PERCEPTIONS OF HUMAN IMMUNODEFICIENCY VIRUS POSITIVE PREGNANT MOTHERS REGARDING THE PREVENTION OF MOTHER-TO-CHILD TRANSMISSION, OPTION B+ PROGRAMME IN A PUBLIC HEALTH UNIT IN MANZINI

by

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in the subject

HEALTH STUDIES

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NOVEMBER 2016
DECLARATION

I declare that PERCEPTIONS OF HUMAN IMMUNODEFICIENCY VIRUS POSITIVE PREGNANT MOTHERS REGARDING THE PREVENTION OF MOTHER-TO-CHILD TRANSMISSION, OPTION B+ PROGRAMME IN A PUBLIC HEALTH UNIT IN MANZINI is my own work and that all sources that I have used or quoted have been indicated and acknowledges by means of complete references and that this work has not been submitted before for any other degree at any other institution.

10 February 2017

SIGNATURE      DATE

Trusty Lomcebo Mbatha
ABSTRACT

The purpose of the study was to explore and describe the perceptions of the HIV positive pregnant mothers regarding the PMTCT Option B+ programme in order to identify and describe gaps; and also help the Swaziland government address these gaps. The study was conducted in one of the public health units in the Manzini Region of Swaziland. The qualitative, exploratory and descriptive research design was used and data collection was done using individual interviews and field notes. Permission was also requested from the participants in order to record the interviews. Population of the study were all cases of HIV positive pregnant mothers enrolled on PMTCT Option B+ programme, and were aged between 18 and 40 years. Number of participants sampled was 20 and only 17 participants were interviewed. Themes of the study were: perceptions of being enrolled on the PMTCT Option B+ programme, understanding about PMTCT Option B+ programme and information needed with regard to PMTCT Option B+ programme, perceptions with the care received from the nurses and their assistance on PMTCT Option B+ programme, effectiveness of the PMTCT Option B+ programme and challenges of taking ARVs. The findings revealed that Option B+ programme was perceived as preventing HIV from mother-to-child. It boosts the mother’s immune system, prevents opportunistic infections and prolongs life. Knowledge and understanding of the programme was displayed by the participants even though challenges such as discrimination and no support by families and partners were mentioned. Improvement of the programme on how to prevent the spread of HIV to babies and strategies to assist participants on how to disclose were recommended. This was found to be having a huge effect on treatment adherence.

KEY CONCEPTS

Acquired immunodeficiency syndrome; describe; explore; human immunodeficiency virus; mother-to-child transmission; perceptions; prevention; public health unit.
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- Finally, to King Sobhuza Public Health Unit staff and colleagues, you are very special. A heartfelt thank you to you all.
Dedication

To my parents, especially my mom, you may be gone, but your memories will always be in my mind. You taught me that education is the only way to success, without it our lives will stumble. You always encouraged me to be courageous, never to lose hope as there is always a light at the end of a tunnel.

I also dedicate this to my loving husband, Mr Henry Silayeto Mbatha, for his love, support and understanding. My love you always stand by my side forever.
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<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3TC</td>
<td>Lamivudine</td>
</tr>
<tr>
<td>AIDS</td>
<td>Acquired Immune-deficiency Syndrome</td>
</tr>
<tr>
<td>ANC</td>
<td>Antenatal Care</td>
</tr>
<tr>
<td>ART</td>
<td>Antiretroviral Therapy</td>
</tr>
<tr>
<td>ARV</td>
<td>Antiretroviral</td>
</tr>
<tr>
<td>AZT</td>
<td>Zidovudine</td>
</tr>
<tr>
<td>BIPAI</td>
<td>Baylor International Pediatric AIDS Initiative</td>
</tr>
<tr>
<td>EGPAF</td>
<td>Elizabeth Glazer Paediatric AIDS Foundation</td>
</tr>
<tr>
<td>eNSF</td>
<td>Extended National Strategic Framework</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Syndrome</td>
</tr>
<tr>
<td>HAART</td>
<td>Highly Active Antiretroviral Therapy</td>
</tr>
<tr>
<td>ICAP</td>
<td>International Center for AIDS Prevention Programmes</td>
</tr>
<tr>
<td>IHM</td>
<td>Institute of Health Management</td>
</tr>
<tr>
<td>MTCT</td>
<td>Mother-to-child Transmission of HIV</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MSF</td>
<td>Médecins Sans Frontières</td>
</tr>
<tr>
<td>NSP</td>
<td>National Strategic Plan</td>
</tr>
<tr>
<td>NVP</td>
<td>Nevirapine</td>
</tr>
<tr>
<td>PMTCT</td>
<td>Prevention of mother-to-child Transmission of HIV</td>
</tr>
<tr>
<td>PIHTC</td>
<td>Provider Initiated HIV Testing and Counselling</td>
</tr>
<tr>
<td>sd-NVP</td>
<td>Single Dose Nevirapine</td>
</tr>
<tr>
<td>SNAP</td>
<td>Swaziland National AIDS Programme</td>
</tr>
<tr>
<td>UNAIDS</td>
<td>United Nations Programme on HIV/AIDS</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children's Fund</td>
</tr>
<tr>
<td>UNFPA</td>
<td>United Population Fund</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency International Development</td>
</tr>
<tr>
<td>VCT</td>
<td>Voluntary Counseling and Testing</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
</tr>
</tbody>
</table>
CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

Mother-to-child transmission (MTCT) is the transmission of the human immunodeficiency virus (HIV) from an infected mother to her child. This can occur during pregnancy, labour and delivery, and breastfeeding (Hadebe 2012:13; Swaziland Ministry of Health 2010a:4). Through research, prevention of mother-to-child transmission (PMTCT) of HIV programme was established. The PMTCT is a highly effective intervention which ensures that an HIV infected mother does not pass the infection to her child. This is implemented through administering medication (antiretroviral drugs) to mothers during pregnancy, labour, delivery, and to their breastfeeding babies. If well implemented, Swaziland will be able to reduce MTCT rates to less than 5% by 2015 (Hadebe 2012:13; Swaziland Ministry of Health 2010a:4).

Recent research about Swaziland’s HIV national statistics showed that the effectiveness of PMTCT programme in Swaziland is about 95 % (HIV and AIDS in Swaziland 2012:1). As good as this progress is, 33% of HIV-infected pregnant women do not access PMTCT services as three quarters of the Swazi population lives in rural areas, outside cities where health facilities are not available, contributing to an excess of infant HIV infection and deaths (Swaziland Ministry of Health 2010a:10; Ministry of Health, Kingdom of Swaziland 2016:9; WHO 2012:1). The recent internal statistics at the researcher’s workplace prompted the researcher to explore and describe perceptions of Human Immunodeficiency Virus positive mothers on prevention of Mother-to-Child Transmission, Option B+ programme in a public health Unit in Manzini.

1.2 BACKGROUND TO THE RESEARCH PROBLEM

Approximately 33,000 deliveries are registered every year in Swaziland. With HIV prevalence among pregnant women of 41.1%, and they give birth to over 17000 HIV exposed infants each year. Babies born to HIV-positive mothers are at risk of getting HIV during pregnancy, labour, delivery and or when breastfeeding. In response to this
situation the government of Swaziland has made the PMTCT of HIV a top priority to combat HIV infection in children in the country (Swaziland Ministry of Health 2010a:10; Swaziland Ministry of Health 2012:10). The Swaziland Ministry of Health (MOH) with the support from organizations such as Elizabeth Glazer Paediatric AIDS Foundation (EGPAF), International Center for Aids Prevention Programmes (ICAP), United Nations Children’s Fund (UNICEF), and other partners had joint forces to combat HIV infection in children so that they can be an HIV free future generation through the PMTCT programme.

In Swaziland the programme was officially launched in 2003 with support from World Health Organization (WHO), and has made tremendous progress in implementation of PMTCT services, beginning with only three facilities in 2003 and increasing to 137 facilities by 2009 (Swaziland Ministry of Health 2012:1). The percentage of HIV positive pregnant women who received antiretroviral treatment to reduce the risk of mother-to-child transmission had increased to 62.45% by 2008 (The Government of the Kingdom of Swaziland 2008:26). In 2003, a single dose nevirapine (sd-NVP) was provided for mothers and infants to reduce MTCT in Swaziland. Since 2007, a dual ARV regimen of zidovudine (AZT) and NVP has been used with a 7 day ‘tail’ of AZT+ Lamivudine (3TC) to minimize NVP resistance. With the new 2010 guidelines, more efficacious ARV regimens are being made available for HIV-infected women and their infants, and these include use of ARV for HIV-exposed infants who are breastfeeding. This is a way to make breastfeeding safer for women with HIV, and ARV prophylaxis may begin earlier in pregnancy. This is as early as 14 weeks gestation (Swaziland Ministry of Health, 2010a:10; Swaziland Ministry of Health 2012:1).

The PMTCT programme offers a package of services that include counselling and testing; prevention of HIV transmission among pregnant and lactating women who initially test HIV negative; antiretroviral (ARV) drugs prophylaxis to both infected women and their exposed infants; counselling and support for safe infant feeding practices; family planning, and referral for long-term antiretroviral therapy (ART) for the child and the mother. The objective of PMTCT is to eliminate new infections among children and keep mothers alive. PMTCT interventions will contribute to the achievement of the outcome which is the percentage of HIV infected infants aged 6-8 weeks who are born to HIV positive mothers reduced from 2% in 2011 to 1% in 2015 and maintained at 1%
in 2018 (The Extended National Strategic Framework (eNSF) for HIV and AIDS 2012-2014:30).

The ultimate goal for PMTCT is to reduce Mother-to-Child transmission and therefore interventions provided to the child are of great importance. In the absence of PMTCT interventions about 15-25% of infants of women living with HIV will be infected during pregnancy or delivery, and in addition 5-20% may become infected during breastfeeding (Swaziland Ministry of Health 2012:16).

Studies in Swaziland have shown that during 2012, around 81% of pregnant women were being tested for HIV per year and 83% of those testing positive received antiretroviral treatment to prevent transmission of HIV to their babies. An estimated 15% of children born to HIV positive mothers were infected with HIV in 2011 (HIV & AIDS in Swaziland 2012:1). During 2012, 9414 exposed infants were seen in child welfare clinics at the six-week visit post child birth in Swaziland, and below is a table that shows PMTCT statistics in the four regions of Swaziland in 2012, according to Swaziland National PMTCT Program (2012:17).

Table 1.1 Infants born to HIV positive women in four regions Swaziland

<table>
<thead>
<tr>
<th>Region</th>
<th>Infants born to HIV positive women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hhohho</td>
<td>2641</td>
</tr>
<tr>
<td>Manzini</td>
<td>2005</td>
</tr>
<tr>
<td>Lubombo</td>
<td>3184</td>
</tr>
<tr>
<td>Shiselweni</td>
<td>1584</td>
</tr>
</tbody>
</table>

(Swaziland Ministry of Health 2012:17)

The study site is a Public Health Unit located in the Manzini region of Swaziland. The tables below show statistics of children tested HIV positive in the years 2010-2012 in the Manzini region, according to Swaziland National PMTCT Programme (2012:17).
Table 1.2 Proportion of infants tested HIV positive by age, in each quarter year 2010 in Manzini region

<table>
<thead>
<tr>
<th>Age</th>
<th>Q1-2010</th>
<th>Q2-2010</th>
<th>Q3-2010</th>
<th>Q4-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;=8 weeks</td>
<td>77</td>
<td>77</td>
<td>72</td>
<td>64</td>
</tr>
<tr>
<td>12 months</td>
<td>153</td>
<td>139</td>
<td>151</td>
<td>94</td>
</tr>
<tr>
<td>&gt;12 months</td>
<td>56</td>
<td>30</td>
<td>29</td>
<td>19</td>
</tr>
</tbody>
</table>

(Swaziland Ministry of Health 2012:17)

Table 1.3 Proportion of infants tested HIV positive by age, in each quarter year 2011 in Manzini region

<table>
<thead>
<tr>
<th>Age</th>
<th>Q1-2011</th>
<th>Q2-2011</th>
<th>Q3-2011</th>
<th>Q4-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;=8 weeks</td>
<td>47</td>
<td>38</td>
<td>52</td>
<td>41</td>
</tr>
<tr>
<td>12 months</td>
<td>125</td>
<td>95</td>
<td>115</td>
<td>94</td>
</tr>
<tr>
<td>&gt;12 months</td>
<td>36</td>
<td>23</td>
<td>22</td>
<td>41</td>
</tr>
</tbody>
</table>

(Swaziland Ministry of Health 2012:17)

Table 1.4 Proportion of infants tested HIV positive by age, in each quarter year 2012 in Manzini region

<table>
<thead>
<tr>
<th>Age</th>
<th>Q1-2012</th>
<th>Q2-2012</th>
<th>Q3-2012</th>
<th>Q4-2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;=8 weeks</td>
<td>92</td>
<td>47</td>
<td>72</td>
<td>47</td>
</tr>
<tr>
<td>12 months</td>
<td>136</td>
<td>72</td>
<td>74</td>
<td>86</td>
</tr>
<tr>
<td>&gt;12 months</td>
<td>87</td>
<td>17</td>
<td>27</td>
<td>24</td>
</tr>
</tbody>
</table>

(Swaziland Ministry of Health 2012:17)

In Swaziland, the MOH adopted PMTCT Option A as a feasible and less costly way to scale up the PMTCT services nationwide. Despite major success since the programme started some barriers exist for continued work in 2013, including that follow up care for pregnant HIV positive women still remains a challenge (Swaziland Ministry of Health 2012:5). However, based on the limitations experienced with widespread implementation, the MOH is taking steps to examine alternative approaches to PMTCT including a modified Option B approach, where all pregnant women initiate lifelong triple ARV therapy (Option B+), and the engagement of HIV positive women in lifelong HIV services which will reduce the delays in ART initiation and as well as loss to follow up (Abrams 2014:11). The Swaziland Annual HIV Programmes Report indicated that the
number of HIV infected infants aged 6-8 weeks was 2% in 2011 (United States Agency International Development[USAID] and Institute of Health Management [IHM] (2014:16), whilst an evaluation report done in August 2014 states that the percentage of HIV infected infants aged 6-8 weeks was 3% in 2014 (USAID 2014:16).

The above statement indicates that there is still increase in the number of children who tested positive with PMTCT Option A. The study investigates the perceptions of HIV positive pregnant mothers regarding the PMTCT Option B+ programme that has been recently implemented in the country.

1.3 THE RESEARCH PROBLEM

Although the Government of Swaziland has demonstrated a high level of commitment to the virtual elimination of paediatric infection due to MTCT of HIV by 2015, there is still a significant increase in the number of HIV positive children born. The Swaziland PMTCT statistics showed a 1% increase of babies who were born infected with HIV in 2014. The percentage of HIV infected infants aged 6-8 weeks was 3% in 2014 compared to 2% in 2011(USAID & IHM 2014:16). This increase prompted the researcher to explore and describe the perceptions of HIV positive pregnant mothers regarding the PMTCT, Option B+ programme in a Public Health Unit in Manzini.

1.4 AIM OF THE STUDY

1.4.1 Research purpose

The purpose of the study was to explore and describe the perceptions of the HIV positive pregnant mothers regarding the PMTCT, Option B+ programme in a Public Health Unit in Manzini.

1.4.2 Research objectives

The objectives of the study were to:

- Explore and describe the perceptions of the HIV positive pregnant mothers with regards to PMTCT Option B+ programme in a Health Unit in Manzini.
- Describe the challenges encountered by the HIV positive pregnant mothers when taking ARV’s in a Health Unit in Manzini.
• To make recommendations to policy makers regarding the improvement of the PMTCT Option B+ programme to prevent the spread of HIV infection to babies.

1.4.3 Research questions

These three key questions, among others, guided the investigation:

• What are the perceptions of the HIV positive pregnant mothers with regard to PMTCT Option B+ programme in a Public Health Unit in Manzini?
• What are the challenges encountered by the HIV positive pregnant mothers when taking ARV’s in a Public Health Unit in Manzini?
• What recommendations should the study make to policy makers regarding PMTCT Option B+ programme to prevent the spread of HIV infection to babies?

1.5 SIGNIFICANCE OF THE STUDY

The researcher envisages the findings of the study would assist the Swaziland Ministry of Health to strengthen the body of knowledge for health care workers in the area of Public Health. The study will enable the development of guidelines and recommendations to policy makers that would assist in the prevention of HIV infection from the HIV positive mothers to their babies. The study would also inform practice on what would be the best option for practitioners to follow hence addressing the gaps related to PMTCT Option B+ programme. The study will also form the basis for further investigation in future studies.

1.6 DEFINITION OF TERMS

1.6.1 AIDS

AIDS is the abbreviation of Acquired Immune Deficiency Syndrome. AIDS is an illness that impairs the body’s ability to fight infection with the result that the body is extremely susceptible to life threatening disease. AIDS represent the terminal phase of the HIV infection (Ndzimandze 2009:36). In the context of this study AIDS is discussed as an illness acquired once a person is HIV positive and has life threatening illness.
1.6.2 Describe

Describe is defined as give a detail account in words of (someone or something), including all the relevant characteristics, qualities, or events (Oxford Dictionary of Current English 2006: 239& Macmillan Dictionary 2017,"context"). In the context of the study HIV positive pregnant women gave in detail their perceptions towards PMTCT Option B+ programme.

1.6.3 Explore

Explore is defined as inquire into or discuss in detail, to investigate, study, or analyze (Merriam Webster 2017,"context"). In this study, HIV positive pregnant women discussed in detail their perceptions and effectiveness of the PMTCT programme during the conducting of semi-structured interviews with them.

1.6.4 HIV

HIV is the abbreviation for Human Immunodeficiency virus. HIV is present in all body fluids, but is more infectious in the blood, semen and vaginal fluid of infected person. The virus attacks and destroys a particular group of cells that are important in regulating the normal body defenses against infecting organisms and foreign cells and proteins. As more of the cells are destroyed with time, the body is less able to defend itself from many infections and disease (Ndizimandze 2009:36, 39).In the study HIV is discussed in the context of PMTCT Option B+ programme as it is transmitted from HIV positive pregnant mother to her unborn baby.

1.6.5 Mother-to-child transmission (MTCT)

Mother-to-child transmission (MTCT) is defined as the transmission of HIV from an infected mother to her child (Hadebe 2012:13). Transmission of HIV from mother to child can occur at any point during pregnancy, labour, and delivery, or through breastfeeding milk after the baby is born (Baylor International Paediatric AIDS Initiative (BIPAI) 2010:3; 91).In the context of this study Mother-to-child transmission is discussed as a mode that spread HIV from HIV positive mother to her child.
1.6.6 Perceptions

Perceptions are defined as the processes by which people translate sensory impressions into a coherent and unified view of the world around them, though necessarily based on incomplete and unverified information, perceptions are equated with reality for most practical purposes and guides human behaviour in general (Mokaba 2013:8). In the context of this study, perceptions refer to the ability of HIV positive pregnant mothers to self-report opinions, attitudes, fears and to understand PMTCT Option B+ programme in order to prevent the spread of HIV infection to their babies.

1.6.7 Prevention

Prevention refers to the act of stopping something bad from happening (Oxford Advanced Learners Dictionary 2010:1160). In this study, the PMTCT Option B+ programme is investigated if it can stop the transmission of HIV from mother-to-child during pregnancy, delivery, and breastfeeding by using antiretroviral treatment. Illness or disease prevention is behaviour motivated by a desire to avoid or detect disease, or maintain functioning within constrain of illness or disability (Taylor, Lilis, LeMone& Lynn 2011:47). In this study the PMTCT option B+ programme is investigated if it can prevent the transmission of HIV from mother-to-child during pregnancy, delivery, and breastfeeding by using antiretroviral treatment.

1.6.8 Public health unit

Public health unit is an official health agency established by a group of urban and rural municipalities to provide a more efficient community health programme, carried out by full-time, especially qualified staff (Ontario Ministry of Health and Long-Term Care 2014:1). According to Joubert and Ehrlich (2012:4), a public health can be defined as one of the efforts organized by a society to protect, promote and restore the health of a population. It is a combination of sciences, skills and beliefs that are directed to the maintenance and improvement of the health of the people through collective and social action. The scope of public health unit is comprehensive, i.e. incorporating prevention as well as treatment, and considering the health system as a whole and the way the different levels of the system support each other. The study was conducted in one
Public Health Unit in Manzini where PMTCT programme is offered to HIV positive pregnant mothers. The PMTCT programme assists in preventing transmission of HIV from Mother-to-Child by restoring the health of HIV positive pregnant mothers in the community thus increasing an HIV free population in the community. The ultimate goal for PMTCT is to reduce Mother-to-Child transmission and therefore interventions provided to the child are of great importance (Swaziland Ministry of Health 2012:16).

1.7 RESEARCH DESIGN AND METHODS

The qualitative approach used in this study is explained in detail in Chapter 3.

1.8 SCOPE OF THE STUDY

The research was conducted in one Public Health Unit of Manzini Region. This particular unit was purposefully selected because it is one of the pilot sites where PMTCT Option B+ programme was implemented. Therefore, selected samples may not be fully representative and the findings may not be generalized, in the fullest sense, to the whole of Manzini Region or Swaziland.

1.9 STRUCTURE OF THE DISSERTATION

The report of the research is presented in the following format:

Chapter 1 gives the orientation and serves as an introduction to the study.
Chapter 2 focuses on the literature review of perceptions held by HIV pregnant mothers regarding PMTCT Option B+ programme.

Chapter 3 presents the research design and method.

Chapter 4 focuses on analysis, presentation and description of the research findings.

Chapter 5 consists of conclusion and recommendations.
1.10 CONCLUSION
The chapter gave an overview of the study. It covered the background and nature of problem to be studied, as well as the aim and significance of the study. Key terms were defined, and the structure of the dissertation given.
CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Literature review is a review or further look at what has previously been written on a particular subject (Joubert & Ehrlich 2012:66). The primary purpose of literature review is to integrate research evidence to sum up what is known and what is not known. Literature review also helps researchers to interpret their findings (Polit & Beck 2014:116). Literature review is therefore intended to convey to the reader the current state of knowledge on a given subject along with the strengths and limitations of the underlying research (Joubert & Ehrlich 2012:66).

The previous chapter gave an overview of PMTCT programme, and this chapter presents a critical review of the related literature on perceptions of HIV positive pregnant mothers regarding PMTCT Option B+ programme. Literature reviewed on this chapter focuses on the overview of PMTCT, PMTCT Option B+ programme and benefits of PMTCT Option B+ programme.

2.2 OVERVIEW OF PMTCT AND PMTCT OPTION B+PROGRAMME

2.2.1 Global history of PMTCT

The prevention of mother-to-child of HIV intervention programme is a strategy to prevent vertical transmission of HIV from mother to the unborn child (Thithi 2014:13). Effective PMTCT programmes require women and their infants to receive a cascade of interventions including uptake of antenatal services and HIV testing during pregnancy, use of antiretroviral treatment (ART) by pregnant women living with HIV, safe child birth practices and appropriate infant feeding, uptake of infant HIV testing and other post natal health care services (AVERT 2015:1).

In 2011, a global plan was launched to reduce the number of new HIV infection via MTCT by 90 percent in 2015. WHO identified 22 priority countries with the top 10(Angola, Botswana, Burundi,Cmeroon, Chad, Cote d`Ivoire, Democratic Republic of
the Congo, Ethiopia, Ghana and India) accounting for the 75 percent of the global PMTCT services need. It was estimated that the effective scaling up of PMTCT interventions in these countries would prevent over 250,000 new infections annually (AVERT 2015:1).

2.2.2 History of PMTCT in Swaziland

About 41 percent of pregnant women in Swaziland are infected with HIV and they give birth to over 17,000 HIV-exposed infants each year. In response to this situation the Government of Swaziland has made the prevention of mother-to-child transmission a top priority (WHO 2012:1). Swaziland’s PMTCT programme was officially launched in 2003, with the support from WHO, UNICEF, The Elizabeth Glasser Pediatric AIDS Foundation and other partners. From an initial three pilot sites in 2003, the national PMTCT programme grew to 150 sites by 2010 (WHO 2012:1).

2.2.3 Progress in the PMTCT global

In 2012, over 900,000 pregnant women living with HIV globally who accessed PMTCT services had a coverage of 62 percent. Four priority countries (Botswana, Ghana, Namibia and Zambia), had received 90 percent PMTCT coverage (AVERT 2015:1). In many countries, less than half of HIV positive pregnant mothers with a CD4 count under 350 (the threshold for ART initiation under the 2010 WHO treatment guidelines), received ART for their own health (AVERT 2015:1). Indeed, HIV prevention for pregnant women varies greatly between regions with over 90 percent accessing these services in Eastern and Central Europe and Caribbean compared to less than 20 percent in Asia and the Middle East and North Africa (AVERT 2015:1).

There was also PMTCT progress among children. Between 2011 and 2012, new HIV infection in children fell by 52 percent. However, in 2012, there were still an estimated 260,000 new HIV infections among these group (AVERT 2015:1). Moreover there is an even bigger gap in ART provision for the children living with HIV. In 2012, only 34 percent of under fifteen years living with HIV received ART — nearly half adult coverage. In priority countries, only 30 percent of children received HIV treatment (AVERT 2015:1).
2.2.4 PMTCT progress in Swaziland

Swaziland has made commendable progress in recent years. PMTCT services are integrated within maternal, newborn, and child health services to ensure that they identify and care for as many HIV positive mothers and children as possible (WHO:2012:1). Based on WHO’s 2010 guidelines on the use of ART for treating pregnant mothers and preventing of HIV infection in infants, the country has made more effective drug regimens available that reduce the risk of mother-to-child transmission to less than 5 percent. In addition all HIV exposed infants are tested at six weeks of age (WHO 2012:1).

2.2.5 Comprehensive approach to PMTCT

According to the Swaziland Ministry of Health (2010a:12) and Baylor International Paediatric AIDS Initiative 2010:92), Prevention of Mother-To-Child transmission of HIV is implemented through a four-pronged approach which is as follows:

- **Prong 1**: primary prevention of HIV infection among women of child bearing age. Women and partners who test HIV negative should stay negative as women who are not infected cannot transmit HIV perinatal to a child. Emphasis on HIV prevention through practice of safe sex and consistent use of condoms as a safe sexual behaviour during pregnancy and breastfeeding period with their partners.

- **Prong 2**: prevention of unintended pregnancies among HIV positive women. It includes counselling and provision of family planning to HIV infected women to prevent unwanted pregnancies.

- **Prong 3**: prevention of MTCT from HIV positive women to their babies during pregnancy, labour and breastfeeding periods through the use of maternal and infant ARV prophylaxis, ART, good obstetric practices and monitoring of labour and delivery.

- **Prong 4**: care support and treatment for HIV positive women and their families. HIV treatment, care and support services are provided for the mother, infant and family respectively.
2.2.6 PMTCT Option B and B+ programme

The Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive is well underway, with ambitious goals of reducing the number of new HIV infections in children by 90% (UNICEF 2012:2). There is now unprecedented collaboration to accomplish these goals and many countries have made exceptional progress. An AIDS-free generation is within reach, and this is possible through a new approach called Option B+, and has already shown an impressive results, dramatically increasing the numbers of pregnant women enrolling on ART (UNICEF 2012:2).

Under WHO's 2010 PMTCT ARV guidance with Option B all pregnant and lactating mothers with HIV initially are offered ART-beginning in the antenatal period and continuing throughout the duration of breastfeeding. At the end of breastfeeding those women who do not require ART for their own health would discontinue the prophylaxis and continue to monitor their CD4 count, eventually restarting ART when their CD4 falls below 350 cells/mm³ (UNICEF 2012:2).

With PMTCT Option B+ programme, all pregnant women living with HIV are offered lifelong ART; regardless of their CD4 count (UNICEF 2012:2).

Table 2.1 Summary of Option B and B+ treatment

<table>
<thead>
<tr>
<th>Options</th>
<th>Treatment for CD4 count &lt;350 cells/mm³</th>
<th>Prophylaxis for CD4 count &gt;350 cells/mm³</th>
<th>Treatment for infant</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Triple ARVs starting as soon as diagnosed, continue for life</td>
<td>Triple ARVs starting as early as 14 weeks gestation and continued intrapartum and through child birth if not breastfeeding or until one week after cessation of all breastfeeding</td>
<td>Daily NVP or AZT from birth through age 4 to 6 weeks regardless of infant feeding method</td>
</tr>
<tr>
<td>B+</td>
<td>Triple ARVs starting as soon as diagnosed, continue for life</td>
<td>B+ Triple ARVs starting as soon as diagnosed, continue for life</td>
<td>Daily NVP or AZT from birth through age 4 to 6 weeks regardless of infant feeding method</td>
</tr>
</tbody>
</table>

(Adapted from UNICEF 2012:2)
2.2.6.1 History of implementation of PMTCT Option B+ programme

In 2012, World Health Organization (WHO) recommended that countries consider moving to PMTCT Option B or B+ programme. WHO formalized this recommendation in its 2013 consolidated ARV guidelines, recommending that countries adopt Option B or B+ programme, thereby removing the step of CD4 testing before ART initiation in pregnancy. These guidelines also recommended providing ART in maternal and child health (MCH) settings (Kukiabor, Katirayi, Nhlabatsi & Mahdi 2014:1).

Option B+ programme was first conceived and implemented in Malawi where the National ART programme had already been functioning well using a public health approach which did not depend heavily on CD4 testing to determine who should initiate treatment (UNICEF 2012:3). In April 2012, in response to Malawi’s early success and other strategic and technical developments WHO released an important programmatic update on the “use of Antiretroviral Drug for treating pregnant women and Prevention of HIV infection in infants” (UNICEF 2012:3), which is Option B+ programme.

Between 2012 and 2013, Lesotho, Uganda, Mozambique, and Tanzania began implementation of PMTCT Option B+ programme, and large increases were immediately seen in the percentage of pregnant mothers accessing ART in antenatal care (ANC) (Kukiabor et al 2014:1).

2.2.6.2 Implementation of PMTCT Option B+ programme in Swaziland

Since 2013, an innovative approach, commonly referred to as prevention of mother-to-child transmission Option B+ programme (PMTCT Option B+ programme) was being rolled out by Médecins Sans Fronières (MSF) and the Swaziland Ministry of Health (MSF 2013:1). With the prevalence of HIV/AIDS among pregnant mothers currently close to 40% is extremely worrying, and without treatment, 25 to 40% of the children born from HIV positive pregnant mothers will also be infected (MSF 2013:1). With the PMTCT Option B+ programme approach implemented, Swaziland will be able to decrease the number of HIV positive babies born. As of March 2014, 10% of facilities in Swaziland are providing PMTCT Option B+ programme (Kukiabor et al 2014:1).
2.2.7 Benefits of PMTCT Option B+ programme

The benefits of PMTCT Option B+ programme are as follows:

- Reduce new number of HIV infection among children, reduce suffering from HIV/AIDS children and those affected (Swaziland Ministry of Health 2006:13).
- Increase maternal life expectancy- allow HIV positive mothers to live longer by reducing the risk of opportunistic infections (MSF 2013:1).
- Provide opportunity to early and comprehensive care for the mother, partner and family members in need of HIV services (Swaziland Ministry of Health 2006:13)
- Prevent transmission of the virus in future pregnancy (MSF 2013:1).

2.3 ACCEPTABILITY OF PMTCT OPTION B+ PROGRAMME BY PREGNANT MOTHERS

The Swaziland Ministry of Health and Elizabeth Glaser Paediatric Aids Foundation (EGPAF) in 2012 conducted a study on barriers to ART initiation for eligible HIV positive pregnant mothers in ANC, using the focus group method among pregnant mothers who did and did not accept ART among eligible women. Although all the women face similar barriers of stigma and disclosure, distance to the facility, cost of transport, lack of knowledge about ART, and anxiety about lifetime commitment were reported. Some pregnant mothers were also reported as being scared and traumatized by the seriousness of the commitment to life-long ART and that acceptance of ARV prophylaxis was easier (Kukiabor et al 2014:1).

In a Malawi study, women diagnosed with HIV and offered ART initiation on the same day reported feeling overwhelmed with having to cope with the HIV diagnosis, disclosure to their partner or family, and having to initiate lifelong ART (EGPAF 2014:1).

2.4 OTHER COUNTRIES VIEWS ABOUT PERCEPTIONS OF HIV POSITIVE PREGNANT MOTHERS REGARDING PMTCT OPTION B+ PROGRAMME

Pregnant women are the PMTCT recipients, therefore have their own personal experiences regarding PMTCT Option B+ programme which can either be good or bad depending on how they perceive the programme. A study conducted by Ngarina,
Tarimo, Naburi, Kilewo, Mwanyika-Sando, Chalamilla, Biberfeld and Ekstrom (2014:1) in Tanzania about women’s preferences regarding ARV prophylaxis for PMTCT of HIV and views on Option B+ programme were as follows:

- There was perceived stigma of giving medicine to the child every day. They explained how hard it was, giving medicine to a healthy baby everyday throughout the breastfeeding period. It was very easy to be noticed when doing something a bit unusual like giving a baby believed to be healthy medicine every day.
- There was the perception that the child was too innocent to take ART. Several mothers were against giving the drug daily to a new-born because they perceived it as a sort of punishment to an innocent child especially when the baby was healthy; they thought the mother will be more tolerable to take medication than the child.
- There was eagerness to prolong life through Option B+ programme. They think that this will help them live a better and a longer life enabling them to raise their children for a much longer time before they die (UNICEF 2012:20).

Findings on a study conducted by Thithi (2014:67), on perceptions of pregnant women about the PMTCT of HIV programme at the antenatal care unit and maternity ward at the Jordan Heynes community, were that:

- The 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 new programme that same day.
- They felt it was made worse by the fact that they were clueless and naive about the PMTCT programme. Most of them were conflicted about whether or not to start the treatment and were worried about whether taking the treatment would harm or protect their babies.
- Regarding their views these pregnant women indicated that they have come to realise that they had 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 great chance of testing HIV positive.

2.5 CONCLUSION

This chapter reviewed literature related on PMTCT, PMTCT Option B and PMTCT Option B+ programmes. Progress made globally and in Swaziland, in terms of PMTCT programme, was also addressed. The chapter also reviewed previous studies about perceptions of HIV positive pregnant women regarding PMTCT Option B+ programme. The next chapter addresses the research methodology that was used to conduct the study.
CHAPTER 3

RESEARCH DESIGN AND METHOD

3.1 INTRODUCTION

This chapter presents the research design and method that were used to conduct the study. Sampling, population, ethical issues, data collection methods and instruments, data analysis, and measures to ensure trustworthiness were also discussed. The purpose of the study was to explore and describe the perceptions of the HIV positive pregnant mothers regarding the PMTCT, Option B+ programme in a Public Health Unit in Manzini.

3.2 THEORETICAL GROUNDING OF RESEARCH

Qualitative research is grounded on the constructivist paradigm. Constructivist studies are heavily focused on understanding the human experience as it is lived, usually through the collection and analyses of qualitative materials that are narrative and subjective. Constructive researchers tend to emphasize the dynamic, holistic, and individual aspects of human life and attempt to capture those aspects in their entirety, within the context of those who are experiencing them (Polit & Beck 2012:14).

Ontology in the constructivist assumption is that reality is multiple and subject and effective, mentally constructed by individuals; simultaneously shaping, not cause and effect (Polit & Beck 2012:13). In the context of this study, the researcher interpreted the data according to the understanding of what the participants revealed to her.

Epistemology in the constructivist paradigm assumption is that the inquirer interacts with those being researched; findings are the creation of the interactive process (Polit & Beck 2012:13). In the context of this study epistemology refers to direct or closely interaction between the researcher and the participants and the findings being reported in the form of written verbal description.
An axiological question is “what is the role of values in the enquiry?” Axiology in the constructivist paradigm assumption is that subjectivity and values are inevitable and desirable (Polit & Beck 2012:13). In the study the personal values of the researcher did not influence the values of the participants during data collection; participant’s values were be respected.

Rhetoric is defined as speech or writing that is intended to influence people, but that is not completely honest and sincere; or is the skill of using language in speech or writing in a special way that influences or entertains people (Oxford Advanced Learners Dictionary 2010:1269). The study was written in a language understandable and can be used to expand knowledge or innovate to other researchers for study.

3.3 RESEARCH DESIGN

Research design is the overall plan for obtaining answers to the research questions and for handling challenges that can undermine the study evidence. It indicates how often data will be collected, what types of comparisons will be made and where the study will take place (Polit & Beck 2014:51). The qualitative, exploratory and descriptive research design was opted for this study to explore and describe the perceptions of HIV positive pregnant mothers regarding PMTCT Option B+ programme, and make recommendations to improve the programme in order to prevent the spread of HIV infection to babies. The main reason for adopting this design is to explore and describe the perceptions of HIV positive pregnant mothers with regard to PMTCT Option B+ programme at a Public Health Unit in the Manzini region of Swaziland. This is one of the pilot sites where PMTCT Option B+ programme is implemented.

3.3.1 Qualitative research

Qualitative research is the investigation of phenomena typically an in-depth and holistic fashion, through the collection of rich narrative materials using a flexible research design (Polit & Beck 2014:389). The reason why qualitative research method was used for this study is because it takes place in a natural setting where human behaviour and events take place. Researchers who use this paradigm are usually interested in understanding a particular social situation, event, role or interaction, as in this case of exploring and describing the perceptions of HIV positive pregnant mothers regarding PMTCT Option B+ programme in a Public Health Unit in Manzini. The paradigm
enabled HIV positive pregnant mothers to provide detailed information without restriction of the researcher.

3.3.2 Exploratory research

An investigation conducted using exploratory research explores the dimension of a phenomenon or that develops or refines hypothesis about relationships between phenomena (Polit & Beck 2012:727). In this study, the researcher used this research type to explore the perceptions of the HIV positive pregnant mothers with regards to PMTCT Option B+ programme.

3.3.3 Descriptive research

Descriptive research is research that typically has as its main objective the accurate portrayal of people’s characteristics or circumstances and/or the frequency with which certain phenomena occur; it attempts to describe a phenomenon (Polit & Beck 2012:725). According to Burns and (Groove 2009:45) descriptive design is used to generate new knowledge about topics on which limited or no research has been conducted. Therefore, descriptive research is suitable for this study because it intends to describe the perceptions of the HIV positive pregnant mothers with regard to PMTCT Option B+ programme.

3.4 RESEARCH METHOD

Qualitative research concentrates on qualitative aspects such as meaning, experience and understanding. It is the approach in which the procedures are formalized and explicated in a non-strict manner, but in which the scope is less defined in nature and in which the researcher does the investigation in a more philosophical manner (translation), Mouton and Marais (1989:157). In the context of this study, qualitative approach was chosen since the main purpose of the study was to explore and describe the perceptions of the HIV positive mothers regarding the PMTCT Option B+ programme at one public health unit in Swaziland. The participants were interviewed about their perceptions regarding the PMTCT Option B+ programme.
In this section, the research method that was used is discussed under the following headings:

3.4.1 Sample
A sample is a representative of the study population or a subset of population element (Joubert & Ehrlich 2012:94; Polit & Beck 2014:177). The representatives of the study were HIV positive pregnant mothers who had enrolled on the PMTCT Option B+ programme and volunteered to participate in the study. Polit and Beck (2012:521) state that there are no fixed rules for sample size in qualitative studies, hence the guiding principle in sample size is determined by the data saturation- that is sampling to a point at which no new information is obtained and redundancy is achieved. The sample size for this study was determined by data saturation. The researcher had intended to interview 20 HIV positive pregnant mothers who had enrolled on the PMTCT Option B+ programme. However, the researcher managed to interview 17 HIV positive pregnant mothers who had enrolled on the PMTCT Option B+ programme and thereafter data saturation was reached.

3.4.2 Inclusion criteria
The selection criterion for the study was that participants had to be:

- HIV positive pregnant mothers speaking Siswati language at least between the ages of 18-40 years.
- Enrolled in the PMTCT Option B+ programme during the current pregnancy.
- Attending antenatal care service in a Public Health Unit in Manzini, the study site.
- Willing to participate voluntarily.

3.4.2.1 Population

The population is the entire aggregation of cases in which the researcher is interested, and might consist of all hospital records, and comprises the aggregate of elements in which the researcher is interested (Polit & Beck 2012:273-275). According to Polit and Beck (2012:274) as well as Joubert and Ehrlich (2012:94), target population is the aggregate of cases about which the researcher would like to generalise and the group the researcher wants to gather information and draw conclusions. The target populations in the study were HIV positive pregnant mothers who enrolled on the
PMTCT Option B+ programme. Polit and Beck (2012:274), also state that accessible population is the aggregate of cases that conform to designated criteria and are accessible for a study. In this study, all cases of HIV positive pregnant mothers who had enrolled on PMTCT Option B+ programme were identified and accessible to participate in the study.

3.4.2.2 Sampling

Sampling is the process of selecting a portion of the population to represent the entire population (Polit & Beck 2012:742), and the important component of the sampling process is determining the appropriate sample size (Joubert & Ehrlich 2012:190).

Qualitative researchers establish the kind of people who are eligible to participate in their research (Polit & Beck 2012:555), therefore, the researcher in this study identified only eligible participants who were all HIV positive pregnant mothers and enrolled in PMTCT Option B+ programme during the current pregnancy in a Public Health Unit in Manzini.

3.4.2.3 Research setting

The research setting refers to the physical location and conditions under which data collection takes place in the study (Polit & Beck 2012:743). This study was conducted in a semi urban setting, in one Public Health Unit of Manzini Region. The facility caters for out-patients and offers preventive services and public health programme. Services offered include provider initiated HIV testing and counseling (PIHTC), PMTCT, ART, antenatal care (ANC), child welfare services (CWF), sexual transmission infection (STI) treatment, laboratory services, etc. The choice of the unit was influenced by that this facility is one of the pilot sites where PMTCT Option B+ programme was implemented in the country.

3.4.2.4 Sampling technique

Purposive sampling was used for this study. Polit and Beck (2014:285) state that purposeful sampling is when the researchers deliberately choose the cases or types of cases that will best contribute to the study. The Public Health Unit in Manzini was
selected purposively for this study because it was one of the pilot sites for PMTCT Option B+ programme implementation. All HIV positive pregnant mothers who had enrolled on the PMTCT Option B+ programme were identified by the nurses at the antenatal department when coming to the facility for antenatal check-up, and those who agreed to participate in the study were interviewed. Sample frame is the list or some representation of the study population, either of individuals or groups, or the list of all the elements in the population, from which the sample is drawn (Joubert & Ehrlich 2012:95; Polit & Beck 2012:742). All HIV positive pregnant mothers who had enrolled in the PMTCT Option B+ programme were identified for the study using their antenatal cards.

3.4.3 Ethical issues related to sampling

Ethics refers to a system of moral values that is concerned with the degree to which research procedures adhere to professional, legal, and social obligations to the study participants (Polit & Beck 2012:727).

The study took place in a Public Health Unit in Manzini where eligible participants were recruited during their antenatal care clinic attendance. The researcher provided information about the study after the senior nurse facilitated the introduction process. HIV positive pregnant mothers who had enrolled on PMTCT Option B+ programme were informed that the study was not part of antenatal services, but was voluntary for those willing to participate, and that they had the right to decline participation. They were also informed that they were even allowed to withdraw any time from the study and that this would not affect PMTCT Option B+ programme services offered to them. Also refusal to participate in the study was not going to affect health care services they had come for in any way. Informed consent was obtained from participants and was written in English and translated in siSwati. The HIV positive pregnant mothers were also informed that the study might be used for scientific purposes and may be published.

3.4.4 Data collection

Data collection is the gathering of information to address the research problem (Polit & Beck 2012:725). Data collecting instruments are tools used to collect data in a study
which may include interviews, and focus group discussions (AIS3704 Only study guide 2008:81). According to Burns and Groove (2009:510), data in qualitative research are collected by means of verbal responses from individuals and organized into categories that describe the phenomenon being studied through data analysis. In this study, the researcher used in-depth one-to-one, semi-structured interviews to collect data from HIV positive pregnant mothers who enrolled on the PMTCT Option B+ programme.

3.4.3.1 Data collection procedure and method

Semi-structured interviews were conducted in December 2015. In the semi-structured method the researcher wanted to be sure that a specific set of topics was covered in the interviews. The researcher prepared an interview guide, and the interview encouraged the participants to talk freely about all the topics on the guide, and to tell stories in their own words. This technique ensured that researchers will obtain all the information required and gives participants freedom to provide as many answers as they wish (Polit & Beck 2012:537).

The permission to conduct this research project was granted by the University of South Africa’s (UNISA) Department of Health Studies Higher Degrees Committee in February 2015 (Annexure A) and the Swaziland Ministry of Health Research Ethics Committee on 24th November 2015 (Annexure D). Permission to conduct the research was also requested from sister-in-charge at the Public Health (Annexure B). Data were collected over one month in December 2015. The researcher was introduced to the antenatal clinic staff by the nurse manager of Public Health Unit in Manzini and all the necessary protocols were observed.

The interview guide was developed for this study in both English and siSwati, using research objectives and questions as the guidelines. The developed interview guide consisted of open-ended questions that allowed the participants to freely describe their perceptions regarding PMTCT Option B+ programme. The Public Health Unit in Manzini was visited in the mornings at the stipulated antenatal care services dates. The antenatal care unit nurses facilitated the process by introducing the researcher and informing all HIV positive pregnant mothers enrolled on the PMTCT Option B+ programme about the study. Interviews were conducted in the mornings and a room was prepared for the interviews to allow privacy with the participants.
The researcher was able to establish rapport with participants through good verbal communication and warm welcome. Consent was obtained from the participants, who were able to share their feelings and views. The interviews were conducted in the language spoken by the participants, which is siSwati. A tape recorder was used to record the interview after obtaining permission from the participants. As HIV is a sensitive issue, the researcher made sure that the room where interviews were taking place has a “DO NOT DISTURB” sign on the door and all health care workers were notified of the session so that nobody enters the interview room. Each interview record was labeled with an assigned code according to the date the interview took place. The interview periods ranged between 30 minutes and 40 minutes per participant. The research assistant who was experienced and knowledgeable about research was recruited by the researcher. Field notes were written during the interview by the research assistant. Both verbal and nonverbal responses were written down. Data were collected until the data saturation was reached at the 17th participant.

3.4.3.2 Development and testing of data collection instrument

A pilot study is a test run of aspects of the main study. It requires an in-depth look at the interview guide with the aim of improving its quality (Joubert & Ehrlich 2012:116). The interview guide was reviewed by the supervisor and the University of South Africa’s Health Studies Higher Degrees Committee. The interview guide was also reviewed by the Swaziland Ministry of Health Ethical Committee. The nurse manager and nurses working at the Public Health Clinic involved in providing the PMTCT Option B+ programme services were also given the guide to review.

A pilot study of the interview guide was conducted with three HIV positive pregnant mothers enrolled on the PMTCT Option B+ programme as they had comparable characteristics with the participants to be studied. The researcher recorded words and sentences that were not clear and questions that required explanation. The participants’ perceptions about the interview guide questions were captured. The feedback was integrated into the final version of the data collection instrument.
### 3.4.3.3 Characteristics of the interview guide

The interview guide had three sections. The first section consisted of the information about the biographical data i.e. age, ethnic group, home language, area of residence, marital status, educational level, employment status, number of children, obstetric history, and religion. The second section reflected interview identification that is, interview number, date of interview and time of interview. The third section contained a key statement (Tell me about your perceptions of being enrolled on the PMTCT Option B+ programme in the Public Health Unit): and probing questions (What do you understand about PMTCT Option B+ programme? What is your perception of the care that you receive at the antenatal clinic? How effective is the PMTCT Option B+ programme?, What challenges you have of taking ARV treatment?, What information do you need with regard to PMTCT Option B+ programme?, How can the nurses in the Public Health Unit assist you as a HIV positive pregnant mother and enrolled on the PMTCT Option B+ programme?).

### 3.4.5 Ethical consideration related to data collection

Protecting the research participants was ensured by respecting the principles on which standards of research are based which are beneficence, respect for human dignity and justice (Joubert & Ehrlich 2012:32).

**Beneficence** imposes a duty on researcher to minimize harm and maximize benefits. It requires acting in ways that will benefit and not cause harm (Polit & Beck 2012:152).

Ethical standards were used in the study. Participants were informed that they were not forced to answer any questions and this protected them from emotional harm. Approval to conduct the study was obtained from the Higher Degrees Committee of the Department of the Health Studies at UNISA. Permission to conduct the study was also obtained from the Swaziland Ministry of Health Ethical Committee and the Public Health Unit in Manzini where data were collected.

**Respect for human dignity** includes right to self-determination and the right to full disclosure. People should be treated as autonomous agents, capable of controlling their own actions and disclosure. **Autonomy** is closely linked with respect for an individual’s...
free will and includes the right to make choices about issues affecting one’s being. Full disclosure means that the researcher has fully described the nature of the study, the person’s right to refuse participation, the researcher's responsibilities, and the likely risks and benefits (Polit & Beck 2012:154; Andrews & Boyle 2012:407). Participants signed consent forms after the nature, purpose, and significance of the study were explained before commencing with the interview sessions (Annexure E). No coercion was used when asked to participate in the study, but respondents were asked to participate voluntarily. They were informed that field notes were written and that a tape recorder was used during the interview to capture the proceedings of the interview sessions.

Justice includes participants' right to fair treatment and their right to privacy (Polit & Beck 2012:155). Participant selection was based on study requirements and not on group vulnerability. Participants were informed that they had the right to withdraw from the study at any stage they wished to and that participation was voluntary. Participants were assured of confidentiality and anonymity as their names were not used as only codes were used to protect their privacy.

Scientific integrity is demonstrated by on-going self-reflection and self-scrutiny to ensure that interpretations are valid and grounded in the data (Polit & Beck 2012:586). The scientific integrity of the researcher must be indisputable and incontrovertible (Pera & Van Tonder 2011:340). The procedures and expectations were explained to the participants in language that they understood and transparency was maintained. Nothing was hidden to participants. Honesty with participants was maintained; the researcher did not mention names of participants and what they had agreed on with the participants, and interpretation of data was grounded on data collected.

### 3.4.6 Data analysis

Bogdan and Bilken (1982:145) define qualitative data analysis as “working with data [which are textual, non-numerical and unstructured], organizing it, breaking it into meaningful units, synthesizing it, searching for patterns, discovering what is important and what is to be learned and deciding what to tell others”. The purpose of data analysis is to organize, provide, structure to, and elicit meaning of data (Polit & Beck 2012:556). In this study, data were analysed using the computer and data from tape recorder were
transcribed then transferred to the computer. The notes taken during interviews were also transferred to the computer. Data were analysed using the following step-wise format proposed by Tesch (Creswell 2014:209).

Data were organized and prepared. The researcher read through all the transcripts carefully and made notes of some ideas as they came to mind. All underlying meanings were noted down; and all similar topics were put together and grouped into major topics. The entire data file was entered into the computer. Reading of the data carefully helped to ensure that the researcher was familiar with the data. Then all the topics were assigned an abbreviated and identifiable code, written next to the data segments that corresponded with the codes. Next step was to find the most descriptive wording for the topics and were turned into themes and categories; topics that related to each other were grouped together to reduce the total list of themes/categories. Then the codes were alphabetized after the final decision on the abbreviation for each theme/category. Using the cut and paste method, data material belonging to each theme/category were assembled in one place and preliminary analysis was done. This was followed by interpreting and reporting the research findings.

3.5 MEASURES TO ENSURE TRUSTWORTHINESS

Trustworthiness is the degree of confidence qualitative researchers have in their data, assessed using the criteria of credibility, dependability, conformability, and transferability (Polit & Beck 2012:745). In this study, trustworthiness was enhanced using these criteria as suggested by Lincoln and Guba (1985) cited in Polit and Beck (2012:584).

Credibility refers to confidence in the truth of the data and interpretation of them (Polit & Beck 2012:585). It was enhanced in the study by checking with participants if instructions were clear, paraphrasing to clarify meaning, also by using different methods of data collection instruments which were a tape recorder and field notes.

Dependability refers to the stability (reliability) of data over time and conditions (Polit & Beck 2012:585). Dependability was enhanced in the study by use of valid data collecting tools, which were available and meet the standard of qualitative research. The participants were willing to participate in the study and were assured that confidentiality
was maintained by the use of codes and also a tape recorder was used to ensure that data were reliable.

**Conformability** refers to objectivity, that is, the potential for congruence between two or more dependent people about the data’s accuracy, relevance, or meaning (Polit & Beck 2012:585). In this, study conformability was enhanced by submitting the data to be analyzed by an independent coder to confirm the researcher’s findings and also by the use of a tape recorder, which assisted during the interview to collect the data.

**Transferability** refers to potential for extrapolation, that is, the extent to which the findings can be transferred to or have applicability in other settings or groups (Polit & Beck 2012:585). The research findings will be forwarded to the Swaziland Ministry of Health to be used in improving the implemented PMTCT Option B+ programme.

**Authenticity** refers to the extent to which researchers fairly and faithfully show a range of realities. Authenticity emerges in a report when it conveys the feeling tone of participants’ lives as they are lived (Polit & Beck 2012:585). Therefore, the researcher demonstrated the feeling tone of the participants’ lives as they were lived by conducting the research within participants’ natural and everyday environments.

### 3.5 CONCLUSION

This chapter discussed research design and method used to conduct the study in order to explore and describe the perceptions of HIV positive pregnant mothers regarding PMTCT Option B+ programme. It also discussed sampling, data collection method and data analysis. Ethical issues related to sampling and data collection were also discussed.

Chapter 4 addresses analysis, presentation and description of research findings.
CHAPTER 4

DATA ANALYSIS, PRESENTATIONS AND DESCRIPTION OF RESEARCH FINDINGS

4.1 INTRODUCTION

Data analysis involves arranging data or information gathered into meaningful units. The purpose of data analysis is to organize, provide, structure and elicit meaning of data (Polit & Beck 2012:556). This chapter presents the data collected from HIV positive pregnant mothers who had enrolled on the PMTCT Option B+ programme at a Public Health Unit in December 2015. The findings of the study are presented in this chapter and includes perceptions of HIV positive pregnant mothers with regard to PMTCT Option B+ programme. The findings in this chapter will assist in serving the purpose of the study which was to explore and describe the perceptions of the HIV positive pregnant mothers regarding the PMTCT Option B+ programme in order to identify and describe gaps; and also help the Swaziland government address these gaps.

4.2 DATA MANAGEMENT AND ANALYSIS

A tape recorder was used to collect the data after obtaining permission from the participants. Data were collected in Siswati; and field notes including observed behaviour and reflections were also taken and recorded. The notes taken during the interviews and data from tape recorder were transferred into the computer. Data were analysed using the following step-wise format as proposed by Tesch (Creswell 2014:209).

The next step was to find the most descriptive wording for the topics and were turned into themes and categories; topics that related to each other were grouped together to reduce the total list of themes/categories. Then the codes were alphabetized after the final decision on the abbreviation for each theme/category. Using the cut and paste method, data material belonging to each theme/category were assembled in one place and preliminary analysis was done. This was followed by interpreting and reporting the research findings.
4.3 DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS

4.3.1 Age distribution of participants

The following graph presents the age distribution of the participants:

![Age distribution of participants](image)

**Figure 4.1 Age distribution of participants (N=17)**

The age distribution in the above graph met the inclusion criteria for age of the participants, as it states that participants who had to be part to the study must be between the ages of 18 to 40 years. This is because the National constitution states that any person below the age of 18 years is a child (Swaziland Ministry of Health 2014:46). The age distribution is very important as clients above the age of 12 years in Swaziland are able to assent consent for HIV testing. The Child protection Act of 2012 states that “anyone 12 years and above is able to give full consent for health care services. This includes consent for HIV testing” (The Swaziland Government 2012:S13; Swaziland Ministry of Health 2014:46)
4.3.2 Residential areas of participants

Figure 4.2 Areas of residence of participants

Figure 4.2 shows the area of residence for the participants. One of the objectives of the study was to explore and describe the perceptions of the HIV positive pregnant mothers with regard to PMTCT Option B+ programme at a Public Health Unit at Manzini region. Therefore, areas of residence for the participants are located in the Manzini region near the facility where the study is conducted.

4.3.3 Level of education of the pregnant women

Figure 4.3 Level of education of pregnant women (N=17)
The figure above shows the level of education of the pregnant women who were participants in the study. The findings show that 23.5% (4) of the pregnant women had enrolled in a primary school, 41.5% (7) with secondary school, and 35% (6) had completed their higher level of education. The level of education is important to assess because people who have received lesser education may have less health related knowledge, and educational level is an indirect indicator of population health status (Clark 2008:355). These participants needed to enroll on PMTCT training whereby there is a great need for them to be educated about this programme and ART treatment and also the importance of adherence to this treatment so that they can give birth to healthier babies and HIV free generation. With a lower level of education among the pregnant mothers, the health care workers have an important role of providing health education to ensure that the pregnant mothers are more knowledgeable so that they are able to adhere on demands of this programme.

4.3.4 Employment status of the pregnant women linked to major source of income

Figure 4.4 Employment status of participants (N=17)
4.3.5 Type of employment status of participants

Those that responded affirmatively to working were further requested to state the type of work they do and their responses were as follows:

![Bar chart showing type of employment status of participants](image)

**Figure 4.5 Type of employment status of participants (N=4)**

4.3.6 Major source of income

All the participants were asked what their major sources of income were and from the total of seventeen, only four had no source of income. The rest gave the following responses:
The findings in Figure 4.4 show that four of the participants were employed and thirteen participants were not employed. Among the employed participants one is employed fulltime, one employed part time and two employed seasonally. Furthermore, for all participants source of income showed there were those who were self-employed, full-time employed, part-time employed, other and none. Worth mentioning is that amongst those that had no source of income, mostly cited getting income from either their partners or spouses. In this study the employment status for participants was assessed because this had the potential to impact on the feeding options they chose for their babies as it is part of the PMTCT programme. In addition, the source of income for the participants might influence their ability to provide for basic necessities and to gain access to health care services as they might lack money for transport to attend antenatal care visits on stipulated dates and refill for the ART treatment.

The findings in Figure 4.6 also indicated that there were more numbers of unemployed participants with limited source of income and therefore, will be limited to choose exclusively breast feeding option in accordance with national guidelines on infant and young child feeding. As a global public health recommendation, infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health (Swaziland Ministry of Health 2010b:19; Ministry of Health, King of Swaziland2010a:19). The health care workers should motivate and educate...
pregnant mothers on the benefits and management of exclusively breastfeeding to reduce mother-to-child transmission of HIV, because HIV can be transmitted from mother to her infant during breastfeeding (Swaziland Ministry of Health:2014:6).

4.3.7 Marital status of participants linked to status relationship

![Pie chart showing marital status of participants](image)

**Figure 4.7 Marital status of participants (N=17)**

The participants were further asked to state whether they lived with their spouses or partners and these were their responses.
4.3.8 Living arrangements of participants

The findings in Figure 4.7 show that ten participants were married and seven not married. Figure 4.8 shows the living arrangements of the participants. Four participants were living with their partners, five with their husbands, seven have their partners or husbands staying elsewhere and only one participant had not stated. Participant's marital status was assessed because these women need support from partners once they start ART treatment. Health care workers should encourage HIV positive pregnant mothers to maintain good and healthy relationship at home in order to enhance the quality of their lives. Health care workers must also encourage these HIV positive pregnant mothers to disclose their status to partners as disclosure enhances the opportunities for HIV infected person to receive support in obtaining proper medical care and treatment. One benefit of disclosure is to assist the HIV infected individual in taking medication properly as she would be able to take medication openly and acknowledge her HIV status (Swaziland Ministry of Health 2014:35).
4.3.9 Pregnancy history of participants in accordance to live births and children alive

The above graph indicates that six of the participants were pregnant for the first time and of these only three managed to deliver. Four respondents were on their second pregnancy and of these six babies were delivered and were alive. Two were pregnant for the third time, and the other two were pregnant for the fourth time, one is pregnant for the fifth time, one also pregnant for the sixth time, and only one on her seventh pregnancy.

Figure 4.9 Pregnancy history of participants (N=17)
A majority of the respondents (10) alluded to have tested their children for HIV out of the total number of women interviewed. There were women who did not have children thus no test history information was required from them. Worth noting is the four women who decided not to test their children and this is worrisome.

A question was asked on the number of children that were tested for HIV and turned out to be positive in the history of these respondents and a total of five respondents had children who were HIV positive. Three of these women had one child positive, one respondent having three HIV positive children and another woman with four HIV positive children.
4.3.11 HIV testing history in accordance with reason for testing

The majority of these respondents first tested HIV positive in 2015. These respondents were tested during pregnancy and represented by 13, 3% wanted to know their HIV status, and one participant tested while hospitalized. According to the PMTCT guidelines, every pregnant woman must do HIV testing during pregnancy as the PMTCT is a highly effective intervention which ensures that an HIV infected mother does not pass the infection to her child (Swaziland Ministry of Health 2010a:4). For this programme to be effective it is important that every pregnant mother knows her HIV status. The midwives, therefore, have a great responsibility to ensure that every pregnant woman does an HIV test. The participants testing history indicated that 11 of the participants were with new infection as they tested during this pregnancy, while the six came for antenatal care services with known HIV status as one tested during hospitalisation and three of them tested because they wanted to know their HIV status. The nurse midwives and counsellors have a responsibility to educate HIV positive pregnant mothers about the PMTCT programme and on-going counselling is needed to ensure that Swaziland the programme is effective. Pregnant women need to be empowered with regard to PMTCT Option B+ programme as all these women have no experience on this programme as it was recently implemented in the country.
### Table 4.1  Themes and sub-themes of HIV positive pregnant mothers

<table>
<thead>
<tr>
<th>THEMES</th>
<th>SUB-THEMES</th>
</tr>
</thead>
</table>
| 1. Perceptions of respondents on being enrolled on the PMTCT Option B+ programme | 1.1 ART boosts the immune system and prevents opportunistic infections so that they may not live longer  
1.2 ART increases CD4 count  
1.3 Prevention of mother-to-child transmission of HIV |
| 2. Understanding about PMTCT Option B+ programme and information needed with regard to PMTCT Option B+ programme | 2.1 Life-long ART is initiated immediately regardless of CD4 count and PMTCT is done during pregnancy, delivery and breastfeeding  
ART Prolongs life span  
2.2 Importance of drugs and balance diet  
2.3 Assistance with adherence |
| 3. Perceptions with the care received from the nurses and their assistance on PMTCT Option B+ programme | 3.1 Friendly and approachable nurses  
3.2 Assistance in Health education about PMTCT Option B+ programme and effects of ART drugs  
3.3 Assistance in disclosure, adherence and ongoing counselling |
| 4. Effectiveness of the PMTCT Option B+ programme | 4.1 Prolongs life span  
4.2 Importance of adherence to treatment  
4.3 Prevention of mother-to-child transmission |
| 5. Challenges of taking ARVs | 5.1 Disclosure and Discrimination  
5.2 Partner testing  
5.3 Side effects of ART |

### 4.4 PERCEPTIONS OF HIV POSITIVE PREGNANT MOTHERS WITH REGARD TO PMTCT OPTION B+ PROGRAMME

The themes indicated in Table 4.1 above emerged during data collection and analysis based on the objectives of the study. The themes were: Perceptions of respondents on being enrolled in the PMTCT Option B+ programme, Understanding about PMTCT Option B+ programme and information needed with regard to PMTCT Option B+ programme, Perceptions with the care received from the nurses and their assistance on PMTCT Option B+ programme, Effectiveness of the PMTCT Option B+ programme and Challenges of taking ARVs.
4.4.1 Theme 1: Perceptions of respondents on being enrolled on the PMTCT Option B+ programme

One of the objectives of the study was to explore and describe the perceptions of the HIV positive pregnant mothers with regard to PMTCT Option B+ programme. Swaziland had adopted PMTCT Option A since 2003 and with the increase number of children testing HIV positive between 2011 and 2014 (USAID & IHM 2014:16), the Swaziland Ministry of Health started piloting PMTCT Option B+ programme since 2015, thus the study was done to explore and describe the perceptions of the HIV positive mothers regarding the recently piloted PMTCT Option B+ programme. The participants’ demographic characteristics regarding testing history shows that 11 of the participants were with new infection as they tested during this pregnancy, while the six came for antenatal care services with known HIV status as one tested during hospitalisation and three of them tested because they wanted to know their HIV status. This information indicates that majority of the participants had known their HIV status during the present pregnancy and were enrolled to the PMTCT programme. Therefore, it was very important to ask the HIV positive pregnant mothers about their perceptions towards this programme.

Sub-theme 1.1: ART boosts the immune system and prevents opportunistic infections so that they may live longer

When participants were asked about their perceptions of being enrolled on PMTCT Option B+ programme they gave the following responses:

“I will always look healthy without any opportunistic infection and will be able to raise my child healthy.” (Participant 3).

“The medication I am taking will help me to be strong so that I cannot fall sick and I will be able to raise my child.” (Participant 7).

“I can now live longer together with my baby as the treatment suppresses the virus so that I cannot pass it to my baby and my partner.” (Participant 9).

“The treatment will prolong my life and I will be able to raise my child.” (Participant 12).
“This programme will prolong our lives without infecting our children” (Participant 13).

“I will be able to live longer for more years provided I adhere to treatment.” (Participant 14).

Maputle and Jali (2008:45) contend that for PMTCT interventions to be effective, every individual woman, more so those of child bearing age, needs to be empowered and updated with knowledge concerning HIV infection, the associated risks of transmission to their children, as well as the available options that will help them counter the risk of HIV transmission to their child.

**Sub-theme 1.2: ART increases CD4 count and boost immune system**

Furthermore, the participants reported the following with regard to CD4 count and ART:

“Yes, a person taking ARVs is not seen that he or she is sick, he or she looks healthy like everybody. The tablets suppress the HIV then the CD4 count increases and then you are not affected by any diseases." (Participant 2).

“ARVs and adherence to treatment will help to boost my immune system and will be able to live longer.” (Participant 9)

“Yes, I was sick before I started the treatment, with general body malaise, and since I started taking them I feel very healthy and I have lot of energy.”(Participant 15).

According to Baylor International Paediatric Aids Initiative (2010:46), HIV infection severely affects the CD4 cell and when a patient begins ART, the CD4 count will increase. This is a reflection of the immune system’s improved ability to fight infection.

**Sub-theme 1.3: Prevention of mother-to-child transmission of HIV**

Additionally, participants perceived this programme as preventing of mother-to-child transmission of HIV as supported by the following extracts:

“It is helping me because I will be able to protect my child from getting HIV infection.” (Participant 1).
“It will protect my unborn child from being infected.” (Participants 2, 4, 6).

“Whether you are sick or not you take your ARVs so that your baby may not be infected.” (Participant 8).

“ART suppress HI virus so that it cannot pass to the baby during pregnancy, delivery and breastfeeding.” (Participant 10).

“It will increase my CD4 count and will help prevent my child from being infected.” (Participant 15).

“It is good to protect or prevent one from giving birth to a HIV positive baby.” (Participant 16).

Ochigbo (2013:28), attests that HIV infected women in Botswana were consistent in taking their ARV drugs as directed. They all believed that anti-HIV medication prevent HIV to child if well taken. According to Bobb (2012:1), women must have access to education and knowledge as well as being empowered to protect them from HIV.

The third approach in implementing PMTCT is prevention of mother-to-child transmission (PMTCT) among HIV-positive pregnant women (Ministry of Health, Kingdom of Swaziland 2015:93).

Other participants reported that ART is just like taking any ordinary tablets and that they did not have stress in taking them, as explained by one participant:

“Many people are HIV positive and I am one of them and I am not seen by anybody that I am on ART. Taking ARV’s is like taking any ordinary tablets, just like I was taking family planning tablets or pain tablets, and I do not have stress in taking them.” (Participant 8).

Without ART treatment, people living with HIV can become ill because of the damage HIV does to the immune system. With HIV treatment many people living with HIV are living just as long as people who do not have HIV (May, Gompels & Sabin 2012:1).
4.4.2 Theme 2: Understanding about PMTCT Option B+ programme and information needed with regard to PMTCT Option B+ programme

Participants responded that they understood that they had to take one tablet at a time, and are taken once every day, and for them to be effective they are not mixed with some traditional herbals.

Sub-theme 2.1: Life-long ART is initiated immediately regardless of CD4 count and PMTCT is done during pregnancy, delivery and breastfeeding.

Participants also understood that patients should start ART immediately when they are diagnosed with HIV and once they start taking them they should continue for the rest of their life. In addition, the participants also understood that:

“CD4 count is no longer considered like before and treatment is taken even if your CD4 count is high.” (Participant 16).

“All pregnant mothers should start ART treatment to increase their CD4 count.” (Participant 1).

“Mothers should start medication early during pregnancy to reduce transmission rate of HIV to the baby while pregnant.” (Participant 2).

“You have to start ART immediately during pregnancy to avoid HIV transmission to the baby regardless of the CD4 count.” (Participant 3).

“The tablet is taken once and the CD4 count is no longer considered, even if your CD4 count is high you are initiated on ART immediately. The tablets do not change the structure of your body like before and you do not have to stop taking them even after delivery as they are a lifelong treatment.” (Participant 13).

The participants understanding is also supported by the Swaziland PMTCT guidelines where it emphasises that “all pregnant HIV-positive women should be initiated on lifelong ART regardless of CD4 count and /or WHO clinical stage, preferably at the first ANC visit, while maintaining on-going counselling” (Ministry of Health, Kingdom of
Swaziland 2015:98). With PMTCT Option B+ programme, all pregnant women living with HIV are offered lifelong ART, regardless of their CD4 count. (UNICEF 2012:2).

Participants also stated that they understood that PMTCT is done during pregnancy, delivery and breastfeeding, thus the treatment is taken to prevent mother-to-child transmission throughout all the stages. According to participants:

“You no longer stop taking the ARV medication after delivery like before, but you continue taking them for the rest of your life.” (Participant 14).

“The baby is prevented from being infected during pregnancy, breastfeeding, and delivery. That’s why you no longer stop the treatment even after delivery.” (Participant 1).

“I think it shall help my unborn baby not to get the virus.” (Participant 7).

“The treatment will protect my baby during pregnancy and suppress the HIV so that I will not fall sick.” (Participant 6).

The participants understanding is supported by the U.S Department of Health and Human Services (2017:1) which stated that pregnant women who are HIV positive receive ART medication during pregnancy, delivery and breastfeeding to prevent mother-to-child transmission of HIV.

Sub-theme 2.2: Importance of drugs and balance diet

When a pregnant HIV infected woman receives adequate medical care early and takes antiviral medications regularly during her pregnancy, the chance that she will transmit HIV to her unborn child is dramatically reduced. It is important that any HIV positive pregnant woman begins prenatal care as soon as possible in order to take full advantage of such availability of treatment. The sooner a mother receives treatment, the greater the likelihood that her child will not be HIV infected. Before the birth of her child, antiviral treatments administered on the mother during pregnancy could help prevent HIV transmission to the child. At the time of birth, antiviral medications could be given to both the mother and the newborn child to lower the risk of HIV transmission that could
occur during the birth process which exposes the newborn child to the mother’s blood and fluids (Dowshen-Atanda 2012:2).

When participants were asked about the importance of ART drugs they stated that:

“It prolongs life for the mother and prevents HIV transmission to the baby.” (Participant 5).

“Not only the baby will be prevented from HIV infection, but also my partner will be prevented from HIV if I take ART.” (Participant 7).

“Adherence to the treatment will boost my immune system and will be able to live longer.” (Participant 9)

The participants’ responses concur with the Swaziland National AIDS Programme (2014:10), which states that clinical benefits of ART are to decrease opportunistic infections, maintain or reverse immune system damage and prolong survival. One of the benefits of ART is to reduce transmission of HIV within discordant couples, from mother to child, and to new partners (Swaziland National Aids Programme 2014:10). This statement is also supported by Ebuy, Yebyo & Almayehu (2014:128) who stated that it is possible to reduce risk of HIV transmission from mother to baby if mother takes PMTCT drugs.

One participant emphasized the importance of taking the ART tablet as a prescribed dosage and taking it daily as she stated that:

“ART tablets are taken as one tablet, same time, everyday and they are not mixed with some traditional herbs. Whether you are sick or not you must take your ARVs so that your baby may not be infected.” (Participant 8).

As ARV medications become more widely available in areas where traditional healers work, practices such as mixing low doses of ARV drugs into herbal remedies would harm patients by leading to the development of viral resistance (Baylor International Pediatric AIDS Initiative 2010:304). Many herbs and supplements contain undeclared pharmaceutical drugs, heavy metals and other contaminants. Therefore health care workers must inform patients about known treatment related risks and must be aware
that unknown toxic effects or interactions may exist (Baylor International Paediatric AIDS Initiative 2010:305).

Some participants responded by saying that they needed to know why some people took the medication once whilst others took it twice. They also wanted to know the importance of co-trimoxazole tablets, and responded thus:

“I need to know why others had to take the tablets once whilst others take them twice, and it is important to always take co-trimoxazole tablets.” (Participant 2).

“I need to know what the importance of co-trimoxazole tablets is.” (Participant 3).

Others also stated the importance of a balanced diet as it is needed for ARV treatment to be more effective. Participants seven and seventeen had this to say:

“I will live longer if I take the ARV treatment as prescribed, and also eat a balanced diet.” (Participant 7).

“It is important to eat balanced diet for the ART treatment to be effective and also take the medication as prescribed and at the right time.” (Participant 17).

HIV affects nutrition by decreasing food consumption, impairing nutrients absorption and causing changes in metabolism. Poor nutritional status can speed up progression of HIV disease (Sellers 2014:714). Economic issues leading to inadequate nutrient intake are frequent contributors to malnutrition in many settings (Baylor International Paediatric AIDS Initiative 2010:287). HIV-positive pregnant women are vulnerable to nutrient deficiencies mainly due to increase nutrient requirements associated with HIV and demands of pregnancy (Sellers 2014:714). Therefore, HIV increases the risk of maternal malnutrition, which in turn increases the risk of mother to child transmission, and ultimately increases maternal and foetal morbidity and mortality (Sellers 2014:714). According to the Ministry of Health, Kingdom of Swaziland (2010a:41), the needs of a pregnant woman are an adequate nutritious diet. Poor maternal nutrition may also affect transmission of HIV to the infant (Ministry of Health, Kingdom of Swaziland (2010b:115). Improving nutrition prior to pregnancy should be the main goal to minimize the impact of HIV on the pregnancy outcome (Sellers 2014:714).
Sub-theme 2.3: Assistance with adherence

Other participants responded by saying that they needed information on what they could be assisted with regarding the challenge of failure to adhere to treatment and they also need to know what happens if they forget to take the medication for days. The participants indicated the following:

“I need to know what the effects of ART on my body are especially if I am not adhering to treatment.” (Participant 14).

“I need to be assisted on adherence to treatment.” (Participant 15).

HIV positive pregnant mothers who repeatedly face adherence challenges must be provided with routine counselling and follow-up. Ebuy et al (2014:1) believed that proper counselling and patient follow up are advantages of adherence to the drugs. The client must be traced consistently to ensure overcoming of adherence barriers.

The PMTCT guidelines: Ministry of Health, Kingdom of Swaziland (2015:90), encourage nurses to assist clients who repeatedly face adherence challenges by:

- Providing one-on-one counselling to try to understand what is happening in the person’s life and the reasons behind non-adherence.
- Encourage client to use treatment supporter and join support groups.
- Routinely document and trace clients who fail to return to clinic for appointments.

There are those who responded that they did not need any further information about the programme since they had already been taught by the nurses on their first clinic visit. They thought that they already had enough knowledge and enough information about PMTCT Option B+ programme as their responses were:

“The counselling I had was satisfactory.” (Participant 5).

“I do have knowledge on PMTCT Option B.” (Participant 7).

“The nurses taught me everything I need.” (Participant 8).
“I think the nurses health education was of great assistance because I now know on how to prevent my child from being infected.” (Participant 9).

“I do not need any additional information because they taught me everything I need to know.” (Participant 10).

“None for now because I think the nurses gave me enough information during the counselling session.” (Participant 17).

4.4.3 Theme 3: Perceptions with the care received from the nurses and their assistance on PMTCT Option B+ programme

The respondents highly praised the care they receive from the nurses at the Public Health Unit and their responses indicate that there is good nurse patient relationship.

Sub-theme 3.1: Friendly and approachable nurses

Participants expressed their happiness and gave the following responses when asked about their perceptions with care they receive from the nurses:

“The nurses are always so caring and this is my third pregnancy in this facility, and I am satisfied.” (Participant 3).

“They welcomed me back even when I defaulted and told me the disadvantages of stopping taking ART.” (Participant 8).

“I am taken good care of since I started attending the facility.” (Participant 13).

“The nurses are so caring and I’m satisfied and I make sure I do everything they advised me about.” (Participant 15).

“The nurses are good and took good care of me and my unborn baby even when I return before my due date they attended me.” (Participant 12).

“They are good as they manage to explain and take care of us.” (Participant 2).

“They are so caring and faster especially at ART department.” (Participant 6).
“They are good because even when we are sick we get cured and not pay even a cent.” (Participant 9).

“The nurses are friendly and approachable and the pregnant mothers are free to ask questions and interact with them.” (Participant 4).

One respondent said that:

“They are good; we are not subjected to abuse like in other facilities and that is why we come at Sobhuza.” (Participant 14).

The researcher was therefore of the opinion that a study be conducted at the health care facilities to investigate PMTCT Option B+ programme received by the clients. For services rendered by nurses to be effective nurses must have good attitude towards patients. Since nurses work very closely with the patients, a lack of sensitivity could have disastrous consequences for the patients (Pera & van Tonder 2011:168). The PMTCT Option B+ will not be effective if patients are abused and not taken good care of by the nurses as some patients may even default the treatment given to them.

Other participants’ perceptions with the care they receive from nurses include that they were not forced to start ART, but that the nurses let them decide and they even told them disadvantages of stopping the therapy. One participant said:

“They were very understanding with me and they literally begged me to take medication.” (Participant 1).

The respondents indicated that the nurses at this facility are in alignment with the UNAIDS 90-90-90 by 2020 campaign (getting to the zero world campaign) which is by 2020:

- 90% of all people living with HIV will know their HIV status.
- 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy.
- 90% of all people receiving antiretroviral therapy will have viral suppression (ICAP 2015:7; WHO 2016:2).
Sub-theme 3.2: Assistance in Health education about PMTCT Option B+ programme and effects of ART drugs

The demographic data about level of education for the participants indicates that four participants had their primary education, seven had secondary education level and only six had completed their education. Lesser educational level means less health knowledge. A systematic review of health literacy and health outcomes found that individuals with lower health literacy had poorer health-related knowledge and comprehension, ability to demonstrate taking medications properly, and ability to interpret medication labels and health messages (Zimmerman 2015:1). The PMTCT nurses have an important role to ensure that pregnant mothers are more knowledgeable about the PMTCT programme so that they will be able to adhere to the demands of the programme. According to Bobb (2012:1), women must have access to education and knowledge as well as being empowered to protect them from HIV.

Respondents showed some interest in knowledge of how they could protect their babies from being infected with the HI virus, and how to cope if their children got infected. Also participants needed to be encouraged on adherence. Participants responded by saying:

“I need to be encouraged on taking the ARVs and also need knowledge on how to prevent my baby from being infected until I stop breast feeding him or her.” (Participant 2).

“I need nurses to teach me on how to prevent my baby not to get HIV.” (Participant 6).

“I need to be encouraged on continuous taking of treatment so that I can have a HIV negative baby.” (Participant 12).

“I need nurses to always encourage me on taking the treatment properly so that my child can be prevented from HIV infection.” (Participant 14).

“I need more information on preventing my child from being infected with HIV virus.” (Participant 16).
According to Corkery (2014:1), taking HIV treatment during pregnancy helps to reduce the risk of passing HIV to the baby. HIV treatment reduces viral load to HIV positive pregnant mothers so that the baby is exposed to less of the virus while in the womb and during birth. One of the factors that can increase the risk of passing HIV to baby is developing resistance to HIV treatment through not taking it properly as prescribed. It is important that health care workers emphasize on the importance of taking ARV treatment properly as prescribed so that the PMTCT programme will be effective.

Some respondents showed some interest in knowing the side effects of the medication and side effects on long-term treatment of drugs, and when the treatment finished before the due date or any treatment if their ARV’s are finished.

“I also need to know the side effects of long term treatment of HIV drugs.” (Participant 1).

“I want to know if I have side effects like persistent rash, must I stop taking the tablets.” (Participant 6).

“When the ARVs finished before the due date will my body be affected and if I am far away from this clinic can I go to the nearest clinic to get the ARVs?.“(Participant 9).

“What are the side effects of ARVs and the life-long effects of the drugs in the body?” (Participant 11).

“Want to know side effects of the drugs more especially if you do not adhere to treatment?” (Participant 13).

The above responses are indicators that there is a great need of providing HIV positive mothers with information about side effects of ART treatment and management of these side effects. According to the Ministry of Health, Swaziland Government (2016:41), one of the negative influences to adherence is adverse events of treatment. Ebuy et al (2014:128) states that side effects of ART treatment are an obstacle to adherence. Another participant indicated that it was easier for her as she had prior knowledge about HIV testing; therefore health care workers must educate and encourage all pregnant
mothers to do an HIV test and encourage women of child bearing age to go for antenatal care as soon as they realise that they are pregnant.

**Sub-theme 3.3: Assistance in disclosure, adherence and ongoing counseling**

When participants were asked if they needed any assistance from nurses at the Public Health Unit, some responded that they needed assistance on how to disclose their status to their partners and family members as disclosure is one of the main challenges for most HIV positive pregnant women. Ebuy et al (2014:1) stated that disclosure of status to their partners affects HIV positive pregnant women adherence to the drugs.

Some were quoted saying:

“I need them to assist me on how to disclose my status to my partner and mother.” (Participant 1).

“I need nurses to assist me on disclosing my status.” (Participant 11).

The general perception by pregnant HIV positive women of routine counseling and testing as ‘compulsory’ also reinforces women’s acceptance of HIV. The perception that HIV testing was part of ANC routine and compulsory has also been documented in other African settings (Angotti, Dionne & Gaydosh 2011:1). Rajumba, Neema, Tumwine, Tylleskar & Heggenhougen (2013:19), also reported in their study on pregnant women’s experiences that routine HIV counselling and testing services were known and acceptable to mothers.

The participants also responded that they need assistance with on-going counselling while on ART so that they will be able to adhere to treatment as they were quoted saying:

“I still need on-going counselling so that I can be able to take treatment correctly and not stop taking the ARVs.” (Participant 3).

“I need on-going counselling so that I can adhere to treatment.” (Participant 4).
“As I am taking ARVs for the first time during this pregnancy and I need nurses to continue counsel me on every visit so that I will be encouraged on taking ART.” (Participant 5).

“I also need to be on-going counselling until I can be able to accept my status.” (Participant 11).

Patients must be well-prepared for ART to avoid treatment failure, and it is recommended that all patients should participate in individual counselling sessions (Ministry of Health, Kingdom of Swaziland 2015:69). Adherence counselling and support should be provided during all patients encounters and key messages repeated regularly (Ministry of Health, Kingdom of Swaziland 2015:71). Indeed, for HIV infected women, PMTCT programme offer an ideal opportunity to link diagnostic and PMTCT services with on-going longitudinal care (Baylor International Paediatric AIDS Initiative 2010:114). Other participants responded by saying they did not need any assistance at the moment because they thought they were taught everything they need to know:

“The nurses taught me everything I needed to know.” (Participant 8).

“The information that I was taught by the nurses was enough.” (Participant 7).

“I do not know how they can help me because they provided me with enough knowledge on PMTCT.” (Participant 10).

“At the moment there is no more information I need, maybe I will need some one day.” (Participant 12).

These mothers also need to be assisted in meeting their health concerns and all their questions answered so that they will not be lost to follow. The patients’ active participation to establish treatment goals and the medical regimen is critical. To identify specific barriers to adherence the health care workers should identify and address any concerns about personal needs for ART, specific concerns about taking ART, and practical barriers to adherence (Ministry of Health, Kingdom of Swaziland 2015:71).
4.4.4 Theme 4: Effectiveness of the PMTCT Option B+ programme

When participants were asked how effective was the PMTCT Option B+ programme, they responded by saying it was effective as it prolonged life span especially for those who adhere to treatment and take ART drugs at the same time everyday.

Sub-theme 4.1: Prolongs life span

The participants’ responses were as follows:

“ARVs boost my immune, and prolong our lives, boost CD4 count and always help to stay healthier and not become ill.” (Participant 12).

“It prolongs life for the mother and prevents HIV transmission to the baby.” (Participant 5).

The participants’ responses concur with the Swaziland National AIDS Programme (2014:10), which states that the primary goal for ART is to achieve viral suppression and restore immunity (Increases the number of CD4 cells). It also states that clinical benefits of ART are to decrease opportunistic infections, maintain or reverse immune system damage and prolong survival.

Sub-theme 4.2: Importance of adherence to treatment

The findings in demographic history of participants also indicated that there were more numbers of unemployed participants with limited source of income and therefore, the issue of initiating in life-long ART may have impact on their lives as they will need money for transport to hospital visits for refill of medication. This is supported by the findings of a study conducted by Tweya, Gugsa, Hossenipour, Speight, Ngambi, Chikonda, Chauma, Khomin, Phosi, Mthande & Phiri (2014:136) in Lilongwe, Malawi, about understanding factors, outcomes, and reasons for loss to follow up among women in Option B+ PMTCT programme, which is lack of money for transport to travel to the facility as other contributing factor to ART discontinuation. This may affect the effectiveness of the programme if some HIV positive pregnant mothers may not return on the stipulated return date given at the hospital.

Other participants responded as follows about the effectiveness of the programme:
“I was sick at first coughing, sores and dizzy, but after taking the medication it was
gone and once taken and adherence practiced, you do not become sick.” (Participant 2)

“It is very effective, but mostly we want to start ART when we are sick and its
effectiveness is compromised.” (Participant 3).

“They say it is effective if you take the ART drugs every day at the same time.”
( Participant 6).

“You do not become sick if you adhere to the ART treatment.” (Participant 14).

This statement indicates that the nurses had emphasized on adherence and
importance of adherence as it is stated in the PMTCT guidelines that adherence
for ART services includes the client taking the correct number of pills (correct
dosing) at the correct frequency (Ministry of Health, Kingdom of Swaziland
2015:88). Other respondent said that:

“I have been taking ARV’s for 6 months now and I still sometimes the head feels
dizzy especially if it is about to be the hour of taking my medication” (Participant 5).

This indicates that there are side effects from the treatment and they create a
barrier to adherence and even affect the success of the programme as other
pregnant women may even stop taking the medication thus giving birth to HIV
positive babies. Watson (2016:1), states that adherence is not easy because
these drugs can cause side effects that can be severe enough to make some
people stop taking them. Some side effects include nausea and vomiting, rash,
appetite loss, diarrhea, fatigue, depression and anxiety, trouble sleeping and
burning or pain in your hands. In the demographic history of testing children ten
women had tested their children HIV status and a total of five respondents had
their children tested HIV positive. This call for nurses to emphasise the
importance of taking the treatment and some side effects may subside, and also
encourage them to visit the health facility immediately if they encounter problems
with medication than to stop taking them without consulting the nurses.

Sub-theme 4.3: Prevention of mother-to-child transmission
Some participants responded by saying that the PMTCT programme is very effective as it protects the baby from being infected during pregnancy, delivery and breastfeeding as some of them were quoted saying:

“It protects baby from getting infected.” (Participant 1).

“It protects child during pregnancy so that my child will be born HIV negative.” (Participant 11).

“Maybe, even my child will not be infected.” (Participant 12).

“The child is protected from getting infected during delivery and breastfeeding.” (Participant 13).

“If you take the medication correctly it protects the child during pregnancy, delivery and breastfeeding.” (Participant 14).

“If you do not take them, it is easy to pass the HIV to the unborn baby.” (Participant 10).

This is in contrast with the statement according to Hadebe (2012:13): “HIV can be transmitted from an infected mother to her child during pregnancy, labour and delivery, and breastfeeding”. Taking HIV treatment during pregnancy helps to reduce the risk of passing HIV to the baby (Corkery 2014:1).

Although there are those who responded that they did not know the effectiveness of the programme as they were enrolled on the programme for the first time and they were taught about the programme and its importance. When asked about the effectiveness of the programme they responded by saying:

“So far there is none, I will know once I tested my child and find that he or she is HIV negative.” (Participant 8).

“I do not know because I am taking ART for the first time during this pregnancy.” (Participant 6).
According to Collins (2016:1), ART quickly reduces viral load, and ART start working from the first dose reducing viral load by 90% within the first few days. Some people take longer, especially if their viral load is very high when they start their treatment.

4.4.5 Theme 5: Challenges of taking ARVs

Even if this programme is good, there are challenges HIV positive pregnant mothers encounter when taking ARV’s. From the interviews in the testing history of the participants it emerged that 11 of the participants were tested HIV positive during this pregnancy, while six came for antenatal care services with known HIV status as one tested during hospitalisation and three of them tested because they wanted to know their HIV status. There was a great impact of starting PMTCT programme for the first time and also disclosing their HIV status to the partners.

Sub-theme 5.1: Disclosure and Discrimination

Some participants reported that they did not get support from their partners as they discriminated against them mostly after starting the medication. Others even left them as they did not want anything to do with them. Their partners even refused to do HIV test with them as a couple. They did not have only challenges to disclose to their partners, but also have challenges to disclose their status to their family members as others said they have a challenge to disclose their status to their parents or mothers. The following are some of the responses from HIV positive mothers who enrolled on PMTCT Option B+ programme about challenges they encounter:

“I have known my status for 5 years now, but I have not disclosed my status to my husband because I am afraid he may leave me and my children.” (Participant 2).  
“I have difficulty with disclosing my status to my partner, also of telling him that I am now taking ARVs.” (Participant 1).

“It is real challenging when coming to disclosure, maybe I may disclose to my sister, but not to my parents and my partner.” (Participant 5).

“I am afraid of disclosing my status to my family and friends.” (Participant 9).
“I have a challenge of disclosing my status to my partner and family members because they may not be able to accept my status. I even hide my tablets from them.” (Participant 11).

These responses indicate that most HIV positive pregnant mothers have difficulty in disclosing their status to partners and family, and these may have a huge effect on adherence as for them to adhere to treatment they need support from their partners and families. HIV positive pregnant mothers need to be encouraged to disclose their HIV status to their partners and family members. One benefit of disclosure is to assist HIV infected individual in taking medication properly as she will be able to take medication openly and acknowledge her HIV status (Swaziland Ministry of Health 2014:35).

**Sub-theme 5.2: Partner testing**

Even though the nurses in the facility emphasize partner testing, they still have a challenge in this aspect as some other partners refuse to do HIV testing. As some participants responded by saying that:

“"My boyfriend even refuses to have sexual intercourse with me after I disclosed my status. I do not even know his status because he refuses to test together even though I told him that the nurses requested that we must do HIV test together." (Participant 16).

“I still had not disclosed my status to my partner even though I had known my status for five years. Every time when I visit the clinic the nurses encourage me to disclose my status, but my husband refused to come with me for testing.” (Participant 3).

The Swaziland Government has to come up with some strategies on how to strengthen male involvement. For these programmes to be effective, HIV positive pregnant mothers need to take their medication regularly and openly. One participant responded that once they disclose their status their partners leave them. This also indicates that there are a number of male partners who still have fear of associating with an HIV positive partner. Even though the Swaziland Ministry of Health had been sensitizing the people of Swaziland on television, radios, heath facilities, community gatherings, rural kraal, schools etc., about HIV through health talks, pamphlets, drama, and advertisements;
but some people have not captured the message fully, while others are illiterate (Swaziland Government Ministry of Health 2015:9). According to Mahlalela (2016:16), the Swaziland government needs to work with men at the community level by properly consulting with them instead of common practice of talking to them since men are lively individualistic, make sure they use strategies that target men as well as mentor young men to become better and responsible adults in their roles as fathers and leaders in the community. The Swazi King, Mswati III demonstrated leadership by challenging men to get more involved and have responsibility to test and know their HIV status, to get treatment and to adhere to treatment (Mahlalela 2016:16)

**Sub-theme 5.3: Side effects of ART**

The other challenges reported were that some participants experience slight discomfort during the first few instances whilst taking the medication. This includes dizziness and swelling of the feet. Other respondents reported that they have a great challenge of taking medication even if they feel healthy and fit every day. Their responses were as follows:

“I have a challenge of taking medication every day even when I do not have any pains.” (Participant 2).

“Knowing that I have to take drugs every day even when I am not sick is a huge challenge for me.” (Participant 4).

“…knowing that I will be taking medication for the rest of my life even when I am not ill is real stressing me sometimes.” (Participant 6).

“The side effects of the drugs I am experiencing sometimes make me want to stop taking the medication. What make me continue taking them is that I want my child to be HIV negative.”(Participant 8).

“When I started taking the tablets I experienced swelling of feet, but now I am fine.” (Participant 13).

“When I started the treatment I had dizziness, maybe it was because my body was still adjusting to the medication.” (Participant 14)
These challenges may have a great impact on the effectiveness of the programme and may even result in some HIV positive pregnant mothers stopping taking the medication. There are those who were able to pass through the phases as they got support from their partners and family members. Below are some of the views they expressed:

“I do not have any challenges because my family is supportive and my partner even went for HIV testing.” (Participant 10).

“I had initially thought that I will fail to adhere to the time, but luckily I am reminded each time I had to take the medication.” (Participant 12).

“None because I had disclosed to someone I trust, stigma is no longer an issue.” (Participant 17).

The above responses indicated that with support from their partners and family members the HIV positive pregnant mothers were able to overcome all challenges they had as they took ART medication and that resulted in success of the PMTCT Option B+ programme and increase number of children testing HIV negative. According to the Ministry of Health, Swaziland Government (2016:41), positive influence to adherence to ART treatment includes support from family and friends, good relationship between patients and health care workers, and community

4.5 CONCLUSION

In this chapter, analysis, presentation and interpretation of the findings of the data collected from HIV positive pregnant mothers were accomplished. The findings of the study were presented in the sections of the demographic characteristics of the participants and personal perceptions of HIV positive pregnant mothers with regard to PMTCT Option B+ programme. The next chapter will present conclusions of the research study and the recommendations for future research
CHAPTER 5

INTERPRETATIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The purpose of the study was to investigate the perceptions of the HIV positive pregnant mothers regarding the PMTCT Option B+ programme at one public health unit in Swaziland. In this chapter, conclusions and recommendations based on the findings from the interviews with the participants are presented.

5.2 SUMMARY OF THE FINDINGS OF THE STUDY

This section presents the summary of the study based on the purpose and objectives. 17 participants were interviewed about their perceptions regarding the PMTCT Option B+ programme. The researcher identified participants who were all HIV positive pregnant mothers and enrolled on PMTCT Option B+ programme by using their antenatal care cards. The researcher provided information about the study to HIV positive pregnant mothers who had enrolled on PMTCT Option B+ programme. The participants were informed that the study was voluntary for those willing to participate, and informed consent was obtained (Annexure E). Semi-structured interviews were conducted by the researcher and privacy was maintained (Annexure F). Participants who volunteered to take part in the study were given baby soap and a towel as incentives.

The findings from the interviews conducted with the participants about the PMTCT Option B+ programme were presented in themes based on the objectives of the study which were to, explore and describe the perceptions of the HIV positive pregnant mothers with regards to PMTCT Option B+ programme, and also to make recommendations regarding the improvement of the PMTCT Option B+ programme in order to prevent the spread of HIV infection to babies. The demographic characteristics of the HIV positive pregnant mothers were related to age distribution, residential area, level of education, employment status, source of income, marital status, relationship status, living arrangements, pregnancy history, live births, testing of children and
participants’ testing history. The demographic characteristics of the participants were presented in the form of graphs, frequencies and percentages. The participants interviewed age group was between 18-39 years and the majority of the participants aged between 25-29 years. Regarding educational status, four had primary education, seven secondary education and six attained higher level of education. Most of the participants’ area of residence is more than eight kilometers from the Public Health Unit and in need of transport when coming to the facility. The majorities of the participants were unemployed with no source of income and married.

5.3 INTERPRETATION OF THE RESEARCH FINDINGS

In this section the results were interpreted based on the identified themes that emerged during data collection. The themes were: Perceptions of respondents on being enrolled on the PMTCT Option B+ programme, Understanding about PMTCT Option B+ programme and information needed with regard to PMTCT Option B+ programme, Perceptions with the care received from the nurses and their assistance on PMTCT Option B+ programme, Effectiveness of the PMTCT Option B+ programme, and Challenges of taking ARVs in a Public Health Unit in Manzini.

5.3.1 Theme 1: Perceptions of respondents on being enrolled on the PMTCT Option B+ programme

When participants were asked about their perceptions about being enrolled on the programme, they perceived this programme as preventing mother-to-child-transmission of HIV. Antiretroviral therapy helps to boost the HIV positive pregnant mothers’ immune system and prevent opportunistic infections so that they may not develop. Their CD4 count would then increase. The findings are strongly supported by Médecins Sans Frontières (MSF) (2013:1) who stated one of the benefits of PMTCT Option B+ programme as to increase maternal life expectancy, which means it allows HIV positive mothers to live longer by reducing the risk of opportunistic infections. Referring to the situation in Tanzania, Ngarina et al (2014:1) also mentioned this finding in a study conducted about women preferences regarding ARV prophylaxis for PMTCT of HIV and views on Option B+ programme, as an eagerness to prolong life through Option B+ programme. The participants thought that this would help them live a better and a longer life enabling them to raise their children for a much longer time before they die.
Additionally, HIV can be transmitted from an HIV infected positive woman to her child during pregnancy, child birth and breast feeding. MTCT accounts for over 90% of new HIV infections amongst children. Therefore, PMTCT Option B+ programme provides antiretroviral treatment to stop their infants from acquiring the virus. Without treatment, the likelihood of HIV passing from mother-to-child is 15% to 45%. However, antiretroviral treatment and other effective PMTCT interventions can reduce the risk to below 5% (De Cock, Fowler, Mercier, deVincenzi, Saba, Hoff, Alnwick, Rogers & Shaffer 2000:3).

5.3.2 Theme 2: Understanding about PMTCT Option B+ programme and information needed with regard to PMTCT Option B+ programme

The HIV positive pregnant women displayed a good knowledge and understanding of the PMTCT programme. The participants stated that PMTCT Option B+ programme is done during pregnancy, delivery and breastfeeding thus the treatment is taken to prevent mother-to-child transmission of HIV. Participants showed an understanding that they have an important role to play for the programme to be effective as they stated that it was important to take the ART drugs as prescribed. The participants stated that they took one tablet at a time, once every day, and for them to be effective they do not mix with some traditional herbs. Participants displayed good understanding of the fact that life-long ART is initiated immediately regardless of CD4 count and patients should start ART immediately when they are diagnosed with HIV. Once one started taking the ARVs one was expected to continue for the rest of your life. These findings indicated that the nurse midwives in the facility had provided health information to the HIV positive pregnant mothers. The participants’ response on the important role they have to play for the programme to be effective indicates that their high level of knowledge about PMTCT Option B+ programme will have a positive effect on the success of the programme. In addition, their awareness on the importance of taking ART medication as prescribed and not be mixed with traditional herbals is another good indication for success of the PMTCT Option B+ programme because many herbs and supplements contain undeclared pharmaceutical drugs, heavy metals and other contaminants, and practices such as mixing low doses of ARV drugs into herbal remedies would harm patients by leading to the development of viral resistance (Baylor International Paediatric AIDS Initiative 2010:304). Participants also understood that ARVs boost their immune system and prolong life. This result is consistent with research findings of the study conducted
by Ngarina et al (2014:1) in Tanzania about women preferences regarding ARV prophylaxis for PMTCT of HIV and views on Option B+ programme, which reported that the participants think that this programme will help them live a better and a longer life and enabling them to raise their children for a much longer time. The participants emphasised the importance of a balanced diet for ART treatment to be more effective, although it was a challenge for those HIV positive pregnant mothers who cannot afford proper diet or a meal. Good nutrition has the greatest impact at the early stages of HIV, strengthening the immune system to fight opportunistic infections (OIs) and delaying the progression of the disease. Good nutrition can play an important role in the care and management of HIV (Ministry of Health, Kingdom of Swaziland 2010b:109).

Participants indicated that they needed knowledge about the PMTCT Option B+ programme. They responded that they needed to know about the side effects and long term effects of the ART drugs in the body; the importance of co-trimoxaxole drugs and different doses taken; and assistance on how to adhere to treatment. The nurses had a huge responsibility of providing the HIV positive pregnant mothers with on-going counselling so that they may adhere to treatment. In addition, nurses must be knowledgeable in order to be able to give information to the HIV positive pregnant mothers.

5.3.3 Theme 3: Perceptions with the care received from the nurses and their assistance on PMTCT Option B+ programme

The care the participants receive from the nurses at the facility is very satisfactory as expressed by the happiness in their responses. The nurses managed to build a good rapport with the HIV positive pregnant mothers. A good nurse-patient relationship will have a positive impact to the success of the programme because the HIV positive pregnant mothers will be willing to take any advises from the nurses about the PMTCT Option B+ programme. If all the nurses give such care to HIV positive women, the programme will be a great success.

Disclosure of the HIV positive pregnant women status was one of the main challenges they have. As a result the participants requested assistance from the nurses on how to disclose their status to their husbands. This is supported by findings in the study about level of adherence and predictors of adherence to the Option B+ PMTCT programme in
Tigray, Northern Ethiopia conducted by Ebuy et al (2014:127). HIV positive women need proper counselling on advantages of adherence to the drugs and disclosure during drug provision. Some women responded that they needed assistance on side effects of the ART drugs and what they can do if they run out of their medication before the due date. There were those who feared that their babies may be infected by the HI virus and were concerned on what best they could do to avoid their babies being infected and how to cope if their babies are infected. On-going counselling was another concern for the HIV positive pregnant mothers, as for them to cope and accept their status they need on-going counselling and psychological care and support. Adherence, counselling and support should be provided during all patients encounters, all their fears and concerns be addressed, and key messages repeated regularly so that these HIV positive pregnant women will adhere to ART treatment.

5.3.4 Theme 4: Effectiveness of the PMTCT Option B+ programme

When coming to the effectiveness of the PMTCT Option B+ programme the participants believed that it was very effective as it prolonged life span especially for those who adhere to treatment and take ART drugs everyday and at the same time. Other participants added that the PMTCT Option B+ programme is very effective as it protects the baby from being infected during pregnancy, delivery and breastfeeding. The outcomes of having a HIV negative baby can motivate the HIV positive pregnant women to adhere to the treatment and accept the programme. This finding is in contrast with findings of a study conducted by Thithi (2014:67) about perceptions of pregnant women on the PMTCT of HIV programme at the antenatal care unit and maternity ward at the Jordan Heynes community. The participants stated that they know that failure to adhere to treatment will lead to their babies having a great chance of testing HIV positive.

5.3.5 Theme: 5 Challenges of taking ARVs

Though the implementation of Option B+ programme has been aimed to decrease the number of HIV positive babies born, for some HIV positive pregnant women, there are challenges encountered with the programme when taking ARVs. Some participants reported that they encounter discrimination from their partners, no support from their partners once they initiate on ART, and others even leave them. Other challenges encountered include disclosure of their status to their partners and family members.
These challenges are barriers to the PMTCT Option B+ programme as they may have a huge effect on adherence to the ART treatment and retention to care. As a result pregnant women may refuse to do an HIV test for fear of discrimination and loss of their partners as some participants stated that once their partners know their HIV status they even leave them as they do not want anything to do with them anymore. A study by Kim, Zouh, Mazenga, Ahmed, Markham, Zomba, Simon, Kazembe & Abrams (2016:14) from Lilongwe, Malawi, reported that some participants needed time, whether it was for discussing their status with their partner or personally accepting their HIV status. For HIV positive pregnant women to adhere to treatment they need support from their partners and families. Another study conducted by Walcott, Hatches, Kwena & Turan (2013:8) in Kenya about facilitating HIV status disclosure for pregnant women and partners, participants reported that they struggled with the thought of how they would be viewed by the public after disclosing their status, and others reported that disclosure sometimes leads to violence from a male partner. The above results indicate that male involvement in HIV testing may facilitate adherence to ART treatment because it will be easy for pregnant women to disclose their status and will be more likely to accept ARV treatment.

The other concern for HIV positive pregnant women was the early ART related side effects that can influence adherence to treatment, as the participants reported that they experienced discomfort during the first few instances while taking medication. These findings are supported by findings of a study conducted by Webb & Cullie (2013:15) in Uganda about Perceptions and experiences of people living with HIV regarding forthcoming Option B+ implementation. The participants raised concerns about PMTCT Option B+ in a study 15 which includes ARVs side effects, stigma when taking treatment, reluctant by male partners to use condoms and get tested. Others reported that it is really challenging taking medication whilst feeling healthy and fit every day. These challenges may have a great impact on the effectiveness of the programme and may even result in some HIV positive pregnant mothers stopping taking the medication thus leading to the higher risk of giving birth to HIV positive babies. Partner and family support is needed for them to be assisted in adherence to ART treatment.
5.4 CONCLUSIONS

The implementation of PMTCT Option B+ in Swaziland will assist with the country’s goal to reduce the number of babies born HIV positive. In this study, perceptions of HIV positive pregnant women about PMTCT Option B+ programme indicated that the HIV positive pregnant mothers have knowledge about the programme. Furthermore, the nurses also played an important role of ensuring that HIV positive pregnant women were given enough information about the programme especially the benefits of it to them and their unborn babies. Good interpersonal relationship between nurses and HIV positive pregnant women will ensure the success of the programme. It is important to motivate the HIV positive pregnant women about the importance of the programme and offer on-going counselling to every antenatal visit to strengthen their knowledge about the programme. However, this study demonstrated that there are some challenges such non-disclosure and side effects of ART treatment that may affect adherence to ART treatment and loss to of HIV positive pregnant women. In that respect, the country’s goal will not be met.

5.5 RECOMMENDATIONS OF THE STUDY

5.5.1 Recommendations for practice

The recommendations presented emerged from the research findings of the study as participants have a great challenge of disclosing their status to their partners and family members.

- It is important that the Swaziland Government designs a strategy that will assist HIV positive pregnant mothers on facilitating disclosure of their HIV status to their partners.
- The Swaziland Ministry of Health should develop male involvement strategies that will target both men in general, and men who are spouses of HIV positive pregnant mothers. According to the Swaziland Government Ministry of Health, (2015:14) men are important as they influence some women and others even make decisions for them, so involvement of men can increase PMTCT Option B+ programme uptake and adherence. Men need to be empowered with PMTCT Option B+ programme and male mentors and peer educators must be trained.
• The Swaziland Ministry of Health should develop an action plan that will promote partner testing and antenatal care attendance. There must be a strategy in place that will assist in tracking of HIV positive pregnant women and their partners and reinforce the need for partner testing.

• It is also important that all men and women who are HIV positive must be linked to psychosocial support services, and that these systems must be available even in the rural areas. An explanation of side effects of ART drugs must be designed for use during pre-ART counselling of HIV positive pregnant mothers.

• Good interpersonal relationships between nurses and HIV positive pregnant mothers should be reinforced by the Swaziland Ministry of Health. Nurses should have a good attitude towards HIV positive pregnant women because care received from health facilities will result in positive impact on the success of the programme.

5.5.2 Recommendations for future research

Deriving from the foregoing discussion, the following recommendations are presented:

• The study was conducted in one facility in one region, thus only perceptions of HIV positive pregnant women regarding Option B+ programme of a small sample size in the country were studied. However in order to know perceptions of other HIV positive pregnant mothers under the same context, it is the recommendation of the researcher for a similar study to be conducted in the other regions so as to allow generalisation of the results.

• According to the research findings, HIV positive pregnant mothers who enrolled on PMTCT Option B+ face challenges of being discriminated against by their partners. A study of male involvement strategies must be conducted. The study will assist the Swaziland Ministry of Health to implement these strategies so that men can be able to understand the importance of PMTCT Option B+ programme, thus discrimination and stigma will be reduced.

• Findings of the study indicated that most HIV positive pregnant mothers have difficulty in disclosing their status to partners and family, and these may have a huge effect on adherence as for them to adhere to treatment they need support from their partners and families. It is recommended that a study be conducted on
best strategies that can assist HIV positive pregnant mothers on how to disclose their status.

- A study on perceptions of health care workers on PMTCT Option B+ programme is recommended and will help identify areas of improvement in the programme.
- A study should be conducted at the health care facilities to investigate care received from nurses by HIV positive pregnant mothers who had enrolled on the PMTCT Option B+ programme.

5.6 CONTRIBUTIONS OF THE STUDY

The study investigated the perceptions of the HIV positive pregnant mothers regarding the PMTCT Option B+ programme. With Option B+ programme, most HIV positive pregnant mothers highlighted the effectiveness of life long ART therapy as it prolongs life span as long as they adhere to treatment, and also it prevents mother-to-child transmission of HIV and AIDS. Their knowledge will have a positive impact on the success of the programme as they are the key people who will spread the information to others and more HIV positive pregnant mothers will initiate on ART and adhere to treatment. The study highlighted the importance of on-going counselling; the health care workers had to be encouraged to offer on-going counselling to the HIV positive pregnant mothers.

It is important to emphasise good nurse patient relationship as more HIV positive pregnant mothers would adhere to treatment if the health care workers have a warm and welcoming reception at the health care facilities. Also all HIV positive pregnant women concerns must be addressed especially the side effects of ART drugs. In the study the researcher found that partners support was repeatedly found to have a great influence on decision making for some women. Involvement of men can increase PMTCT Option B+ programme uptake and adherence.

Specific challenges that may influence adherence to ART treatment were identified in the study. These challenges need to be addressed as they may have a negative impact on the effectiveness of PMTCT Option B+ programme and may even result in some HIV positive pregnant mothers stopping taking the medication.
The study also identified the importance of disclosure. Some participants indicated that they need assistance on how to disclose their status to their partners and family members as disclosure is one of the main challenge for most HIV positive pregnant mothers. Psychological care and support is another gap identified in the study. It is also important that all men and women who are HIV positive must be linked to psychosocial support services and these systems must be available even in the rural areas.

5.7 LIMITATIONS OF THE STUDY

- The study was conducted only at King Sobhuza Public Health Unit and the findings could not be generalised to the entire region.
- The eligibility criteria was only HIV positive pregnant mothers who initiated ART during pregnancy, and those who were already on ART before pregnancy were not included, and therefore perceptions of all HIV positive pregnant mothers on ART were not investigated.
- The possibility of sample bias was due to the fact that the study participants were only women living in semi urban setting that could not reflect experiences of HIV positive pregnant mothers from rural areas.
- Finally, the study investigated perceptions of HIV positive pregnant mothers with regard to PMTCT Option B+ programme, and the most reasons for stopping ART were not investigated.

5.8 CONCLUDING REMARKS

In this chapter the researcher presented summary of findings, conclusions, recommendations, contribution of the study, and its limitations. With the initiation of PMTCT Option B+ programme, the Swaziland Ministry of Health had trained all health care workers about the programme so that it will be effective. However, the study demonstrated that there are some challenges that HIV positive pregnant mothers encountered that may affect the uptake and adherence to ART treatment and may result in failure of the programme. On-going counselling and support for HIV positive pregnant mothers encourage adherence and HIV negative babies will be born.
LIST OF REFERENCES


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MSF see M’edicins San Froniesres.


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USAID see United States Agency International Development.

USAID and IHM see United States Agency International Development and Institute of Health Management.


WHO see World Health Organization.


ANNEXURES
ANNEXURE A
Ethical Clearance Certificate from the University of South Africa

UNISA

UNIVERSITY OF SOUTH AFRICA
Health Studies Higher Degrees Committee
College of Human Sciences
ETHICAL CLEARANCE CERTIFICATE
REC-012714-039

Date: 26 February 2013
Student No: 4669-184-7

Project Title: Perceptions of human immunodeficiency virus positive pregnant mothers regarding the prevention of mother-to-child transmission programme in King Sobhuza Public Health Unit in Swaziland.

Researher: Trusty Lonzebo Mthetha
Degree: MA in Nursing Science
Code: NPC1594
Supervision: Dr. DSK Habed
Qualification: D Lit et Phil
Joint Supervisor: D Lit et Phil

DECISION OF COMMITTEE
Approved       Conditionally Approved

Prof S. Roots
CHIEF ENSAHR: HEALTH STUDIES HIGHER DEGREES COMMITTEE

Prof MM Meleki
ACADEMIC CHIEF ENSAHR: DEPARTMENT OF HEALTH STUDIES

PLEASE QUOTE THE PROJECT NUMBER IN ALL ENQUIRIES
ANNEXURE B
Letter requesting permission from King Sobhuza Public Health Unit to conduct the research

PO BOX 5229
MANZINI
M200
7 September 2014

KING SOBUZA PUBLIC HEALTH UNIT
P.O BOX 5229
MANZINI
Dear Madam

REQUEST FOR PERMISSION TO CONDUCT A RESEARCH

I hereby wish to request your permission to conduct a research study in your institution. I am currently registered with the University of South Africa for Master's degree of Health Science. In order to fulfill the requirements of this Master's I am required to conduct a research study. The research title is "PERCEPTIONS OF HUMAN IMMUNODEFICIENCY VIRUS POSITIVE PREGNANT MOTHERS REGARDING THE PREVENTION OF MOTHER-TO-CHILD TRANSMISSION, OPTION B+ PROGRAMME IN A PUBLIC HEALTH UNIT IN MANZINI."

I will be conducting interviews with the clients who are enrolled on the prevention of mother-to-child transmission (PMTCT) Option B+ programme. I request that the interviews be tape recorded. However, I assure you that I will keep all information confidential and the anonymity of clients will be ensured by identifying them with codes instead of their names.

Information gained will assist the Swaziland Ministry of Health and co-partners to see if there is efficiency and acceptability of the PMTCT Option B+ programme, and feedback of the study will be shared with you and the Ministry of Health. Permission to conduct
the study has already been obtained from the Swaziland Ministry of Health scientific and ethics committee.

Should you require further information concerning the study contact my supervisor Dr. DSK Habedi at +27124296180.

I hope to receive your approval to conduct the study.

Yours faithfully

Trusty Lomcebo Mbatha

Cell: +268 78476183

Email: lomcebot@gmail.com.

Supervisor: Dr DSK. Habedi

Cell:+27124296180

Email:habeddsk@unisa.ac.za.
ANNEXURE C
Letter seeking consent from Swaziland Ethical Committee, Swaziland Ministry of Health

P.O BOX 5229
MANZINI
M200
7 September 2014

SCIENTIFIC AND ETHICS COMMITTEE
SWAZILAND MINISTRY OF HEALTH
P.O.BOX 5
MBABANE
Dear Sir/Madam

REQUESTING FOR AN APPROVAL LETTER FOR PERMISSION TO CONDUCT A STUDY AT KING SOBHUZA PUBLIC HEALTH UNIT

I hereby wish to request an approval letter for permission to conduct a study at King Sobhuza Public Health Unit.

I am currently registered with the University of South Africa for Master’s of Health Science. In order to fulfill the requirements of this Master’s I am required to conduct a research study. The research title is “PERCEPTIONS OF HUMAN IMMUNODEFICIENCY VIRUS POSITIVE PREGNANT MOTHERS REGARDING THE PREVENTION OF MOTHER-TO-CHILD TRANSMISSION, OPTION B+ PROGRAMME IN A PUBLIC HEALTH UNIT IN MANZINI.”

I will be conducting interviews with the clients who had enrolled on the Prevention of Mother to Child Transmission (PMTCT) Option B+ programme. I request that the interview be tape recorded, however I assure you that I will keep all information confidential and atomicity of clients will be ensured by identifying them with codes instead of their names.

Information gained will assist the Swaziland Ministry of Health and co-partners to see if there is efficiency and acceptability of the PMTCT Option B+ program, and feedback of
the study will be shared with your office and the Ministry of Health. Should you require further information concerning the study contact my supervisor Dr DSK Habedi at +27124296180.

I hope to receive an approval letter from the committee for permission to conduct the study.

Yours faithfully

Trusty Lomcebo Mbatha
Cell: +268 78476183
Email: lomcebot@gmail.com.

Supervisor: Dr DSK. Habedi
Cell:+27124296180
Email:habeddsk@unisa.ac.za.
ANNEXURE D
Ethical clearance letter from Swaziland Ethical Committee, Swaziland Ministry of Health

24th November, 2015

Trusty Mbatu
Principal Investigator
MBABANE

REF: MH/599C/FWA 000 15267/IRB 000 9688

Dear Ms Mbatu,

RE: PERCEPTIONS OF HUMAN IMMUNODEFICIENCY VIRUS POSITIVE PREGNANT MOTHERS REGARDING THE PREVENTION OF MOTHER TO CHILD TRANSMISSION PROGRAMME IN KING SOBUZUZA 11, PUBLIC HEALTH UNIT IN SWAZILAND.

The committee thanks you for your submission to the Swaziland Scientific and Ethics Committee, an expedited review was conducted.

In view of the importance of the study and the fact that the study is in accordance with ethical and scientific standards, the committee grants you authority to conduct the study. You are requested to adhere to the specific topic and inform the committee through the chairperson of any changes that might occur in the duration of the study which are not in this present arrangement.

The committee requests that you ensure that you submit the findings of this study (Electronic and hard copy) and the data set to the Secretariat of the SEC committee.

The committee further requests that you add the SEC Secretariat as a point of contact if there are any questions about the study on 24047712/24085469.

Yours Sincerely,

RUDOLPH T O MABALU
THE CHAIRMAN, SEC
cc: SEC members
ANNEXURE E
Informed consent form seeking consent from participants

INFORMED CONSENT FORM (English)

TITLE OF STUDY: PERCEPTIONS OF HUMAN IMMUNODEFICIENCY VIRUS POSITIVE PREGNANT MOTHERS REGARDING THE PREVENTION OF MOTHER-TO-CHILD TRANSMISSION PROGRAMME, OPTION B+ PROGRAMME IN A PUBLIC HEALTH UNIT IN MANZINI.”

NATURE AND PURPOSE OF STUDY

The purpose of the study is to investigate the perceptions of HIV positive pregnant mothers regarding Prevention of mother-to-child transmission of HIV Option B+ programme.

There will be interviews of clients who have undergone the programme, their experiences, thoughts, and feelings about the programme.

RESEARCH PROCESS

Your participation in the study will be requested as you are a representative of the population under the study. You will be asked questions about the program and you are requested to be free when answering the questions. Please express all your opinions and these will be respected and valued. The interviews will be tape recorded and the interviewer will take notes during the interview. There will be privacy during the interview.

CONFIDENTIALITY

Privacy will be offered during data collection, and data will be kept confidential. Your identity will not be revealed since codes will be used instead of names.

WITHDRAWAL CLAUSE

Your participation is voluntary and you are free to withdraw anytime, and your withdrawal will not affect services to be offered to you at the facility.
WHAT IS THE POTENTIAL RISK?

There will be no risk attached to your participation.

POTENTIAL BENEFIT OF THE STUDY

The study will assist the Ministry of Health in implementing the program and identify any hinders so that measures can be taken for the accomplishment of the program.

AGE RESTRICTION

For you to participate in the study you must be above 18 years of age.

WHO TO CONTACT FOR MORE INFORMATION

If you have any questions concerning the study or need more information about the study you can contact:

Trusty Lomcebo Mbatha

Cell: +268 78476183

Email address: lomcebot@gmail.com

CONSENT

I, the undersigned (full name) have read the above information and I declare that I understand this information. I was given an opportunity to ask questions and was answered. I hereby declare that I agree voluntarily to participate in the study.

I have received a signed copy of this consent form.

Signature of participant: .................................................................

Signature of interviewer: .................................................................

Signed at .............................................on .................................
Consent form siSwati

TITTLE OF STUDY: PERCEPTIONS OF HUMAN IMMUNODEFICIENCY VIRUS POSITIVE PREGNANT MOTHERS REGARDING THE PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OPTION B+ PROGRAMME IN A PUBLIC HEALTH UNIT IN MANZINI.”

INHLOSO YALOLUCWANINGO

Lolucwango lwentelwe kutsi fukundvwe kabanti ngabomake labaneligciwane le HIV labatfola kunakekelwa kulomtfolampilo ngekutsi bacabangani ngelusito labalutfola uma batetfwele noma sebabezile.

Bomake labanakekelwa kulomtfolampilo batocelwa kutsi bavete imicabango yabo ngeluhlelo labakulo lwekuvikela kutsi make atselele umntfwana ligciwane le HIV, ngemitsi labaniketwa yona ngesikhati batetfwele nanasebabezile.

Uyamenywa kutsi ube yincenye yololucwango ngoba ungumake lotfola lusito lwekuvikela kutseleleka kwemntfwana ngeligciwane le HIV kulomtfolamphilo. Uma uvuma kubayincenye yololucwango utawubutwa imibuto lemayelana nelusito lolutfole kulomtfolamphilo lwekuvikela kutseleleka kwemntfwana ngeligciwane leHIV kanye nemicabango yakho ngekunatsa amaphilisi eHIV nekuwanatsa ngendlela lengiyo.

Uyacelwa kutsi ukhululeke nawuphendvula lembuto, ukhulumene imicabango yakho netifiso takho ngalolusito lolutfolako, konkhe lokushoko sitokuhlonipha siphindze sikulalelele.

Tingcogco letitawentiwa titobhalwa phansi emaphepheni phindze titsebulwe kubongcondvomshini, nalapho kutocociswana khona kutaba yindzawo lepephile ekukhulumisaneni imfihlo.

KUGCINEKWA KWEMININGWANE YAKHO IMFIHLO

Uma uvuma kuba yincenye yololucwango, timphendvulo takho titawugcinwa imfihlo. Libito lakho ngeke libhalwe kulamaferu alolucwango futsi angeke isetjentiswe ndzawo kuchumanisa losiitlele kona. Esikhundleni semabito sitosebentsa inombolo letsite lele budlelwane nolimito lakho. Kute lotawati kutsi nilungenele lolucwango.
NGINGAPHUMA YINI KULOLUCWANINGO?

Unelilungelo lwekiwe nentsha singumulo sekuphuma kulolucwango nome nini, futsi angeke kutshibateke kusita kala kwakho kulomkhwaniso. Utolitfola lonke lusito lolutele emtfolamphilo.

YINI BUNGOTI BEKUNGENELA LUCWANINGO?

Kute bungoti longabhekana nabo ngekungenela lolucwango.

YINI INZUZO?

Iminingwane yalolucwango litosita litiko letemphilo kutsi libone lokukhinyabeta kuphumelela kwaleluhlelo kute litotfutfukisa tinhlelo tekuvikela kutseleleka ngeligciwane kubantfwana

IMINYAKA LEVUMELEKE KUNGENELA LOLUCWANINGO

Kute ube yincenye yalolucwango kufanele kutsi ubeneminyaka lengetulu kwelishumi nesiphohlango.

NGUBANI LENGINGAMTSINTSA NANGABELINGEMBUTO?

Nangabe unembuto mayelana nalolucwango ungatsintsana na:

Trusty Lomcebo Mbatha

Lucingo: 78476183

SIVUMELWANO


Nginikiwe lifomu lakami.

Kusayina kwalopenhenele lucwango.................................................................

Kusayina kwalowenta lucwango........................................................................
ANNEXURE F
Data collection instrument: interview Questions

PMTCT OPTION B+ PROGRAMME
INTERVIEW GUIDE
SECTION A
INTERVIEW IDENTIFICATION

<table>
<thead>
<tr>
<th>PMTCT Client study identification number</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of interview</td>
<td></td>
</tr>
<tr>
<td>Time of interview</td>
<td></td>
</tr>
</tbody>
</table>

SECTION B
BIOGRAPHIC DATA

<table>
<thead>
<tr>
<th>How old are you?</th>
<th>Age:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>What is your area of residence?</td>
<td></td>
</tr>
<tr>
<td>What is the highest level of education that you have completed?</td>
<td></td>
</tr>
<tr>
<td>[ ] Primary</td>
<td></td>
</tr>
<tr>
<td>[ ] Secondary</td>
<td></td>
</tr>
<tr>
<td>[ ] Higher</td>
<td></td>
</tr>
<tr>
<td>[ ] Did not attend</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Are you currently working?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) If yes what type of work do you do?</td>
<td></td>
</tr>
<tr>
<td>[ ] Employed full-time</td>
<td></td>
</tr>
<tr>
<td>[ ] Employed part time</td>
<td></td>
</tr>
<tr>
<td>[ ] Employed seasonally</td>
<td></td>
</tr>
<tr>
<td>[ ] Informal job/hawker</td>
<td></td>
</tr>
</tbody>
</table>
(b) What is the major source of income for your household?

- Self employed
- Full-time employment
- Part-time employment
- Informal employment
- Pension
- Social grant
- Other: specify__________
- none

Are you married

- Yes
- No

Are you living together with your husband or you living together with your partner?

- Yes, living with my husband
- Yes, living with my partner
- Husband or partner staying elsewhere

Obstetric history:

(a) How many times have you been pregnant?
(b) How many children have you given birth to?
(c) How many of these children are living?
(d) Have you ever tested your children for HIV?
(e) How many of your children have tested HIV positive?

- Number of pregnancies__________
- Number of children__________
- Number of living children__________
- Yes, have tested my children
- No, have not tested my children
- Do not have children

Number of children tested for HIV positive__________

HIV testing history

When did you first test HIV positive

Year ______

Why was the test conducted

- Tested during pregnancy
- Tested during hospitalization
- Wanted to know my HIV status
- Other, specify__________

What is your religion?

- A Christian
- Not a Christian
SECTION C
PERSONAL PERCEPTIONS AND EXPERIENCES WITH PMTCT OPTION B+ PROGRAMME

1. What are your perceptions of being enrolled on the PMTCT Option B+ programme in King Sobhuza Public Health Unit?
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2. What do you understand about PMTCT Option B+ programme?
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________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________
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________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________

3. What is your perception with the care that you receive from the nurses at the facility?
________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________
________________________________________________________________________________________________________________________________________
4. How effective is the PMTCT Option B+ programme?

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5. What challenges do you have of taking ARV treatment?

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6. What information do you need with regard to PMTCT Option B+ programme?

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7. How can the nurses in King Sobhuza Public Health Unit assist you as a HIV positive pregnant mother and enrolled on PMTCT Option B+ programme?

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PMTCT OPTION B+ PROGRAMME
INTERVIEW GUIDE (SISWATI)

SECTION A

INTERVIEW IDENTIFICATION

<table>
<thead>
<tr>
<th>Inombolo</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lusukulwelucwaningo</td>
<td></td>
</tr>
<tr>
<td>Sikhatsi</td>
<td></td>
</tr>
</tbody>
</table>

SECTION B

BIOGRAPHIC DATA

<table>
<thead>
<tr>
<th>Uneminyakalemingakhi?</th>
<th>Umnyaka______________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uhlala kuphi?</td>
<td>Indzawoyekuhlala</td>
</tr>
<tr>
<td>Wafundza wafika kuliphi libanga</td>
<td>□ Libanga leliphasi</td>
</tr>
<tr>
<td></td>
<td>□ Libanga lelisekhatsini</td>
</tr>
<tr>
<td></td>
<td>□ Libanga leliphakeme</td>
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<tr>
<td></td>
<td>□ angifundzanga</td>
</tr>
<tr>
<td>Umsebenti</td>
<td></td>
</tr>
<tr>
<td>Ngabeuyasebenta yini?</td>
<td>□ Yebo</td>
</tr>
<tr>
<td></td>
<td>□ cha</td>
</tr>
<tr>
<td>(a) ucashwe kanjani?</td>
<td>□ ucashwe sukhatshi lesidze</td>
</tr>
<tr>
<td></td>
<td>□ ucashwe sikhhashana</td>
</tr>
<tr>
<td></td>
<td>□ ucashwe kusebenta ngetikhatsi letitsite</td>
</tr>
</tbody>
</table>
| (b) Nguyiphi indlela lengenisa imali? | □ Nguyatisebenta  
□ Ngicashwe  
□ Ngibamba imisetjentana  
□ Ngifola imali yembasha  
□ Impenisheli  
□ Lukunye______________________  
□ Kute |
|--------------------------------------|---------------------------------------------------------------|
| Ngabe ushadile yini (ngesilungu nome ngesintfu) nome kukhona lovana naye? | □ Yebo ngishadile  
□ Yebo kukhona lengivana naye  
□ Cha |
| Ngabe wena nemyeni wakho nihlala ndzawonye noma yena uhlala encenye? | □ Sihlala ndzawonye  
□ Uhlala encenye |
| Ngabe sewake watitfwala kangakhi ubala nalokwamanje? | Inombolo yetisu__________ |
| Watala bantwana labangakhi? | Inombolo yebantfwana______________ |
| Bangakhi labaphilako? | Inombolo yebantfwana labaphilako
_______________________________ |
| Bantfwana bakho sowake wabahlolela yini ligcgwiwane? | □ Yebo  
□ Cha  
□ Angati |
| Bangakhi bantfwana bakho labatfolakala banaleligciwane le HIV? | Inombolo yebantfwana labaneligciwane le HIV_______________________ |
| Watfola nini kutsi uneligciwane le HIV? | Umnyaka__________ |
SECTION C
KUCONDZISISA NENDLELA LOBUKETA NGAYO EMAPHILISI EKUTSINTSIBETA LIGCIWANE LE HIV.

1. Ngicocele, indzaba yekunatsa emaphilisi ekutsintsibeta ligciwane le HIV uyitsatsa njani wena?

______________________________________________________________________
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______________________________________________________________________

2. Yini lokwatiko ngalendlela lensha yekunatsa emaphilisi ekutsintsibeta ligciwane le HIV kubomake labatetfwele?

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______________________________________________________________________
3. Wena ngekubona kwakho bukhona yini buhle bekunatsa emaphilisi ekutsintsibeta ligciwane le HIV?

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4. Uyikhandza injani indlela bonesi kulomtfolamphilo labanakekela ngayo tigulane letelashelwa ligciwane le HIV?

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5. Yini tingcinamba letibakhona ngekunatsa emaphilisi?

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______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
6. Nguliphi lwati loludzingako mayelana nemaphilisi ekutsintsibeta ligciwane le HIV

______________________________________________________________________

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______________________________________________________________________

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______________________________________________________________________

7. Nguliphi lusito locabanga kutsi bonesi kulomtfolamphilo bangakusita ngalo
njengamake lotetfwele nome loneluswane lonatsa lamaphilisi ekutsintsibeta ligciwane
le HIV?

______________________________________________________________________

______________________________________________________________________

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______________________________________________________________________
EDITORIAL CERTIFICATE – LANGUAGE EDITING

Perceptions of Human Immunodeficiency Virus Positive Pregnant Mothers Regarding the Prevention of Mother-to-child Transmission Programme in King Sobhuza Public Health Unit in Swaziland.

By
Trusty Lomcebo Mbatha

This serves to confirm that the above-named document has been edited for language.

Regarding the linguistic dimension, the following aspects were closely addressed:

1. General orthographic aspects, including the discourse of research, that is, the extent to which research discourse is accurately applied.
2. Spelling and punctuation, that is, the mainstay of communication.
3. Attention was accorded to repetition and paragraphing.
4. Tense usage in chapter contexts. Tense use is critical in terms of showing what has already been accomplished (past); what the researcher intends (future), and what is (present). The student is advised to revisit the entire dissertation to complement input from the Editor.
5. Logical flow of argumentation, where close attention has been paid to coherence of thoughts and avoidance of disjointedness.
6. Cohesion, which involves correct sequencing of parts of speech in order to communicate the intended messages in compliance with research problem and related questions.

7. Syntax as it relates to clarity, ambiguity and diction in sentences. Indications have been made to show that when the sentence is too complex, the intended meaning gets inevitably lost.

The red in-text represents suggestions made to facilitate smooth and unambiguous flow, while the red in square brackets stands for suggestions to be considered by the author. There are situations when the editor is not sure what was intended by the researcher, so rectification is left to the candidate lest the editor distorts meaning. Where there is ambiguity, the author has been requested to revise a given section.

Cancellations are made as suggestions to enhance both cohesion and coherence. It is noteworthy that all is left to the researcher’s discretion to factor in suggested changes, or not to do so. If in the researcher's view the changes are unwarranted, the writer is at liberty to leave them as they are.

Prof. S. Tichapondwa Modesto (Dlitt et Phil)
Dr D S K Habedi
Department of Health Studies
TVW 6-181
UNISA

Dear Dr Habedi

I have pleasure in informing you that the research output of your student (Mrs T L Mbatha) has been accepted for the degree of MA in Nursing Science.

The student has been requested to send the final electronic copy to you. Please verify that it is the accepted version and kindly email it to lib-drc@unisa.ac.za.

Yours faithfully

[Signature]

for THE EXECUTIVE DEAN: COLLEGE OF GRADUATE STUDIES