 2010 found that the rate of transmission from mother-to-child (MTCT) at 6 weeks after birth had been reduced to 3.5% in 2010, from 8.5% in 2008 (Department of Health, Global AIDS Responses Progress Report 2012:2). The report on whether the programme is working for midwives and pregnant women still needs to be determined by the current study. The target set by the country of 2% and 5% indicates that there are short falls in PMTCT interventions; however, the vision is to reach zero new infection due to vertical transmission (NSP 2012:12).

The current study will reveal the strengths and weaknesses of the PMTCT programme and will also provide input from midwives and pregnant women with regard to recommendations to optimise the PMTCT services for the future pregnant women.

The study on the characteristics of pregnant women attending the PMTCT of HIV programme at the Bulawayo city clinic in Zimbabwe, Sibanda (2008), indicates that the demographic characteristics have an impact on the attitude and behaviour of women towards the PMTCT programme and these characteristics include: area of origin, marital status and level of literacy. The PMTCT programme provided services to different women and the services are offered by different midwives, therefore, this study seeks to find out whether the programme is working for these groups.

### **2.16 The strengths and weaknesses of the PMTCT of HIV programme**

A previous study to ascertain Health workers' view about the quality of the PMTCT programme and postnatal care for HIV-infected women and their children, done in Hanoi by Nguyen et al (2009), highlighted the factors that could lead to failure to give good quality service for PMTCT. These factors were, among others, Health workers' fear of HIV infection, lack of knowledge about HIV and inadequate counselling skills, a high work load and shortage of staff, a shortage of antiretroviral drugs and lack of operational guidelines (Nguyen et al 2009). Some of the factors are also common in the health facilities in South Africa; however, there is still a need for the current study to be conducted to gauge the perceptions of Midwives who are part of the PMTCT programme. To meet the needs of women, Nguyen et al (2009) recommended that the communication and other skills of the health workers be improved; that they should be provided with greater support that they are able to function optimally, that their work load should be reduced and the staff complement be strengthened; and a referral system be adopted.

The findings and recommendations of Nguyen et al (2009) confirm to this researcher that there is a need for this study to be conducted, because Health workers are the key role players in the PMTCT programme. Policies and guidelines are available, funds are allocated and trainings provided in South Africa, however, the effectiveness of the PMTCT programme depends on midwives and pregnant women. The Global AIDS Progress Report (Department of Health 2010:15) further indicates that PMTCT services have been scaled up and uptake has increased since the programme was initiated in

2004. The prevention of mother-to-child transmission of HIV (PMTCT) coverage was estimated at more than 95% in the public sector antenatal care in 2008 (South Africa: Country progress report on HIV/AIDS 2010:15). However, PMTCT is now available and offered in at all Health facilities, the NSP target of 98% coverage at public sector antenatal service site was achieved in 2010, ( Department of Health, Global AIDS Progress Report 2012:60). This study seeks to assess the PMTCT of HIV programme implementation at the facility level by identifying the strengths and weaknesses as reported by both the service providers (midwives) and recipients (pregnant women). It has to be kept in mind that there are pregnant women who report to the maternity ward without ever having attended an ANC clinic, while there are others who have enrolled for the PMTCT programme, but they did not return to the maternity ward at the Johan Heyns CHC. The Sedibeng District data for the Johan Heyns CHC 2013-2014 Annual report showed 33 pregnant women tested for HIV and, out of them, 4 pregnant women tested positive.

In a study conducted by Murithi (2012), factors that enhanced utilisation of and Adherence to the prevention of mother-to-child transmission (PMTCT) of HIV services were explored in an urban setting in Kenya, which looked at the positive dimension. The findings are supportive counselling, striving for motherhood, assurance of confidentiality and maternal attachment. These factors, if well implemented, could strengthen the PMTCT programme; however, if these factors are neglected, it could lead to failure of the programme. These studies show that where more is needed or expected, more is required.

### **2.17 PMTCT services and providers (Midwives)**

The role of the midwives in the PMTCT programme is to carry the mandate of the Department of Health, which is to improve the quality of the mother's Health and prevent mortality by identifying women who are HIV-positive and ensure that these women are enrolled in the PMTCT programme, where they will be provided with an appropriate treatment regime (Department of Health 2010:2). The PMTCT programme is a nurse-driven programme and the skills, knowledge and commitment of a midwife is

vital to ensure that PMTCT coverage reach the target of 100%. Every antenatal care clinic and maternity ward should have a skills audit of people working there, because it is very important that everyone working in the antenatal care clinic and maternity wards are HCT, PMTCT and HIV/AIDS management trained.

Monitoring and evaluation is very important to measure the results and to ensure that all pregnant women, who need PMTCT services, leave with the desired outcome. When providing the PMTCT programme no speciality qualification is needed, but midwives need to integrate PMTCT services with the services provided at the antenatal care (ANC) clinic and maternity wards. Taking into consideration the entire PMTCT programme and policy guidelines, the prevention of MTCT services provided at ANC clinics, maternity wards and postnatal care facilities, it is clear that a lot is being done to prevent vertical transmission, therefore, it is not clear why there are still newborn babies that get exposed to HIV and who end up being HIV infected. In 2009, the evidence of the transmission rate, indicated by PCR data (infants HIV test), and estimated transmission rates of mother-to-child in the Gauteng Province, in South Africa was at 10.9% (Department of Health, Global AIDS Progress Report 2010:26).

Training for midwives (Health professionals) has to be ongoing. To ensure optimal performance in the work place, training for midwives (health professionals) has to be ongoing; the changing diseases profile and epidemiology demands the update in skills and knowledge of Health workers; (Baldwin-Ragaven, de Gruchy & London 1999:216) in order to ensure that Health professionals, who work in situations in which they have dual loyalties are not complicit in committing human rights abuses.

The changing disease profile and epidemiology demands that appropriate ongoing training in institutional Health care and human rights in the context of Health issues, be mandatory for all Health professionals working at public health facilities. The PMTCT programme, as indicated earlier, has been amended several times; to optimise the prevention of MTCT, therefore, it should be mandatory that the midwives training also be updated.

## **2.18 Theories**

The study was informed by theories that related to Health behaviour change these include the social ecological theory (SET), social cognitive theory (SCT) and social network theory (SNT). The theories chosen for the study were interlinked, because the SET points out the factors influencing the individuals attitude, knowledge, behaviour and skills, of which environment plays a major role like intra and interpersonal relations (Taylor & Decosas 2002). The SCT looked at the perception and self-efficacy of individuals, where the environment plays a major role (Bandura 2006). The SNT verifies the assertions in the previously mentioned theories. According to this theory, the structure of the network influences the success of any activity, where the activity involves two or more individuals at a given environment (Cargill 2005). The researcher felt that aspects from the three theories, that is, the individual, environment, interaction and cognitive abilities cannot be separated; therefore, a combination of these dimensions give birth to attitude, knowledge, behaviour and self-efficacy.

## **2.19 The social ecological theory (SET)**

The social ecological theory (SET), by Taylor and Decosas (2002), which informs the current study, states that there are factors influencing the attitude, knowledge, behaviour and skills of an individual like intrapersonal, interpersonal, institutional and community factors, thus there is a relationship between organisms and their environment. The theory indicates that the social environment has an impact on the human being, for example the experience is gained through interaction with the environment. The SET further states that knowledge, attitude and skills are gained through interaction. A supportive and caring environment gives birth to healthier people (positive experience); however, an unsupportive and uncaring environment will give birth to a negative attitude and experience.

The assertions contained in the social ecological theory (SET) confirm the suggestion in this study that the Department of Health needs to provide a supportive and caring environment for the midwives to be able to provide a quality service, the same applies

for pregnant women, midwives need to create a supportive and caring environment for mothers to be able to adhere to the demands of the programme.

The midwives and pregnant women are individuals from different background and experiences. They interact with each other as participants in the PMTCT programme; these interactions give birth to new experiences. When the pregnant women first visit the health facility and they have tested positive for HIV, they are not only confronted with the news that they are HIV-positive, but they also have to make a decision about whether or not to disclose this information to their partners, family and community. If the interaction between the midwife and the HIV-positive pregnant women has been positive and environment supportive, as indicated by the SET (Taylor & Decosas 2002), she will be empowered to make the right decision.

## **2.20 The social cognitive theory (SCT)**

The social cognitive theory was developed by Bandura (2006). It states that knowledge alone cannot change the behaviour and it focuses more on developmental stages and human nature. Bandura suggested that, unlike other species, humans are not born with instinctive survival skills, yet they are the most developed species on earth, having constantly adapted the environment to suit their needs. Bandura and other theorists such as Glasser (Choice theory) and Vygotsky (Zone of proximal development) had questions around consciousness in behaviour and development and self-efficacy's impact on the decision-making process. Then Bandura eventually looked at the relationship between perceptions of individuals and self-efficacy, he also came to conclusion that environment has a direct impact on the behaviour of an individual.

Thus, both the social cognitive theory (SCT) and social ecological theory (SET) agree that the environment have an impact on individuals' perception, attitude, knowledge and behaviour. The self-efficacy of midwives and pregnant women depends on what the environment dispose to them at the facility level and they need to adjust according to what is at their disposal. The environment, apart from a behavioural change, can also teach them judgement, morality and cognitive abilities (Bandura 2006).

### **2.21 The social network theory (SNT)**

The social network theory (SNT) was developed by Cargill (2005) and states that individuals' relationships impact on social behaviour change. The midwives and pregnant women's interpersonal relationships can impact on PMTCT interventions. The SNT further indicates that the relationship (ties) between individuals (nodes) influences their success. In other words, the interaction between the midwives and the facility where they work can influence the success of the PMTCT programme, while the interaction between the midwives and pregnant women can also influence the success of the PMTCT programme. The relationship between the pregnant women and their partners/families can also impact on the success of the PMTCT programme.

The SNT points out that no individual will display behaviour without interaction and interaction brings out the results. The SNT is relevant to the current study in the sense that the success of the PMTCT programme is dependent on, among others, the relationship between the midwives and pregnant women. The Department of Health can help to strengthen this relationship by providing continuous refresher training for health workers, so that they can empower the pregnant women.

### **2.22 Summary**

This chapter reviewed related literature on the Prevention of Mother-to-Child Transmission (PMTCT) of HIV programme. It also looked at the theories informing the study; provided information on the whole PMTCT process, from HCT at the entry point to providing ART. The progress made in South Africa, in terms of HIV prevention strategies, is also addressed.

The next chapter (Chapter three) addresses the research methodology that was used to conduct this study.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The current chapter presents the methodology that was adopted to conduct the study. The data analysis, ethical considerations and pilot study results will also be discussed.

The research methodology is defined as the methods, techniques and procedures that are employed in the process of implementing the research design or research plan as well as the underlying principles and assumptions that underlie their use (Babbie & Mouton 2005:647).

#### **3.2 Research method**

The research method refers to a plan or structured framework of how you intend conducting the research process in order to solve the research problem (Babbie & Mouton 2005:647)

A qualitative approach refers to a generic research approach in social research according to which research takes its departure point as the insider perspective on social action (Babbie & Mouton 2005:646). Qualitative research always attempts to study human action from the insider's perspective. The goal of qualitative research is to describe and understand rather than to explain and predict human behaviour (Babbie & Mouton 2005:646). In this current study, we will seek to understand and describe the midwives and pregnant women's behaviour; attempt to discover their understanding of each other and, finally, offer a description of their human behaviour.

In this study the qualitative approach was chosen, instead of quantitative approach, because the objectives and purpose of the study required that the researcher interview the participants about their experiences and perceptions on the PMTCT programme.

This was a descriptive study, which employed a qualitative approach to assist the researcher to gain insight into the experiences and perceptions of both midwives and pregnant women on the PMTCT of HIV programme and whether the PMTCT



programme was working for them at facility level. According to Welman and Kruger (2005:18), a descriptive qualitative study describes how things are where, when and by whom and it can also give a picture of why outcomes manifest in the way they do. In this study, the perceptions of midwives and pregnant women of the PMTCT programme is ascertained by gaining their opinions of the PMTCT services provided, about where it is provided (the antenatal care and maternity ward); when it was provided (when pregnant women test positive for HIV); by whom (midwives) and for whom (pregnant women). Descriptive study refers to research in which one paints a picture with words or numbers, presents a profile, outline stages or classify types (Neuman 2007:364). In this study, words from the midwives and pregnant women painted a picture of the PMTCT programme at the facility level.

In a qualitative, ethnographic study, Welman, Kruger, Mitchell (2005:193) states that the primary task is to uncover and explicate (state in detail) the ways in which people, in particular settings, come to understand, account for, take action and manage their situations, as well as the problems and difficulties, they encounter. In this study, the focus is on the midwives, working at the antenatal care clinic and in the maternity wards, who provide PMTCT interventions to pregnant women (recipients) living with HIV at the facility level (particular setting). The institutional ethnography used was the antenatal care (ANC) clinic and maternity wards at the Johan Heyns community health centre, where the study was conducted.

ethnography refers to an approach to field research that emphasises providing a very detailed description of a different culture from the viewpoint of the insider/s ( in this instance, midwives and pregnant women) in the culture ( or the PMTCT programme activities) in order to gain a greater understanding of PMTCT (Neuman 2007:365). In this study, the midwives, with their different experiences over the years of providing services and the pregnant women, with their PMTCT services experiences and numbers of pregnancies, are able to contribute to the current study.

### **3.3 Research design**

The **research design** refers to one of the seven procedures that researchers use to collect data, including: surveys, participant observation, case studies, secondary analysis, and analysis of documents, experiments and unobtrusive measures (Henslin 2012:367). Babbie and Mouton (2005:647) further refer to research design as a plan or structured framework of how you intend to conduct the research process in order to solve the research problem.

In this study, a survey design was chosen because the researcher wanted to present the general view of the participants of the PMTCT programme and, therefore, data was collected by presenting the participants (midwives and pregnant women) with a series of questions, which they had to answer (Henslin 2012:368).

### **3.4 Area of study**

The **area of study** refers to the identified facility or place where the study will be conducted and where the researcher can have access to the participants.

The study was conducted in the Gauteng Province, Sedibeng District, at the Johan Heyns Community Health Centre (CHC). The Johan Heyns Community Health Centre is a health facility that offers 24 hour health services to its community. It is situated in the Sedibeng District, which is south of Johannesburg. The services offered include primary health care (PHC), casualty, antenatal, intrapartum and postnatal care and allied services, including X-rays services. The population coverage estimates for 2014 for Johan Heyns CHC is 173 474 and the uninsured population is (84%) 145 718 (Sedibeng District Health Services report 2014).

**Table 3.1 HIV performance report in the context of PMTCT** (Sedibeng District, Johan Heyns CHC 2013 April - 2014 March).

Data elements	numbers	Indicators	%	Comment
Women pre-test counselled for HIV in Labour -new	34	ANC first visit before 20weeks	54.8%	In labour report indicates that pregnant women still present in maternity wards with unknown HIV status
Women tested for HIV in Labour -new	33	ANC client HIV first test positive rate	12.9%	Out of the 34 pre-counselled only 33 tested for HIV, one refused
Women tested HIV positive in Labour -new	4	ANC client HIV re-test rate	38%	Out of the 33 tested, 4 tested HIV-positive meaning that if they do not report to the labour ward for childbirth, then PMTCT programme will not be provided
Women re-test for HIV in Labour	0	ANC client HIV re-test positive rate	3.1%	These women tested negative on first test, then later re-tested positive
Women re-test HIV positive in Labour	0	ANC client initiated on ART rate	67.6%	Pregnant women initiated on ART (PMTCT) is less than 100%

### 3.5 Target population

**Target population** refers to the large, general population from which a sample is drawn and which are specified in a very concrete term (Neuman 2007:375). Bailey (1994:517) refers to **population** as the total group to be studied; if the total population cannot be studied, it is the group from which the sample is taken.

The target population for this study were midwives and pregnant women in the antenatal care and maternity wards at the Johan Heyns CHC. The antenatal care (ANC) clinic and maternity wards are managed by midwives and their clients are pregnant

women, some of whom are on the Prevention of Mother-to-Child Transmission (PMTCT) of HIV programme. This Health facility is based in Vanderbijlpark, in the Sedibeng District. The targeted population (pregnant women) was between 20 and 40 years old. The sample drawn from the population of midwives were based on their professional category, that is, whether they had a basic or advanced midwifery qualification. The young women, age below 20 years were not selected, because they were vulnerable of age and maturity in terms of dealing with HIV-positive status and being pregnant for the first time and they cannot give informed consent without their parents consent. of which accessing them could be a challenge, because these women attends ANC clinic alone. Women above 40years were not selected, because women older than 40 may choose not to have more children and would, therefore, not make use of PMTCT services in the future.

### **3.6 Validity and reliability of the study**

Welman, Kruger and Mitchell (2005:142) describe validity as the extent to which the research findings accurately represent what is really happening in the situation. Likewise, Neuman (2007:376) refers to validity as a term the meaning truth that can be applied to the logical tightness of the experimental design, the ability to generalise the findings outside a study, the quality of measurement, and the proper use of procedures. Babbie (2007:313) notes that validity measures what is supposed to measure rather than something else.

In this study the interview questions were able to give an indication of the views held by midwives and pregnant women with regard to the Prevention of Mother-to-Child Transmission (PMTCT) of HIV programme process, their experiences of the programme and their interactions from day the two participants met. The PMTCT service starts at antenatal care clinic and treatment continues when the women present themselves at maternity wards and post-partum.

The interview schedule piloted proved to be valid and reliable, because the answers collected could be aligned to the research objectives and the questions in the pilot were

based on the objectives of the study. The same questions can be used at any health facility and the desired results will be obtained, because the results of the pilot can also be generalised to all pregnant women and midwives. However, the only part that will differ is the experience of the participants due to the environmental factors particularly to that area.

Babbie (2007:314) refers to reliability as when the researcher uses the same interview questions (measurements) again and again, and still get the same results. On the other hand, Welman, Kruger, Mitchell (2005:145) state that reliability is measured by asking the same questions, like if repeated, will the evidence and conclusions stand up to the closest scrutiny and relates to credibility of the finding. In this study, the questions were explained to the different participants, individually, according to their level of understanding, and they were able to give information that answered the research questions. Therefore, the interview questions were reliable and valid and can be used, even for future references, at the different Health facilities. The results of the study are also reliable, to the extent that one can make a judgement based on them and use them to improve or make changes at any Health facility level. The manner in which the questions were structured, kept the response of the participants to the context.

### **3.7 Sampling**

Sampling refers to the process used to select a sample. On the other hand, a sample can be defined as the individuals intended to represent the population to be studied (Henslin 2012:367). Sample refers to a selection, hopefully representative, of the total population or universe that one desires to study (Bailey 1994:519).

In this study, purposive sampling was employed. Midwives and pregnant women were the only key people in the PMTCT of HIV programme, hence, they were chosen for the purpose of this study. These participants were considered useful for this study, because the midwives lead the PMTCT programme and the outcomes of the programme depended on them and the compliance of pregnant women. Non-probability sampling

refers to a sample selected in some fashion other than any suggested by the probability theory, for example (judgemental) purposive sampling (Babbie & Moutan 2005:644).

Purposive sampling refers to a non-probability sampling procedure in which the researcher uses his or her judgement to select those participants that best meet the needs of the study (Bailey 1994:518). The doctors and other categories of nurses were not selected, because it is only midwives who have 24-hour, close communication and interaction with pregnant women during PMTCT services process. The midwives and pregnant women (sample of 15 participants) were not representative; however, they were very useful for the purpose of this study in providing a picture of PMTCT services at the facility level.

### **3.7.1 Sampling frame**

The sampling frame refers to a list of cases in the population (Neuman 2007:373). Likewise, Babbie and Mouton (2005:647) describe the sampling frame as a list or quasi-list of units composing a population from which a sample is selected. If a sample is to be representative of the population, it is essential that the sampling frame include all (or nearly all) members of the population.

In this study, sampling frames were the antenatal care clinic and maternity wards registers for pregnant women and off duty book for midwives. The antenatal care (ANC) register, a record is kept of the pregnant women, who visit the clinic for the first time (booking), including follow-up (subsequent) visits during pregnancy. In the maternity ward register a record is kept of all the pregnant women when in labour and after delivery. The midwives scheduled is recorded in the off-duty book, on the specific day and night shift. Therefore, a sample was drawn from all pregnant women in the antenatal care clinic and maternity wards and similarly, a sample was drawn from the list of all the midwives working in the antenatal care clinic and maternity wards in the off-duty book. The abovementioned source documents were accessed with the permission of the stakeholders in the district.

### **3.7.2 Sample size**

The sample size for this study was fifteen (15) participants. The total in sample frame was 13 midwives and 1 staff nurse working at this health facility and listed in the off-duty register. Of the total population of midwives, 1 midwife from the ANC clinic and 4 midwives from the labour/maternity ward were selected, thus, a total of five (5) midwives were selected for the study. The antenatal care and maternity wards registers were used to select 10 pregnant women.

### **3.8 Data collection instrument**

The data collection instrument used in this study was the interview schedule. Two sets of open-ended questions were used in in-depth, face-to-face interviews. The interviews were unstructured and the sets of questions were based on the research objectives. These questions were asked to direct the interview session. According to Babbie (2007:246) in-depth, qualitative interviewing relies almost exclusively on open-ended questions.

Two sets of questions were used, one for the midwives and the other for the pregnant women. The interview schedule had two sections, one section contained questions to gain data on the demographic characteristics of the participants, which could shed light on the responses of participants, while the questions in the second section was based on the research objectives. The interview was guided by a set of questions to prevent the interview session from getting out of control and questions were structured in such a way that they did not intimidate the participants. The major sources of information were the participants, that is, the pregnant women and the midwives, which was tape recorded. Consent was obtained from the pregnant women and the midwives to use a tape recorder. Pseudo names were used to ensure privacy and confidentiality.

The researcher employed the in-depth interview, because some of the questions asked allowed for storytelling responses from the participants especially the questions on their experiences of the PMTCT services and how that PMTCT experience came to be.

The years of experience of the midwives and the number of pregnancies the women had were taken into consideration, because it impacted on their responses, since it can be assumed that a midwife who has more work experience, would understand what works and what does not work. On the other hand, a pregnant woman, who has had previous exposure to the PMTCT programme, would have an opinion about what was good or bad about her experiences of the PMTCT services.

The tools used for data collection were

- the interview questions,
- a tape recorder,
- pen and paper and
- the researcher's observations.

The current study was conducted at the Johan Heyns CHC and permission to access the premises was granted by the Gauteng Provincial Protocol Review Committee (GPPRC) and the District Research Co-ordinator of the Sedibeng District.

### **3.9 Data analysis and data coding**

Data analysis refers to an analysis of the information that has been carefully gathered according to established rules or procedures (Neuman 2007:364). Qualitative analysis refers to non-numerical analysis, analysis limited to nominal variables like race, gender, and means interpretation of field notes (Bailey 1994:518). Qualitative data refers to information in the form of words and sounds (Neuman 2007:372) for the purpose of the current study, the face-to-face interview was used to gather the information which was captured through tape recording and handwritten notes.

Babbie and Moutan (2005:640) refer to coding as the process whereby raw data is transformed into a standardised form suitable for machine processing and analysis. In this study, thematic categorisation was used after the transcribing was done based on the objectives of the study.



In this study, the tape recorded interview was transcribed on the same day immediately after the interview, to avoid the mixing of information gathered from different participants. The notes that were taken during interview of the of the participants body language, which could not be captured on the tape recorder, were integrated in the transcription.

### **3.10 Pilot study**

A pilot study is a preliminary study done on a small scale before the start of the bigger project in order to identify and correct problematic items or questions (Bailey 1994:517)

Heidelberg Hospital, located in the Lesedi Sub-District of Gauteng, was selected for the pilot study. This area was not the same as the area where the main study was conducted. Three people were selected for the pilot study, including professional nurse, social worker and pregnant woman. Unstructured, face-to-face and in-depth interviews were used to collect the data. Open ended-questions were asked to get the necessary answers from the participants and their responses were tape recorded.

The pilot study employed a qualitative approach to assist the researcher to gain insight on the set questions and whether the tool can be used for the bigger study. This pilot study was a survey type of study like the main study, where questions were asked for data collection. The participants were asked to give views of the interview tool, like the length of the questions, timing, clarity and phrasing, language simplicity, sensitivity and appropriateness of the questions.

The participants answered all the interview questions, because these questions were clearly explained to them. The professional nurses was purposively selected for the pilot study, because of her professional knowledge and she was able give feedback on the questions for midwives; the social worker was purposively selected to assess the sensitivity of the questions, to assess the length of the questions as well as the language and she was able to give feedback on the interview questions for both the pregnant women and the midwives. The pregnant woman was also purposively selected

and was able to give feedback on the understanding of what the interview questions wanted from pregnant women, she was able to respond appropriately even though the PMTCT terms had to be simplified to ensure that she understands what is being referred to.

### ***3.10.1 Findings of the pilot study***

The interview with the professional nurse, social worker and pregnant woman took 12 minutes, respectively, and the questions were open-ended to allow the participants to answer freely and to verbalise their feelings, emotions and experiences. Positive feedback was given and no problems were identified that required an alteration or changes to the interview schedules. The social worker said that the tool used for pregnant women was normal and not insensitive in terms of triggering disturbing emotions and she perceived it to have less personal questions, like invading participants' privacy. The questions were structured to direct the interview session and, thus, participants did not digress from the topic. The participants were able to give a clear picture of their experiences of the PMTCT services at the facility level and their recommendations were constructive and can be used to change or improve PMTCT services.

### ***3.10.2 Conclusion and recommendation based on the pilot study***

The pilot study confirmed that the questions were not insensitive or too personal, according to social worker. The feedback also confirmed that, the participants could relate to the flow of questions, they kept to the context and their responses were relevant to the questions.

The questions were straight to the point and not too long and allowed the participants to answer freely. They provided the necessary answers for the set objectives. Therefore, there was no need to revise the questions.

### **3.11 Ethical considerations**

According to Henn, Weinstein and Foard (2006:67), ethical considerations are defined as ethical factors that arise when you try to decide between one course of action and another, not in terms of expediency or efficiency but in reference to standards of what is morally right or wrong.

Ethical guidelines help to ensure that the research is directed towards worthwhile goals and that the welfare of the research participants is protected. In other words, the ethics are important because they prevent abuse and serve to delineate responsibilities (Diener & Crandall 1978:1).

Ethical clearance refers to a process followed by the researchers to get approval for their research proposal, before conducting the study. The process involves getting the approval of an institutional ethical review committee and ethics committee as well as a departmental protocol review committee before data collection can proceed.

Ethical clearance for the current study was given by the Unisa Department of Sociology, Higher Degree Committee (HDC) upon approval. Permission to access the health care facility, to use the documents involved and to approach the participants was granted by the Gauteng Provincial Protocol Review Committee (GPPRC) and District Research Co-ordinator of the Sedibeng District.

Informed consent was obtained. Prior to giving their consent, the participants were fully informed about the nature and scope of the study, which indicated the aim of the study, that is, to assess the perceptions of both midwives and pregnant women of the PMTCT services offered at the facility and to make recommendations in this regard. The information provided in the consent form, informed and reassured the participants that the study was not aimed at identifying their mistakes or to take punitive steps against them. Consent was obtained for the use of the tape recorder during the interviewing session. No one was forced to participate in the study. However participants were informed about the purpose and possible benefits of the study.

The interview sessions were tape recorded (informed consent was obtained from all the participants prior to the interview). The community health centre offers antenatal care services, from 7h30 to 17h00 and the maternity ward provides a 24 hour services, therefore, both day and night staff were interviewed to get their perceptions of the PMTCT programme as the service providers. The pregnant women were interviewed to get their perceptions on PMTCT services as recipients.

The questions were asked in English and the responses were allowed in English and in participants' home languages, which allowed them to express their thoughts more easily. The possibility of causing emotional harm was avoided by all means; however, a debriefing session was offered to the participants to assist them to deal with possible emotional aspects of the interview. Some of the midwives have had some very emotional experiences, like having to deal with angry partners and having to counsel pregnant women who were in denial about their HIV-positive status, leading to non-adherence to PMTCT treatment, hence, a debriefing session was done after each interview session. No pictures were taken to protect privacy respondents. Pseudonyms were used to protect their identity.

As indicated, confidentiality in terms of identity was ensured through the use of pseudonyms. The participants were informed that if the study gets published pseudonyms will be used. The participants were informed about shared confidentiality between the researcher, the supervisor and university team. A social worker on the premises was asked to be available to provide support and to supervise the debriefing session. She was informed of the interview schedule and agreed to be available from the 07 to 10 January 2014, when the study was conducted.

No additional questions other than those agreed upon were asked, except for instances where clarification were required, where the researcher was requested to simplify questions for better understanding or when the researcher wanted the participants to elaborate, for example, "tell me more". The timeframe agreed upon was kept. The interview schedules were adhered to. No re-imburement was needed because the

study was conducted at work when the midwives were on duty and the pregnant women were interviewed at the clinic.

Participants (midwives and pregnant women) were debriefed individually after the interview, where they were asked about their feelings and experiences while taking part in the study. Participants were informed that feedback will be given after completion of the study.

### **3.12 Summary**

This chapter focused on the methodology of the current study. A qualitative approach was employed to conduct this study. Interview sessions were conducted with 15 participants, who were purposively sampled and data was analysed using thematic categorisation. Ethical considerations were adhered to throughout.

The next chapter (Chapter Four) will focus on data analysis.

## CHAPTER FOUR DATA ANALYSIS

### 4.1 Introduction

Data analysis refers to an analysis of information that has been carefully gathered according to established rules or procedures. (Neuman 2007:364).

This chapter presents the data collected from the midwives and pregnant women at the antenatal care and maternity ward at the Johan Heyns CHC in the Sedibeng District, Gauteng, 07 to 10 January 2014. The demographic information or characteristics collected from the participants was to justify the responses given during the interview. The findings in this chapter are presented as the following demographic characteristics of the participants and in four thematic categories that were based on the objectives of the study. These themes are grouped according to the experiences of the midwives and pregnant women, their views of the value of PMTCT programme, the impact that the PMTCT programme has had on the midwives and pregnant women and strengths and weaknesses of the PMTCT programme.

### 4.2 Demographic characteristics of the participants

The demographic characteristics in this study is presented in tables and grouped into themes. In this section, the demographic characteristics of the participants (n=15) will be presented. The participants were divided into two groups, that is, midwives (n=5) and pregnant women (n=10). The demographic information in this section will be presented per group, in other words, first demographics of the midwives, followed by that of the pregnant women. Table 4.1 to table 4.4 presents the findings of the midwives.

#### 4.2.1 Demographic characteristics of the 5 midwives

**Table 4.1 Age distribution of the midwives (n=5)**

Age in years	Frequency	Percentages (%)
20 . 40 years	2	40%
41 . 60 years	3	60%
Total	5	100%

Table 4.1 shows the age distribution of the five (5) midwives who participated in the study. In this regard, 40% of the participants were between 20 and 40 years of age, 60% of the participants were between 41 and 60 years of age. The age distribution in this study was very important, since the ages of the midwives and their years of experience will impact on their behaviour, their points of view and their interaction with the pregnant women and the PMTCT programme. According to the social ecological theory, by Taylor and Decosas (2002), the social environment has an impact on the human being, like the experience gained through interactions with the environment, supportive and caring environment gives birth to healthier people. Supporting the findings from the interview, age of these midwives differs, indicating their level of maturity, which impacts on their responses and years of services, indicating interaction within work environment and outside work environment which can give birth to positive or negative human behaviour.

**Table 4.2 Level of education (in the nursing profession) of the midwives (n=5)**

<b>Level of Education</b>	<b>Frequency</b>	<b>Percentages (%)</b>
Basic Midwifery	3	60%
Advanced Midwifery	2	40%
Total	5	100%

Table 4.2 shows the level of education of the participants in the nursing field. In this regard 60% of the participants had basic midwifery and 40% of the participants had advanced midwifery. For the participants to function effectively in the antenatal care clinic and maternity ward, they needed to have a midwifery qualification which could be either a basic or an advanced qualification. According to Bandura's (2006) social cognitive theory, knowledge alone cannot change behaviour, but integrating developmental stages and human nature can change the behaviour. Bandura (2006) further states that, unlike other species, humans are not born with instinctive survival skills, yet they are the most developed species on Earth having constantly adapted the environment to suit their needs. The midwives had either a basic or advanced midwifery qualification, which indicated that the midwives have the capacity to deal with the

demands associated with their position in the antenatal care clinic and maternity ward, their cognitive abilities and reaction to the environment depended on their skills level.

**Table 4.3 Year of basic midwifery completion of the midwives (n=5)**

<b>Year of completion</b>	<b>Frequency</b>	<b>Percentages (%)</b>
1980 . 1990	2	40%
1991 . 2000	1	20%
2001 . 2010	1	20%
2011 . 2013	1	20%
Total	5	100%

Table 4.3 shows the year in which the participants (midwives) completed the basic midwifery qualifications. In this regard 40% of the participants completed their basic midwifery qualifications between 1980 and 1990 and 20% of the participants completed their basic midwifery qualifications between 1991 and 2000. The aforementioned groups completed their qualifications before the introduction of the PMTCT programme in South Africa (Department of Health 2008:4). The PMTCT programme was conceptualised in 2000. The midwives who completed their training before 2000 were not trained in the PMTCT curriculum. However, 20% of the participants completed their training between 2001 and 2010, and another 20% between 2011 and 2013, when the PMTCT programme had already been introduced (Department of Health 2008:4).

The relevant changes to the PMTCT guidelines were integrated into the basic midwifery training and they would have been informed of what it entailed, depending on the year in which the participants completed their qualification.

These participants training would have included training in the PMTCT curriculum and as part of their practical experience to become midwives, they had to work in the antenatal care and maternity ward, where they had to provide services directly to pregnant women including the women on the PMTCT programme.



In 2013 the Department of Health revised the antiretroviral (ARV) and PMTCT guidelines (Department of Health 2013:16). Looking at the findings, it is clear that 60% of the participants had completed their training between 2000 and 2013 and they would fully understand what is involved with regard to the changes to the PMTCT programme.

It is important to note that for midwives to adapt to these changes training had to be ongoing to ensure optimal performance in the work place (Baldwin, Ragaven, de Gruchy & London 1999:216). The PMTCT programme as indicated earlier was amended at regular intervals to optimise the effectiveness of the PMTCT interventions therefore the training for the midwives, to update their skills, was also mandatory. The social ecological theory (SET), by Taylor and Decosas (2002), indicates that a supportive and caring environment gives birth to a positive experience, in other words empowering the midwives to enable them to function optimally will translate into a positive experience and a positive attitude and behaviour.

**Table 4.4 Years of PMTCT programme experience of the midwives (n=5)**

<b>Years of experience</b>	<b>Frequency</b>	<b>Percentages (%)</b>
2 . 5 years	1	20%
6 . 10	3	60%
11 . 15	0	0%
16 . 20	0	0%
21 . 25	1	20%
Total	5	100%

Table 4.4 shows the years of experience of the midwives in the PMTCT programme. Of the total number of participants, 20% had 2 to 5 years experience in the programme. In addition, 60% of the participants had 6 to 10 years experience in the PMTCT programme and the other 20% of the participants had 21 to 25 years experience, in other words all the changes to the PMTCT guidelines took place in the presence of these midwives.

The social ecological theory by Taylor and Decosas (2002), states that knowledge, attitude and skills are gained through interaction with the environment. This can be linked with Bandura's (2006) social cognitive theory, which looks at perceptions and self-efficacy, pointing out that the environment has a direct impact on the individual's behaviour. The number of years midwives have spent in the antenatal care and maternity ward would have had an impact on their knowledge, cognitive skills, attitude and behaviour.

#### **4.2.2 Demographic characteristics of the ten pregnant women**

The findings presented below are the demographic characteristics of the other 10 participants (pregnant women) and will start from table 4.5 to table 4.10.

**Table 4.5 Age distribution of the pregnant women (n=10)**

<b>Age in years</b>	<b>Frequency</b>	<b>Percentages (%)</b>
20 . 25 years	6	60%
26 . 30 years	1	10%
31 . 35 years	2	20%
36 . 40 years	1	10%
Total	10	100%

Table 4.5 shows the age distribution of the 10 participants (pregnant women) in this study. It shows that 60% of the participants were between 20 and 25 years old, 10% of the participants were between 26 and 30 years old, 20% of the participants were between 31 and 35 years old and 10% of the participants were between 36 and 40 years old. This finding of age 20 and 25 years old indicated that a lot of young women living with HIV needing PMTCT interventions for the future as they go for second babies, because they are at the childbearing age and building a positive experience is crucial.

**Table 4.6 Pregnancy history of the pregnant women (n=10)**

Number of pregnancies	Frequency	Percentages
P0G1 (first time mother-to-be)	2	20%
P1G2 (second time mother-to-be)	3	30%
P2G3 (third time mother-to-be)	5	50%
Total	10	100%

**P = live babies and G = pregnancies**

Table 4.6 shows the pregnancy history of the 10 participants. It shows that 20% of the participants were first-time mothers-to-be, 30% of the participants were second-time mothers to be and 50% of the participants were third-time mothers-to-be. Thus, the experiences of those participants having their third child would be different from those who are pregnant for the first time because of the kind of support required and the demands would differ. It was important to know the pregnancy history of the participants because it impacts on their PMTCT experiences and their knowledge and understanding of the programme.

Cargill (2005) proposes, in the social network theory, that no individual will display behaviour without interaction and interaction brings out the results. This was addressed by the Department of Health by providing continuous training to the midwives so that they can, in turn, empower the pregnant women especially the first-time mothers to be.

**Table 4.7 PMTCT programme experience linked to pregnancy history of the pregnant women (n=10)**

PMTCT exposure	Frequency	%	Pregnancy	Frequency	%
First-time exposure	9	90%	P0G1	2	20%
			P1G2	2	20%
			P2G3	5	50%
Second-time exposure	1	10%	P0G1	0	0%
			P1G2	1	10%
			P2G3	0	0%
Total	10	100%	Total	10	100%

**P = alive baby and G = pregnancy**

Table 4.7 shows the participants' experience with the PMTCT programme linked to their pregnancy history. The findings show that 90% of the participants were participating in the PMTCT programme for the first time and of this 90%, while 20% were first-time mothers-to-be, 20% were second-time mothers-to-be and 50% were third-time mothers-to-be. In other words, these were new infections and they had no experience with regard to the PMTCT programme. This is where the midwives needed to intensify their counselling and support services, to empower these women with knowledge and skills.

Table 4.7 shows that 10% of the participants were pregnant for second time and this was the second time they participated in the PMTCT programme. In other words they have had experience of the PMTCT programme and therefore, the midwives needed to empower these women by providing them with knowledge with regard to the updated PMTCT treatment guidelines (Department of Health 2013:16).

**Table 4.8 Level of education linked to pregnancy history of the pregnant women (n=10)**

Highest standard passed	Frequency	%	Pregnancy	Frequency	%
Grade 11	3	30%	P0G1	1	10%
			P1G2	0	0%
			P2G3	2	20%
Grade 12	7	70%	P0G1	1	10%
			P1G2	3	30%
			P2G3	3	30%
Total	10	100%	Total	10	100%

Table 4.8 shows the level of education linked to the pregnancy history of the 10 participants. The findings shows that 30% of the participants completed Grade 11 and, of this 30%, 10% were first-time mothers-to-be and 20% were third-time mothers-to-be. The findings also show that 70% of participants completed Grade12, of this 70%, 10% were first-time mothers-to-be, 30% were second-time mothers-to-be and 30% were third-time mothers-to-be. All these participants needed the midwives to create a

supportive and caring environment for them, to ensure that they adhere and cope with the demands of the PMTCT programme. This is in line with Taylor and Decosasq(2002) suggestion that a supportive and caring environment gives birth to healthier people. The level of education of the participants was also important because these participants had to undergo a treatment literacy programme to fully understand the PMTCT programme.

**Table 4.9 Marital status of the participants linked to pregnancy history of the pregnant women (n=10)**

<b>Marital status</b>	<b>Frequency</b>	<b>%</b>	<b>Pregnancy</b>	<b>Frequency</b>	<b>%</b>
Single	8	80%	P0G1	1	10%
			P1G2	3	30%
			P2G3	4	40%
Married	2	20%	P0G1	1	10%
			P1G2	0	0%
			P2G3	1	10%
Total	10	100%	Total	10	100%

Table 4.9 shows the marital status linked to pregnancy history of the 10 participants. The findings show that 80% of the participants were single parents and of this 80%, 10% of them were first-time mothers-to-be, 30% were second-time mothers-to-be and 40% were third-time mothers-to-be. Thus, these women needed the support of the family and the midwives. However, the involvement of the family would depend on whether they disclose their HIV-status or not. In accordance to the theories forwarded by Taylor and Decosas (2002), the interaction through participation in the programme, the services provided by midwives and the supportive environment created by the midwives, will enable the pregnant women to know what to do with regard to disclosure, adherence to the PMTCT programme and the care of the baby. It was important to know the marital status of the participants, because it gives an indication of the environment and the type of support they have in terms of adherence to the PMTCT treatment and disclosure of HIV-status and with regard to the care of the baby.

The findings also show that 20% of the 10 pregnant women were married and of this, 20%, 10% were first-time mothers-to-be and the other 10% were third-time mothers-to-be. These first time mothers-to-be participants needed to inform their partners and family members their HIV positive status and their participation in the PMTCT programme, which they have to start as soon as possible. The midwives needed to intensify their support until the mothers-to-be find a way to break the news to their partners.

**Table 4.10 Employment status linked to pregnancy history of the pregnant women (n=10)**

<b>Employment status</b>	<b>Frequency</b>	<b>%</b>	<b>Pregnancy</b>	<b>Frequency</b>	<b>%</b>
Employed	3	30%	P0G1	1	10%
			P1G2	2	20%
			P2G3	0	0%
Unemployed	7	70%	P0G1	1	10%
			P1G2	1	10%
			P2G3	5	50%
Total	10	100%	Total	10	100%

Table 4.10 shows the employment status of the 10 participants in line with their pregnancy history. It was important for this study to establish the employment status of the participants, because this may impact on the feeding option they choose for the baby, which is part of PMTCT programme. The findings also show that 30% of the participants were employed and, of this 30%, 10% of them were first-time mothers-to-be and 20% were second-time mothers-to-be. Furthermore, 70% of the 10 participants were unemployed and, of this 70%, 10% were first-time mothers-to-be, another 10% were second-time mothers-to-be and 50% were third-time mothers-to-be.

The above findings indicated that the feeding option for the unemployed women would be limited to exclusively breast-feeding (EBF) for 6months (Department of Health 2008:36). According to the guidelines proposed by the Department of Health (2008:36),

the feeding options for the first 6 months are either exclusively breast-feeding (EBF) or exclusively formula feeding (EFF). The midwives needed to intensify counselling for the women who choose to exclusively breast-feed and also give them reassurance should they have fears about the virus in the breast-milk. The employed women, have the option of choosing exclusive formula feeding (EFF), however, they must meet the AFASS criteria. The AFASS criteria were used by Department of Health to assist with infant feeding choices in women living with HIV.

#### **4.3 Experiences of the midwives and pregnant women in the context of PMTCT**

##### **4.3.1 PMTCT- first experiences of the midwives**

The first objective of the study, as indicated in chapter one, was to describe the experiences of the service providers (midwives) and recipients (pregnant women) of the Prevention of Mother-to-Child Transmission of HIV programme process. It was very important to describe the experiences of the participants because the PMTCT programme has changed several times since its introduction in 2000; from monotherapy to dual therapy (2010) and then to FDC (2013). The reason for these changes were to optimise the prevention interventions and to ensure that South Africa achieve its goal of zero new infections due to vertical transmission of HIV from mother-to-child (Department of Health, NSP 2012-2016 2012:40). For the midwives it is important to adapt to the changes so that the pregnant women can get the care and support necessary for the PMTCT programme to succeed because midwives deals with different pregnant women on daily basis. However, the pregnant women's PMTCT programme is individualised and rely on midwives for update.

In the interview with the 5 midwives, the participants reported their frustrations with having to work in the unit before they had received any training on the PMTCT guidelines. However, during this time they followed the guidelines that were given to them during their orientation and the instructions given to them by their mentors. It emerged from the interviews that they had fears about HIV and reservations about working with PMTCT clients because of the stigma associated with HIV. Some of the

utterances included comments such as they were not keen to work with PMTCT clients+or not really into it+and the following admission:

was one of those people who did not want to come and work with PMTCT clients.+

Some of the midwives indicated that though they are knowledgeable about HIV; they knew nothing about the PMTCT programme and were working under supervision of the senior midwives. The mentors would tell them what to do and how to keep record, but to them it had no meaning and they only executed their duties because they thought that it was part of the routine.

Some midwives indicated that through mentoring they had fallen in love with the programme and wanted to learn more. It emerged from further discussions with the midwives that their attitudes changed after they had undergone training, because they were now clear about the objective of the PMTCT programme, which was to prevent new infections from vertical transmission. When they understood the purpose of the programme, they were able to capacitate the pregnant women with knowledge and understanding, and they started to enjoy what they were doing, especially when they saw the outcome of the programme, when babies in postnatal care tested HIV negative.

The oldest participants, a midwife who was more than 55 years old indicated that she could not remember much because her first experience is long time ago, however, she remembers was that at that time a lot of women were very a shamed of being HIV-positive and thought that people would shun them. She used to feel sorry for them and encouraged them to approach life with a positive attitude.

The social cognitive theory developed by Bandura (2005) looked at the relationship between perceptions of individuals and self-efficacy, he also pointed out that the environment has a direct impact on the behaviour of an individual.in the context of the study, it can be suggested that changes in the behaviour of the midwives are dependent on the quality of the training or the information session the Department of Health provide to them with regard to PMTCT programme. The individual who receives PMTCT



training is still the same person before and after the training no change in behaviour, this came out of the interview that lack of interest by some midwives in PMTCT programme.

#### **4.3.2 PMTCT – the worst experiences of the midwives**

During the interviews participants shared their worst PMTCT experiences. Midwives who work in the antenatal care unit indicated that the worst experiences included having to tell the pregnant women about their HIV-positive results, having to face their angry partners after these women have disclosed their HIV status, seeing pregnant women defaulting on treatment after receiving counselling and knowing the effects of defaulting on the treatment. Midwives working in the maternity ward related in the interview that they regularly find that pregnant women would present themselves in the maternity ward in an advanced stage of the pregnancy and ready to give birth and when tested, they tested HIV-positive. That frustrates the midwives, because they believe that if the pregnant women attended antenatal care clinic early enough, they would have had the opportunity to protect their babies from contracting the HI-virus. Even though the PMTCT programme can be started in the maternity ward, it will not be as effective as it could be when the mother-to-be starts the programme in early stages of pregnancy.

A previous study on HIV-positive women's experiences of the PMTCT programme in rural Malawi, by Kasenga, Hurtig and Emmelin (2008), supported by this finding, had the common finding in terms of pregnant women behaviour. Kasenga et al (2008), indicated that the PMTCT programme influences women's health profoundly, because the PMTCT programme provide women with extensive knowledge and skills through the process of testing, treatment, counselling with regard to disclosing of HIV-positive status to partners or the choice to remain silent, reasons for breastfeeding for 6 months and giving Nevirapine syrup to child and also about how to explain to the family why the child is receiving treatment. The importance of the quality of the counselling and strengthening male involvement in the antenatal care process was another recommendation. The findings in this study concurs with that of Kasenga et al (2008), who recommend that that clinic environment should be conducive for pregnant women

but it also suggested that the home environment could impact on the outcome if the home environment is not caring and supportive to the pregnant women newly diagnosed with HIV.

#### **4.3.3 PMTCT - first experience of the pregnant women**

The interview conducted with the 10 pregnant women revealed that the pregnant women experience a lot of challenges when they came to the antenatal care clinic the very first time. Nine of the participants had not previously participated in the PMTCT programme; however, they were currently in the programme because they have tested HIV-positive with the current pregnancy. Only 1 participant had previously signed up in the PMTCT programme, with her first pregnancy because she is HIV-positive.

The ten participants' demographic characteristics regarding their pregnancy history show that two participants were first-time mothers-to-be, two participants were pregnant for the second time and five participants were pregnant for the third time. However, nine of these participants were all new to the PMTCT programme and have recently tested HIV-positive. One of the 10 participants had been living with HIV and she has participated in the PMTCT treatment (Nevirapine sd) with the first and the second pregnancy and is now on a fixed-dose combination. She recalls her initial experience as follows:

My first experience was with my first born when I received Nevirapine single dose (sd) and now I am on the three in one table called fixed dose combination+.

#### **4.3.4 PMTCT- worst experience of the pregnant women**

The pregnant women also became very emotional during the interview. They all stated that they were worried about their babies' HIV status, mentioned fear of death for them and that their babies may die from HI virus, they stressed about what the future might hold, while some expressed anger at first when they received the news of HIV-positive. There was one who heard general information about PMTCT from the media and at first ANC clinic visit when told about PMTCT programme, she was fine because she had knowledge already. These participants recalled the shock of finding out that they were

HIV-positive and having to start PMTCT programme on same day. They thought that, emotionally, it was overwhelming. Most of them were not sure about embarking on the treatment and were concerned about the damage the strong treatment may cause the baby (safety). Having to decide to inform the family about their HIV-positive status, was another stressor mentioned by the participants. One of the pregnant women commented,

Wish! Poor nurses + a lot has been done in terms HIV testing information and campaigns, women to book early when pregnant. However, she conceded that we as women are still not coming forward to the clinic, but ignoring the messages as if we do not know what to do when we become pregnant.+

#### **4.4 The views of midwives and pregnant women on the value of the PMTCT programme**

##### ***4.4.1 Knowledge and understanding of midwives***

The second objective of the study, as indicated in chapter one, was to establish the views of the midwives and the pregnant women on the value of the prevention of mother-to-child transmission programme at the facility level. All the midwives were familiar with the PMTCT programme and its objective, that is, to prevent new HIV infections due to vertical transmission, they, knew about the HIV testing in the context of PMTCT, and the treatment regimen for HIV-positive pregnant women and they were also aware of the feeding options for the baby as suggested by the Department of Health. One of the participants stated that as much as they are trained one would still find midwives who are not passionate about the PMTCT programme, in other words, it will take more than knowledge for behaviour to change.

##### ***4.4.2 Knowledge and understanding of pregnant women***

It emerged from the interviews with the 10 pregnant women that they all agree that PMTCT programme was a good programme, provided they cooperated with the midwives by following the instruction correctly. They knew more about the PMTCT programme now compared to when they first visited the antenatal care unit. They knew that the PMTCT programme was there to protect their babies, provided they adhered to

treatment and presented themselves for the follow-ups. Most of the participants heard about the PMTCT services at the clinic when they tested HIV-positive at the first antenatal visit.

During the interview counselling and reassurance with regard to the feeding options were given. It also emerged from the interviews that the pregnant women grasped the importance of condom use to assist in the protection of their babies. However, the condom issue was not addressed in detail, as that could be another topic for research.

#### **4.5 Effectiveness of the PMTCT programme**

The third objective of the study, as indicated in chapter one, was to determine whether the prevention of mother-to-child transmission programme is working for both women and midwives at the facility level. It was very important to determine the impact because the PMTCT programme is the subject of a lot of research and changes happen regularly.

##### ***4.5.1 Impact of the changes to the PMTCT guidelines on midwives***

In the interview with the midwives to gauge their views of the on the changing guidelines to the PMTCT programme, it emerged that they felt that the change were good and the general feeling was that ~~to~~ something is not working why keep it+. They all stated that the current treatment of a fixed-dose combination (FDC) is good, compared to the previous mono- and dual therapy. A midwife, who works in the antenatal care unit, stated that after seeing the women she had counselled continue to adhere to the treatment, and then, later, to see their babies at postnatal care, remaining HIV-negative at 6 weeks and 18 months, has been inspiring. This has motivated her to continue to support the PMTCT programme. One of the sub-objectives of the Department of Health's National Strategic Plan on HIV, STIs and TB for the prevention of transmission of HIV, is to reduce MTCT to at least 2% at 6 weeks and to less than 5% at 18 months by 2016 and it aims to realise this by strengthening the PMTCT programme by extending coverage and improving the quality of the service (Department of Health NSP 2012 . 2016 2012:42).

The midwives in the maternity ward indicated that they see the results of the good work done by midwives in the antenatal care unit when the women come to the postnatal care unit. As midwives in the maternity ward, their role is to complete the work done by the antenatal care midwives and to help HIV-positive pregnant women, who did not attend the antenatal care clinic and who present themselves when they are in labour by getting them on the PMTCT programme. They also indicated that the FDC not only protects the baby, but the woman's health also. All the participants felt that it is critical that the pregnant women come forward, that they test for HIV, start the PMTCT programme and complete the programme.

#### ***4.5.2 Impact of disclosure on pregnant women***

To determine whether the programme was working for the ten pregnant women, the impact it has had on them was measured. The participants interviewed were either in their first, second or third pregnancy. From the interviews it emerged that nine of the pregnant women were tested for HIV for the first time when they came to the antenatal clinic and then found out that they were HIV positive, while one was living with HIV. The nine participants stated that disclosure of their HIV-positive status and the issue of starting PMTCT programme had a negative impact, on their daily routine and habits adjustments; this means that disclosing your HIV status is still a challenge, despite the counselling efforts and treating HIV as a chronic condition, like diabetes and high blood pressure.

#### **4.6 Strengths and weaknesses of the PMTCT programme**

The fourth and last objective of the study, as indicated in the first chapter, was to identify the strengths and weaknesses of the Prevention of Mother-to-Child Transmission programme implementation process at the facility level. It was important to identify the strength and weaknesses, because the Department of Health has made great strides in terms of providing guidelines, treatment supply and staff training. However, at the facility level midwives, are the ones who implement the guidelines and who is responsible for achieving the vision of zero new infections due to vertical

transmission, as highlighted in the National Strategic Plan on HIV, STIs, and TB 2012-2016 (2012:21).

It emerged from the interviews conducted on both the five midwives and the ten pregnant women that the strength of the programme is dependent on each of the parties (midwives and pregnant women). Both midwives and pregnant women must know their roles and be actively involved, because it takes commitment by for the PMTCT programme to succeed. They all agreed that midwives can have all the skills and knowledge, but if pregnant women do not present themselves the antenatal care clinic and agree to test for HIV, the PMTCT programme will not take place. On the other hand, if pregnant women come forward for antenatal care at the clinic and find that the midwives are not skilled, knowledgeable and passionate about the PMTCT programme, then, the PMTCT programme will not succeed. According to the participants, capacity-building of both parties, was a very important pillar of the PMTCT programme. The pregnant women felt that they absolutely have to cooperate with the midwives. Each individual pregnant woman needed to make a decision to protect or not to protect the baby and they indicated that now they understand the consequences of adhering (baby born HIV-negative) or not adhering (baby born HIV-positive) to the treatment regimen.

## **4.7 Discussions**

### ***4.7.1 Perceptions and experiences of the participants***

The discussions with the 15 participants revealed the perceptions and experiences of the service providers (midwives) and recipients (pregnant women) of the PMTCT programme at the facility level, the first objective of the study, as indicated in chapter one. The midwives stated that all of them are now more knowledgeable about and understand the PMTCT guidelines, compared to their first experiences with the programme (when they had little to no knowledge about PMTCT) and encounters with the pregnant women. They also felt that a weakness in the original guidelines was that it stated that midwives should conduct a general group information session on HIV and PMTCT-related issues for all women coming to the antenatal clinic for the first time and on repeat visits (Department of Health 2010:10).

The discussion with the midwives about HCT as an entry point to the PMTCT programme revealed that the Department of Health provided them with the guidelines on how to start the PMTCT service. When the programme was introduced, all pregnant women who presented at the antenatal clinic were offered a group information session about HIV testing and the PMTCT programme, subsequently, a one-on-one individual information session was introduced, which entailed sharing information about the routine HIV counselling and testing (HCT) procedures and their offer of a HIV test (Department of Health 2010:10).

The social network theory (SNT), proposed by Cargill (2005), pointed out that no individual will display behaviour without interaction and interaction brings out the results. The social cognitive theory, proposed by Bandura (2006), states that knowledge alone cannot change the behaviour; it focuses more on developmental stages and human nature. The findings in this study confirm the theories suggested by Cargill (2005) and Bandura (2006), pregnant women cannot react to PMTCT programme without interacting with the midwives in information sharing and even if information has been shared that does not conclude positive behaviour but they can only hope for and Bandura stated that it will take more than knowledge for behaviour to change. This was also confirmed in this study when the midwives reported that pregnant women still defaulted on treatment, were late for antenatal bookings and some still only presented themselves when they were in an advanced stage of labour, ready to deliver the baby, at that stage, when they are offered HCT, some would then test HIV-positive.

The 10 pregnant women stated that the first antenatal visit was very emotional for them, because of the news they had received about their HIV status and having to start on the PMTCT programme that same day. They felt it was made worse by the fact that they were clueless and naïve about the PMTCT programme. Most of them were conflicted about whether or not to start the treatment and worried about whether taking the treatment will harm or protect their babies.

#### **4.7.2 Views of midwives and pregnant women**

The discussion with the 15 participants revealed their views about whether or not the PMTCT programme was important to protect the babies from being infected with the HIV virus; based on the second objective, as indicated in chapter one.

The midwives indicated that in the postnatal care unit a lot of babies of the women, who signed up for the PMTCT programme in the antenatal care clinic at Johan Heyns CHC, were testing HIV-negative. These outcomes were supported by the fact that all the midwives rotate in the antenatal care, maternity ward and postnatal unit; hence, they could witness how the women progressed through the whole process, which is, attending the antenatal care clinic, delivering in the maternity ward and bringing the baby to the postnatal care clinic for HIV testing.

These pregnant women indicated that they have come to realise that they played the most important role in ensuring the success of the PMTCT programme, because though the midwives are available to provide all the services at the clinic, like counselling and treatment, it ultimately is their choice about whether or not they take the treatment. They all know that failure to adhere will lead to their babies having a greater chance of testing HIV positive.

#### **4.7.3 Effectiveness of the PMTCT programme**

The discussion with the 15 participants revealed their perceptions on the effectiveness of the PMTCT programme at the facility level, based on the third objective, as indicated in chapter one of the study. The midwives mentioned the impact that the changes to the PMTCT guidelines have made to the success of the programme and they stressed that change is good. However, they indicated that because these changes happened so fast, it created a challenge for the person who had not been working in the programme for a long time. They also said that it is not always possible to send midwives for in-service training before they are placed in mother and child care units.

In the interview with the pregnant women, it was indicated that they all managed to disclose the news of their HIV-positive status and their decision to participate in the



PMTCT programme to their partners and/or families. For some of them, it took one to two weeks before they were able to do this, because they were trying to work out how to break the news and wondering about the reactions of their partners, parents, siblings and friends. They concurred that good communication was the key that led them to decision to disclose. Many were worried that they will be discriminated against and, judged, and that, this will create conflict between them and their partners, especially with regard to who is responsible for introducing the virus to the relationship. The biggest impact the PMTCT programme had on the pregnant women was in this regards; they were equipped with the skills to deal with the situation at home when they had to disclose.

Counselling at the healthy and caring environment gives birth to healthy people according to Taylor and Decosas (2002). The social ecological theory holds that knowledge and attitude/skills are gained through interaction and that a supportive and caring environment gives birth to a healthier people (Taylor & Decosas 2002). The midwives, who work in the antenatal care unit, also mentioned that there were cases where midwives resisted having to participate in the programme and they did not fully support the pregnant women. The outcome of this attitude was poor adherence to treatment. However, it was also mentioned that some pregnant women would religiously collect the treatment but their clinical condition health wise was not improving, but instead, their condition was deteriorating, which proved to her that these women were not taking their treatment.

#### ***4.7.4 Strengths and weaknesses of PMTCT programme***

The discussion on the fourth objective, as indicated in chapter one, was to identify the strengths and weaknesses of the PMTCT programme implementation process at the facility level. The 15 participants indicated that role clarification, in context of the PMTCT programme, was necessary for the programme to succeed. The pregnant women highlighted the fact that they play a leading role in the success or failure of the programme, they have access to treatment, however, when they get home, it is their decision to take it or not. One pregnant woman said that if they were directly observed

when taking their treatment, then the default rate would be lower. However, she also admitted that it is not possible to come to the clinic every day.

The midwives indicated that prioritising training for staff in all PMTCT processes could strengthen the PMTCT programme. They also suggested that the midwives should work in mother and child care units for longer period as this will create an environment where midwives will be passionate about the programme and will gain more experience.

#### **4.8 Summary**

Chapter four dealt with the presentation and interpretation of the findings of the study with the emphasis on the aim and objectives of the study. The demographic characteristics of the 15 participants were also presented and it was found that certain characteristics had an impact on the responses, experiences, perceptions, knowledge and understanding, attitude and behaviour with regard to the PMTCT programme. The participants consisted of 5 midwives and 10 pregnant women. The study revealed that both the pregnant women and the midwives had negative experiences during their first contact with the PMTCT programme. However, after the Department of Health intervened, by providing further training for the midwives, which resulted in them finding more enjoyment in working with PMTCT clients. The PMTCT interventions by the midwives included ongoing counselling for the pregnant women to allay any fears they may have about the programme or the impact of the treatment regimen on their babies. The knowledge and understanding of PMTCT programme, on the part of both groups of participants, seem to be 100%. Their views were that the PMTCT programme does work, provided the midwives and the pregnant woman play their roles and are honest with each other, because their roles are interdependent. Disclosure of their HIV-positive status and about starting the PMTCT treatment was a challenge for the pregnant women.

The next chapter (Chapter Five) will deal with the summary, conclusions and recommendations of the study.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

In this chapter a summary, conclusion and recommendations based on the findings will be presented. It is guided by the objectives of the study as indicated in chapter one.

#### 5.2 Summary

This section present the summary of the study based on the aim and objectives indicated in chapter one. The aim of the study was to assess the perception of midwives and pregnant women of the PMTCT of HIV programme in the antenatal care (ANC) and maternity ward at the Johan Heyns Community Health Centre in the Sedibeng District, Gauteng, the objectives of the study were:

- to describe the perceptions and experiences of the service providers (midwives) and recipients (pregnant women) with regard to the implementation of the Prevention of Mother-to-Child Transmission of HIV programme at the facility level
- to establish the views of the midwives and pregnant women on the value of the Prevention of Mother-to-Child Transmission of HIV programme at the facility level
- to determine whether the Prevention of Mother-to-Child Transmission of HIV programme is working for both women and midwives at the facility level
- to identify the strengths and weaknesses of the Prevention of Mother-to-Child Transmission of HIV programme implementation process at the facility level

The demographic characteristics were presented in the form of tables, frequency and percentages while the findings, from the interviews conducted with the participants about the PMTCT programme, were presented in themes based on the objectives of the study. The findings presented were based on the data gathered in the interviews with the 15 participants, (5 midwives and 10 pregnant women). The demographic variables

of the 5 midwives related to age distribution, level of education in the nursing profession, years in which the basic midwifery qualification was completed, and years of experience in the PMTCT of HIV programme. The demographic variables of the 10 pregnant women related to their age distribution, pregnancy history, experiences on PMTCT programme, level of education, marital status and employment status.

The findings indicated a strong link between the demographic characteristics of both groups of participants and their responses in terms of knowledge, understanding, emotions, and experiences with regard to the PMTCT programme. The link between the two groups of participants was underscored by the finding that their interpersonal relationship needed to be strengthened for the PMTCT programme to be 100% effective. The highlight was that neither of them can function individually but they were interdependent and there has to be regular and effective communication regarding the PMTCT programme. This is also endorsed by National Strategic Plan (NSP) on HIV, STIs and TB 2012-2016, where one of its strategic enablers identified was effective communication stating that communication efforts must encompass the various platforms including traditional media (TV, newspapers and radio) and social media platforms, like cell phones, SMS messages, Twitter and Face book (Department of Health NSP 2012 -2016 2012:56).

These findings strongly support the chosen social behaviour theories that formed the basis for this research. Firstly, the social ecological theory (SET), by Taylor and Decosas (2002), indicated that the social environment has an impact on the human being, for example the experience is gained through interaction with the environment and further stated that knowledge, attitude and skills are gained through interaction. The social cognitive theory (SCT), by Bandura (2006), looked at the perception of individuals and self-efficacy, while he also pointed out that the environment has a direct impact on the behaviour of an individual. Both theories suggest that the environment has an impact on individuals' perception, attitude, knowledge and behaviour. Lastly, the social network theory, by Cargill (2005), stated that the relationships between individuals have an impact on social behavioural change. In this study, the interaction between the

midwives and the pregnant women can influence the success of the PMTCT programme and the relationship between the pregnant women and their partners/families can also impact on the success of the PMTCT programme.

### ***5.2.1 Perceptions and experiences of participants***

At first both the midwives and the pregnant women found the PMTCT experiences very challenging. In the case of the midwives, there was a lack of interest, fears about HIV or working with PMTCT clients and limited about knowledge about the content of the PMTCT programme. Some midwives were also placed in mother and child care units before they had received any training in this field. For the midwives the worst experiences in the PMTCT programme, include: having to deal with being confronted by the angry partners, after the women had disclosed to them their HIV-positive status; the pregnant women defaulting on their treatment or non-adherence to treatment, the pregnant women who only present themselves in maternity ward when they are already in advanced stage of labour, but who have never participated in the PMTCT programme or attended antenatal care and were never tested for HIV; and, thus, having these women learning about their HIV-positive status when they have been offered the HCT. For the pregnant women the most challenging experience with regard to the PMTCT programme was learning at their first visit to the ANC that they are HIV-positive, then to hear about option of participating in the PMTCT programme and having to make a decision about this on the same day.

### ***5.2.2 Views of midwives and pregnant women***

The pregnant women and the midwives, who participated in this study, displayed a good knowledge and understanding of the PMTCT programme, specifically with regard to the objective of protecting the unborn child. The views of both groups of participants were that each of them must be actively involved in their particular roles in the programme. However, each group acknowledged that their roles are interrelated or interlinked and that they cannot function individually but needed each other. During their first experiences all the participants had different views because of a lack of knowledge and emotional stress. However, now that they are capacitated, the pregnant women were

positive about the outcomes of the programme for their children and the midwives were upbeat about the number of children in the postnatal care unit, who tested HIV negative.

### **5.2.3 Effectiveness of the PMTCT programme**

The midwives indicated that the PMTCT programme was effective, because of the good work they, together with the pregnant women, do during the antenatal care phase, which can be seen in the postnatal care unit, where babies born from the women tested HIV-negative at 6 weeks and 18 months. This motivated them to continue the good work they are doing in antenatal care regarding the PMTCT service. They cautioned though, that rotation of midwives leads to a loss of interest in and forgetfulness of the PMTCT programme.

### **5.2.4 Strengths and weaknesses on PMTCT programme**

Capacitated midwives and motivated pregnant women were recognised as strength of the PMTCT programme. Good interpersonal relationships (pregnant women cooperating with midwives) ensure that the programme run smoothly. Early pregnancy antenatal care bookings and early HIV testing were seen as the enabling factors. Decision-making on early initiation of the PMTCT treatment, to intensify the protection of the unborn baby, was also seen as a strength. The weakness was lack of knowledge, late booking or not booking for antenatal care, refusing to test for HIV or to start the PMTCT treatment and poor counselling and lack of support from the partners/family. The rotation of midwives working in the antenatal care and maternity units also impacted on the success of the PMTCT programme.

## **5.3 CONCLUSION**

These are the research conclusions, are based on findings and the four objectives of the study.

### **5.3.1 Perceptions and experiences of the participants**

The conclusion, based on the first objective of the study, is that there is a strong link between knowledge and experience, because lack of knowledge, with respect to both

groups, led to negative experiences. Previous experience is of value for future reference and to bring about a change in the attitudes of the participants.

### ***5.3.2 Views of midwives and pregnant women***

The conclusion based on the second objective of the study is that knowledge about the PMTCT programme interventions, if effectively transferred to the midwives and the pregnant women, can contribute to the success of this programme. The first encounter with PMTCT programme must be given more attention for better outcomes.

### ***5.3.3 Effectiveness of the PMTCT programme***

The conclusion, based on the third objective of the study, is that the midwives working in the antenatal care and maternity ward should be a priority for capacity building whenever guidelines changes to the PMTCT programme occurs because after they have received PMTCT training, PMTCT services improved because of positive attitude about their role in the programme and, thus, the desired outcomes can be reached. It was noted that the pre-pregnancy PMTCT information is of vital importance for the PMTCT programme to be a success. Both groups of participants agreed that pre-PMTCT information and knowledge were important.

### ***5.3.4 Strengths and weaknesses on PMTCT programme***

The conclusion, based on the fourth objective, is that role clarification for both midwives and pregnant women is important for the PMTCT programme. Motivated and capacitated pregnant women and midwives lead to a change in attitude, behaviour and perception. Demotivated and incapacitated pregnant woman and midwives could lead to the failure of PMTCT programme.

## **5.4 RECOMMENDATIONS**

The recommendations presented here emerged from the findings, which are based on the objectives of the study.

#### **5.4.1 Perceptions and experiences of the participants**

The recommendations presented here are based on the first objective, as indicated in chapter one of the study. Before being placed in the antenatal care (ANC) unit and maternity ward, the midwives should undergo for training to prevent the frustrations experienced by them when they are not familiar with the guidelines. Placement of the midwives in the ANC unit and maternity ward would be more constructive if people who are passionate and interested in the PMTCT programme were appointed. The PMTCT information should be integrated with family planning, primary health care and school health, so that every woman of child-bearing age is informed about the PMTCT programme before pregnancy occurs. Optimise the capacity building of the pregnant women by employing professional trainers to educate and train these women in PMTCT interventions, because these trainers will have enough time and they will understand the content.

#### **5.4.2 Views of midwives and pregnant women**

The recommendations presented here are based on the second objective, as indicated in chapter one. The placement selection of midwives in the mother and child care units should be given to people who are skilled in the PMTCT interventions and passionate about it. The midwives placed in these units should also be kept there for longer. There should also not be rotation of staff in the mother and child care units, to ensure that midwives do not get to be out of practice. HIV counselling and testing (HCT) campaigns should be strengthened, specifically for all women of child-bearing age. Community awareness programmes on PMTCT interventions should be strengthen and PMTCT awareness should also be fostered among girls at high schools.

#### **5.4.3 Effectiveness of the PMTCT programme**

The recommendations presented here are based on the third objective, as indicated in chapter one of the study. Pregnant women expressed the wished that their partners, family members and the community at large be actively involved in the PMTCT programme, so that they do not have to be fearful of their reaction when they have to disclose their HIV-positive status. Thus, an enabling environment for disclosure has to



be created. Family members, if they can, should accompany the pregnant women to the ANC unit offer support. This will strengthen adherence to treatment and follow-ups.

#### **5.4.4 Strengths and weaknesses on PMTCT programme**

The recommendations presented here are based on the fourth objective, as indicated in chapter one of the study. There should be role clarification when the midwives and pregnant women meet for the first time. Time should be invested on capacity building for both groups of participants.

#### **5.5 Recommendations for further studies**

- Further studies are needed on the same topic to cover more health facilities, because implementation differs per health facility, though there is only one PMTCT guideline. Therefore, for optimal service delivery, the input of the midwives and the pregnant women at other health facilities will add value.

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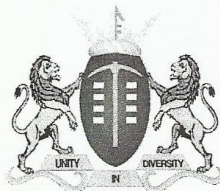
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## GAUTENG PROVINCE

HEALTH  
REPUBLIC OF SOUTH AFRICA

### OUTCOME OF PROVINCIAL PROTOCOL REVIEW COMMITTEE (PPRC)

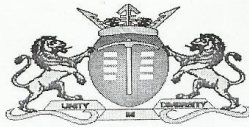
Researcher's Name (Principal investigator)	Potetsa Elizabeth Thithi
Organization / Institution	University of South Africa, Department of Sociology
Research Title	Assessing the implementation of Prevention of Mother to Child Transmission (PMTCT) programme in the Ante Natal Care (ANC) and Maternity in Johan Heyns community health Centre in Sedibeng district in Gauteng province.
Protocol number	P131113
Date submitted	01 November 2013
Date reviewed	20 November 2013
Outcome	APPROVED
Date resubmitted	N/A
Date of second review	N/A
Final outcome	N/A

It is a pleasure to inform that the Gauteng Health Department Provincial Protocol Review Committee (PPRC) has approved your research on "Assessing the implementation of Prevention of Mother to Child Transmission (PMTCT) programme in the Ante Natal Care (ANC) and Maternity in Johan Heyns community health Centre in Sedibeng district in Gauteng province".

We kindly requests that you to submit a report after completion of your study and present your findings to the Gauteng Health Department.


Dr Bridget Ikalafeng :  
Provincial Protocol Research Committee (PPRC), Chairperson

Date 30/12/2013



En: Dr. Victor Figueroa

 (016) 950 6116

 (016) 950 6034

To: Sedibeng District Health management

From: Dr. Victor Figueroa

Sedibeng District Research Co-ordinator

**Re: Consent to conducting research to Mrs. Potetsa Elizabeth Thithi.**

This is to state that Mrs. Potetsa Elizabeth Thithi, currently writing a research to be submitted in fulfilment of her MA Social Behaviour Studies in HIV/AIDS, in Sociology department, UNISA, is applying for permission from Sedibeng District Research Committee to conduct research in the district.

The Title of the study is: **Assessing the implementation of Prevention of Mother to Child Transmission (PMTCT) programme in the Ante Natal Care (ANC) and Maternity in Johan Heyns community health centre in Sedibeng district in Gauteng province.**

I, Dr. Victor Figueroa in my capacity as Sedibeng District Research Co-ordinator recommend and support this application for permission to conduct research in our district.

Regards,

Dr. Victor Figueroa

2014/01/07

Title:

Perception of midwives and pregnant women on Prevention of Mother-to-Child Transmission of HIV programme in the Antenatal Care and Maternity in Johan Heyns Community Health Centre in Sedibeng district in Gauteng.

Principal Researcher:

- Mrs. Potetsa Elizabeth Thithi
- Cell no. 083 525 0834/079 777 2729
- Email: [potetsa.thithi@gmail.com](mailto:potetsa.thithi@gmail.com)

Purpose of the study:

To describe the experience of the service providers (midwives) and recipients (pregnant women) in the implementation of Prevention of Mother to Child Transmission programme at the facility level.

To establish the views of the midwives and pregnant women on the value of Prevention of Mother to Child Transmission programme at the facility level.

To determine whether the Prevention of Mother to Child Transmission programme is working for both mothers and midwife at the facility level

To identify the strengths and weaknesses on the Prevention of Mother to Child Transmission programme implementation process at the facility level.

What will the study involve?

Different midwives will be interviewed in the context of PMTCT, therefore comparing the responses of midwives will be done and checking whether the implementation/understanding/experiences of PMTCT is the same among them. The mothers will also be interviewed on their experiences as recipients of the service. There will be two sets of questions one for midwives and the other for mothers. Interviews will last 20minutes. Consent will be obtained to tape record the interview and no photos will be taken for confidentiality and privacy of the participants.

Why have you being asked to participate?

The key role players in the prevention of mother to child transmission (PMTCT) are midwives and pregnant women. You are the people who understand the service provision and service recipients. You are the people who can tell the story best. NSP 2012 -2016 also emphasise the issue of zero new infection due to vertical transmission.



Do you have to take part?

Your participation is totally voluntary and you can either participate or withdraw your consent. If withdrawal happens in the middle of the interview session, consent and information given will be destroyed. The information given will be kept confidential all the time.

The results of the study is for education purpose therefore the results will be presented in the dissertation, will be seen by my supervisor, second marker and external marker. After the study is completed the results will be kept by the UNISA and will not be published without your consent.

Benefits:

After the study there will be a better understanding of the programme and importance of role players in the PMTCT. There will be developments of the future usage of the PMTCT.

Risks:

Minimal to zero risks however will ensure the protection and confidentiality is maintained at all times. The story telling can trigger the emotions therefore the social worker of the facility will be informed regarding the study and will be requested to be on standby in case of crises.

Who has to review the study?

- My Supervisor
- UNISA High degree committee
- UNISA Ethical clearance committee
- Department of health Provincial Protocol Review Committee (PPRC)
- District ethical/research team

For any **queries:**

My contact is:

- Mrs Potetsa E Thithi
- 083 525 0834/079 777 2729
- [potetsa.thithi@gmail.com](mailto:potetsa.thithi@gmail.com)

If you agree to take part in the study please sign the consent form.

**Consent form**

I \_\_\_\_\_ agree to participate in Potetsa Thithi's research study.

The purpose and nature of the study has been explained to me in writing.

I am participating voluntarily.

I give permission for my interview with Potetsa Thithi to be tape recorded.

I understand that I can withdraw from the study, without repercussions at any time, whether before it start or while I am participating.

I understand that I can withdraw permission to use my data within two weeks of interview, in which the material from interview will be deleted.

I understand that disguised extract from my interview may be quoted in the dissertation and subsequent publication if I give permission below.

I \_\_\_\_\_ agree to quotation and/or publication.

SIGNATURE:

DATE:

Interview schedule face to face: To assess the perceptions of midwives working on Prevention of Mother-to-Child Transmission (PMTCT) of HIV programme in the Antenatal Care (ANC) and Maternity in Johan Heyns Community Health Centre in Sedibeng District in Gauteng Province.

### SECTION A: DEMOGRAPHIC INFORMATION

<b>The following information will be asked based on the objectives:</b>				
<b>GROUP</b>	<b>MIDWIVES</b>			
NAME OF FACILITY				
DATE OF INTERVIEW				
TIME OF INTERVIEW	Start:		End:	
GENDER	1. Male		2. Female	
DATE OF BIRTH				
AGE				
PROFESSIONAL STATUS	Basic midwifery		Advance midwifery	
YEAR OF COMPLETION				
YEARS OF EXPERIENCE	Antenatal care		Maternity ward	

### SECTION B: PREVENTION OF MOTHER TO CHILD TRANSMISSION (PMTCT)

<b>The following questions will be asked based on the objectives</b>
1. Comment about your understanding of PMTCT
2. How would you describe PMTCT service?
3. Comment on your role in the PMTCT
4. How would you describe your first time providing the PMTCT service?
5. Comment on your perception about the changing (revised) PMTCT guidelines
6. Comment on your worse experience in PMTCT service
7. How did you handle that worse experience?
8. Comment on the strength and weaknesses in PMTCT service
9. What are your recommendations based on your experience for future purposes?

Interview schedule face to face: To assess the perceptions of pregnant women age 20 – 40 years on Prevention of Mother-to-Child Transmission (PMTCT) of HIV programme in the Antenatal Care (ANC) and Maternity in Johan Heyns Community Health Centre in Sedibeng District in Gauteng Province.

### SECTION A: DEMOGRAPHIC CHARACTERISTICS

The following information will be asked in based on the objectives:				
GROUP	PREGNANT WOMEN			
NAME OF FACILITY				
DATE OF INTERVIEW				
TIME OF INTERVIEW	Start:		End:	
NAME OF THE INTERVIEWEE				
HOME LANGUAGE		ALT:		
AGE				
EDUCATIONAL STATUS	High school		Tertiary	
PARITY STATUS	Premi-gravid		Multi-parity	
MARITAL STATUS	Single		Married /unique	
EMPLOYMENT STATUS	Employment		Unemployment	

### SECTION B: PREVENTION OF MOTHER TO CHILD TRANSMISSION (PMTCT)

The following questions will be asked based on the objectives:
1. Comment about your understanding of PMTCT
2. How did you hear or know about PMTCT?
3. How would you describe PMTCT service?
4. Comment on your role in the PMTCT
5. Comment on your first time experience receiving PMTCT service
6. Comment on your fears, when you were about to start PMTCT
7. Comment on the disclosure of your HIV status , who did you disclose to
8. Comment on your fears before disclosing your HIV status
9. Comment on the support person or buddy during the PMTCT service.
10. Comment on the factors that can influence success or failure of PMTCT service.
11. What should be added in the future (recommendations)?