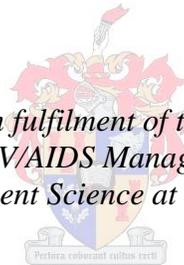


**MALE PARTNER INVOLVEMENT IN THE PREVENTION OF MOTHER-TO-CHILD
TRANSMISSION (PMTCT) OF HIV PROGRAM IN MTHATHA, SOUTH AFRICA:
WOMEN'S PERSPECTIVE**

by

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*Assignment presented in fulfilment of the requirements for the degree of
Master of Philosophy (HIV/AIDS Management) in the Faculty of Economic
and Management Science at Stellenbosch University*



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March 2013

DECLARATION

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

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ABSTRACT

Although the significant impact that male partners have on the health decisions and well-being of women have been well documented, prevention of mother-to-child transmission (PMTCT) programmes in many countries, including South Africa, has largely been targeted exclusively at HIV-positive women. This study focused on women's perception of male involvement in the prevention-of-mother-to-child-transmission of HIV program in South Africa.

A qualitative study was conducted among HIV-positive pregnant women who were on the PMTCT program at a clinic in Mthatha, Eastern Cape Province. Semi-structured interviews and a focus group discussion were conducted among 20 participants and were audio-taped, transcribed, translated and analyzed.

The main findings show that respondents recognized the benefits associated with as well as showed positive attitudes towards male participation in the PMTCT programme; participants expressed the view that although most of their partners provided financial support during pregnancy, they were not involved in the PMTCT program; and they believed that partner involvement would be in the interest of their unborn children. Perceived obstacles to male partners' involvement included socio-cultural factors, fear of knowing their HIV status and factors relating to health care systems.

Suggested ways of encouraging male participation from respondents included writing invitational notes on women antenatal cards, adjusting current labour practices (so that men could be permitted to attend clinics with their partners) and the use of peer educators for mobilizing male participation. The study concluded that the positive attitudes of women on male participation and the benefits it may hold, point towards the possible re-designing of the PMTCT program in South Africa, where more male involvement would be encouraged as an integral part of this prevention strategy.

OPSOMMING

Hoewel die beduidende impak wat manlike metgeselle op die gesondheidsbesluite en welstand van vroue het deeglik opgeteken is, was programme rakende moeder-na-kind-oordrag (PMTCT) in talle lande, insluitende Suid-Afrika, grotendeels eksklusief op vroue gerig wat MIV-positief is. Dié studie het gefokus op vroue se persepsies van manlike betrokkenheid in PMTCT van die MIV-program in Suid-Afrika.

‘n Kwalitatiewe studie is by ‘n kliniek in Mthatha in Oos-Kaapland onder vroue wat swanger en MIV-positief is uitgevoer – hulle was deel van die PMTCT-program. Semi-gestruktueerde onderhoude en ‘n fokusgroep-bespreking is met deelnemers gedoen; dié onderhoude is op oudioband opgeneem, vertaal en geanaliseer.

Die belangrikste bevindinge toon dat respondent die voordele van manlike betrokkenheid in die PMTCT-program besef en ook positief daarteenoor ingestel is; deelnemers het die mening uitgespreek dat hoewel die meeste van hulle metgeselle geldelike steun tydens swangerskap bied, hul nie by die PMTCT-program betrokke is nie; en hulle glo dat metgesel-betrokkenheid tot voordeel sou strek van hulle ongebore kind(ers). Persepsies oor hindernisse ten opsigte van manlike betrokkenheid, het sosio-kulturele faktore ingesluit, asook vrees vir wat hulle MIV-status is en faktore wat met gesondheidsorgstelsels verband hou.

Voorgestelde wyses deur respondente om manlike deelname aan te moedig, het die skryf van uitnodigings op vroue se voorgeboortelike kaarte ingesluit, asook dat arbeidspraktyke aangepas word sodat mans toegelaat word om hulle metgeselle na klinieke te vergesel en die gebruik van portuurgroep-opvoeders met die oog op die mobilisering van manlike deelname. Ten slotte word gemeld dat die positiewe ingesteldheid van vroue ten opsigte van manlike betrokkenheid en die voordele wat dit moontlik kan inhou, dui op die moontlike herontwerp van die PMTCT-program in Suid-Afrika waar groter manlike betrokkenheid aangemoedig sou word as integrale deel van hierdie voorkomingstrategie.

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DEFINITION OF KEY CONCEPTS

The terms and concepts identified as being central to the research topic are defined below:

Attitude: According to the Oxford Advanced Learners' Dictionary, attitude is the way one thinks and feels towards someone or something (Hornby, 2007). Gerrig and Zimbardo (2002, p. 550) defined attitude as the “learned, relatively stable tendency to respond to people, concepts, and events in an evaluative way”. In this study, the Researcher defines attitude as the way a pregnant woman thinks and feels (favourable or unfavourable) towards male partner’s involvement in the prevention of mother-to-child transmission of HIV program.

Perception: Perception is the process by which organisms interpret and organize sensation to produce a meaningful experience of the world (Lindsay & Norman) as cited in Pickens (2011).

Perception is defined in this study as the way male involvement is regarded, understood and interpreted by women.

Vertical Transmission of HIV (mother-to-child Transmission): is defined as the transmission of HIV infection from an HIV positive pregnant woman to her infants. This can occur during pregnancy (intra-uterine), during delivery (intra-partum) or afterwards (post-partum) during breastfeeding.

Prevention of Mother-to-Child Transmission of HIV (PMTCT) Program: is defined as interventions that are aimed at reducing the transmission of HIV infection from mother to child during pregnancy, delivery and in the post-natal period. These interventions include primary prevention of HIV infection in women, HIV counselling and testing for pregnant women, provision of anti-retroviral drugs to (mother and child), counselling, and adoption of safe infant feeding method as well as provision of psychological support.

HIV infection: is infection by the Human Immune-deficiency Virus as diagnosed by a positivity of a rapid HIV antibody test, confirmed by a second HIV rapid antibody test, relying on different antigens or of different operating characteristics.

Male Partner: is defined by the researcher as an adult male (of age 18 years and above) sexual partner of a woman on the PMTCT program who may or may not be in a spousal relationship with the woman, but who is responsible for the index pregnancy.

LIST OF ABBREVIATIONS

AIDS:	Acquired Immune-Deficiency Syndrome
ANC:	Ante-Natal Clinics
ART:	Anti-Retroviral Therapy
ARV:	Anti-Retroviral
HAART:	Highly Active Antiretroviral therapy
HIV:	Human Immunodeficiency Virus
PLHIV:	People Living with HIV
PMTCT:	Prevention of Mother-To-Child Transmission
TB:	Tuberculosis
UNAIDS:	Joint United Nations Programme on HIV/AIDS
UNICEF:	United Nations Children's Fund
WHO:	World Health Organization

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CHAPTER ONE

INTRODUCTION

1.1 Background and Rationale

At a press conference in April 1984, Margaret Heckler, the United States Health and Human Services Secretary, announced the discovery by the United States scientist, Robert Gallo of the virus causing AIDS. She was optimistic that a vaccine against the virus will be available for testing within two years and that “yet another terrible disease is about to yield to patience, persistence and outright genius” (OTA, 1985). Three decades later, the world is still reeling from the devastation of the HIV pandemic, which according to former United Nations Secretary-General, Kofi Annan, is the greatest challenge of our generation (UNAIDS, 2011a).

The Joint United Nations Programme on HIV/AIDS (UNAIDS) estimated that globally, there are 34 million people living with HIV (PLHIV) at the end of 2011, 69% of whom are in Sub-Saharan Africa, a region accounting for a mere 12% of the world’s population (UNAIDS, 2012). Although the number of new infections worldwide continues to decline, in 2011, about 300 thousand children acquired HIV infection: more than 90% of these children live in Sub-Saharan Africa. The main route of transmission being from infected mother to child (UNAIDS, 2012). The Prevention-of-mother-to-child-transmission (PMTCT) program is an intervention designed to reduce infants infection through vertical transmission, without which about 25 - 30% of children born to HIV-infected mothers will be infected with the virus (Read, 2006, p. 107). If well implemented, a comprehensive PMTCT program can potentially decrease transmission rate to less than 5% (Peltzer, Mlambo, Mafuya-Phaswana, & Ladzani, 2010) and theoretically below 2% (Lindegren, 2006).

With an estimated 5.6 million people living with HIV, a number greater than the total number of PLHIV in south, South-East and East Asia combined (UNAIDS, 2011b), South Africa is literally in the eye of the HIV epidemic storm. An effective PMTCT program therefore provides the country with an opportunity to curb the continuing spread of the virus, while protecting its future generation from the rampage. Although modest gain has been recorded over the past years in Sub-Saharan Africa, where the number of children newly infected with HIV has fallen by 24% between 2009 and 2011 (UNAIDS, 2012), but for a region which is home to 92% of pregnant women living with HIV, more

still needs to be done, if the global target of eliminating new HIV infections among children by 2015 is to be achieved.

Studies have identified factors influencing the successful implementation of the PMTCT program in Africa including low maternal HIV knowledge, home births, late attendance at the antenatal clinic as well as negative attitude to health (Aluisio *et al.*, 2011; O’Gorman, Njirenda, & Theobald, 2010; Peltzer, Sikwane, & Majaja, 2011; Theuring *et al.*, 2009). A common finding in most of the studies is the pivotal role that male partners of HIV-positive pregnant women play in the uptake of PMTCT services. As O’Gorman *et al.* (2010) has observed, PMTCT program in the African context should be seen as a community issue in which more than the mother will be involved. In the male-dominant African culture, where men control important family decisions as well as resources, it is important to establish some of the factors influencing their involvement or lack of it, in the PMTCT program.

Having worked as a medical officer in the Gateway Clinic, Mthatha, the researcher had noticed with concern the apparent lack of male partners’ involvement in the PMTCT services provided at this health facility. This study will therefore investigate the attitude and perceptions of women accessing PMTCT services in a clinic located in a community with HIV prevalence on male partner involvement in the program, with a view to gaining more insights into how this important aspect could be incorporated into the program.

1.2 Research Problem

Mother to child transmission of HIV accounts for over 95% of all paediatric HIV infection worldwide (Byamugisha, Tumwine, Semiyaga, & Tylleskar, 2010). The pace of HIV disease progression is accelerated in children compared with adults and without treatment, only a few of these children will survive more than 2 years (Zeichner & Read, 2006, p. 51). The important opportunity provided by a well-coordinated PMTCT program, to prevent the transmission of HIV infection to this vulnerable group should be well utilized. Male involvement has been demonstrated by several studies to be invaluable to the success of this program.

The perceptions and attitude of women who are on PMTCT program about their male partner involvement in Mthatha is currently unknown.

1.3 Significance of the Study

South Africa is one of the few countries in the world in which child and maternal mortality increased in the 2000s, a trend largely attributed to AIDS-related deaths (UNAIDS, 2011b). Reversing this trend require among other measures, an effective and responsive PMTCT program. Designing the PMTCT services in a way that actively encourages male partners' participation will not only reduce AIDS-related cases in infants, it will also lead to an overall improvement in maternal health. This study, by assessing the attitudes and perceptions towards male involvement in PMTCT by women who are already accessing this service could provide useful insights that may guide the formulation of necessary policy and programmes that are aimed at incorporating male folks into the PMTCT activities. This will make the program more effective, leading to a lower incidence of HIV transmission from mothers to babies and potentially to a zero transmission rate.

1.4 Aim and Objectives of the Study

The aim of the study is to determine the perception and attitude of women especially as it concerns factors influencing the level of involvement of male partners in the PMTCT program in order to improve on partner support for women on the PMTCT program.

The Objectives to achieving this aim are the following:

1. To identify women on the PMTCT program in Mthatha Gateway clinic;
2. To describe the attitude of women on the PMTCT towards male involvement;
3. To determine the perspectives of women on PMCTC program about male partner involvement;
and
4. To make recommendations on intervention to encourage partner support for women on the program.

1.5 Research Question

The study will address this question: what are the perceptions and attitudes of women on PMTCT about factors influencing the involvement of male partners in the PMTCT program?

1.6 Demarcation of the Study

The study was conducted among HIV-positive women who are already accessing Prevention of mother-to-child Transmission (PMTCT) services at Mthatha Gateway Clinic. The clinic is located in Mthatha, the main town in the King Sabata Dalindyebo (KSD) municipality of the OR Tambo District in the Eastern Cape Province of South Africa. The Gateway Clinic operates from the old Ophthalmology building of the Sir Henry Elliot Hospital, Mthatha, which was closed down in the mid-1990s. The clinic is one of the busiest clinics within the municipality, with the clinic records showing that about 3000 adults and 500 children are attended to every month. Service offered by the Gateway Clinic include outpatient management of adult and paediatric medical conditions, Antenatal services, immunization services, family planning services, TB care as well HIV/AIDS management including initiation and monitoring of antiretroviral treatment.

A medical officer is permanently allocated to the clinic who oversees all section and units within the facility. The antenatal clinic of this health facility offers PMTCT services to patients as part of the routine antenatal care. The ANC unit comprises of a reception area and an examination room, and is being run by two professional nurses, assisted by an enrolled nurse. An average number of 80 pregnant women are seen for the first time every month, majority of who are offered HIV testing and counselling. The prevalence of HIV among pregnant women at the clinic is about 30%. HIV-positive pregnant women are offered antiretroviral treatment according to the National guideline on PMTCT.

1.7 Career and Employment Relationship of Researcher with the Study site

The researcher is a medical practitioner, currently working at the Mthatha General Hospital, a district hospital situated a few kilometres away from the Gateway Clinic. As part of an outreach program to clinics and health centres within the King Sabata Dalindyebo municipality, the researcher was assigned to work as a medical officer at Gateway Clinic between April 2010 and February 2011. The initial idea of this study was borne out of the observation by the researcher during this period that the ANC unit of the clinic was an exclusive female area, and that male partners were not available to provide support for the women on the PMTCT.

Although, the researcher works at Mthatha General Hospital, (where patients from Gateway who need higher level of care are referred) but he also maintains a good relationship with staff at the Gateway Clinic thus providing a good platform for this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter is designed to provide a review of what is currently known about the research topic and areas surrounding it. An overview of the current trends in the global HIV pandemic is provided, with particular emphasis on the South African HIV epidemic. The theoretical basis of the prevention of mother-to-child transmission interventions is discussed, including an appraisal of the PMTCT program in South Africa, and factors that have been identified as hindrance to an effective programme in Africa. Some of the previous studies investigating the extent as well as the advantages of male partners' participation in the program are also reviewed.

2.2 Literature Search Strategy

A search of published literature was conducted using PubMed, Scopus and Google Scholar. Key words used in a variety of combinations were; PMTCT, male, partner, men, HIV/AIDS prevention, participation, involvement, Africa. The website of international organizations such as World Health Organization (WHO), United Nations Children Fund (UNICEF), as well as the UNAIDS were also searched for relevant publications and information. Electronics journals were accessed using the Stellenbosch University on-line facility. All articles retrieved were in English language.

2.3 Trends in HIV Epidemiology

2.3.1 Global trends

At the end of 2011, 34 million people have been estimated to be living with HIV worldwide according to the UNAIDS (UNAIDS, 2012). The 2012 Global Report on the Global AIDS Epidemic by UNAIDS brought some good tidings:

- Globally, the number of people, including children, newly infected continues to fall, with a 20% decrease in the number of new HIV infections in 2011 compared to 2001;
- In 39 countries, the incidence of HIV infection fell by more than 25% between 2011 and 2001; 23 of these countries are in Sub-Saharan Africa;

- In 6 countries in Sub-Saharan Africa (including South Africa), the number of children newly infected with HIV declined by 40% – 59% between 2009 and 2011;
- the number of people dying from AIDS-related causes are declining globally;
- there is increasing access to antiretroviral therapy, with a 20-fold in the number of people on antiretroviral treatment in 2011 compared to 2003; and
- Since 1995, antiretroviral therapy has added 14 million life-years in low- and middle-income countries, including 9 million in sub-Saharan Africa.

However, the same report was quick to caution that the battle against HIV is far from over. While the much of the news on the HIV pandemic is encouraging, huge challenges still remain, especially in Sub-Saharan Africa.

- Sub-Saharan Africa remains most affected, where nearly 1 in 20 adults are infected, and home to about 70% of PLWH worldwide;
- Sub-Saharan Africa accounted for 71% of the adults and children newly infected in 2011;
- The number of new HIV infection has increased in some part of the world (Middle East and North Africa);
- Although the number of death due to AIDS-related causes declined by 32% in Sub-Saharan Africa between 2005 and 2011, the region still accounted for 70% of all people dying from AIDS in 2011, about 1.2 million people;
- The number of new infection in children fell by 24% from 2009 to 2011, but more than 90% of children who acquire HIV infection in 2011 lives in Sub-Saharan Africa;
- At the end of 2010, an estimated 230,000 children died of AIDS-related diseases in Sub-Saharan Africa (UNAIDS, 2011a); and
- Women in sub-Saharan Africa remain disproportionately impacted by the HIV epidemic, accounting for 58% of all people living with HIV in the region in 2011.

The prevalence data presented above should be interpreted with caution, as they may not reflect the true state of the epidemic (Shisana *et al.*, 2009; UNAIDS, 2011b). This is because HIV prevalence (number of people living with HIV) increases with increasing access to antiretroviral treatment due to a reduction in HIV-related deaths. It will therefore be misleading to draw conclusions on the trend of the epidemic by analysing the prevalence rate alone.

2.3.2 The South African HIV epidemic trends

Since Ras, Simson, Anderson, Prozesky, and Hamersma (1983) reported the first cases of AIDS in South Africa; the country's epidemic has grown over the next three decades to be the largest in the world. Statistics in South Africa has estimated that 5.4 million people were living with HIV in the country in 2011, with a national prevalence of 10.6 % (SSA, 2011), more than 300 thousand of who are children less than 15 years old (UNAIDS, 2012). The National HIV prevalence among women attending antenatal clinic was 29.7% in 2011, a slight decrease from the 30.2% reported in 2010 (NDH, 2012; UNAIDS, 2011a).

An earlier population-based household survey has shown some encouraging trend (Shisana *et al.*, 2009); national prevalence has remained fairly the same at 11% from 2001 to 2008, the prevalence has decreased among children (2-14 years) from 2.6% in 2002, to 2.5% in 2008, a decrease in HIV prevalence among youth (15-24 years) from 10.3% in 2005 to 8.6 % in 2008 and a decrease in the incidence of HIV for young people aged 15-20 years. The conclusion that can be drawn is that the South African HIV epidemic is stabilizing, although at a very high and unacceptable level (NDH, 2012).

In the OR Tambo District, the prevalence of HIV among pregnant women in 2011, according to the National survey remains high at 28.4%, one of the highest prevalence in the Eastern Cape Province, where the provincial average is 29.3%. Local data from the Antenatal unit of Mthatha Gateway Clinic shows that the prevalence has remained about 30% over the past 24 months.

2.4 Prevention of Mother-to-child-Transmission (PMTCT) of HIV

Mother-to-child transmission (MTCT) of HIV infection can occur during pregnancy, at the time of labour and delivery, or after birth through breast feeding (Read, 2006, p. 107). Numerous factors for mother to child transmission of infection have been identified, these include:

1. The amount of virus to which the child is exposed;
2. The duration of the exposure;
3. Factors facilitating the transfer of virus from mother to child;
4. Characteristics of the virus; and
5. The child's susceptibility to infection.

The PMTCT program consists of intervention at each of the potential stages of HIV transmission to reduce the risk of child's infection. Some of these interventions include: administration of antiretroviral drugs to pregnant mothers to reduce the amount of virus in their blood, safe obstetrics practices like avoidance of early rupture of membrane or performing caesarean section for the delivery of babies, safe breastfeeding practices (avoiding breastfeeding, or if this is not feasible, avoiding mixed feeding of infants) (Read, 2006).

The World Health Organization (WHO) has estimated that in the absence of any intervention, rates of mother-to-child transmission of infection can be as high as 45%, especially in the setting of prolonged breastfeeding, and in 2002, recommended four approaches to the prevention of mother-to-child transmission. These are: preventing new infections in parents-to-be, preventing unwanted pregnancies in HIV-infected women, preventing MTCT and appropriate treatment and care (WHO, 2007)). Available evidence has shown that the major reduction in MTCT of HIV has come from the use of antiretroviral drugs during pregnancy and the modification of infant feeding (Thorne *et al*) as cited in (McIntyre, 2005).

PMTCT responds to three of the most challenging problem areas of international health: combating HIV/AIDS, reducing child mortality and improving maternal health (Theuring *et al.*, 2009). These are goals 4, 5 and 6 respectively of the millennium development goals set by the United Nations to be achieved by 2015; targets which most countries in Sub-Saharan Africa are unlikely to meet (UN, 2011; UNAIDS, 2011c).

There is global consensus that the world must strive towards elimination of new HIV infections among children by 2015 and keep mothers and children living with HIV alive (UNAIDS, 2011c). This led to the formulation of the Global Plan towards the elimination of new infections in children launched by the United Nations Secretary General in June 2011(UN, 2011; UNAIDS, 2011c). The plan set an ambitious target for 2015 for:

1. Reducing the number of new HIV infections among children by 90%;
2. Reduce the number of AIDS-related maternal deaths by 50%; and
3. Reducing the mother-to-child transmission rate to less than 5%.

The Global Plan covers all low and middle-income countries, which continues to bear an inordinate burden of the epidemic, but focuses on 22 countries with the highest number of women living with HIV, including South Africa and 20 other sub-Saharan African countries.

There are ample data showing that the PMTCT intervention has been largely successful, protecting children from the pain and misery associated with HIV infection. About 1800 HIV-infected children were born each day in 2003, recent estimates has however shown that there were 330 000 new infections in children or about 900 new infections each day in 2011 (UNAIDS, 2012). The UNAIDS has calculated that more than 350 000 children globally have avoided becoming newly infected with HIV since 1995 because of the antiretroviral prophylaxis provided to pregnant women living with HIV (UNAIDS, 2011b).

The concerted efforts to strengthen PMTCT programs in high prevalence countries is yielding results; in six sub-Saharan countries (Burundi, Kenya, Namibia, South Africa, Togo and Zambia), the number of newly infected children declines by 40 - 59% from 2009 to 2011, while a more modest decline of 20 - 39% were reported in 16 additional countries. Progress has not been universally apparent however, with an increase in the number of newly-infected children in four Sub-Saharan African countries (UNAIDS, 2012).

2.5 The PMTCT Program in South Africa

Just over a million babies are born in South Africa each year (UNICEF, 2010)), with a HIV prevalence of 30% among pregnant women, nearly 300 000 of these children are born to HIV-infected mothers. Without access to a PMTCT program, around 90 000 (approximately 30%) of these babies will be born HIV-infected every year. However, a comprehensive PMTCT intervention has the capacity to reduce the neonatal infection rate to <5%, thus saving 75 000 baby lives annually (Peltzer *et al.*, 2010). A national PMTCT programme was initiated in 2001, using a single-dose Nevirapine regimen. This was updated in 2008 to employ a dual therapy protocol (AZT and Nevirapine) (National Department of Health) cited in Peltzer *et al.* (2010). The South African National PMTCT program currently involves three inter-linked processes (NDH, 2010):

1. Antenatal care: This entails:
 - Identifying HIV-positive pregnant women;

- Ensuring HIV-positive women enter the PMTCT program; and
- Provide AZT from 14 weeks of pregnancy or lifelong antiretroviral therapy, depending on the mother's clinical state.

2. Labour and delivery

- Identify HIV-positive women;
- Continuity of prophylactic and treatment antiretroviral regimen; and
- Initiatives neonates born to HIV-positive mothers with antiretroviral prophylaxis immediately at birth (Nevirapine).

3. Post-natal care

- Provide follow-up post-partum care including a postnatal visit within three days;
- Provide post-exposure prophylaxis antiretroviral for infants (Nevirapine);
- Reduce postnatal HIV transmission through breastfeeding;
- Identify all HIV-exposed infants; and
- Identify all HIV-positive infants and start ART early.

The success of this preventive intervention depends on the effective implementation and integration of each of the processes, as a failure in any part of the PMTCT chain leads to a breakdown of the whole program. PMTCT interventions are now offered in more than 95% of antenatal and maternal facilities country-wide (Goga, Dinh, & Jackson, 2012a), with more than 98% of pregnant women having access to PMTCT services (UNAIDS, 2012). The results of this massive scale-up of PMTCT services have been impressive. A cross-sectional study involving 10 178 infants in 572 facilities across the country, conducted in 2010 to evaluate the effectiveness of the PMTCT program in South Africa (Goga *et al.*, 2012a), shows that while 32% of the children born in the country are exposed to HIV infection (born to HIV-positive mother), at age 8 weeks, the maternal-to-child transmission rate is 3.5%. This is a remarkable achievement, considering the fact this would have been more than 30% in the absence of any intervention.

The authors recently reported a further decline in the transmission rate to 3% in 2012 (Goga, Dinh, & Jackson, 2012b). The UNAIDS has however estimated that the late transmission rate (beyond age of 8 weeks) could be as high as 12-18% when factors such as breastfeeding duration and other transmission probabilities are considered (UNAIDS, 2011b). This points to the fact that while early transmission rate (Peripartum transmission) is declining due to increasing access to antiretroviral prophylaxis for mother

and child, late postnatal transmission remains high, probably as a result of inadequate nutritional support and unsafe breastfeeding practices.

Current evidence seems to suggest that in South Africa, a 0% rate of HIV transmission from mother to child is possible. Achieving this will however require further strengthening and coordination of the mother-to-child transmission preventive interventions in the country. One of such strategies might be to encourage male partners' participation in the PMTCT program.

2.6 Barriers to Effective PMTCT Program

Service uptake often turned out to be the critical point of PMTCT program, with women dropping out of the service at various points. It could be during: HIV-counselling, HIV-testing, post-test counselling, program enrolment, drug intake of the mother, drug administration to the child, adherence to feeding recommendations and follow-up visits. (Theuring *et al.*, 2009). The key challenge for PMTCT in South Africa, for example, is no longer drug treatment at the time of birth, but feeding support in the postnatal period (Mayosi *et al.*, 2012). The acceptability of PMTCT in urban African contexts, e.g. Awka, Gaborone, Abidjan and Lusaka, has been impeded by disbelief in its effectiveness, negative attitudes of health workers and lack of male support; economic affordability constrained by distance and transport costs; and social affordability hampered by stigma, discrimination and the fear of abuse and divorce after partner disclosure (O'Gorman *et al.*, 2010).

Social support plays a crucial role in enabling women to take on the required serial decisions and adhere to the course of the intervention as the involvement of family and community members has been shown to be essential to the success of the program in Africa (O'Gorman *et al.*, 2010; Peltzer, Mosala, Shisana, Nqueko, & Mngqundaniso, 2007; Theuring *et al.*, 2009). As Theuring *et al.* (2009) has argued that key decision makers in questions of sexual and reproductive health in many societies, especially male partners are attributed to a high potential of impact on pregnant women's behaviour and unsupportive partner attitudes which are likely to create a barrier to women's program participation. Lack of male partner involvement has been consistently shown to be one of the major barriers to the success of PMTCT program in Sub-Saharan African (Auvinen, Souminen, & Valimaki, 2010; Dahl, Mellhammar, Bajunirwe, & Bjorkman, 2008; Peltzer, Jones, Weiss, & Shikwane, 2011). As the South African experience has shown, success in preventing MTCT will not depend solely on widespread use

of antiretroviral prophylaxis, but also on continuing support for the nursing mother during the postnatal period from key stakeholders in the community, especially their male partners.

2.7 Male Involvement in PMTCT: The missing link?

There are several studies that have examined the benefits of male partner involvement in PMTCT, and the verdict is indicative of the positive impacts that male involvement has on the success of the program. Male partner participation has direct effect on the stages of the PMTCT program, from antenatal to the postnatal phase.

Antenatal care is a critical opportunity for both pregnant women and their partners to receive HIV testing and counselling. This is particularly important in sub-Saharan Africa, where about half the people living with HIV are in a long-term sexual relationship with an HIV-negative partner (Eywo *et al.*) as cited in UNAIDS (2011b). In a study conducted among 2104 women attending a Nairobi antenatal clinic, Farquhar *et al.* (2004) showed that partner participation in voluntary counselling and testing (VCT) and couple counselling increased uptake of Nevirapine and avoidance of breast feeding.

A randomized trial conducted in Tanzania comparing couples and individual VCT for HIV, demonstrated that women that were counselled for HIV together with their partners are more likely to use preventive measures against transmission and to receive Nevirapine for themselves and their babies compared to women who were counselled without their partners (Becker, Mlay, Schwandt, & Lyamuya, 2010). Although Conkling *et al.* (2010) found no impact of couple counselling on Nevirapine adherence in a prospective cohort study conducted in the capital cities of Rwanda and Zambia. They reported a significant reduction in loss to follow-up for women that were counselled with their partners compared to those with no partner counselling. Partner attendance at antenatal clinic has been to be associated with reduced risk of infant HIV transmission as well as decrease infant mortality, independent of the maternal HIV viral load (Aluisio *et al.*, 2011).

Moodley, Esterhuizen, Pather, Chetty, and Ngaleka (2009) reported a high incidence of newly acquired HIV infection among pregnant women in three provinces of South Africa. When women who initially tested HIV negative earlier in pregnancy were re-tested at 12 weeks later, 72 of the 2377 women re-tested were found to be HIV positive, yielding a HIV incidence of 10.7/100 woman years, which according to the authors, is four times higher than in the non-pregnant population. This is perhaps

another reason for involving male partners in the PMTCT program by encouraging HIV counselling and testing for the couple rather than just the woman alone.

There is increasing access to antiretroviral therapy for pregnant women and infants in Sub-Saharan Africa (with coverage currently estimated at 59% by UNAIDS in 2012), with greater than 98% coverage in some countries, including South Africa. The challenge now seems to be how to reduce late postnatal HIV transmission through effective breastfeeding support. Current evidence suggests that improving male partner participation in PMTCT program has the potential to address this problem. In order to reduce the risk of HIV transmission, HIV positive mothers are advised to use exclusively formula feed or where this is not feasible, exclusively breast feed their children since mixed feeding (combining breast and formula feeding) significantly increases the chance of MTCT of HIV (Read, 2006).

Bil, Otieno-Nyunga, A., and Rotich (2008) investigated the infant feeding practices among HIV-positive mothers in a district hospital in Kenya. Although the sample size for this descriptive cross-sectional study is small (comprising of 146 women), their conclusion that infant feeding decisions were mainly influenced by the male partner's involvement and the socio economic status of the mother shows the pivotal role male participation can have in preventing infant HIV transmission. A cross-sectional study to identify social determinants of mixed feeding in Jos, Nigeria, found that lack of partner support of the feeding decision predicted mixed feeding behaviour (Maru *et al.*, 2009). If the 2015 Global Plan target of a 90% reduction in new infection among children is to be realized in Sub-Saharan Africa, and there are indication in some countries like South Africa that this is possible, then the PMTCT program design and implementation should include not just statements on male partners participation, but should seek to actively to involve these key stakeholders in MTCT preventive interventions.

Ramirez- Ferrero and Lusti-Narashimhan (2012) argues that it is time to move beyond seeing men as simply “facilitating factors” that enable women to access health-care services. Men need to be recognized as a constituent part of reproductive health policy and practice. With neither a cure nor an efficient vaccine against HIV available, at least for the next decade, prevention remains the most viable strategy in combating the pandemic, and protecting infants from being infected provides an opportunity for the world to have the much-talked about “HIV-free” generation

2.8 Low Male involvement in PMTCT in Sub-Saharan Africa

PMTCT programs have focused primarily on women, and there is a call for the need to examine men's, and particularly male spouses, engagement in PMTCT in order to fulfil the objective of these programs (Reece, Hollub, Nangami, & Lane, 2010). Studies that have examined male partner involvement in PMTCT in Africa have reported low level of male participation.

Only 5% pregnant women attending a Nairobi Council Clinic in Uganda received HIV counselling with their male partner (Farquhar *et al.*, 2004). Peltzer, Mosala, Dana, and Fomundam (2008) reported that among HIV positive women from 5 sites in the OR Tambo district of the Eastern Cape Province of South Africa, only 14.9% of them reported that their male partner accompanied them to their antenatal care clinic visits. In Mbale district, Uganda, Byamugisha *et al.* (2010) found that only 5% of men accompanied their spouses to antenatal clinics. Similarly, despite instituting a program targeted at encouraging male partner participation in PMTCT and antenatal programs, the observed percentage of men participating in such activities in a facility in Cameroon was 18% (Nkuoh, Meyer, & Nkfusai, 2010). Falnes *et al.* (2011) also noted that very few men joined their partners for PMTCT or antenatal activities in five health clinics studied in northern Tanzania.

2.9 Reasons for lack of Male involvement in PMTCT program

With the increasing recognition of the crucial role of male partners in PMTCT, it is not surprising that the quest for the reasons for their participation have been a subject of interest for researchers. Byamugisha *et al.* (2010) identified three main barriers to male participation in PMTCT; poor health system, socio-economic factors and cultural beliefs. Findings from other studies fit into these categories.

2.9.1 Health system factors

Some of the health system factors identified by Byamugisha *et al.* (2010) in a cross-sectional study conducted in Eastern Uganda include the fact that health care workers in some instances do not allow men to enter the antenatal clinic with their pregnant partners. The men also complained about the structural design of antenatal clinics which are often congested, with no space to accommodate the women and their partners. This is similar to the situation in Mbeya region of Tanzania where some of the men who have followed their wives to the antenatal care were in fact refused access by health care

providers (Theuring *et al.*, 2009). In Durban, South Africa, Maman, Moodley, and Groves (2011) reported that some men expressed the view that they do not feel welcomed and comfortable in prenatal clinics, and in some settings, there are policies that restrict men's access to clinics. The organization of the PMTCT program in Moshi district, northern Tanzania inhibited men from participating, and several fathers did not attend the antenatal clinic owing to fear of the reactions of other men and also feeling uncomfortable about the idea of being the only man present (Falnes *et al.*, 2011).

2.9.2 Socio-economic factors

In most of the studies, the main socio-economic reasons for failure of male participation in PMTCT is the fact that most of the men were too busy trying to make ends meet and were not willing to wait for endless hours in queues at the antenatal/PMTCT facilities (Byamugisha *et al.*, 2010; Maman *et al.*, 2011; Nkuoh *et al.*, 2010; Theuring *et al.*, 2009)(Reece, 2010). To accommodate this problem, it has been suggested to offer services after working hours or on weekends and to reduce waiting time for men/couples (Bolu *et al.*, 2007) as cited in Theuring *et al.* (2009).

2.9.3 Cultural beliefs

A recurring findings in most of the researches conducted on the involvement of male partners in PMTCT is the strong effect that cultural beliefs about gender role plays in influencing men behaviour towards antenatal and PMTCT services. Deep-seated socio-cultural ideas constitute a hindrance to male involvement in PMTCT, where pregnancy is seen as the sole responsibility of a woman, and antenatal clinic was perceived to be a female arena not acceptable for a man to enter (Falnes *et al.*, 2011). 30.6% of men interviewed in a health facility in Cameroon responded that it was not good to go to the antenatal clinic (ANC) with their partners (Nkuoh *et al.*, 2010). The primary reason identified by these men was the belief that pregnancy is a woman's affair and that it was not their custom to participate in ANC. Some of them felt they will be viewed by their community as being over-protective if they go to the clinic with their wives.

One of the men interviewed in Uganda responded (Byamugisha *et al.*, 2010):

“If I accompanied my wife to hospital every time she goes for her antenatal check-up, my friends would think I am a weakling. They would laugh at me”.

2.10 Women Attitudes and Perceptions towards Male Participation in PMTCT

It has been noted that women's perceptions of men influence whether they disclose their HIV status to their partners during pregnancy or not. These perceptions include the fear of abandonment, loss of economic support, being stigmatized, rejection, discrimination, violence, upsetting family members, and avoiding accusations of infidelity (Reece *et al.*, 2010). In a study conducted in public health centres in Blantyre, Malawi, majority of women reported that they believed their spouse would attend at least one antenatal clinic visit if asked by a health care worker, but only 5% had ever been accompanied by their husbands (Tadesse, Muula, & Misiri, 2004). Most of the women interviewed in Tanzania did not feel empowered to request their partners to undergo HIV test and several of them expressed the wish that their partners be invited by others (Falnes *et al.*, 2011).

It was noted by Tadesse *et al.* (2004) as well as Falnes *et al.* (2011) that the majority of the women they interviewed will chose their partners as their primary confidants if they tested HIV positive. However, other studies have found that there are some women who will not disclose their status to their partners. Kilewo *et al* cited in Moodley *et al.* (2009) found that 77.8% of HIV-positive women participating in a perinatal trial had not shared their HIV results with their partners eighteen months after diagnosis. Reece *et al.* (2010) reported that most of the women participants in a qualitative study conducted in Kenya to assess male spousal engagement in PMTCT, described engaging their spouses in HIV care as being particularly challenging if they were unaware of their status, refused to be tested, or were in denial about their HIV status.

HIV-related stigma was also described by some women as being a significant factor preventing them from being able to secure the help of their husbands with basic activities such as going to clinics to get formula; subsequently women suggested that they were less likely to adhere to a formula-based regimen (Reece *et al.*, 2010). According to Peacock *et al* as cited in Reece *et al.* (2010), women perceived that men's lack of involvement in antenatal care is due to the belief in traditional gender roles, that childbearing is a woman's affair, and the fear that their involvement would create the perception that one or both were living with HIV.

2.11 Conclusion

Although recent statistics suggests that the HIV pandemic is stabilizing globally, Sub-Saharan Africa continues to bear an excessive burden of the infection. 92% of HIV positive pregnant women are in Sub-Saharan Africa, where predictably, majority of new infections in infants are recorded. The prevention of mother-to-child transmission (PMTCT) program is the intervention designed to reduce vertical transmission of infection from mother to child. The global target of reducing new infection in infants by 90% by 2015 has necessitated renewed PMTCT efforts in Sub-Saharan Africa, with significant increase in PMTCT coverage in the region as well as a decline in the MTCT of HIV rate. South Africa has recorded dramatic results with a perinatal transmission rate of just 3%. However, the transmission during the postnatal period remains high, drawing attention to the need for continuing support of the nursing mothers and infants, particularly by the male partners.

There is ample evidence documenting the positive impact that male partner engagement has on the MTCT preventive services. Male partner involvement improves the adherence of mothers to prophylactic antiretroviral use, can potentially reduce the incidence of HIV infection during pregnancy, improves child survival and encourages safe infant feeding practices in the postnatal period. The level of male partner engagement in PMTCT in Sub-Saharan Africa is currently low: this has been attributed to health system, socio-economic and cultural factors. Giving the key role of the male partners in ensuring a successful mother to child transmission prevention, there is a need to design PMTCT program in such a way as to incorporate men, not just as ‘facilitators’ for women, but as active participants in the preventive efforts.

This study aims to provide further insight into the perspective of women on male involvement in PMTCT which might be useful in designing and implementing programs to encourage active participation of male partners.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This study set out to investigate the attitude and perception of HIV-positive pregnant women in Mthatha, who are in the PMTCT program on the involvement of male partners in the program. The purpose of this chapter is to provide information on how this investigation was carried out. According to Brink, Van der Walt, and Van Rensburg (2006, p. 191), the research methodology section “informs the reader of what the researcher did to solve the research problem or to answer the research question”. The target population, sampling, research design, data collection methods, data analysis and ethical issues are discussed in this chapter.

3.2 Target Population and Sampling

Target population is the entire group of persons or objects that is of interest to the researcher (Brink *et al.*, 2006). Since it is however rarely possible to have access to this entire population, studies are conducted on the population to which the researchers do have access to. The population that the researcher does have access to and actually studies is known as the “accessible population” or the “study population” (Brink *et al.*, 2006). It is from the accessible or study population that researchers draw their samples.

In this study, the target population is all HIV-positive pregnant women who are on the PMTCT program in Mthatha, Eastern Cape province of South Africa. The Study (or accessible) population however, are pregnant women who are on PMTCT program and are attending the antenatal clinic at the Mthatha Gateway Clinic.

3.2.1 Selection criteria

The following inclusion and exclusion criteria were applied to the study population:

Inclusion Criteria:

- a. Attendance of at least one antenatal clinic during the current pregnancy;
- b. Should be at least 18 years old;
- c. Tested HIV positive and has agreed to be on the PMTCT program; and

- d. Living with a partner or in a regular visiting relationship.

Exclusion criteria:

- a. Refusal to provide a written informed consent for the study.

3.2.2 Sampling

According to Christensen, Johnson, and Turner (2011), the manner in which a sample of participants is selected depends on the goals of the research project. In this study, purposive sampling was done. This non-probability sampling technique is “based on the judgment of the researcher regarding subjects or objects that are typical or representative of the study phenomenon, or are especially knowledgeable about the question at hand” (Brink *et al.*, 2006, p. 133).

Arguing in support of this sampling technique, Miles and Huberman as cited in Limb (2004) posit that in a qualitative research, it is not representativeness that is of concern, what is required are informants, episodes and interactions that are driven by a conceptual questions (Limb, 2004). This position is justified, since the purpose of qualitative research as Morse and Field points out is to “discover meaning not measure of the distribution of attributes within a population (Limb, 2004, p. 62).

The advantage of this sampling method is that it allows the researcher to select the sample based on the knowledge of the phenomena being studied, but has the disadvantages of a potential for sampling bias and the use of a sample that does not represent the population (Brink *et al.*, 2006). This sampling technique as used in this study is aimed at having an in-sight into the attitude and perceptions of the participants and not “empirical generalization from a sample to a population” (Patton) as cited in (Christensen *et al.*, 2011).

3.2.3 Recruitment

Pregnant women that met the inclusion criteria were identified by professional nurses working at the ANC/PMTCT unit of the clinic and are informed about the study. All the women were reassured that the care they will receive at the clinic will not be affected whether or not they chose to participate. Those that showed interest in participating in the research were then shown to the researcher, who explained the purpose of the research and what will be expected of them should they choose to participate. Those willing to participate were then recruited and interviewed. Recruitment continued until no new data emerged during the interviews (data saturation).

3.3 Research Design and Methods

Silverman (2005) defined methodology as the choices made about cases to study, methods of data gathering, forms of data analysis and so on, in planning and executing a research study. Methods on the other hand, are defined as “specific techniques, like statistical correlations, as well as techniques like observation, interviewing and audio-recording. There are three main research methodologies, each with its unique strengths and weaknesses: quantitative, qualitative and the mixed methods (Brink *et al.*, 2006; Christensen *et al.*, 2011; Silverman, 2005). A research design refers to the outline, plan, or strategy that specifies the procedure to be used in seeking an answer to research question(s) (Christensen *et al.*, 2011, p. 232). According to this author, the goal in research is to use the strongest design that is possible, ethical and feasible for the research question. In this study, the research design used is the qualitative approach.

Unlike in a quantitative design in which numerical data are collected, a qualitative study collects non-numerical data to answer a research question (Christensen *et al.*, 2011). Qualitative methods focus on the qualitative aspects of the meaning, experience and understanding, and they study human experience from the viewpoint of the research participants in the context in which the action takes place (Brink *et al.*, 2006, p. 113). Christensen *et al.* (2011) identifies three primary component of qualitative research. A qualitative research is interpretive, uses a variety of methods to collect data (multi-method) and is conducted in the field or in the person’s natural setting. This design is deemed by the researcher to be appropriate for addressing the research question in this study.

Qualitative research has demonstrable utility in the field of sexually transmitted infections (STIs) and HIV/AIDS research, where many of the social phenomena being studied are personal, intensely private, and sometimes illicit (Power, 2002). McKinlay as cited in Reece *et al.* (2010) posits that in public health, qualitative rather than quantitative methods lead to relevant results at the level of socio-political topics and relations due to their complexity. One of the weaknesses of this research approach is that different qualitative researchers might provide different interpretations of the phenomena studied. Another weakness is that it is difficult to generalize the findings (Christensen *et al.*, 2011).

A phenomenological approach was used in this qualitative study. Brink *et al.* (2006) regard phenomenological studies as those that examine human experience through the description that are provided by the people involved. In such a research, the researcher attempts to gain access to each

participants 'life world', which is their inner world of subjective experience (Christensen *et al.*, 2011). The purpose of this research is to investigate the how HIV-positive women experience and feel about male partners; engagement in PMTCT program

3.4 Data Collection Methods

Semi-structured interviews and focus groups were the data collection method used in this study. Data were collected over a three-week period from 24th September 2012 to 8th October 2012.

3.4.1 Interviews

An interview is a situation where the interviewer asks the interviewee a series of questions (Christensen *et al.*, 2011). Interviews can be classified as structured, unstructured or semi-structured. During a semi-structured interviews, the interviewer ask a certain number of specific questions, but can also pose additional probes or prompting questions (Brink *et al.*, 2006).

Semi-structured interviews were conducted by a trained research assistance who has a lot of experience in qualitative research and who is proficient in English language and *Isi-Xhosa*. The interviews were conducted in *isi-Xhosa* with the aid of an interview guide. The guide provided a structure for the interview, while allowing flexibility to pursue emergent issues and topics. The interview took place in an empty quiet room which was separate from the clinical area within the Mthatha Gateway Clinic. This ensures patients confidentiality and also reduces background noise to enhance the quality of the tape recording. Each individual interview was audio-taped with the permission of the participant.

Each of the participants was asked questions about her age, marital status, and socio-economic background and whether she has had any previous pregnancy. Questions about knowledge of the Prevention of Mother to Child Transmission (PMCTC) of HIV, as well as the perceptions and attitude towards partner's involvement in the program were also asked. Participants were allowed to freely express their thoughts while the interviewer guided them towards the topics that are of relevance to the research. Data collection was continued until no new theme emerged (data saturation). Data saturation was reached after 15 interviews. Banton as cited in Limb (2004) explains that a category can be said to be saturated when examination of the data reveals no new properties. Limb (2004) however stated that care should be taken before arriving at this decision in order to avoid premature closure.

Christensen *et al.* (2011) enumerated some of the strengths of interviews as data collection tools. They are good for measuring attitude and most other content of interest (as is the case in this research), allow probing and posing of follow-up questions by the interviewer, can provide in-depth information, can provide information about participants subjective perspectives and ways of thinking. Some of the weaknesses of this data collection method include, being time consuming, reactive effects, (for example interviewees might try to show only what is socially desirable), interviewer might distort data because of personal bias, and perceived anonymity of the respondent might be low.

3.4.2 Focus Group

A focus group is a situation where a focus group moderator keeps a small and homogenous group focused on the discussion of a research topic or issue (Christensen *et al.*, 2011). This method of data collection has the advantages of being useful for exploring ideas and concepts, provides windows into participants' internal thinking, allows probing and can help to examine how participants react to each other. The disadvantages being that it might be dominated by one or two participants, might include large amount of extra or unnecessary information, reactive and investigator effects might occur if participants feel they are being watched, and it might be expensive to organize (Christensen *et al.*, 2011). It might also be difficult to identify individual speakers and differentiate between the statements of parallel speakers (Flick, 2006). One focus group, comprising of five participants was conducted, with the aim of having in-sights into participants' perspectives about the research topic and to complement findings from the individual interviews. While participants were willing to be interviewed individually; they were reluctant to be part of a group. The researcher intention of conducting two focus groups in this study was therefore unrealized.

3.4.3 Pilot testing of the interview schedule

Christensen *et al.* (2011) emphasize the need to pilot test the data collection instrument. This is to identify problems with the instrument and to make appropriate corrections before it is used in a research study. Brink *et al.* (2006, p. 166) maintains that the purpose of such pilot-testing is to "...detect possible flaws in the data-collection instruments, such as ambiguous instructions and wordings, inadequate time limits and so on".

A pilot study was conducted with two HIV positive women accessing PMTCT services at the study site and who were not included as participants in the main study. Appropriate changes were made to the interview guide based on the responses of the participants in the pilot study.

3.4.4 Validity

Many strategies have been described that can be used to enhance the validity (the accuracy and truthfulness) of a qualitative study (Brink *et al.*, 2006; Christensen *et al.*, 2011). In this study, some of the strategies used to improve the validity of the research include:

1. The data were collected over a three week period;
2. Method triangulation: the use of multiple data collection methods (focus group, individual interviews); and
3. Use of audio-taping to ensure accurate record of interviews.

3.5 Data Analysis

Data analysis entails categorizing, ordering, manipulating and summarizing data and describing them in meaningful terms (Brink *et al.*, 2006, p. 170). The interviews were transcribed into *Isi-Xhosa* and translated into English for analysis by the research assistant. The transcript was reviewed by an independent reviewer for accuracy by replaying the tape while the transcript is read to check for correctness of the transcription. Line numbers were used to identify questions asked by the interviewer and responses made by the participants. Themes were developed from what constituted participants' responses to different questions and various issues. The broader objectives of the study informed the process of themes development. Participants' responses were categorized according to themes and content analysis was used to interpret those responses. Line numbers were useful in referencing each analyzed response. Themes have been given colours and these colours were been used to shade responses related to the theme in the interviews.

3.6 Ethical Considerations

Research ethics is a kind of applied or practical ethics pertaining to not only general issues but also specific problems that arise in the conduct of research. Its goal is to determine the moral acceptability and appropriateness of specific conduct and to establish that moral agents ought to take in particular situation (Chima, 2011, p. 153).

3.6.1 Informed consent

Central to the conduct of a research is the informed consent of the participants or subjects (Chima, 2011). According to Singh (2007), the four elements of informed consent in research are; capacity, disclosure, understanding and voluntary nature. Details of each of these elements as they relate to obtaining participants informed consent in this study are discussed below:

- *Capacity*: the researcher ensured that participants are legally and mentally competent to participate in this research by ensuring that all participants in this study are of age 18 years and older.
- *Disclosure*: the researcher disclosed to the participants all relevant information about the research including its purpose, benefits to the society and the potential risks the participants may suffer. This disclosure was made in isi-Xhosa, the language spoken by all the participants. This conversation was conducted through an interpreter (the research assistant), who is proficient in English and isi-Xhosa. Participants were also provided with a participant information sheet containing all the details about the research and what will be expected of them if they decide to participate in it. They were informed that their antenatal record (which is held by them) will be checked to ascertain that they have tested for HIV and are on the PMTCT program.
- *Understanding*: it was established that participants understood the information provided, and they were encouraged to ask for any clarification to any of the issues discussed.
- *Voluntary nature*: it was emphasized that participation in the research is completely voluntary, and that the participants may withdraw from the study at any time they want without suffering any consequence.

3.6.2 Confidentiality

The confidentiality of the participants was protected throughout the study by ensuring that no names or personal identifiers will be recorded in any of the data collection tools. Data were stored in a secured place where only the researcher had access to them.

Questions asked in this study were of a personal and sensitive nature, and could potentially cause discomforts to the participants and generate anxiety about their health as well as that of their unborn children. To mitigate this, participants were provided with any information they wish to know about

HIV infection and its management. They were informed that they will be referred to the clinical psychologist at the Mthatha General Hospital in case of any adverse psychological stress following the interviews. However, at the end of the study, none of the participants in this study reported suffering from any undue emotional or psychological strain.

Ethical approval was obtained from the Research Ethics Committee of Stellenbosch University (Protocol Number: HS839/2012). Formal approval to undertake this study at Mthatha Gateway Clinic was sought and received from the King Sabata Dalinyebo (KSD) Health authorities, before the study commenced.

CHAPTER FOUR

RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the findings from this study. A demographical characteristic of the study participants will be presented, followed by the main themes that arose in the course of the research.

4.2 Demographic Characteristics

The demographic characteristics of the research participants are shown in Table 1.

Age

Participants ranged in age from 18 to 44 years. The most common age group was between 23 to 27 years while 20 % of the participants were aged 33 years and above.

Marital Status

Majority of the participants (75%) were single. 10 of the 15 of participants individually interviewed were single. All the focus group participants were unmarried women.

Educational Level

Three of the twenty participants had tertiary education, while for the majority of the participants, the highest education level was between grade 10 and 12. Some of these women were however still in school.

Employment

Fourteen of the twenty participants (70%) were unemployed, while 6 of them (30%) were working.

Number of children

For 45% of the women, this was their first pregnancy, while 55% were multigravid.

Age of current pregnancy

The gestational age of the index pregnancy was below five months for two of the 20 participants (10%), while 70% had a gestational age between 6 and 7 months. 2 of the participants (one in the focus group, and one individually interviewed) gave the age of their current pregnancy as 9 months.

Race; All of the participants were Africans of *Xhosa* extraction.

TABLE 1: Demographic characteristics of Research Participants

Socio-demographic factors	Individual interviews n=15	Focus group n=5	Total N=20 (%)
AGE (Years)			
18-22	3	2	5 (25)
23-27	5	1	6 (30)
28-32	4	1	5 (25)
≥33	3	1	4 (20)
MARITAL STATUS			
Single	10	5	15 (75)
Married	5	0	5 (25)
LEVEL OF EDUCATION			
≤ Grade 9	4	0	4 (20)
Grade 10-12	8	5	13 (65)
Tertiary	3	0	3 (15)
EMPLOYMENT			
Employed	3	3	6 (30)
Unemployed	12	2	14 (70)
NUMBER OF CHILDREN			
0	6	3	9 (45)
≥1	9	2	11 (55)
AGE OF CURRENT PREGNANCY			
<5 months	1	1	2 (10)
6-7 months	11	3	14 (70)
≥8months	3	1	4 (20)
RACE			
African	15	5	20 (100)
Coloured	0	0	0 (0)
White	0	0	0 (0)
Asian	0	0	0 (0)

4.3 Themes

Six main themes with several sub-themes emerged from the interviews and Focus group. These main themes are:

1. General knowledge of the participants about PMTCT;
2. Current level of partner support/involvement in PMTCT;
3. General attitude towards male involvement in PMTCT;
4. Perceived obstacles to male engagement in PMTCT;

5. Perception about the attitude of health care workers to male partners' involvement in PMTCT; and
6. Ways to get men involved in the PMTCT program.

The themes are discussed in detail below.

4.3.1 General knowledge about PMTCT among participants

All the research participants stated that they know what prevention of mother-to-child transmission is. However, they had varying ideas about how HIV is transmitted to infants, the most effective way of preventing such transmission, as well as the most appropriate approach to infant feeding. These are further explained below.

4.3.1.1 Transmission of HIV infection from mother to child

All the participants stated that HIV is transmitted to the unborn child inside the womb, and that this can be prevented by using the pills given at the clinic during pregnancy and by administering the medications to the child after delivery.

Five of the participants interviewed believed that unprotected sexual intercourse during pregnancy can lead to the infection of the child and that the use of condom is one of the ways to prevent HIV infection during pregnancy. This was also the view of one of the participants in the Focus group:

“What I know is that a child gets infected when the mother and father do not use condom when having sex, the child gets infected that way.” (Focus group participant 1: age 21 years)

According to another participant;

“A child can be infected if you are sharing the towel with the child and sometimes when the mother is having a cut and she bleeds and touches the child.” (Interview participant 4: age 23 years)

4.3.1.2 Child feeding/breastfeeding

Asked about infant feeding approaches, all the participants know that mother-to-child transmission can occur through breastfeeding, however, most of them are unsure of just the right way to breastfeed in order to prevent the transmission of infection to their children. Some of their responses include;

“We are not allowed to breastfeed and if we choose to, there is a certain period that we should breastfeed.” (Interview participant 15: age 23 years).

“There is confusion when it comes to the ways of feeding the baby because here at the clinic, they ask you if you are going to breast feed or not and you say no; when you get to the hospital for delivery they tell you to breastfeed.” (Interview participant 12: Age 44 years).

“When you decided to breastfeed you should do that for six months and not give him something else other than breast milk, we should not mix feed.” (Focus Group participant 3: age 30 years).

4.3.2 Current level of partner support/involvement in PMTCT

Research participants expressed their views about the current level of male partners’ involvement in the PMTCT program. This came from their personal experiences of their relationship from their partners, as well as from what they have observed in the clinic.

Three sub-themes were identified: men’s attendance at the antenatal clinic, disclosure of HIV status to the partner, and partner’s support during this pregnancy.

4.3.2.1 Men’s attendance at the antenatal clinic

PMTCT services are accessed by pregnant women at the antenatal clinic (ANC), and there was a general consensus among the participants that men are rarely ever seen at the ANC. Most of these women have never seen a man attend the ANC; *“I have never seen them. I only saw them (men attending ANC) on the TV and if the ones from my community can do the same, it will be better.”* (Interview participant 11: age 31 years).

Three participants reported previously seeing men at the antenatal clinic:

“I once saw a man at the clinic. People were laughing at him. He was entering every consulting room with the wife, but he was not a Xhosa man, he was a foreigner and the guy was very supportive, we were laughing at him.” (Interview participant 13: 26 years).

According to another woman:

“People who use to do that (attend ANC with their partners) are coloureds, I have never seen a black person.” (Interview participant 2: age 32 years).

Some of the women have witnessed partners who came as far as the gate of the clinic before turning back: *“He turns around at the gate... (laughing), and then he comes back in the afternoon to fetch me.”* (Interview participant 4: age 23 years).

However, three of the participants stated that their partners have come to the clinic with them previously, two of whom are also using Antiretroviral:

“Since I’ve been visiting the clinic in Mt Frere, I use to invite him when he is off...he is taking ARVS too.” (Interview participant 5: 26 years).

“We did come together and attended the class; especially by the time we started taking the pills.” (Interview participant 9: age 37 years).

4.3.2.2 Disclosure of HIV status to their partners

Four of the women stated that they have not disclosed their HIV status to their partners:

“I have tested and the nurses asked me if there is someone I’m going to tell and I said I will tell my husband, when I got home it was not easy and he never even asked how it went so I kept quiet. On the next Thursday, we were supposed to come together here at the clinic, but he was busy at work and I ended up coming alone” (Interview participant 13: age 26 years).

Another interview participant said her boyfriend was only aware that she was attending the ANC but had no idea she is on PMTCT. When asked for the reason for not disclosing to her boyfriend, she replied: *“Yho, I don’t know”*. (Interview participant 7: age 18 years).

The third participant who said she has not disclosed her status to her boyfriend said:

“If you tell them you are HIV positive, they blame us.” (Interview participant 14: age 25 years)

Another participant did not have a chance to inform her partner about her status:

“No he is not aware because I never had a chance to talk with him, when I call him he just shouts at me.” (Focus group participant 3: age 25 years).

One of the participants, while stating that she had disclosed her status to her partner provided an insight into why some of the women might not want to do so;

“... Some of us are afraid that they might run away from us so we refuse to tell them.” (Focus group participant 5: age 22 years)

Most of the participants who have disclosed their HIV status to their partners reported positive responses and support from them. According to one of these women:

“He said its fine and said I should always inform him when I’m coming to the clinic. I always do that, and after I have finished from the clinic, he phones and asks how it went.” (Interview Participant 6: age 18 years old).

However, for two of these women, the responses were not so positive:

“I said I tested in the clinic and the results came back positive. Since then he left me and he told me that it’s my thing. I said to him go to the clinic and get tested he never did that and he left me ... he said he is not having HIV.” (Interview participant 1: age 31 years).

“When we were talking about it he becomes very angry but he use to pretend as if he accepted it but I know he has not....” (Focus group participant 2: age 30 years).

4.3.2.3 Partners’ support during this pregnancy

When the participants were asked how they have been supported by their partners during the present pregnancy, the responses were a mixed one. While the majority of them (12) said their partners have been supportive, some reported been rejected by their partners since they became pregnant, especially when their HIV status were known.

One of the participants, an unmarried mother of one talked about the strained relationship she has with her partner, and the lack of support from him:

”Ever since I fell pregnant we have been fighting. Sometimes he avoids my calls for a full month. There is no support from him at all but he knows that I am pregnant with his child.” (Interview participant 14: age 25 years).

Of the four participants who are married, one reported not getting enough support from her husband (she has also not disclosed her HIV status to him). She spoke about how her husband only supports her financially, but never asked her questions about activities at the clinic:

“The only thing is that he is supporting me by giving me money when I need to come to the clinic, when I have pains and want to see the doctor.” (Interview Participant 13: age 26 years).

Most of the participants stated that they were receiving a wide range of support from their partners, mostly financial, which facilitate their attendance at the ANC clinic to assess PMTCT services:

“He gives me money to come in the clinic and when I need anything, he provides it for me.” (Interview participant 8: age 21 years old).

Some further reported being supported emotionally by their partners:

“He is not staying in this town... He calls every day; he always wants to be updated about what is going on, sometimes when I visit him, we do chat a lot” (Interview participant 10: 32 year-old).

“I am staying with my partner. We have other kids besides the one I’m pregnant with. He is very supportive, last week I went for the scan with him.” (Focus group Participant 4: 34-year old).

4.3.3 General attitude towards partners’ involvement in PMTCT

All the participants, except one, said it will be good for men to attend the ANC with their partners, and all of them will be glad for their partners to come with them to the clinic. Some of the benefits of male partners involvement and attendance at the ANC/PMTCT clinic mentioned by the participants include helping to get the men counselled and tested, improves the relationship between the couple, as well as making the women feel happy and appreciated. This will also help the men feel more responsible and “bond” more with the child, improves and protect the health of the child, convince them to use condoms, and also enables them to provide support for their partners by reminding them of what is said at the clinic.

A 32-year old participant spoke about how this will improve her relationship with her partner:

“Honestly, involving men in the program will help because they will be able to see the processes of ANC. They will know what exactly is going on when you say you are going for ANC visits. What I use to say when my boyfriend is nagging and asking me about issues of pregnancy is that he should use Google because that’s what he knows how to do most. If he accompanies me to the clinic, he will be informed about the processes of pregnancy.” (Interview participant 10: age 32 years).

According to another participant:

“It will be very helpful because when you find out that you are HIV positive you need to take very good care of yourself, but now, how can you do that if you are only doing it by yourself and your partner is not doing it?” (Interview participant 14: age 25 years).

One interview participant spoke about the benefits to the child:

“It is the right thing to include them so that we can come with them and listen to ways of protecting the child together.” (Interview participant 9: age 37 years).

A similar opinion was expressed by another woman:

“Maybe that’s where things can be improved, because we will be educated on how to protect the child and so on and I will be very glad if that can happen.” (Interview participant 5: age 26 years).

However, interview participant 12, a mother of 4, does not care whether or not her partner accompanies her to the clinic;

“No I don’t even care, they are careless and sometimes they will tell you that you are not the first person to fall pregnant. For example, right now he is at work and I’m here, while he is the one who made me pregnant. So the best way is to ignore them and do things our way to avoid being hurt.” (Interview participant: 12, age, 44 years).

4.3.4 Perceived obstacles to men involvement in PMTCT

The research participants mentioned several factors which they perceived to be obstacles to their partners’ participation in the PMTCT program. These obstacles can be broadly categorized into four:

1. Socio-cultural factors;
2. Fear of knowing their HIV status;
3. Time factors; and
4. Health system factors.

4.3.4.1 Socio-cultural factors

Most of the women believed that the socio-cultural norm in which ANC and PMTCT are perceived primarily as a woman’s affair is one of the obstacles to men’s involvement in the program. According to them, a man attending antenatal clinic with his partner could be perceived by the society to “weak”, and men do not attend the clinic to avoid being ridiculed.

“... They take it as if clinics are for us women only.” (Interview participant 13: age 26 years).

“They take it as if this is something for women only, so they are shy to participate.” (Focus group participant 5: age 22 years).

“They do not want to come to the clinic saying that they are not pregnant.” (Interview participant 4: age 23 years).

One of the participants puts this more clearly when she said;

“If one of them is visiting the clinic with the wife, to others it is like he is being controlled. So they do not want to give that type of impression to their friends. He can accompany you and turn around at the gate, what he does not want to do is to enter the clinic with you, because he is going to be laughed at by his friends.” (Interview participant 10: age 32 years).

4.3.4.2 Fear of knowing their HIV status

Seven of the women interviewed believed that the fear of knowing their HIV status is one of the reasons men do not want to come with their partners for PMTCT. Some of the participants said some

men will never go for an HIV test themselves, using their partner's status during ANC as a proxy indication of theirs.

This issue of 'proxy' testing by men was of particular concern to a participant who said:

"If we are tested and know our status, they take it as if they have known theirs too. Using the results from the women, they take it will be the same for them, so they see no need for them to visit the clinic."

(Interview participant 5: age 26 years).

This is similar to the opinion of another participant when asked about what she perceived as obstacles to male participation:

"I don't know, because if you are tested as the wife or girlfriend and tested positive or negative, they take it for granted that their status is the same as yours." (Interview participant 8: age 18 years).

According to one of the Focus group participants;

"Men have a lot of fear; they do not want to know their status" (focus group participant 5: age 22 years).

4.3.4.3 Time factors

Going to the antenatal clinic to access PMTCT services involves spending long hours at the health facility. Participants were of the view that men are unwilling to wait for such a long period of time, and that this could be one of the reasons they were not participating in PMTCT.

Interview participant 4 described her own experience, stating that although her partner would have loved to attend the clinic with her, he was too busy to wait:

"My partner is too busy, he drops me here and rushes back to the shop" (interview participant 4: age 23 years).

A participant remarked during the Focus group discussion about the fact that men are simply unable to wait for hours at the clinic:

"They are panicking, they do not want to wait, you will hear them saying, 'look at you, you left the house at 08:00 and you only came back at 4pm'." (Focus group participant 4: age 34 years).

Another participant who said her husband has been attending the clinic with her because he is also on antiretroviral therapy also commented about the time constraints faced by her husband. When asked if her partner was still interested in attending the clinic with her, she responded:

“Yes he is but because he is working he doesn’t have time.” (Interview participant 9: age 37 years).

4.3.4.4 Health system factors

Antenatal care and PMTCT services as currently being implemented are designed mainly for women, in the opinion of some of the research participant. In fact one of the women described her surprise when she learnt men are allowed to attend the clinic with their partners:

“We thought men are not allowed to come here, we have no idea that men are allowed.”

(Interview participant 13: 26-year old).

One of the participants spoke about her partner’s refusal to attend the clinic with her because he does not like being attended to by female nurses who conduct the ANC and PMTCT services:

“He hates it because we are attended to by the female nurses. So he prefers to visit male doctors.”

(Focus group participant 2: age 30 years).

4.3.5 Perceptions about health care workers attitude to male involvement in PMTCT

Most of the participants perceived that health care workers (mainly nurses) will be glad to have men accompany their partners to the clinic. According to them, the general attitudes of the nurses towards them have been good and they believe this will be extended to any male partner that attends the clinic. This positive perception was exemplified by one of the interviewed participants who believed nurses’ response to her partner attending the clinic with her will be supportive: *“I think they will feel very happy because they want him to come, and they will see that he is caring.”* (Interview participant 13: age 36 years).

Another participant expressed the same view;

“They will be happy, because they will be able to tell if you have been listening to what they have been telling you. They said that when you come to the clinic, the person who has impregnated you must accompany you, so that he can also listen to what is being said at the clinic.” (Interview participant 4: age 23 years).

One respondent was of the view that the nurses will be happy to see men at the clinic as this will actually make their job a lot easier:

“I think it will make them happy because it can make things easy for them. They are repeating the same thing every day with us, but if men can be involved, it will be better. We are told to use condoms but they refuse to use it, so I think it will be a bit easy if they could attend the PMTCT.” (Interview participant 2 years: age 3).

One of the participants however had a different opinion. According to interview participant 5, nurses do not encourage men to attend the clinic with their partners. She said:

“Where I came from, men are asked to leave the ANC unit if they are with their wives. They are not allowed to enter the ANC room where the nurses do the check-up to us.” (Interview participant 5: age 26 years).

4.3.6 Suggestion on how to get partners involved in PMTCT

4.3.6.1 Women need to talk to their partners

Participants all agreed that there is a need for women who are on the PMTCT to talk to their partners in order to get them involved.

According to one of the respondents:

“Women need to talk some sense with them and convince them.” (Interview participant 15: age 23 years).

Another participant said:

“He is not the kind of person who is hard to convince. I am suffering from hypertension, and whenever my blood pressure is up, he comes to the hospital with me. So if he can be convinced about the importance of this, he will come.” (Interview participant 2: age 32 years).

However, there are different opinions about how easy it is to talk with their partners. Some of the women insisted it is difficult to talk to men about PMTCT:

“No it is not easy, my sister, it is not easy even to tell them that you tested positive.” (Interview participant 12: age 44 years).

“I don’t know because men are stubborn, if men were listening like women do, the world wouldn’t be like this. They want us to cry for them before they listen.” (Interview participant 11: age 31 years).

“Yho! It is going to be the very difficult, men are very stubborn. They do not want to listen and they hate clinics, they do not want to go to the clinic, they do not want to test themselves, they are so impatient.” (Interview participant 10: age 32 years).

Some however felt that talking to their partners is easy, although they believe that men will refuse to participate anyway:

“Yes it may be easy but some of the partners are stubborn. They can refuse to come to the clinic, but the (pregnant) mothers can talk to them.” (Interview participant 2: age 32 years).

Talking to the partner, according to one of the participants depends on the type of relationship that exists between the couple. She believed it is much easier to talk to the partner if they are married than if they are not.

4.3.6.2 Government /Health care workers intervention needed

The women believed that it will be difficult to talk to or convince their partners on their own and they all will welcome assistance from health care workers and the government in this regard.

Several other suggestions were made on how the government and health care workers could help to encourage men's engagement in PMTCT. Some of the suggestions are:

1. Health workers (preferably, male health care workers) should do home visits to teach men about HIV and to explain to them the importance of being involved in the program;
2. Conducting HIV awareness campaigns in the community;
3. Government should make it compulsory for husbands and boyfriends to accompany their wives and girlfriends to the clinic;
4. Health care workers from the clinics should phone the men to request them to come to the clinic with their partners;
5. Information about men engagement in PMTCT should be publicised on the radio, television, magazines as well as on social networks;
6. Invitation for men to attend the clinic should be written on the clinic card; and
7. Peer education, where those already attending the clinic with their partners can talk to those who are not.

Some of the participants felt that some form of compulsion (or force) should be introduced by the government to make men accompany their partners to the clinic. One of the women commented that; *“Government can go to the various departments and talk to people. They should tell them that it is compulsory; that if a man is having a pregnant wife or girlfriend, he should (be allowed) to accompany her whenever she is going for clinic visits.”* (Interview participant 10: age 32 years).

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides an evaluation and interpretation of the findings from the empirical study, making conclusions related to the research question. Recommendations and suggestions are made based on the findings of this research.

5.2 Discussion

Discussion on the result and findings of this thought provoking research piece will be stratified according to the following:

5.2.1 Knowledge of women about PMTCT

Although this study did not set out primarily to assess the knowledge of HIV-positive women on PMTCT but during interviews with the research participants, it seems that there is an inadequate knowledge about certain aspects of the PMTCT program. Most of the participants understood the antenatal and intrapartum interventions to reduce MTCT of HIV, which are mainly antiretroviral prophylaxis for the mother and infant. Some of the participants however had no clear understanding about safe infant feeding practices, which is the main thrust of post-natal PMTCT. While the participants were aware that HIV could be transmitted through breastfeeding and that mixed (breast and formula feeding) increases the risk of HIV transmission, some are unsure of the best approach to feeding their babies. Maman *et al.* (2012) found a limited understanding of the specific mechanisms through which their infant feeding practices influenced HIV transmission risk among a group of HIV-positive women interviewed in Kinshasa, the DR Congo. Levy, Webb, and Sellen (2010) reported that similar confusion about infant feeding choices among HIV-positive women existed in Malawi. Such mixed messages from health care workers often resulted in mixed-feeding by mothers (WHO, 2007) as cited in (Anderson *et al.*, 2013).

Goga *et al.* (2012a) noticed the high prevalence of mixed feeding practices among mothers in all the provinces in South Africa and argue that the gains made by the dramatic decline in early MTCT rate (of about 3%), could be negated through poor infant feeding and postnatal transmission. This view is

supported by UNAIDS, who has reported the late transmission rate to be as high as 18% (UNAIDS, 2011b). Anderson *et al.* (2013) in a recent study conducted in Butterworth, Eastern Cape, has suggested integrating ‘feeding buddies’ that will support HIV-positive mothers feeding practices into the PMTCT program.

5.2.2 Current low level of men involvement in PMTCT

Findings from this study show that the level of male participation in PMTCT, as measured by attendance at the ANC, is very low. Some of the participants in this study have never seen a man attend the clinic before. Similar findings of low male involvement in ANC/PMTCT program was reported by Peltzer *et al.* (2008) in an earlier study conducted in the OR Tambo district of the Eastern Cape province, the same district where the current research took place. Only 14.9% of HIV-positive women reported that their male partner accompanied them to their antenatal care clinic visits (Peltzer *et al.*, 2008). Results of studies from other countries in Africa, such as Uganda, Tanzania and Kenya reveal similar pattern of poor male partner’s involvement in PMTCT (Falnes *et al.*, 2011; Farquhar *et al.*, 2004; Nkuoh *et al.*, 2010). All these authors are of the view that to be effective in Sub-Saharan Africa, PMTCT interventions need to be designed to encourage more male participation and engagement.

Although only three out of the 20 participants (15%) in the study stated that their partner have been to the clinic with them, the majority said their partners provided other type of support, mainly in the form of money to them to facilitate their attendance at the clinic. A similar pattern was reported by Byamugisha *et al.* (2010) among male partners of HIV-positive women in Uganda. While only 4.7% of the men had attended ANC with their partners, most of them (97%) said they provided financial support to their spouses to attend ANC. HIV-positive women, in a study conducted in Durban, South Africa also talked a lot about the instrumental support that their partners provided them to facilitate their access to the clinic and to provide them with food or money for food while they waited for their prenatal appointment (Maman *et al.*, 2011).

5.2.3 Disclosure of HIV status to partners

Seventeen out of the 20 (85%) participants in this study had disclosed their HIV status to their partners. This is similar to a high disclosure rate found in studies conducted in Nigeria and Ethiopia, with disclosure rates of 89% and 90.8% respectively (Deribe, Woldemichael, Wondafrash, Haile, & A., 2008; Sagay *et al.*, 2006). Findings from this research is however in contrast to that by Mucheto *et al.*

(2009) which found that 45% of PMTCT attendees in six health facilities in Zimbabwe have not disclosed the information to their partners. A review of 17 journals from 15 Sub-Saharan article shows that the disclosure rate among HIV positive women to their partners vary widely, ranging from 16.7 to 87% (Moodley *et al.*, 2009). Factors that have been implicated as being responsible for non-disclosure include fears of abandonment, discrimination, violence and accusations of infidelity (Moodley *et al.*, 2009).

Only two of the participants in this study reported negative responses from their partners. One of them was abandoned after he informed the partner, while the other perceived resentment from her partner. This finding is very similar to that by Deribe *et al.* (2008) where 80.3% of respondents in the study reported receiving a positive response from their partners following disclosure. With such a high disclosure rate and positive responses from partners, it is surprising that few men are actually involved in PMTCT in this area.

5.2.4 General attitudes towards male involvement in PMTCT

There is an overwhelming positive attitude towards male involvement among the research participants, similar to findings among HIV-positive women in Mbeya region of Tanzania (Theuring *et al.*, 2009) and Durban, South Africa (Maman *et al.*, 2011). In these studies, the women identified the potential benefits of partners engagement in PMTCT to include provision of support and facilitation of attendance at ANC/PMTCT clinics and that it provides opportunity for starting difficult dialogue on difficult topics (such as condom use). In addition to these, the research participants in this study also expressed the views that men involvement in the program will improve relationship between couples, protect the health of the child and make women feel loved and appreciated. The participants assertions that male involvement will protect the health of the child is supported by the results from a study conducted in Nairobi Kenya, where partner involvement in PMTCT was associated with improved infants' health outcome and survival.

5.2.5 Perceived obstacles to male involvement in PMTCT

Participants in the study identified some factors that they believe contribute to the low level of men participation in PMTCT in this area. Some of these factors have been mentioned in other studies examining the issue of obstacles to male partners' involvement in PMTCT.

A major factor mentioned by the participants is the societal perception that ANC is exclusively for women and that only weak men, controlled by their partners visit such clinics. This is similar to the finding in Kenya by Reece *et al.* (2010), where research participants felt that traditional cultural norms and gender roles prevalent in the region made it particularly difficult for men to attend the programs with their wives. Nkuoh *et al.* (2010) reported that most of the men respondents in a study conducted about PMTCT in Cameroon regarded the PMTCT and antenatal care services as a woman's affair. Likewise, according to Falnes *et al.* (2011), antenatal clinics are regarded as 'female arena' in northern Tanzania.

In this study, a time constraint was mentioned by some of the participants to be a major hindrance to their partners' attendance at the clinic. To these women, it is impractical to expect men to spend many hours waiting with their partners at the clinic, when they have jobs to do. Similar views have been expressed by women in other studies in Africa (Maman *et al.*, 2012; Theuring *et al.*, 2009). Male participants in a study by Reece *et al.* (2010) in Kenya stated that the requirements of their jobs made it difficult to accompany their wives to PMTCT appointments, particularly the perception that an extended amount of time would be consumed at the clinic. Both men and women in this particular study further described that it was difficult for men to approach their employers due to the general societal belief that the program was only for women and children.

The structural characteristic of the ANC/PMTCT services at the study site does not encourage men participation in the program. Characteristics of clinics as well as procedures within these clinic have been identified as creating an environment in which it is difficult for men to attend with their partners (Byamugisha *et al.*, 2010; Falnes *et al.*, 2011; Theuring *et al.*, 2009). All but one of the research participants expressed the view that nurses will be glad to have men in the clinic. According to these participants, male partner's attendance at the clinic will be encouraged by the nurses as this will make their job of counselling and educating the parents easier. Only respondents reported having observed nurses asking men to leave the clinic. This according to the participant occurred not in the study site but "where I came from". This perception of positive attitude by nurses towards men attendance is in contrast to some of the findings from other studies in Africa. In Mbeya region, Tanzania, men who have accompanied their partners were sometimes turned away (Theuring *et al.*, 2009), while in Eastern Uganda, some of the health care providers are perceived as rude and unfriendly to men (Byamugisha *et al.*, 2010).

Fear of knowing their HIV status was mentioned by some participants as a major reason for men not attending HIV clinic with their partners. Men's fear of having an HIV test has been shown to present barriers to their obtaining HIV testing and to women's health care (Nkuoh *et al.*, 2010).

5.2.6 The need for formal interventions to encourage male partners' involvement

In order to ensure male involvement in PMTCT, participants were of the opinion that formal interventions from the health care system and government are required. The majority of participants stated that they are able to speak to their partners about coming to the clinic with them, but felt they will not be able to convince them to come to the clinic with them. Most of the participants expressed the view that men will come to the clinic if spoken to by a health care worker. This is similar to the view of a group of women in Northern Tanzania, who claimed that they had asked their partner to come to the clinic but that they had experienced great difficulty trying to persuade them and expressed the wish that partners be invited by health care workers (Falnes *et al.*, 2011). Many of the participants suggested that invitation to partners be written on the antenatal cards. Similar suggestions for partners' invitation have been made by men in Tanzania (Theuring *et al.*, 2009) and Uganda (Byamugisha *et al.*, 2010). Abdallah *et al.* as cited in Bolu *et al.* (2007) has demonstrated the effectiveness of using such an approach in Tanzania, where there was a 30% increase in male partner counselling when men were sent a letter of invitation to participate in PMTCT programs. Koo, Makin, and Forsyth (2013) also recently reported that the use of such cards received positive responses among a group of men and women in a health facility in Pretoria, South Africa.

5.3 Conclusion

As the efforts to stem the tide of the HIV epidemic continues, prevention of vertical transmission presents a veritable opportunity to prevent unborn children from the pain and misery that HIV infection signifies. The global community has rightly committed itself to the elimination of new infections among infants in high-burden countries, mostly in Sub-Saharan Africa, where more than 90% of HIV-positive pregnant women live. The focus of the prevention of mother-to-child transmission (PMTCT) program, in many countries has traditionally being on HIV-positive women. As recent evidence has shown, male partners are as equally important in the successful implementation of such a program. This study provides some insights about the involvement of men in PMTCT program from the perspectives of women who are already accessing such services.

Findings from this study reveal that the level of male partners' involvement in PMTCT remains low although most of the women on the program will like their partners to be more actively involved in it. The study suggests a positive attitude among HIV-positive pregnant women towards male participation. There is a perception of inadequate male support among the study participants, who will like to see men do more than just providing financial support to facilitate women attendance at the antenatal/PMTCT clinics. Considering the various benefits attributed to male participation by the research participants, continuing low involvement of men in PMTCT perhaps indicate the deep-seated gender role within the community, where pregnancy and child-bearing is a woman's responsibility. The current reality in South Africa of a low perinatal HIV transmission rate of 3%, attributable to antiretroviral use during pregnancy and immediate childbirth period, is contrasted with a late post-natal transmission rate of up to 18%, indicating possible lack of support for the nursing mothers, shows the urgent need to engage men in the PMTCT strategies.

The conclusion from this study therefore is that most HIV-positive women did recognize the important role their partner could play in supporting them during and after pregnancy in order to prevent transmission of HIV to their babies. As the participants in this study have shown however, most women feel incapable of motivating their partners to get involved on their own, indicating the need to incorporate strategies to encourage active male participation in the program at national, provincial and institutional levels.

5.4 Recommendation

The following recommendations are made from the findings of this study:

1. There is a need to re-evaluate the content and focus of PMTCT information provided by health care workers. As findings from this study has shown, while majority of women understood the importance as well as the usage of ARVs, there is a lot of misunderstanding about the best feeding approach for the infant in the immediate post-natal period. Provision of clear, simple and consistent information on safe infant feeding practices should be provided;
2. Men should be formally invited to attend the PMTCT clinics with their partners. This could be achieved by the use of specially designed 'invitational cards' which could be designed similar to the STI partner tracing cards that are widely use at clinics and health centres countrywide. As the some of the participants in this study had suggested, partners could also be invited by

writing such invitation in the women's antenatal card. Where possible, health care workers should also phone the partners to invite them to come to the clinic with the women;

3. Re-organization of antenatal/PMTCT clinics to make them more male-friendly;
4. More male health care workers should be allocated to work at the antenatal/PMTCT units. This is because participants suggested men might be more willing to come to the ANC/PMTCT clinic if they will be attended to by male nurses;
5. Appropriate changes should be made to relevant labour legislations and policies to make provision for men to be allowed time off from work to attend ANC/PMTCT clinics with their partners; and
6. Male peer educators should be recruited to mobilize men in the community towards active participation in PMTCT program.

5.5 Limitations of the Study

The following limitations were identified in this study:

The finding from this study may have been affected by the fact that participants were recruited from only one health facility. Although the purpose of a qualitative research such as this is not to generalize the findings but to 'describe and understand particular groups and individuals in particular context (Christensen *et al.*, 2011, p. 362), recruiting participants from other facilities could have enhanced the richness of the information obtained.

Fewer than anticipated individuals participated in the focus group discussion. A larger group may provide different result than that obtained from the group of 5 in this study. Conducting more than one Focus group will also have allowed for a better triangulation in order to further improve the internal validity of this study.

Another limitation of the study is that it was conducted among a small number of participants and it is therefore difficult to generalize its findings to the general population.

This study investigated male participation in PMTCT from the perspective of women already undergoing the program. However, an in-depth understanding of male attitude towards PMTCT could be better explored by conducting the study among male partners of women on the PMTCT program.

There is therefore the need for more male-focused studies to provide more insights into the issues associated with male participation in PMTCT.

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APPENDIX A: INTERVIEW SCHEDULE

INTERVIEW SCHEDULE

Opening

After obtaining informed consent, women who met the inclusion criteria and are willing to participate in the study shall be interviewed in a quiet room within the Gateway Clinic. During the interview, I would like to ask the participant questions about her age, marital status, socio-economic background and whether she has had any previous pregnancy. I will also ask questions about her knowledge about the Prevention of Mother to Child Transmission (PMCTC) of HIV, as well as the perceptions and attitude about her partner involvement in the program.

The interview will last between 30 and 40 minutes

The interview will be semi-structured and will be guided by the following kinds of questions:

A. Demographic information

1. How old are you?
2. How old is this pregnancy?
3. Marital status and or status of relationship or partner support.
4. Is this your first pregnancy?
5. Level of education
6. Are you employed?

B. Background questions

1. Have you ever discussed the fact that you are on the PMTCT programme with your partner?
2. Have you ever invited him to come to the clinic with you?
3. Is your partner involved in the programme?
4. How has your partner being supporting you during this pregnancy?

C. Knowledge questions

5. Can you tell me what you know about the PMTCT programme?

D. Perception Questions

6. What do you think about involving male partners in PMTCT?
7. What do you think influences male involvement?

E. Attitude questions

8. Do you think male involvement in the PMTCT programme is adequate at present?
9. Do you think it helps to have your partner involved in the programme?
10. Do you think it will be easy for women to come this clinic with their partners?
11. Would you prefer for your partner to be involved?
12. What has been the attitude of the health care workers about your partner involvement?

F. Closure Question

13. How do you think male partners can be encouraged to be more involved in the program?

APPENDIX B: LETTER OF PERMISSION TO CONDUCT THE RESEARCH



Province of the
EASTERN CAPE
DEPARTMENT OF HEALTH

DEPARTMENT OF HEALTH: 100 OLD REVENUE OFFICES: KING SABATA DALINDYEBO SUB DISTRICT: MTHATHA
TEL: 047 5314362/047 5310110: FAX: 047 5311344

FROM	SUB DISTRICT MANAGER
TO	DR OLUKAYODE ADEMOLA ADELEKE
SUBJECT	PERMISSION GRANTED TO YOU TO CONDUCT A RESEARCH PROJECT AT GATEWAY CLINIC
DATE	20/09/12

The Sub District has received your request to conduct a research study at Mthatha Gateway Clinic on PMTCT Programme. As Department we welcome your idea and your purpose of the study as it will detect the quality of our service. The Sub District will appreciate your findings and the recommendations being presented after the study.

In the light of the above you are therefore permitted to conduct the study but the results will be published will be utilized by the Sub District for quality improvement purposes.


SUB DISTRICT MANAGER

