



MALE PARTNER INVOLVEMENT IN THE PREVENTION OF MOTHER-TO-CHILD
TRANSMISSION (PMTCT) OF HIV: A MIXED METHODS STUDY OF THE GOKWE
NORTH DISTRICT, ZIMBABWE

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TRANSMISSION (PMTCT) OF HIV: A MIXED METHODS STUDY OF THE GOKWE
NORTH DISTRICT, ZIMBABWE**

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A THESIS SUBMITTED IN FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
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SCHOOL OF BUILT ENVIRONMENT AND DEVELOPMENT STUDIES
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MAY 2018

DECLARATION

I Vimbai Chibango declare that:

1. The research reported in this thesis, except where otherwise indicated, is my original research.
2. This thesis has not been submitted for any degree or examination at any other university.
3. This thesis does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.
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5. This thesis does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the thesis and in the References sections.

Signed



.....23 May 2018

DEDICATION

To my dad Sekuru VaB and mom VaShoko

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I am also indebted to all the staff members of the School of Built Environment and Development Studies for the support they provided in various forms, which made the writing of this thesis a success. My gratitude goes to Priya Konan for her constant support. I wish to thank my colleagues, Lydia Hangulu, Nkeka Tseole, Claudine Muraraneza, Venencia Shonhai, Kemist Shumba, Ines Kajiru and Pauline Murima who always assured me of the successful end of this study.

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TO GOD BE THE GLORY!

ABSTRACT

The aim of this study was to shed insight into male partner involvement in the prevention of mother to child transmission (PMTCT) of HIV programmes in the Gokwe North district in Zimbabwe. The study was motivated by the fact that the number of pregnant women who tested for HIV in the antenatal care centres has been increasing since the inception of PMTCT in the country. Most of the men, however, were not being tested for HIV along with their pregnant spouses, yet the success of the PMTCT programmes was routed in the concerted efforts of both partners.

The study utilised mixed research methods: qualitative and quantitative data collection and analysis. The qualitative data came from focus group discussions and key informant interviews and the quantitative data came from a survey, using self-administered questionnaires to collect the data. The use of methodological triangulation enabled the research to benefit from the different strengths inherent in quantitative and qualitative methods in a single study, while at the same time offsetting the biases associated with each of the methods. A total of 331 men and women who had had a child in the last five to 10 years participated in the survey. In addition, eight focus group discussions, seven key informant interviews and eight follow-up interviews were conducted.

Studies revealed the benefits associated with male partners' involvement in PMTCT programmes, yet little is known about their attitudes and the factors influencing their involvement. It was essential to explore the meanings and understandings attached to the concept of male partner involvement as this is likely to have a bearing on the attitudes, behaviours, as well the expectations of the male partners in the PMTCT initiatives. It is widely agreed that the concept of male partner involvement is complex in terms of definition and measurement; literature revealed varying meanings of male partner involvement, as well as the complications associated with measuring it.

Male partner involvement was dominantly described as when the male partner accompanied their pregnant spouse to the antenatal care centre for HIV couple counselling and testing. Results show approximately 45.7% of males in the survey had tested for HIV as a couple with partner. The male partner was also expected to test for HIV and disclose their HIV status to their partner. Participants in this study considered counselling sessions provided at the health care centre as crucial, and male partner involvement was seen when the males followed the health care worker's advice in practising safe sex during breastfeeding and when the appropriate infant feeding practices were adhered to.

Inter-spousal communication facilitated male partners' taking part in PTMCT services. HIV and sexual and reproductive health were identified as sensitive topics which male partners would not feel comfortable discussing in public; hence discussions that couples conducted in private enabled the male partners to cooperate with their partners. Traditional chiefs and village headmen also played a key role in mobilising male partners to take part in HIV intervention programmes, however, challenges such as shortages of male peer educators and the lack of male-oriented services within health care settings were associated with a low uptake of PMTCT services by men. Additionally, due to traditional gender roles that denoted child care as a woman's role, men who took part in antenatal care activities were stigmatised and labelled as jealous and over-protective, and this further hindered their participation in PMTCT initiatives.

The male partner involvement index suggested that the level of male partner involvement was generally high. Using this index, male partner involvement was high (94.6%) among men who accompanied their partners to antenatal care, and relatively high (94%) among men who were counselled on HIV prevention during infant feeding. In addition, HIV testing for males was 88.8%. However, in comparison with qualitative results, male partners were not willing to go for HIV due to various personal, cultural and structural inhibitors. This was reported as one of the major challenges in dealing with HIV prevention.

In a traditional setting steeped in culture and gender roles it was challenging to engage male partners in issues of child health care, such as interventions for the prevention of mother-to-child HIV infection. In light of these findings, it was recommended that local organisations collaborate with local traditional leaders in working towards increasing men's involvement in PMTCT interventions. In order to ensure that male partners took part in PMTCT and that their health needs were addressed in the process; health institutions could provide male-oriented health services within their ANC and PMTCT centres.

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ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal care
ART	Antiretroviral therapy
CIA	Central Intelligence Agency
FGD	Focus group discussion
GAD	Gender and development
HCCT	HIV couple counselling and testing
HIV	Human immunodeficiency virus
ICPD	International conference on population and development
IDI	In-depth interviews
KII	Key informant interview
MOHCC	Ministry of Health and Child Care
MOHCW	Ministry of Health and Child Welfare
MTCT	Mother-to-child transmission of HIV
NVP	Nevirapine
OPHID	Organisation of Public Health and Interventions
PCA	Principal component analysis
PCR	Polymerase Chain Reaction
PMTCT	Prevention of mother-to-child transmission of HIV

SDM	Standard day method
SPSS	Statistical Package for the Social Sciences
UNAIDS	Joint United Nations Programme on HIV and AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
VCT	Voluntary counselling and testing
WHO	World Health Organisation
ZIMSTAT	Zimbabwe National Statistics Agency

CHAPTER ONE: INTRODUCTION

1.1 Background to the study

Mother-to-child transmission (MTCT) of HIV is a public health problem, especially in countries with generalised epidemics (WHO, 2014). Approximately 1 500 000 HIV positive women become pregnant every year, and more than 90 percent of the children infected with HIV during pregnancy, at birth or breastfeeding live in Sub-Saharan Africa (Weiler, 2013b, UNAIDS, 2015). It is almost a decade since the introduction of the prevention of mother-to-child transmission (PMTCT) of HIV programmes. In defining what PMTCT is, Johnson (2009:2) states that it is...

A comprehensive health service intervention that aims to limit... forms of HIV transmission from mother to child. In contrast to the life-long provision of antiretroviral treatment for children, the intervention is limited to women's pregnancy and breast-feeding period ... can result in massive reductions in HIV transmission if effectively implemented (Johnson, (2009:2).

It can be noted from the above definition of prevention of mother-to-child transmission (PMTCT) that interventions are mostly limited to pregnancy and the breastfeeding period, however, this research includes other components of PMTCT as well as prevention during pregnancy and breast feeding. This is in line with the approach utilised in Zimbabwe. The services offered within this programme in Zimbabwe are based on the United Nations' PMTCT promotion components that are: Primary prevention of HIV infection in women; prevention of unintended pregnancies in women living with HIV; prevention of transmission from women living with HIV to their infants and lastly; the provision of care, treatment and support for women living with HIV and their families (WHO, 2012a). Effective access to HIV testing and counselling, access to antiretroviral therapy (for infants and mothers), appropriate infant feeding practices and safe deliveries (De Cock et al., 2000) contribute to PMTCT and reduce child mortality (WHO, 2014).

The global community, composed of the Joint United Nations Programme on HIV/AIDS (UNAIDS), the United Nations Population Fund (UNFPA), the United Nations Children's Fund (UNICEF) and the World Health Organisation (WHO) was committed to the elimination of new infections among children by 2015 and keeping their mothers alive, focusing on about 22 low and medium income countries based in sub-Saharan Africa, where 90 percent of the global mother-to-child transmission of HIV occurred (WHO, 2014). Among these countries, however, only a third of them had made considerable progress towards the elimination of new infections among children by 2015 and the majority still had more than 90 percent of new infections through mother- to- child after 2015 (WHO, 2014). Botswana is one of the countries that has made progress towards elimination of new infections among children from 1120 cases in 2005 to 323 cases in 2012 (Weiler, 2013a).

Substantive progress has been made towards the implementation of these interventions with regards to prevention and treatment, although the progress is slow in most parts of sub-Saharan Africa due to operational and implementation barriers (Aizire et al., 2013). At present, increased access to antiretroviral drugs for PMTCT has enabled countries that are burdened with HIV to escalate the provision of PMTCT services in underserved areas (Manjate Cuco et al., 2015). Recent WHO guidelines on treatment regimens promote Option B+, in which lifelong ART is provided to all HIV infected pregnant women regardless of their CD4 cell count (WHO, 2012a). Although progress has been made towards the expansion of PMTCT interventions, there is a need to strengthen the traditional approach to PMTCT which only focuses on women and children and include male partners (Manjate Cuco et al., 2015).

For a long time PMTCT programmes focused on facilitating and encouraging women to utilise the services offered in PMTCT programmes as well as in sexual and reproductive health, with less or no emphasis on male partners to utilise the same services. This approach eventually led to failure by women to fully utilise PMTCT services since few men would test for HIV during their partner's pregnancy (Montgomery et al., 2011a). One of the common reasons leading to women's failure to utilise PMTCT services is due to negative outcomes following disclosure of their HIV status, such as violence, divorce and stigmatisation by male partners (Yashioka and Schustaek, 2001, Medley et al., 2004). In response to this problem, the focus of recent research has shifted

to involve the male partner in issues that relate to maternal and child health such as HIV/AIDS, sexual and reproductive health and other health-related issues. One of the driving forces behind this shift was the International Conference on Population and Development (ICPD) of 1994 (UN, 1994) that called for increased male involvement in family and reproductive health matters due to their influential role in women's utilisation of PMTCT. Although the ICPD of 1994 called for increased male involvement, it is less than a decade since research has documented the effectiveness of this approach. Recent conference debates on male partner involvement in PMTCT have been reported to include the 19th International AIDS Conference (AIDS, 2012) in Washington DC which raised awareness of the benefits of increasing male involvement in PMTCT efforts (Mtambalike et al., 2012, Kikumbih et al., 2012). Also, the advent of the gender and development (GAD) approach adopted by development institutions and agencies in the early 1990s influenced research interest in terms of male involvement in women empowerment projects. The aim of the GAD approach in development projects is to ensure that unequal gender power dynamics are reversed so that both men and women benefit (Moser, 1993).

It is assumed that understanding the different gender dynamics between men and women will help in realisation of the motivations that encourage male partners to take part in PMTCT initiatives, as well as identifying factors that prevent them from participating in these interventions in their own homes and at community level. Male partner involvement in such interventions, however, is influenced by a number of factors that this research explores. It is also important to establish what men and women consider as male partner involvement within their context as this has an influence on what the community expects male partners to do in PMTCT programmes.

Male partner involvement is a concept with no universal definition, however, a few studies have tried to define male partner involvement in antenatal care (ANC) or PMTCT in diverse ways (Ditekemana et al., 2012, Maman et al., 2011). It is also important to note that involvement can be in two distinct forms that are either positive involvement or negative involvement. This study focuses on the positive ways in which male partners contribute to the prevention and elimination of mother-to-child transmission of HIV. According to the United States Agency for International Development (USAID,(2009), positive male partner involvement in maternal and child health is

about the physical and mental participation of men who aim to help in increasing maternal and child health survival outcomes.

In the context of HIV, the definition of male partner involvement varies according to authors. A study conducted in South Africa describes male partner support as when male partners accompany their spouses to the clinic and provide them with material and psychological support (Maman et al., 2011). Byamugisha *et al.* (2010) describe male partner involvement using six criteria. These are: the male partner accompanying his spouse during antenatal care (ANC) services, supporting ANC costs, having knowledge of his partner's next ANC visit, discussing the ANC interventions with his spouse, having knowledge of what happens at an ANC and the using of condoms with his spouse during the current pregnancy. A study conducted in the Mwanza district in Southern Malawi describes male partner involvement as couple HIV counselling and testing, a strategy for fast services for women in ANC, a government policy that requires men to take part in ANC activities and a programme that is unfair for women without partners (Kululanga et al., 2012c). Male partner involvement within the antenatal care setting is seen as an act of love, yet it is a foreign concept (Kululanga et al., 2012c) which diverts men from their traditional roles by having them carry out the women's duties of child care.

These studies thus show that the description of a male partner accompanying their spouse to an ANC is a cross-cutting theme among various authors, but some of the descriptions of male partner involvement from (Kululanga et al., 2012c), which consider male partner involvement as a foreign practice, show that the concept of male involvement is not clearly understood. Such misconceptions are likely to influence the manner in which male partners participate in PMTCT or ANC services.

1.2 Why involve men in PMTCT programmes?

The involvement of the male partner in PMTCT programmes is crucial, mainly because male partners play an important role in decision making on issues regarding family planning and sexual and reproductive health (SRH) (Theuring et al., 2009). This finding concurred with that of

Piotrow et al. (1992), who highlighted a 1984 Zimbabwe Reproductive Health Survey, where 42 percent of the married women surveyed indicated that it was only the husband who could decide on the family planning method to be used, the number of children to be had, as well as the spacing between each child. It was also found that men wanted to learn more about family planning so that they could make informed decisions. Dudgeon and Inhorn (2004) concur with Piotrow et al. (1992) that the use of female-centred contraceptives such as oral contraceptives, injectables and implants may be highly influenced by the male counterparts, in that they may mediate the economic resources needed to access them or indirectly sanction or prohibit their use.

In addition to these studies, Zukoski et al. (2011) explored the relationship between power and reproductive decision making with regards to condom and contraceptive use among young Latinos in the United States. Their findings indicate that although men and women report having high degrees of power in their relationships, men are considered to have more relative power in relationships than women. These results confirm that the male counterpart has more influence in reproductive and sexual health, hence, greater male involvement is important for the success of PMTCT programmes.

Involving the male partner in voluntary counselling and testing (VCT) and other procedures within PMTCT programmes enhances the uptake of interventions; and couple-centred VCT is identified as one of the ways of improving the uptake of PMTCT interventions in many settings (WHO, 2012a, Manjate Cuco et al., 2015, Aarnio et al., 2009, Msuya et al., 2008, Farquhar et al., 2004, Katz et al., 2009). Msuya et al. (2008) conducted a study in Moshi, urban Tanzania so as to describe the prevalence and predictors of male partner participation in HIV voluntary counselling and testing at two primary health care clinics. Their results show that HIV-seropositive women whose partners attended the clinics were three times more likely to use nevirapine (NVP) prophylaxis, and six times more likely to adhere to the infant feeding method selected than those whose partners did not attend the clinics. Participation of male partners, especially in VCT, is important as it reduces the burden of the woman in having to disclose her HIV status on her own as well as informing the partner of the correct measures to be taken to avoid HIV transmission to the child.

On the other hand, the absence of male partners in PMTCT intervention programmes is associated with negative outcomes. Communication between couples becomes difficult in relationships with little or no male partner involvement. Research has shown that mothers that receive positive HIV test results often find it difficult to disclose to their partners for fear of stigmatisation, divorce or domestic violence (Yashioka and Schustaek, 2001, Medley et al., 2004). Without disclosure of their seropositive status to their partners, it becomes difficult for mothers to employ the necessary measures that help to avoid or reduce HIV transmission during pregnancy and after birth. These include condom use, adherence to anti-retroviral therapy (ART), as well as infant feeding practices. (Njunga and Blystad, 2010) conducted a qualitative study in the Chiradzulu District, Southern Malawi to explore the experiences of HIV positive women and their partners linked to PMTCT programmes, and their results suggest that disclosure of a seropositive status leads many men to abandon their families, hence in the event of receiving positive HIV test results, mothers choose not to disclose results to partners for fear of such negative outcomes.

Zimbabwe has seen an increase in the uptake of PMTCT services by women. According to UNAIDS (2012), between 2010 and 2011, the proportion of HIV positive pregnant women receiving ARVs for prophylaxis increased from 84 percent to 98 percent. Although the number of infants receiving ARV prophylaxis is low relative to the proportion of pregnant women, the number of HIV exposed infants accessing the ARV regimen increased from 74 percent in 2010 to 94 percent in 2011 (UNAIDS, 2012). Recent statistics shows that the percentage of infants born to HIV infected women (HIV exposed infants) who received antiretroviral prophylaxis to reduce the risk of early mother-to-child transmission in the first six weeks increased from 26 percent in 2007 to 75.6 percent in 2015 (MOHCW, 2016).

In as much as male partner involvement plays an important role in the reduction of HIV infections among children, a number of socio-cultural factors can act as a deterrent to their involvement. These include cultural practices that consider child's health as the responsibility of women, stigmatisation against men who take part in PMTCT or HIV programmes and lack of knowledge on the importance of men's role in PMTCT initiatives. Gokwe North district is one of places that is deeply rooted in traditional practises and customs. Hence, it is likely that their

perceptions towards gender roles have a bearing on community's understanding of PMTCT issues.

1.3 Statement of the research problem

PMTCT programmes aim at responding to three major international health problems that are: combating HIV/AIDS, reducing child mortality and improving maternal health (Theuring et al., 2009). Although significant progress has been made worldwide in the reduction of new infections among children, sub-Saharan Africa bears the heaviest burden of the epidemic (UNAIDS, 2012, UNAIDS, 2011). Of all the global paediatric HIV infections, 95 percent are through MTCT (Byamugisha et al., 2010), and more than 90 percent of the children who had acquired HIV infection by the end of 2011 live in sub-Saharan Africa (Weiler, 2013b).

Previous studies conducted in the global north and south attempt to explain poor and low male involvement in different aspects of sexual and reproductive health matters, including in PMTCT initiatives. Firstly, traditional gender roles or expectations have been identified as negatively impacting on men's participation in sexual and reproductive health matters in health care centres where PMTCT services are offered (Nkuoh et al., 2010). In terms of traditional gender roles, child rearing, child health and other domestic services are considered to be a woman's responsibility; while the man, on the other hand, is expected to provide for the family (Walston, 2005, Culley et al., 2013). Connected to this, the historic institutionalisation of reproductive health, especially maternal and child health as a domain for women only, has resulted in services that are not male-friendly. Consequently, this has led men to perceive antenatal clinics as women's spaces and 'reproductive health' as women's health (Ramirez-Ferrero and Lusti-Narasimhan, 2012). The institutionalisation of reproductive health discourages men from utilising health care services where men are not the 'target' of the interventions, and this approach has also led to the use of women's bodies as the focus of medical interventions and ignored males' experiences of reproductive health (Throsby and Gill, 2004). Also, programmatic factors have been identified by various researchers as preventing men from being fully involved in reproductive health at health care centres. These include, for example, a lack of access into

antenatal clinics (ANCs), inconvenient consultation times at ANCs, staff attitudes towards men and a lack of privacy (Bolu et al., 2007, Nkuoh et al., 2010, Theuring et al., 2009, Tshibumbu, 2006). Understanding some of these barriers to male involvement in the different sexual and reproductive health-related aspects outlined above is important as it leads the researcher to explore potential obstacles that hinder the involvement of men in the different aspects of PMTCT initiatives.

Clinical trials have been conducted to assess the feasibility of involving male partners in HIV couple counselling and testing (HCCT) for PMTCT at antenatal clinics (Ditekemana et al., 2012, Msuya et al., 2008, Theuring et al., 2009). The results from these studies generally reflect that HIV positive women whose partners come for HCCT are most likely to adhere to antiretroviral treatment and the appropriate infant feeding practices as compared to those whose partners do not take part in HCCT. The participation of male partners, especially in HCCT, thus enables couples to know their status together and also allows them to make joint decisions on the correct measures that must be taken to avoid HIV transmission to the child. These studies are useful in understanding some of the outcomes that are associated with the involvement of male partners for HCCT and the implications of their involvement in preventing HIV transmission to children; however, they have paid inadequate attention to interrogating the underlying structures that influence men's attendance or the lack thereof in such initiatives. Although studies generally found that the uptake and adherence to PMTCT services by women increase with male partner involvement, little is known about women's and men's attitudes, understanding and expectations with regard to partner participation in PMTCT programmes. Accordingly, one of the strengths of this study is that it draws knowledge from both men and women that are potential beneficiaries of PMTCT interventions.

1.4 Aims of the study

The main of the study is to shed insight into the role of male partners in PMTCT of HIV programmes in Gokwe North District.

The specific objectives of the study are:

- *To ascertain the meaning of ‘male involvement’ from the perspectives of men and women.* It is important to explore what men and women consider as male partner involvement, as this will give insight into policy regarding the sort of interventions that can be introduced to improve male partner involvement in PMTCT of HIV in similar rural communities.
- *To investigate men’s and women’s perceptions and attitudes towards male involvement in PMTCT.* Knowledge of the attitudes that the community has towards male involvement in PMTCT enables one to understand the reasons behind the participation or non-participation of males in PMTCT programmes. Perspectives and attitudes have a bearing on how male partners are engaged in PMTCT services.
- *To explore barriers and opportunities to male involvement in PMTCT interventions.* It is important to know the factors that impede or enable male partners in PMTCT interventions from their own experiences.
- *To develop an index for male involvement that can be adopted in PMTCT interventions in the Gokwe North District.* The purpose of the index is to facilitate an increase in men’s uptake of PMTCT interventions. Since there is no universally agreed index or measure on male partner involvement in PMTCT, this will provide indicators for measuring male participation in similar settings.

1.5 Theoretical framework

The study draws upon insights provided by gender and development (GAD) theory so as to unpack these gender dynamics. GAD is one of the emancipatory theories that, according to Parpart et al. (2000), “*adopts a two-pronged approach to the study of women and development, investigating women's material conditions and class position, as well as the patriarchal structures and ideas that define and maintain women's subordination. The focus is on relationships between women and men, not on women alone*” (Parpart et al., 2000:62).

Accordingly, GAD takes into account women's subordination to men in the context of historically socially constructed gender relations (Moser, 1993). Its basic principles are to bring holistic equality between men and women, however, addressing women's issues without including men is assumed insufficient as their contribution will influence positive institutional change. Tolhurst et al. (2012), in their analysis of gender mainstreaming health programmes, argue that addressing hegemonic masculinities must benefit both men and women. In support of this approach, interventions aimed at engaging men and boys within health interventions have used the gender transformative approach as it is seemingly more effective in changing men's behaviour and attitudes; also, this approach ensures that in the process of incorporating men in such interventions, women are empowered so as to prevent unanticipated negative outcomes of men's involvement in health programmes (WHO, 2009). In accordance with the GAD approach, this research tries to understand the different factors that impact on men's involvement in PMTCT programmes in their communities specifically by identifying and unpacking the gender roles that are inherent in the local community. Gender inequalities are often a common phenomenon within patriarchal societies in which, for instance, men are often bestowed with the authority to control female access to medical treatments.

The study is also informed by the debate which is most prevalent in the discipline of sociology, between 'structure' and 'agency' (otherwise known as the structure-agency debate). In short, sociological theory recognises that communities and individuals essentially make choices (i.e. exercise their agency) within particular settings (i.e. structures) that are not of their choosing, nor brought about by their own accord (Sewell, 1992, Giddens, 1984). As such, understanding the choices that people make (or, for that matter, do not make) requires comprehending the structural conditions in which such choices are in fact made (or not made, as the case may be). In the study at hand, increasing male partner involvement in PMTCT; in addition to increased education and awareness of PMTCT measures, requires that one engage with the structural factors that may be impeding male partner involvement in PMTCT services.

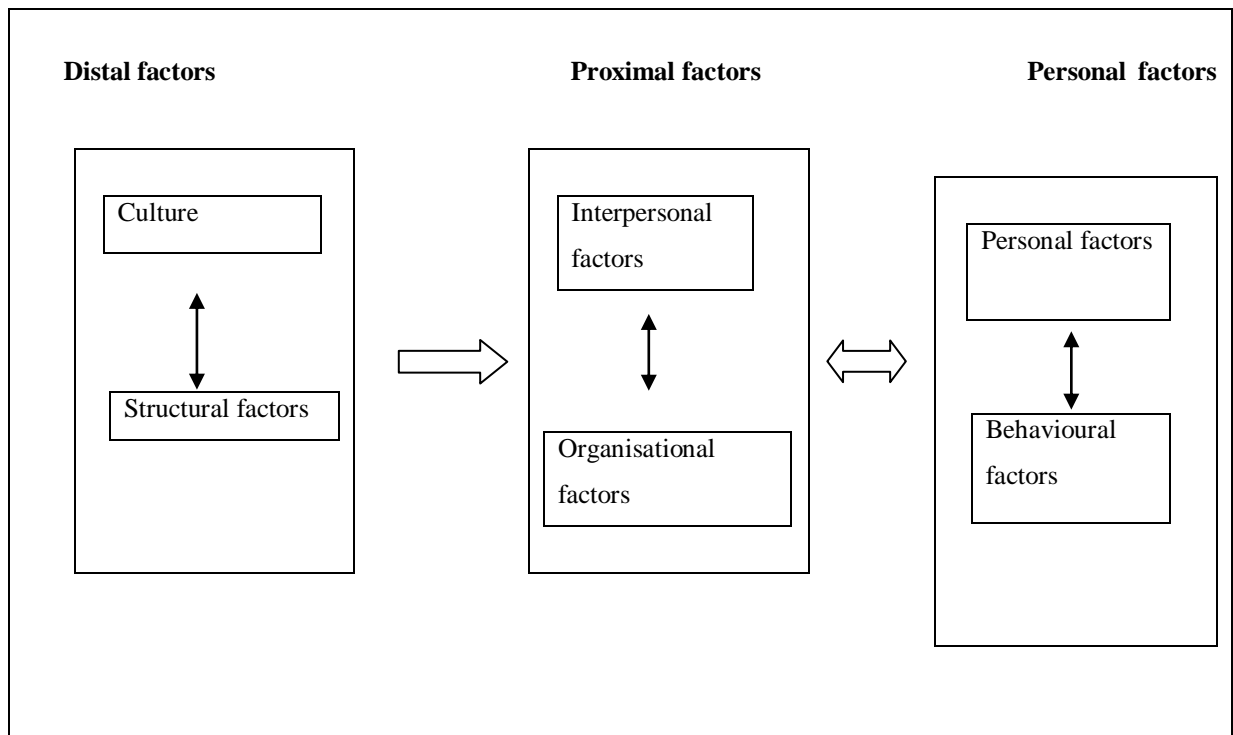
The study uses the conceptual framework formulated by Eaton et al. (2003) which highlights the influence of a person's immediate factors (such as interpersonal factors) as well as distal factors

(such as structural; culture - also a structural pedestal) in influencing their decision making with regard to sexual behaviour¹. Extending upon this model – which itself is essentially founded in structure-agency analysis – the proposed study seeks to utilise structure-agency analysis to understand: 1) the role that culture plays in either hindering or enabling males to be involved in PMTCT programmes; as well as 2) the impact that culture – which is often patriarchal in nature – has on women’s exposure to, involvement in and/or adherence with PMTCT initiatives.

The study adopts a theoretical framework that was developed by Eaton et al. (2003). This model was used to understand factors that influence sexual risk behaviour in Southern Africa by examining how individuals and their immediate environment are influenced by broader social conditions (Eaton et al., 2003). There are three levels of analysis that are considered in this model, these are: factors within the person, the proximal context (interpersonal relationships, physical and organisational environment) and lastly within the distal context (that is, culture and structural factors). Figure 1.1 illustrates the model.

Figure 1.1: Framework for organising the relationship between sexual behaviour, personal factors and the proximal and distal contexts

¹ Note, although Eaton *et al.* (2003) formulated their model to explain decision making pertaining to sexual behaviour, the factors depicted in their model could equally be cited to explain scholastic accomplishment, attitudes towards different racial groups or an array of other societal relationships.



Source: Eaton, Flisher and Aaro (2003).

The first context that is considered in this model is within the individual. At this stage, Eaton et al. (2003) state that behaviour is influenced by personal factors. These include feelings and cognition about HIV/AIDS prevention and transmission modes. In the context of this research, it is assumed that individual knowledge, for example about PMTCT by male partners, is one of the factors that influence their participation in PMTCT interventions. Understanding individual factors that operate within men and women may help in explaining the reasons for their limited or lack of participation in PMTCT programmes.

The proximal context also plays an important role in influencing sexual behaviour. Eaton et al. (2003) define this level as the immediate environment - that with which the individual interacts that influences their behaviour. These are interpersonal relationships and organisational and physical factors. In the study of HIV risk sexual behaviour among the youth in South Africa, some of the factors that were associated with their behaviour were access to media, condoms and significant others (Eaton et al., 2003). This research seeks to examine the possible proximate factors that hinder or promote the participation of men in PMTCT programmes. It is also important to note that proximal factors can also be reciprocal with personal factors; hence, the

research will also explore the linkages between these two contexts, that is, personal and proximal.

The last level of factors that influence behaviour is the distal context which is composed of both cultural and structural factors (Eaton et al., 2003). In this context, culture is referred to as a set of traditions, norms, shared beliefs and values of a larger community. It is often argued that traditional African cultures are frequently patriarchal and oppressive towards women (Airhihenbuwa, 1995) and this diminishes women's role in sexual relationships. Also, structural factors such as legal, political, economic and or organisational elements of a society may also influence sexual behaviour (Eaton et al., 2003). Exploring these factors guided the research in identifying structural and cultural factors that influence male partners' participation in PMTCT.

This framework assumes an interactive process within different levels or contexts and does not follow a linear process, hence factors at different levels may be overlapping. For example, personal factors may also be a result of structural or cultural elements of a society.

1.6 Organisation of the thesis

This thesis is organised into eight chapters. Chapter one has outlined the background to the study of male partner involvement in PMTCT programmes. This chapter also provided the rationale for involving male partners in PMTCT. The problem statement, objectives and the conceptual framework guiding this study were outlined. Chapter two is a review of the research on male partner involvement in PMTCT, with special interest in those conducted in sub-Saharan Africa. Chapter three describes the context where the study was conducted, as well as the methods and processes that were followed during data collection and analysis. The presentation and discussion of the findings is provided in the next four chapters (4, 5, 6 and 7). Chapter eight concludes the study by delineating the major findings of the study. It also outlines the limitations of the study and concludes by recommending suggestions for practice as well as further study.

CHAPTER TWO: LITERATURE REVIEW

“Because there is ample evidence documenting the impact of men on the various components of prevention of mother-to-child transmission (PMTCT) programmes, male involvement has been recognised as a priority area of intervention within this woman-centred approach”

(WHO, 2012a:v).

2.1 Introduction

The increase in HIV incidences among pregnant women attending antenatal clinics in sub-Saharan Africa has attracted many studies to direct their focus towards male partner involvement in the prevention of paediatric HIV. A recent report in Zimbabwe shows that although the percentage of HIV positive pregnant mothers who receive antiretroviral treatment to reduce the risk of MTCT increased steadily between 2007 and 2015 (22%-85% respectively), the percentage of pregnant women attending the ANCs, whose partners were tested for HIV, remains relatively low, from 4 percent to 23 percent over the same period (MOHCW, 2016). Various studies also highlight that male partner involvement is very low in programmes aimed at preventing paediatric HIV in most countries in Sub-Saharan Africa (Morfaw et al., 2013, Msuya et al., 2008, Nkuoh et al., 2010, Theuring et al., 2009, WHO, 2012a).

Although male partners' involvement in PMTCT programmes is generally low in antenatal care settings, they play an undisputable role in the uptake and adherence of PMTCT services by women. In most African communities, men are the household heads and they influence women's access to health care interventions such as HIV prevention (Nkuoh et al., 2010, Morfaw et al., 2013). In this chapter, a review of the literature on various aspects of male partner involvement in PMTCT and its related programmes is presented. It focuses on the challenges associated with defining and measuring male partner involvement and the factors associated with their involvement. Additionally, the benefits associated with male partner involvement are outlined and lastly, a few case studies are outlined demonstrating how the respective countries successfully implemented programmes that involve male partners in PMTCT.

2.2 Origins of the male involvement debate in reproductive health

The debate on male involvement in sexual and reproductive health was ignited at the 1994 International Conference on Population and Development (ICPD) in Cairo (UN, 1994). This conference acknowledged that maternal and child mortality, abortion, morbidity and contraception issues have been traditionally associated with women except in issues related to sexually transmitted infections and HIV/AIDS, yet in many parts of the world men make the decisions regarding women's health (Barker and Das, 2004). The conference provided a new direction with regards to male participation and responsibility in health-related issues by situating it within the framework of women's empowerment, as well as within comprehensive sexual and reproductive health (Shepard, 2004).

In terms of male participation and responsibility in sexual and reproductive health, the ICPD made a recommendation that aimed at promoting gender equality in all spheres of life to include; encouraging them to take full responsibility for their sexual and reproductive behaviour as well as their social and family roles (UN, 1994). As a means of reaching this objective, the following actions were stipulated;

Special efforts should be made to emphasise men's shared responsibility and promote their active involvement in responsible parenthood, sexual and reproductive behaviour, including family planning; maternal and child health; prevention of sexually transmitted infections, including HIV; ... shared control and contribution to family income, children's education, health and nutrition; and recognition ... of the equal value of children of both sexes. Male responsibilities in family life must be included in the education of children from the earliest ages. Special emphasis should be placed on the prevention of violence against women and children (UN, 1994:27).

Involvement of men in the issues mentioned above has been met with various responses. Barker and Das (2004) state that various organisations, especially in Latin America and Sub-Saharan Africa, embarked on educational sessions, support groups for fathers, as well as mass media campaigns that promoted positive images of men's involvement in the lives of children. In terms of HIV/AIDS, some countries in Sub-Saharan Africa such as Rwanda, Uganda, Malawi and

Tanzania have, since the inception of PMTCT programmes, involved male partners actively in PMTCT initiatives. Studies have shown that male partner involvement (especially couple counselling) is associated with the high uptake of PMTCT interventions among HIV positive mothers in terms of adherence to ART and appropriate infant feeding practices (UNAIDS, 2011, Grabbe and Bunnell, 2010, Msuya et al., 2008, Aarnio et al., 2009).

Although research has highlighted the importance of male involvement in programmes for PMTCT of HIV, little is known of their perspectives and attitudes regarding their involvement; hence this study further reflects on the ICPD deliberations that aim to actively involve men in responsible parenthood, especially those aimed at reducing and eliminating MTCT of HIV. Other than participation in PMTCT interventions, which is a relatively recent development, male partners' experiences of fatherhood have been documented regarding their involvement in child development and in other reproductive health issues.

2.3 Men's involvement in reproductive health

The ICPD calls for active participation of men in different aspects of reproductive health so as to promote family health. Reproductive health is composed of various aspects that include sexual health, pregnancy, child birth, postnatal care, family planning and STI/HIV infections (UN, 1994). Aspects of the various reproductive health matters including pregnancy, child birth, postpartum care and family planning will be discussed to illustrate the different ways in which men have been involved. Few studies in the global south have documented the experiences of men and their roles in child upbringing (Richter and Morrell, 2008, Datta, 2007, Booth, 2003, Mbekenga et al., 2011); while a number of studies have been conducted in the global north to capture the experiences of fathers in providing care and support to facilitate maternal and child health from the prenatal period, through birth, to the postpartum period. These also portray the outcomes that are associated with children that receive support from their fathers. This section provides an overview of some of the aspects in which men are involved at the different stages of child development, and their experiences are varied.

2.3.1 Involvement of fathers during prenatal, intrapartum and postnatal care

Men that were actively engaged in prenatal, intrapartum and postnatal events in different healthcare facilities reported having received no support from healthcare professionals in situations where their baby or foetus had complications. Åhman et al. (2012) conducted a study with expectant fathers in Sweden to explore their expectations of routine ultrasounds, as well as their experiences upon detection of soft markers. The results suggested that fathers did not know how to handle complicated results, especially when the foetus was found with soft markers. Mbekenga et al. (2011) studied the postpartum experiences of first time fathers in Dar es Salam, Tanzania, and their results showed that fathers did not feel content with the information provided by healthcare professionals; they felt it was too general, with no detail for specific conditions. A similar study was conducted in North West England by (Longworth and Kingdon, 2011) to explore the roles, expectations, as well as the meanings that individual fathers gave to their presence at the birth of their infants. Their results were consistent with the studies of Åhman et al. (2012) and Mbekenga et al. (2011), which found that fathers were not provided with sufficient information on the risks and benefits associated with the different methods of giving birth.

In addition, men accompanied their partners to antenatal care but were often ignored and thus felt disconnected as healthcare professionals failed to engage with them. Fenwick et al. (2012) conducted a study among 12 Australian expectant fathers to describe their perspectives of pregnancy and childbirth. One of the themes that came up was that fathers felt side-lined, pushed aside and were not respected by health professionals when they accompanied their wives during pregnancy and at the birth of their infants. A study to explore fathers' birth experiences and the factors associated with a less-positive birth experiences among Swedish fathers found that fathers received no or very little empathy from health professionals (Johansson et al., 2012). Also, it was shown that fathers' views during labour and at birth were not taken into consideration and were hardly listened to, and this was considered as a lack of respect on the part of health professionals towards fathers. These studies showed that some men made an effort to fulfil their responsibilities as fathers and partners in terms of family health, regardless of unfriendly circumstances.

Studies have found that fathers who had hands-on experiences during their children's birth and during the postpartum period had a sense of having made a contribution to their children's health (Mbekenga et al., 2011, Longworth and Kingdon, 2011, Aarnio et al., 2009). Although barriers such as time constraints and providing care for older children were referred to as some of the factors that prohibited men from spending time with their wives at the healthcare facilities, the support they provided for their spouses and babies brought them satisfaction and a sense of responsibility. Johansson et al. (2012) conducted a qualitative study to describe the perceptions and feelings among 21 Swedish fathers, having stayed with their partners and babies when their partners had undergone elective or emergency caesarean sections. The main findings showed that men stayed with their partners because they felt involved and this instilled a sense of responsibility in them. Similar results were also obtained in Tanzania and Brazil (Pontes et al., 2009, Mbekenga et al., 2011) respectively, where men assisted with household chores and attended to the babies or other children during the early postnatal period.

2.3.2 Involvement of fathers during early child development

Research on the contributions of mother-child interactions and how these influence early childhood development is well documented, according to Bornstein and Tamis-LeMonda (1989) and (Pianta, 1997, Bornstein and Tamis- LeMonda, 1989). In contrast, research on the influence of father-child interactions on child development is new (John et al., 2013), yet their contribution to child development is vital. Hence, as a matter of policy and practice, various western countries have, for almost a decade, initiated awareness of the importance of fathers' involvement in the lives of their children (Zanoni et al., 2013)². Similarly, research in the global south regarding fathers' involvement is also recent, except that it is biased towards HIV prevention.

The debate on the importance of fathers in child development was stimulated by Lamb (1975), who argued that the theoretical perspective that assumed that the father's role in child

² These policies are for example, The National Fatherhood Initiative (United States), The Fatherhood Institute (United Kingdom), the 2006 Family Law reforms (Australia) and The Fatherhood Involvement Research Alliance (Canada) ZANONI, L., WARBURTON, W., BUSSEY, K. & MCMAUGH, A. 2013. Fathers as 'core business' in child welfare practice and research: An interdisciplinary review. *Children and Youth Services Review*, 35, 1055-1070.

development was minimal and indirect was unsubstantiated. Fathers play a vital role in socialising the child, that which is different from the mothers. John et al. (2013) studied the specific differences between father and mother-child (preschool) play interactions in Oklahoma (United States), and they observed a distinction between paternal and maternal play interaction orientations: mothers tend to provide guidance, teach and engage in emotional dialogues with the child; whereas fathers involve themselves in physical play, behave like age-mates, allow the child to lead and challenge the child. These results prove that both paternal and maternal child-play relationships are equally important as each contribute to child development in unique ways. Moreover, in a preceding study, Shannon et al. (2002) explored the relationship between father-child interactions and children's cognitive development. Their findings suggest that cognitive development is associated with fathers' responsiveness and emotional attachment with their children, hence, their involvement in child development is crucial.

2.3.3 Involvement of men in family planning

Traditionally research and practice in family planning have mostly focused on women, yet most of the components of family planning such as sexually transmitted diseases, HIV and infertility require the active engagement of both men and women (Becker, 1996, Kanbur, 2004), so recent efforts have been made to involve men in family planning, as well as to address their reproductive health needs (Kanbur, 2004, MacDonald et al., 2013).

Both men and women are central to reproductive health, including family planning, however, most programmes rarely include couple services as far as family planning is concerned (Jennings et al., 2004). As a result, family planning methods that need the cooperation of both men and women hardly succeed as men are usually not involved. Jennings et al. (2004) conducted a study in El Salvador with couples to describe the feasibility and success of using the Standard Days Method (SDM) for pregnancy prevention, as well as to discuss the effect of involving men in counselling. The results showed that acceptance of and correct use of the SDM was high when men were involved in the programme and unplanned pregnancies numbered lower when men received counselling. A study by Jennings et al. (2004) thus underscores the positive role that male partners can play in the prevention of unwanted pregnancies.

Involving men in reproductive health also entails the use of male-centred family planning contraceptives. MacDonald et al. (2013) argue that in most parts of Asia (as well as in developing countries), most contraceptives are designed for females, yet in some situations females lack the decision-making powers regarding their own health and as a result, they fail to use them. The use of male-oriented contraceptives thus allows men to take responsibility for their sexual and reproductive health.

Although men make decisions on reproductive health in most societies, their knowledge of the different family planning methods is limited (MacDonald et al., 2013, Jennings et al., 2004). Mistik et al. (2003) conducted a study in Turkey to determine the attitudes and behaviour of married men regarding family planning. Although the majority of them (approximately 92%) approved of their wives' use of family planning methods, none of them was aware of female contraceptives such as the pill, diaphragm or Norplant device. In addition, only a few of them (about 18%) had contacted a doctor to obtain information about family planning. MacDonald et al. (2013) also implemented a programme to promote male-centred family planning methods and to address the stigma and misconceptions associated with contraceptive use in Vietnam and India. In their baseline study, it was found that men had no knowledge of the different forms of male contraceptives. Through various awareness campaigns and education on contraceptives to both men and women, men became aware of the need to consider vasectomies and condoms as reliable family planning methods; while others began to engage their wives in reproductive health discussions (MacDonald et al., 2013).

For the purpose of this study, it is important to understand the different ways in which men have been involved in reproductive health. This is specifically due to the fact that PMTCT of HIV interventions are part of the reproductive health initiatives which couples need to take part in during pregnancy and after the birth of the child. For instance, condom use is recommended during pregnancy and for breastfeeding mothers, so as to limit the chances of infection from mother to child (Coutsoudis, 2005). Hence, men's involvement in the use of such contraceptives as these is crucial.

2.4 Understanding the concept of male partner involvement

The existing literature lacks a clear operational definition of what male involvement in PMTCT programmes is, and it is not clear what it constitutes exactly (Ditekemana et al., 2012, Aluisio et al., 2011). In addition, Greene et al. (1991) argue that,

... Male involvement is an ambiguous concept and many responses to the call for involving men are more limited than what was envisioned by the International Conference on Population and Development Programme of Action or by health and rights advocates. Programmes diverge in their ultimate purpose in involving men, and in how they involve them (Greene et al., 1991:8).

The ICPD's framework has three basic approaches to male involvement in reproductive health. According to this framework, men are defined as 'clients'. This approach aims to address men's reproductive needs by extending a range of similar reproductive health services to men and women, as well as by employing male health workers (Greene et al., 1991). Secondly, men are considered as 'partners', where men play a central role in supporting women's health by educating them on family planning and signs of labour, among others (Greene et al., 1991). Lastly, men are considered as 'agents of positive change'. The aim is to promote gender equity as a way of improving men's and women's health by engaging men in a range of activities as fathers, sexual partners and community members (Greene et al., 1991, UN, 1994). Various programmes that have considered involving male partners in sexual and reproductive health have used one or more of the above approaches.

Montgomery et al. (2011a) express their concern about the manner in which male partners have been incorporated in the broader HIV prevention strategies; these include men so that they facilitate female partners' access to health services, without considering the men's own health needs. In the context of PMTCT, the same approach of involving male partners so as to support the women's uptake of ANC services for the benefit of the mothers and infants remains the focus in health care settings. Several clinical studies (Aluisio et al., 2011, Byamugisha et al., 2011, Katz et al., 2009, Farquhar et al., 2004, Maman et al., 2011) have also involved male partners so that they provide support to their partners, and these studies are valid, but they run the risk of portraying male partners as mere instruments used to improve women's and children's health (Montgomery et al., 2011a), a weakness of the traditional approach to male partner involvement.

A holistic approach to understanding the conceptual and operational underpinnings of male partner involvement, that is similar to the ICPD framework that considers male partners as agents of social change, is suggested (Jewkes et al., 2008, Montgomery et al., 2011b).

Few studies attempt to define the concept of male partner involvement within different contexts. In the context of sexual and reproductive health, male partner involvement is described as “*an umbrella term to encompass the various ways in which men relate to reproductive health problems and programmes, reproductive health problems and programmes, reproductive rights and reproductive behaviour*” (Greene et al., 1995:8). This definition reflects on the ‘multi-faceted’ nature of the concept as there are a myriad of ways in which men in different settings relate to reproductive needs or programmes. Again, the definition is neutral and tries not to limit male involvement to men’s support of women’s access and utilisation of sexual and reproductive health care.

In studying the knowledge, attitudes and practices of male partners in PMTCT, Birhanu (2014) proposes an operational definition of male partner involvement in PMTCT as “*male partner participation in dialogue on decision[s] of couple counselling and testing, condom use, child feeding, place of birth and taking medication during pregnancy, and after delivery child medical treatment follow up*” (Birhanu, 2014:7). This definition reflects on the multi-faceted nature of the concept, as there are various ways in which male partners participate, and Birhanu (2014) also considers dialogue as key to the male partners’ involvement. These studies reveal that due to the multiple ways in which male partners take part in PMTCT, there is a challenge in coming up with one precise definition.

2.5 Measurements of male involvement

Given that there is no universally agreed or clear definition of what constitutes male involvement, there is a challenge in measuring the concept. Montgomery et al. (2011a) note that “*a partial consequence of this ambiguity is that there are no standardised measures or reliable indicators of male involvement*” (Montgomery et al., 2011a:e114). This is because different

researchers will define the concept in their own terms and develop indicators based on what they consider as constituting male involvement.

Another challenge is that since there has been no standard approach to measuring male involvement, the measurements that have been used have not been evaluated. Greene et al., (1991:36) indicate that, “ *[a] few programme evaluations that do measure these concepts rarely use measures that have been evaluated for their psychometric properties and cultural appropriateness*”. Although literature shows the complexity of defining and measuring male involvement, it is suggested that the appropriateness of measurements within a specific cultural context be considered. As far as involvement of male partners in PMTCT is concerned, it is possible to hold the position that a single universal measurement is difficult to arrive at due to the complex cultures across the globe. Nonetheless, one may suggest that although indicators may vary, perhaps it is possible to have a few similar cross-cutting indicators which can be compared across different contexts.

Aluisio et al. (2011) investigated the relationship between male involvement in PMTCT services and infant HIV acquisition and mortality in Kenya. Two indicators of male involvement were used: male involvement was measured by their physical presence and by their testing for HIV with their spouse/partner at the antenatal clinic. For women whose partners did not come to the antenatal clinic with them, these women’s self-reports of their partner’s previous HIV testing were recorded. The two indicators of male involvement were important in Aluisio et al. (2011) study for they facilitated measuring infant health outcomes influenced by male partner involvement in these two aspects. For example, pregnant women whose spouses were tested previously tended to have increased adherence with zidovudine protocols and reported discussing formula feeding with their partners (Aluisio et al., 2011).

Although these indicators are useful in measuring male involvement, they have two limitations. Firstly, there could have been response bias on the part of the women reporting partner sero-status disclosure and testing. Secondly, measuring male involvement by only considering males that come in to the antenatal clinics leaves out men who want to come but fail to do so due to other commitments, rather than because they do not want to be involved. (Maman et al., 2011) argue that drawing conclusions from this measure is likely to be biased towards implying that

men's presence at antenatal clinics is a portrayal of positive action, while their absence means that they are not involved, because there could be other factors that are associated with their absence. Their presence at the antenatal facility is thus only a single indicator from which it is difficult to draw conclusions.

Another scale for measuring male involvement in PMTCT was developed by Mangeni et al. (2014) with the aim of determining the relationship between male involvement in maternal health and the utilisation of skilled birth attendants in Kenya. Two variables were used to measure male involvement in maternal health care. The first was the participation of the male partner in any antenatal clinic intervention that a woman received. The specific question that was asked was whether a man had accompanied his spouse for at least one antenatal clinic visit during the most recent pregnancy that resulted in a live birth. The second was men's perceptions of women's health. This variable was based on responses to two questions: (i) if the spouse considered it important for a woman to be attended by a skilled birth attendant, and (ii) whether the man considered childbearing as a woman's responsibility or not (Mangeni et al., 2014). The strength of this index is that it does not use women as a proxy in measuring male involvement; rather it uses men as subjects of the inquiry, unlike other studies that use women to answer questions on behalf of their partners.

Byamugisha et al. (2010) suggest a more inclusive index for measuring the levels of male involvement in PMTCT in Eastern Uganda. Contrary to the measurements discussed above, their male involvement index has more variables which represent different forms of male involvement.

Unlike other measurements that exclusively consider men's physical appearance at antenatal clinics, this index acknowledges the importance of communication between partners regarding antenatal demands, as well as sharing those responsibilities. Relying solely on this index, however, ignores other components of PMTCT such as the prevention of unwanted pregnancies in women living with HIV, the primary prevention of HIV among women of childbearing age, as well as the provision of care, treatment and support for women living with HIV and their families. Also, it is limited to the prevention of HIV transmission during the antenatal stage and does not consider the possibilities of HIV infection and prevention after the birth of the child.

2.6 Benefits of male partner involvement

Involving the male partner in VCT and other procedures within PMTCT enhances the uptake of interventions by women (Farquhar et al., 2001, Msuya et al., 2008, Aarnio et al., 2009, Farquhar et al., 2004, Katz et al., 2009). Studies have shown that male partner involvement, especially couple counselling, is associated with high uptake of PMTCT interventions among HIV positive mothers, in terms of adherence to antiretroviral therapy (UNAIDS, 2011, Grabbe and Bunnell, 2010, Msuya et al., 2008, Aarnio et al., 2009, Dunlap et al., 2014, Desgrées-Du-Lou et al., 2009, Byamugisha et al., 2010, Betancourt et al., 2010). A study conducted to describe the prevalence and predictors for male participation in HIV voluntary counselling and testing in urban Moshi in Tanzania illustrated that HIV seropositive women whose partners attended an ANC, where they were counselled and tested for HIV, were more likely to use Nevirapine prophylaxis than those whose partners did not attend (Msuya et al., 2008).

A large volume of published studies describe the association between partner participation at ANC and adherence to infant feeding methods among HIV seropositive mothers (Dunlap et al., 2014, Morfaw et al., 2013, Msuya et al., 2008, Theuring et al., 2009, Farquhar et al., 2004). Couples that are counselled together are more likely to follow the appropriate infant practices than those counselled separately. A study conducted to determine the effects of male partner involvement and couple counselling on the utilisation of interventions to prevent vertical HIV transmission in Nairobi showed that HIV seropositive women who received couple counselling were five-fold more likely to avoid breastfeeding compared to those counselled individually (Farquhar et al., 2004). In a similar study conducted to describe the prevalence and predictors for male participation in Moshi, HIV seropositive women whose partners received couple counselling were six times more likely to adhere to the infant feeding method chosen than those whose partners never attended an ANC (Msuya et al., 2008).

Several studies highlight the association between male partner participation in voluntary couple counselling and testing and adherence to HIV treatment by HIV seropositive women during

pregnancy and breastfeeding (MOHCC, 2013, Msuya et al., 2008, Betancourt et al., 2010, Farquhar et al., 2004). Recent developments have been made by the World Health Organisation with regard to antiretroviral therapy administered to HIV positive pregnant and breastfeeding mothers. Option B+ is the new life-long antiretroviral therapy administered to HIV positive and breastfeeding mothers as soon as they are diagnosed with HIV, regardless of their CD4 count (WHO, 2012c). In the previous regimens; Option A involved women being given a short course zidovudine during pregnancy and infant nevirapine (NVP) prophylaxis throughout breastfeeding (Ciaranello et al., 2011b). Under Option B, they received triple ARVs from 14 weeks of gestation to intrapartum and childbirth if not breastfeeding, or until a week after weaning (Ebuy et al., 2015, WHO, 2012c). It can be argued that adherence to Option A and B is likely to be less demanding since it is a temporary therapy compared to the new therapy, Option B+, which is a life-long therapy. Ebuy et al. (2015) conducted a study to measure the levels of adherence to the Option B+ regimen prescribed for HIV positive pregnant and breastfeeding mothers in Ethiopia. Their results showed that disclosing of the HIV status to the partner was positively associated with good adherence to treatment (adjusted OR 4.2, 95% CI 1.07-16.33) (Ebuy et al., 2015). Conversely, where disclosure to the partner is lacking, women may take ART under the pretence of pregnancy-related medication which is expected to end with delivery (Clouse et al., 2014). In the context of Option B+ ART therapy, adherence to treatment is thus compromised due to the fear of disease disclosure.

Evidence from previous studies portrays an association between male partner involvement and spousal communication on HIV and sexual risk (Reece et al., 2010, Desgrées-Du-Lou et al., 2009, Msuya et al., 2008, Tonwe-Gold et al., 2009). Reece et al. (2010) assess male spousal engagement in the prevention of mother-to-child transmission of HIV programmes in Western Kenya, and the results from their study show that good couple communication was associated with high levels of HIV disclosure and support between husband and female partner; while on the other hand, poor spousal communication was associated with poor male partner involvement. Also, HIV positive women whose partners did not receive HIV counselling and testing with them were less likely to disclose to their partners that they were taking ART (Tonwe-Gold et al., 2009). Research has shown that mothers that receive HIV positive test results often find it difficult to disclose their status to their partners for fear of stigmatisation, divorce or domestic violence (Yashioka and Schustaek, 2001, Njunga and Blystad, 2010, Kalembo et al., 2012,

Medley et al., 2004); yet without disclosure to the partner, it becomes difficult for mothers to employ the necessary measures that prevent HIV transmission to the baby during pregnancy and after birth.

Previous studies show that male partners who attend HIV counselling with their partners are more likely to agree and negotiate on condom use (Msuya et al., 2008, Farquhar et al., 2004). Farquhar et al. (2004), in a study on male involvement in HIV couple counselling and testing, demonstrated that HIV positive women whose partners tested with them for HIV as a couple reported high consistent condom use in comparison to those who tested without their partners. The use of condoms during pregnancy and postpartum is highly recommended, even among couples with a HIV negative sero-status, due to the fact that the pregnancy and postpartum periods present a high risk of HIV and sexually transmitted infections (Drake et al., 2014, Maman et al., 2014).

2.7 Factors influencing male partner utilisation of PMTCT services

In the context of HIV, pregnant couples are encouraged to attend antenatal clinics and get tested for HIV together. In contrast, traditional gender roles stipulate that child rearing, child health and other domestic services are known to be women's responsibility while men provide the material needs for the family (Walston, 2005, Culley et al., 2013). As such, health institutions treat reproductive health, especially maternal and child health, as a domain for women (Ramirez-Ferrero and Lusti-Narasimhan, 2012). It should be noted that the focus on maternal and child health was a common community healthcare phenomenon in the past decades due to the fact that women and children were considered as vulnerable populations which needed support to undo the unequal socio-cultural power structures in access to health (Theuring et al., 2009). As a result, programmes towards this goal had women and children as the 'targets' of interventions. Theuring et al. (2009) conducted a study in Mbeya, Tanzania, regarding partner involvement in ANC/PMTCT services. Their results showed that integrating men in PMTCT was challenging because ANCs had a long tradition of representing a female realm, thus, where VCT was provided within antenatal care, male attendance remained low.

Inconvenient consultation times at ANC's were a factor identified as preventing men from being fully involved in utilising antenatal care services (Theuring et al., 2009). Studies conducted by Theuring et al. (2009) and Bolu et al. (2007) to assess the barriers to male participation in PMTCT reveal that men were interested in supporting their spouses but that the times within which the antenatal clinics operated were not conducive to this, since most of them were working and the clinics only operated within their working hours. In addition, they had to wait for long periods of time at the ANC's, which made it difficult for them to leave work for that length of time (Bolu et al., 2007).

Negative attitudes by staff towards the men who accompany their partners also act as a barrier to male partners' participation in antenatal care in the health facilities. Byamugisha et al. (2010) conducted a cross-sectional study with men whose spouses were attending ANC's in Eastern Uganda, to determine the level of male involvement, as well as to identify its determinants in PMTCT. Results in this study demonstrated that male partners were denied entry into the ANC sites with their pregnant spouses because health practitioners dismissed them. A study conducted in rural Western Kenya explored men's experiences of antenatal and delivery care services (Kwambai et al., 2013), and the male partners who accompanied their wives reported similar findings where the maternity staff prevented them from entering the delivery rooms. In addition, they were ignored by the health care workers and subjected to unfriendly attitudes and abusive language.

Several studies highlight a lack of privacy within the antenatal care setting and the labour and delivery wards in health facilities as limiting male partner support and care (Kaye et al., 2014, Kwambai et al., 2013, Hodgkin, 1996, Oboro et al., 2011, Tann et al., 2007, Theuring et al., 2009). In a study conducted in Nigeria, women's attitudes were assessed regarding the presence of their partners or husbands during labour, and the results revealed that about 21 percent of the 197 women who took part in the study did not want their husbands present during labour because of the lack of privacy in the wards (Oboro et al., 2011). Similar findings were reported in Mulago Hospital in Uganda, where men's experiences of their involvement during their partner's pregnancy and childbirth were studied. While the hospital's policy encouraged fathers to give support to their partners during pregnancy and childbirth, the delivery rooms were congested and

there was no privacy (Kaye et al., 2014). As a result, the men were locked out of the labour ward and delivery rooms, so they could not support their partners during their labour and delivery.

Men's lack of knowledge of reproductive health services is a barrier to partner involvement in PMTCT or ANC. In a study to assess male attitudes towards male partner involvement in ANC/PMTCT services in the Mbeya Region, Tanzania, lack of knowledge and information was reported as a primary barrier to male involvement (Theuring et al., 2009). Another study found similar results illustrating that men lacked knowledge because their wives would not tell them what was advised or taught at the ANC (Mullick et al., 2005). Although there could be various reasons, a possible explanation for the lack of access to knowledge can be attributed to the traditional approaches to the delivery of sexual and reproductive health services, which are biased towards focusing on women in health education and other forms of service delivery. Studies also show that men may be aware of HIV counselling and testing services offered in ANC care centres, but they may not know the benefits of their involvement (Larsson et al., 2010).

Previous studies found stigmatisation and discrimination against men who take part in PMTCT programmes as another barrier to male partner involvement in such programmes. For example, men's involvement in PMTCT creates the perception that one or both partners are infected with HIV (Peacock, 2003), hence the fear of HIV-related stigma plays a significant role in discouraging men's involvement in HIV programmes. Due to the fear of stigma, men fail to engage in PMTCT infant feeding regimens as their families and friends question their adoption of infant formula feeding, which is a deviation from the local norms of breast feeding (Reece et al., 2010). Since child care and children's well-being is culturally seen as women's responsibilities, men who are seen participating in ANC or other PMTCT services are labelled as weak and not manly enough (Reece et al., 2010, Byamugisha et al., 2010).

2.8 Male involvement from women's perspectives

As much as this research seeks to understand men's perspectives regarding male participation in PMTCT programmes, in order to improve the uptake of the interventions by women and their male partners, it also tries to make an inquiry as to whether or not women also want their men to take part in these programmes. If they do, it is important to investigate the aspects which women will recommend that their partners or their husbands be involved in.

Studies have highlighted that women may not disclose their use of contraception to their male partners for fear of intimate partner violence, confrontation and being labelled as promiscuous (Bawah et al., 1999, Decker et al., 2013, Fanslow et al., 2008, Kazmerski et al., 2015). For example, Bawah et al. (1999) explain that in Ghanaian society, where bride wealth signifies the women's requirement to bear children, the use of contraception is unacceptable, and women who are found to be using contraception are physically abused and rebuked by their spouses and extended family. In the context of HIV, women who receive HIV positive test results may not inform their partners about their status for fear of adverse social effects such as violence, divorce and rejection (Ramirez-Ferrero and Lusti-Narasimhan, 2012, Maman et al., 2011). Under such circumstances, women chose to use contraception and HIV treatment in secret.

Women also consider that involving men in reproductive health matters may have negative results, such as increased male dominance (Piotrow et al., 1992, Mullany et al., 2005). As much as involving men in reproductive health may have positive outcomes on family health, involving men in female contraceptive use has been found to give power to men over their partners. A study conducted in Zimbabwe on social marketing campaigns to promote family planning had mixed results. On one hand men acquired more knowledge about family planning, while on the other hand they felt they had gained an opportunity to control female orientated contraceptive use (Piotrow et al., 1992). (Maman et al., 2011) studied ways in which men supported their wives in PMTCT and attempted to identify the barriers to support, and they reported that although some women received support from their partners, others indicated that they did not want their partners to be involved at all due to previous violent attacks.

A recent study explored the perspectives and experiences of antenatal care and partner involvement among women who had nearly died during pregnancy in Kigali, Rwanda (Påfs et al., 2015), and the study revealed that the strict emphasis on pregnant women to bring their

partners as an ANC requirement exposed single women to public scrutiny. In Rwanda and other African societies, unintended pregnancies occurring outside of a partnership are socially stigmatising (Atuyambe et al., 2009), hence depending on a male partner in an ANC setting, particularly where there was no partner support, created a barrier for women's access to health care; a finding supported in other countries in Sub-Saharan Africa (Biratu and Lindstrom, 2006, Grede et al., 2014). Although male partner involvement is crucial in preventing paediatric HIV infection, its emphasis prioritises the normative relationships while exposing women who become pregnant outside partnership to various forms of vulnerability (McPhail, 2008) such as stigma and lack of access to health care.

In contrast, studies also show that women want their male partners to be involved in HIV prevention, PMTCT of HIV and other sexual and reproductive services due to the role men have in controlling the family resources and their influence on the women's access and uptake of health services (Kwambai et al., 2013, Mugore et al., 2008, Maman et al., 2011). For instance, Mugore et al. (2008) conducted a study with women in the Murehwa District in Zimbabwe to assess their understanding of the routine offer of HIV testing for the women using ANC services. The results from the study illustrated that women expected health care workers to play a key role in facilitating the process of getting their partners involved in PMTCT programmes and getting tested as couples for HIV in the antenatal care facility (Mugore et al., 2008, Mullick et al., 2005).

A randomised control study conducted in Zimbabwe and South Africa exploring the dimensions of covert use of the diaphragm illustrated that women found it necessary to inform partners of the use of a diaphragm so as to avoid adverse outcomes once the partner noticed (Sahin-Hodoglugil et al., 2009).

2.9 Enabling factors for male partner involvement

Previous studies have found that men take part in HIV testing and counselling when it is done outside of PMTCT/ANC health facilities (UNAIDS, 2011, Larsson et al., 2010, Reece et al., 2010, Ditekemena et al., 2011). According to UNAIDS (2011), between 2003 and 2010, the percentage of men who received HIV testing and counselling in Rwanda increased on a yearly

basis from 16 percent in 2003 to 84 percent in 2010. In Kenya, home-based counselling and testing was useful in the detection of HIV among previously undiagnosed HIV-discordant couples. Were et al. (2006) conducted a study in Kenya to identify HIV-infected and HIV-discordant couples in households. Of the 120 spouses that tested for HIV, 52 (43%) were HIV negative and 99 percent of these had never been tested previously.

In Kenya it was found that male partners preferred to be tested in other places outside of the ANC centres (Farquhar et al., 2001), so as to avoid the social stigma associated with male attendance at ANC facilities. Another study conducted in the Democratic Republic of Congo found that the number of men who tested at bar venues was higher than that of those who tested at a health facility or at a church (Ditekemena et al., 2011). In a randomised trial conducted in Zambia, male participation rates in VCT at a local clinic were lower than for VCT provided outside of local clinic settings (Fylkesnes and Siziya, 2004). These studies all underscore the importance of using other feasible and acceptable settings to get male partners tested.

Several studies demonstrate that sending a direct official ANC invitation letter to male partners from health staff plays an important role in drawing men to ANC facilities (Ditekemana et al., 2012, Mlay, 2008, Nkuoh et al., 2010, Theuring et al., 2009, Morfaw et al., 2013, Jefferys et al., 2015, Mohlala et al., 2011, Nyondo et al., 2013, Byamugisha et al., 2010). These letters serve the purpose of inviting the male partner to an ANC, or as a formal letter which they can present at their work place in order to be excused and in this way attend an ANC with their partner. A recent study shows that out of the 318 women who received an official invitation for their partner, 53.5 percent returned with their partners for a joint ANC session, and 81 percent of these had couple voluntary counselling and testing (Jefferys et al., 2015).

Similar results were obtained in Cape Town, South Africa, where 35 percent of pregnant women given voluntary counselling and testing invitations for their partners brought their male sexual partners for an antenatal care visit; compared with the 26 percent given pregnancy information sessions with no invitation (Mohlala et al., 2011). Male partners who received a direct official invitation for voluntary counselling and testing were more likely to test for HIV as a couple and negotiate for safe sex during pregnancy, than those who received pregnancy information sessions only (Mohlala et al., 2011).

Spousal dialogue on HIV testing and counselling is documented as one of the motivations behind male support of partners during pregnancy (Reece et al., 2010, Ampt et al., 2015). Men are keen to support their partners, as long as they are informed in advance of HIV testing, hence the woman has to obtain the husband's consent for her own HIV testing, or run the risk of being divorced (Airhihenbuwa, 1995). A study by Njunga and Blystad (2010) illustrated that HIV-positive women were rejected by their spouses because they had undergone HIV testing without asking for their partner's consent. According to (Katz et al., 2009), male partners who had communicated about HIV in advance were willing to be tested as a couple. The idea of spousal communication is thus central to male support in PMTCT programmes. It should be noted here though that power dynamics exist among patriarchal societies, where a man is expected to lead the discussions or stipulate what should be done, and men's acceptance of their partner's notification of HIV testing varies with the different contexts and the nature of their relationships.

Studies found that increased male participation in VCT and couple testing can be obtained if health facilities extend their working hours so as to accommodate working men who cannot attend during working hours (Ditekemana et al., 2012, Reece et al., 2010, Ditekemana et al., 2011). Most of the health facilities provide ANC/PMTCT services during the hours of the day (Ditekemana et al., 2012) when most of the men are busy at work, hence the extension of antenatal care hours during the day and over weekends allows working men to attend ANC care with their partners (Kululanga et al., 2011, Reece et al., 2010, Larsson et al., 2010). A study conducted in Kinshasa, Democratic Republic of Congo, shows that male partner participation in VCT increased when the Maternal and Child Health services opened in the evenings between 17:00 and 20:00 as well as during weekends (Ditekemana et al., 2011). These studies underscore the importance of flexibility within health facilities to accommodate the challenges faced by working male partners who cannot afford to leave their work during the day to attend ANC sessions with their partners.

Studies also highlight that community mobilisation plays an important role in creating awareness of the importance of male partner involvement in PMTCT programmes (Koo et al., 2013b, Byamugisha et al., 2010). Mobilisation of men by other men in churches and communities is effective in motivating male partners to attend PMTCT activities, according to (Kululanga et al.,

2011, Mohlala et al., 2012). Mohlala et al. (2012) identified barriers to male partner attendance at ANC's with their female partners, as well as potential mechanisms to overcome these barriers, and these studies emphasise the importance of encouraging men who have attended ANC and have positive feelings towards ANC's to motivate other men to do the same (Mohlala et al., 2012).

2.10 Summary

In this chapter, the literature on male partner involvement in PMTCT of HIV programmes was reviewed. The literature shows that male partner involvement is a difficult concept that has no clear definition, not only in PMTCT but in any other sexual and reproductive health matter. The definition of male partner involvement is described as a complicated process, for various studies define it in different ways. It is not one single activity performed by male partners in PMTCT services that is sufficient to explain what is male partner involvement; rather it is a combination of various aspects of support that male partners give to their partners in preventing paediatric HIV infections. The literature has demonstrated that the lack of a definition of the concept of male partner involvement has had a ripple effect on the measurements designed to measure it, hence arriving at a standard measure of male partner involvement is difficult given the complexity and/or lack of a standard definition.

A few studies have attempted to measure male partner involvement in ANC care, especially in voluntary couple counselling and testing using different measures, but in the context of Zimbabwe, there is very scarce literature on the measurement of male partner involvement in the PMTCT of HIV. The existing literature relates to the perspectives on male partner involvement in PMTCT, correlates male partner involvement in PMTCT and assesses the barriers and enablers of participation by males in maternal and child health care. This literature is crucial as it elaborates on how male participation is viewed, as well as the factors that influence participation in the Zimbabwean context.

The literature also documents the substantial evidence on the importance of male partner involvement in preventing mother-to-child transmission of HIV; however, a considerable number of studies conducted in African countries demonstrate that their involvement is still very low, especially in services that are provided in health care facilities. They also show the strategies that have been put in place in trying to increase and retain male partners in PMTCT-related activities. The literature outlines that the challenges associated with low male partner involvement are vast and interconnected. One cross-cutting explanation that was found to explain low male partner involvement in ANC facilities and other activities relating to maternal and child care is based on the traditional gender roles prevailing in most African societies, which stipulate child care and welfare as women's duties, while men are to provide financial support and ensure that the household needs are catered for. In the same way, interventions on sexual and reproductive health, HIV/AIDS and other health aspects were historically designed to target women and children (with little or no attention given to men's needs), as they were known to be the vulnerable population. The literature has shown how PMTCT programmes focused on women's utilisation of services, in which the male partner was considered as a means that facilitated women's access to these interventions. As such, it was shown that this approach perpetuates the male partners' isolation from being agents of change in PMTCT initiatives, yet at the same time they influence women's access and adherence to health care interventions.

CHAPTER THREE: CONTEXT AND RESEARCH METHODOLOGY

In the beginning, there was Quantitative Research. A few years later, there was Qualitative Research. And then Mixed Methods was born, as a separate child of these parents. Let's all welcome Mixed Methods. As it happens, I am very committed to the idea of mixed methods research, dislike the idea of any kind of hierarchy of methods (as opposed to an hierarchy of evidence)...(Creswell and Plano Clark, 2007:388).

3.1 Introduction

The aim of this chapter is to provide a description of the methodology that was used in the study. It begins by providing a socio-demographic profile of Zimbabwe. In addition, a brief description of the study site is also provided. A combination of qualitative and quantitative methods were used so as to provide a more comprehensive understanding of the factors underlying male partner involvement in the prevention of mother-to-child transmission of HIV. The chapter concludes by outlining the procedures used to obtain ethical clearance, as well as the validity of the study.

3.2 Context

Zimbabwe, officially known as the Republic of Zimbabwe, is a landlocked country situated in Southern Africa between the Limpopo and Zambezi rivers. According to the Political Economy Southern Africa (PESA), the country shares borders with Botswana, Mozambique, South Africa, Zambia and meets Namibia at its westernmost point (PESA, 2015). Zimbabwe is divided into eight provinces and two cities with provincial status: Bulawayo, Harare, Manicaland, Mashonaland Central, Mashonaland East, Mashonaland West, Masvingo, Matebeleland North, Matebeleland South and Midlands.

Figure 3.1: Map of Zimbabwe



Source: Nationsonline (2017)

According to the Zimbabwean National Statistics Agency (ZIMSTAT), Zimbabwe has a population of approximately 13 000 000 (ZIMSTAT, 2012). The birth rate is about 32.47/1000, the infant mortality rate is 25.9 per 1000 live births (males: 28.1 deaths per 1000 live births and females: 23.6 deaths per 1000 live births), and the life expectancy at birth is approximately 58 years (males: 57.3 and females: 58.7 years) (ZDHS, 2015). There are 16 official languages spoken in the country, with English, Shona and Ndebele as the commonly used languages. The literacy rate is 86.5 percent, according to 2012 estimates (ZIMSTAT, 2012).

In terms of religion, Christianity is the leading belief system in the country. In the Christian religion, 17 percent of the households belong to the Protestant sector, nine percent of the households belong to the Roman Catholic sector and about 32 percent of the households belong to the Apostolic sector (UNICEF, 2016). The Protestant Christian religion has a wide variety of

denominations such as the Anglican, Lutheran, Methodist, Reformed Church and Seventh - Day Adventist, among others. The traditional African religion is observed by approximately 15 percent of the households, atheism by 16 percent and one percent professes to be Islam (ZIMSTAT, 2012). Other religions such as Baha'i, Hindu, Latter Day Saints, Orthodox and others are observed by less than six percent of the total population (UNICEF, 2016).

The economy depends heavily on agriculture and mining. The country was once the bread basket of the Southern African region, but since 2000 it has struggled to provide for its own people due to severe droughts, low mining revenues, poor infrastructure and regulatory deficiencies, foreign debt, high government spending, a poor investment climate and political instability (PESA, 2015). The country experienced a drastic economic downturn which directly impacted on its service delivery systems (Lopman et al., 2007). Between 1997 and 2005, the Gross Domestic Product declined by more than 30 percent, inflation was approximately 250 percent in 2003 and increased to above 1000 percent per annum (World-Bank, 2006). The inflation rate continued to increase sharply over the years such that in mid-November 2008, it was at approximately 79.6 billion percent per month and making it the highest in the world (Hanke and Kwok, 2009). Such economic challenges have had a negative impact on the delivery of health services including the roll-out of HIV-related programmes. For example, lack of medication especially within public institutions has exposed the HIV positive to the risk of deterioration of health. It also goes without saying that PMTCT of HIV programmes were affected.

As a result of economic mismanagement and hyperinflation, the country experienced a wave of emigration which created challenges of brain drain in various sectors of service delivery. For example, the health sector's professionals migrated to other countries within and outside Africa due to the poor economic conditions prevailing in the country and deteriorating health services (Chikanda, 2008, Chibango, 2013). Also, migration occurred within the country where trained health personnel migrated from rural to urban areas and unqualified cadres filled this gap, thus compromising the quality of the service in rural areas (Chibango, 2013). Perez (2004) points out that the HIV/AIDS burden also co-existed with this economic crisis, thereby restraining access to the public health services that were already weakening. Hence, the unstable macro-economic environments, along with other socio-political problems, have had negative impacts on the health sector.

Like many other countries in Sub-Saharan Africa, Zimbabwe is one of the worst affected by the HIV/AIDS epidemic, with about 1 300 000 to 1 500 00 adults and children living with HIV/AIDS in 2014 (UNAIDS, 2015). By the end of 2013, approximately 786,299 of the population living with HIV/AIDS was in need of antiretroviral therapy (MOHCW, 2014). The HIV epidemic in Zimbabwe remains generalised, and new infection rates, prevalence and AIDS related deaths continue to decline (MOHCW, 2016). In 1995, the HIV prevalence among adults was estimated to be 21.5 percent. By 2005 it had decreased to 18.4 percent and further declined to 13.1 percent in 2011 (UNICEF, 2010, UNAIDS, 2012). The United Nations General Assembly (UNGASS) report on HIV/AIDS suggests that the decline in HIV prevalence is due to a combination of factors such as behaviour change (condom use and multiple partner reduction), effective treatment care and support, as well as the prevention of mother-to-child transmission of HIV (UNGASS, 2008, MOHCW, 2016). Although the prevalence has declined over the years, it is still high (UNICEF, 2010). One of the challenges that this study addresses is male partner involvement in PMTCT, which is envisaged to help in reducing HIV among women and children. It is also argued that in Zimbabwe and other African settings, men play a role in controlling access and utilisation of health interventions in a number of ways. In this regard, the involvement of male partners in PMTCT programmes is expected to result in a decrease of HIV infections as well HIV-related infant mortality.

It goes without saying that mother-to-child transmission of HIV is a public health problem in Zimbabwe, and PMTCT is one of the strongest programmes responding to HIV/AIDS in the country. According to the estimates of the Ministry of Health and Child Welfare (MHCW), approximately 105 740 children in Zimbabwe are living with HIV and 90 percent are a result of mother-to-child transmission (MOHCW, 2010). The number declined to approximately 77 000 in 2013 (UNAIDS, 2015), and HIV/AIDS is the most common cause of deaths; followed by other diseases and prematurity (WHO, 2010).

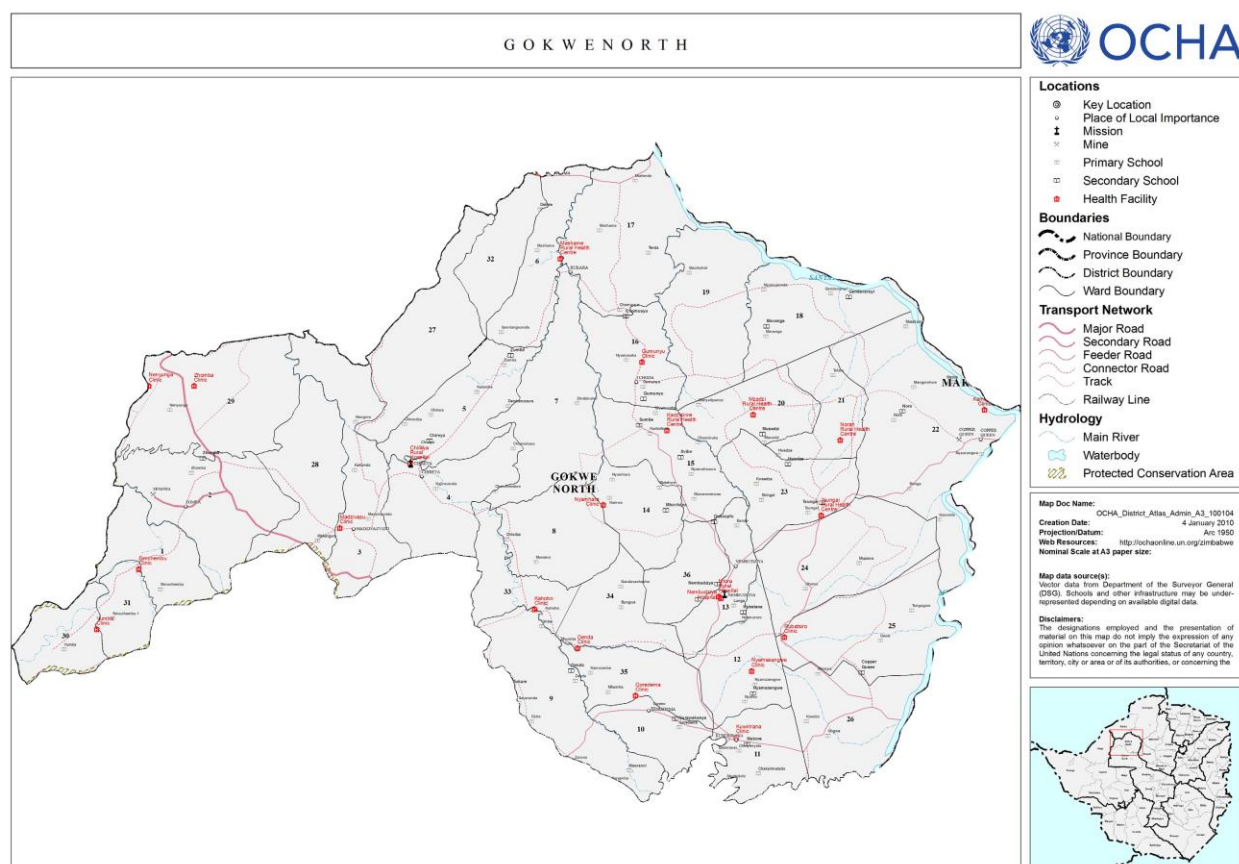
The PMTCT programme was initiated in 2002 and is offered in about 1 422 health facilities with 875 sites, providing a minimum package of PMTCT services to include on-site supportive counselling, as well as ARV prophylaxis (UNGASS, 2008). From 2002 to 2009, the Zimbabwe national PMTCT programme provided a single-dose nevirapine (sdNVP) treatment, but began

replacing it with a more efficacious antiretroviral (ARV) regimen (Ciaranello et al., 2011a). The Ministry of Health (Zimbabwe) adopted the new WHO guidelines on ART, namely Option B+, in which all HIV positive and lactating mothers are prescribed lifelong ART, regardless of their CD4⁺ cell count (WHO, 2012b). The major advantages associated with this treatment plan include protection against mother-to-child transmission, especially in future pregnancies; an increase in protection against HIV transmission between sero-discordant couples; as well as improved maternal and child health (WHO, 2012b). Current studies on Option B+ by and large focus on its cost effectiveness and feasibility, and a few studies have been conducted in Malawi, Zimbabwe, Kenya, Zambia and Vietnam (Gopalappa et al., 2014). Although these studies show that the use of Option B+ is cost-effective in reducing mother-to-child transmission of HIV, little is known of how male partners' involvement (especially among sero-discordant couples) can lead to good infant, maternal and paternal health outcomes. One of the aims of this research, therefore, is to explore how these new treatment regimens influence male partner support in the PMTCT of HIV.

3.2.1 The study setting

The research was conducted in Gokwe North, a rural district in the Midlands province in Zimbabwe. It is located approximately 350 kilometres west of Harare, and the district consists of approximately 245 000 people (ZIMSTAT, 2012).

Figure 3.2: Map of the Gokwe North District



Source: Office for the Coordination of Humanitarian Affairs (OCHA) (2010).

The district is characterised by poor infrastructure and its inhabitants have limited access to health facilities. There is a scarcity of potable water and electricity in the district. The community relies largely on an agrarian economy and it is renowned for being one of the leading producers of cotton in the country. Mvumi and Marimo (2011) note that basic HIV/AIDS knowledge is a challenge and there are a few organisations implementing AIDS services in the area. This is mainly because the area is not easily accessible, due to its poor physical infrastructure, yet vulnerability is high due to the cotton marketing activities (Mvumi and Marimo, 2011).

The district was chosen because it is one of the districts in the country that has made efforts to involve men in PMTCT programmes within its health services since the beginning of 2012. The Ministry of Health and Child Welfare engaged the chiefs and other traditional leaders in raising

awareness in communities about the importance of men's involvement in HIV prevention projects. In the context of Gokwe North district, male involvement was generally considered as when the man accompanies the female partner to the antenatal clinic for couple HIV testing and counselling. The measurement was a basic headcount of men who were tested at the antenatal clinics. In addition, men in the district have initiated and run campaigns to promote men's involvement in PMTCT programmes at a community level (Chadenga, 2013). Conducting the research in this area enabled the researcher to draw lessons on the processes that led to this achievement, and facilitated the exploration of the challenges and opportunities associated with male involvement in such programmes.

3.3 Research methods

The research made use of a mixed method approach. There are diverse definitions of mixed methods that have evolved to include research processes, philosophy, research designs and elements of methods (Creswell and Plano Clark, 2011), and these have undergone extensive revision (Tashakkori and Teddlie, 2010). For example, a definition by Green, Caracelli and Graham (1989:256) refers to mixed methods as: *"...those designs that include at least one quantitative method (designed to collect numbers) and one qualitative method (designed to collect words)...where neither type of method is inherently linked to any particular inquiry paradigm"*.

In this definition, the writers denote that the methods are not necessarily informed by any world view. Creswell and Plano Clark (2011) argue that the definition of mixed methods needs to incorporate various methods, viewpoints, as well as a research design orientation. In addition, they emphasise the key components associated with various designs and how these are conducted in mixed methods. For the purpose of this research, the latter definition is the most appropriate as it seeks to consider a specific mixed method design which is informed by a theoretical framework in understanding male involvement in PMCT initiatives.

A mixed method research was used for two major reasons. Firstly it was chosen for the purpose of triangulation (Plano Clark and Creswell, 2008), to offset biases in investigations of the same phenomenon, with the aim of strengthening the validity of the results (Denzin, 1978, Green and McClintock, 1985). In this research, method triangulation was largely used as the study employed qualitative and quantitative methods. Furthermore, within each component there was use of 'within-method', which Denzin (1978) describes as the use of multiple techniques within a given method to collect and interpret data. For example, the qualitative methods used techniques such as focus group discussions, key informant interviews, as well as in-depth follow-up interviews for data collection, which could be referred to as the 'within-method' form of triangulation. Hence, the use of different methods enabled the research to benefit from the different strengths inherent in quantitative and qualitative methods in a single study.

A mixed method was used because of the strengths inherent in this method. The use of quantitative methods allowed the researcher to be able to identify and observe specific trends in levels of male partner involvement after analysing quantitative data. This also allowed the researcher to be able to measure attitudes using scores as well as behaviour of respondents by use of checklists. On the other hand, the use of qualitative methods enabled the researcher to have an in-depth understanding of respondents' perceptions, experiences and views on various questions discussed. For example, the use one on one interviews allowed respondents to provide narratives about their personal experiences and views on the subject. Focus group discussions enabled in obtaining personal and group feelings and opinions on various aspects of male partner involvement. It also provided the researcher to obtain a broad range of information on the subject. The combination of quantitative and qualitative methods was useful in offsetting the weaknesses of each of the methods.

In addition, the use of mixed methods facilitated complete analysis of the problem investigated. In this regard, the qualitative methods provided an in-depth understanding of the problem being studied, while the quantitative methods gave a picture of the prevalence of the problem and enabled the researcher to make comparisons between different groups on the same phenomenon.

3.4 Research design

The research used an exploratory sequential design. Creswell and Plano Clark (2011) describe this design as the kinds of methods that are implemented in sequence. It begins with qualitative data collection, referred to as phase one. The next is quantitative data collection and analysis (phase two) which builds on phase one (Creswell and Plano Clark, 2011).

Although the research used this approach for data collection and analysis, some modifications were employed; instead of having two phases, the study made use of three phases. In terms of procedure, the results obtained from the qualitative data were analysed in phase one. The themes that emerged from the qualitative findings were used to modify the questionnaire for quantitative data collection in phase two. Once the results were analysed from the survey, a few in-depth interviews were conducted (phase three) to explore the trends and outstanding issues obtained from the quantitative data. While data analysis was independent, final interpretation of the results was interactive and it was done at the end of the data analysis of phase three.

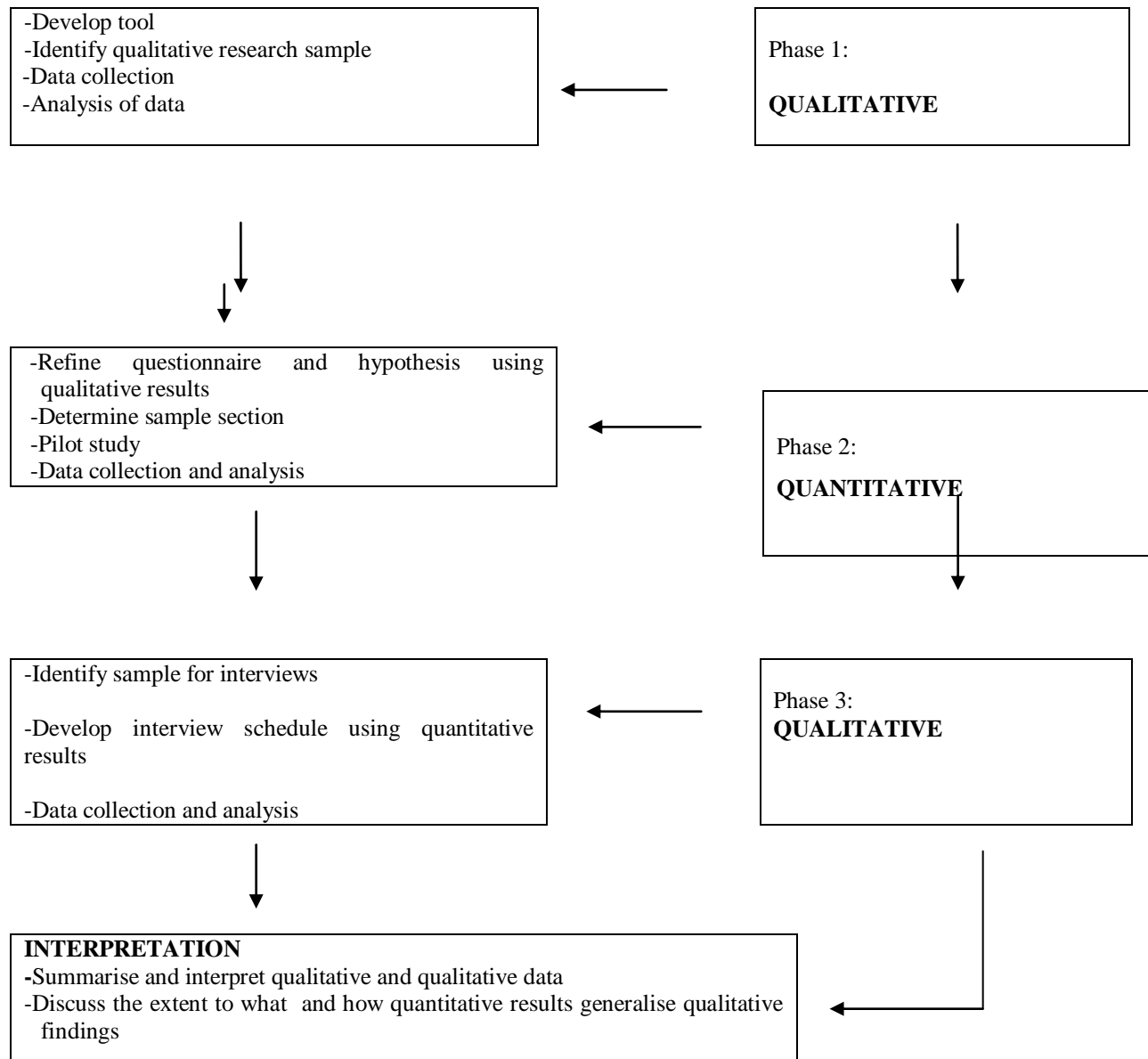
The exploratory sequential design was used because of its fundamental principle that places greater emphasis on the qualitative research component and by so doing, exploring a (relatively new) phenomena in depth (Plano Clark and Creswell, 2008). The main aim of this research was to explore the various aspects of male partner involvement in PMTCT programmes such as the meanings, experiences, views and attitudes about male involvement. Numerous studies in the past have used quantitative methods in determining the outcome of male participation in voluntary couple counselling and testing for PMTCT (Byamugisha et al., 2010), however, prioritising the qualitative component of this research also enabled the researcher to identify the perspectives, meanings, and the lived experiences of men and women regarding male participation in PMTCT interventions. The second reason for using this design was that application of the quantitative component enabled generalisation of the findings (Creswell and Plano Clark, 2011, Tashakkori and Teddlie, 2010). When a study is based only on a few individuals studied, the qualitative findings cannot be generalised, however, the use of quantitative research methods can facilitate generalisations of the findings to a larger population with similar settings.

Plano Clark and Creswell (2008) state that the use of the exploratory sequential design is to determine the distribution of a phenomenon within the chosen population. Since this was one of the few studies that have been conducted in a rural population on PMTCT and male involvement in Zimbabwe, using this design provided a picture, for example, with regards to the nature as well as the extent of male involvement in PMTCT initiatives.

3.5 Research procedures

Traditional exploratory research follows specific steps that cover the two phases of the research, namely the qualitative and quantitative phases. These steps were summarised by Creswell and Plano Clark (2011) and previous studies have also followed the same procedures. The present research used the same procedures but utilised three stages or phases; in other words, the research commenced with phase one (interviews and focus group discussions), followed by phase two (survey) and lastly phase three (interviews), as shown in Figure 3.3.

Figure 3.3 Procedures in implementing exploratory research



Source: Adopted from Creswell and Plano Clark (2011).

3.6 Focus group discussions

In this first phase of the study, focus group discussions were conducted. Focus group discussions (FGD) are a means of generating data in which a group of individuals are selected and assembled by researchers to discuss and comment from their personal experiences on the subject of the research (Kitzinger, 1995). The aim of the focus group discussions was to generate a common understanding and perceptions regarding the inclusion of males in PMTCT initiatives in the local context; and interaction among the participants of the focus group could also reflect the (sub) cultural values and shared knowledge on the subject, according to (Powell and Single, 1996).

An interview schedule was designed with questions to be used when conducting the focus group discussions. The questions for focus group discussions were decided during the design stage. Some of the themes explored were knowledge of MTCT and its prevention; general attitudes towards the PMTCT programme; views concerning HIV testing at antenatal clinics; condom use within marriage; the reason for male participation in PMTCT programmes and HIV couple counselling and testing. Views on how to increase male involvement in the PMTCT programme were also explored.

3.6.1 Research assistant training and data collection

A research assistant was enrolled to assist in conducting the focus group discussions. This position was given to a student enrolled in a master's programme in Zimbabwe, who had knowledge and experience in qualitative research methods, including the processes of data collection. The research assistant was trained before the beginning of data collection. During the process, the principal investigator briefed the research assistant about the study, and the research assistant was given the interview schedule so that they could familiarise themselves with the questions. During the focus group discussions, the main duty of the research assistant was to moderate the discussions while the principal investigator wrote notes and captured any important observations.

The discussions were held in places where the participants always met for their meetings. For instance, some were conducted in a church with church members, some in hospitals with expectant mothers, and others at community soccer fields with men. All the focus group

discussions were conducted in Shona as this was the language participants preferred to use. These discussions were audio-taped, transcribed and translated from Shona into the English language. Notes were also taken so as to have a backup of what was recorded on the audio-recorder and also to highlight information that seemed to take significance during the discussions.

In order to ensure robustness and quality of the results, a number of checks were conducted at different stages of the study. When designing the questions for the focus group discussions, the researcher ensured that questions were clear and not misleading. Such questions included follow-up and probing questions. This allowed for greater clarity and less ambiguity. During data collection, the moderator ensured that all the participants were given equal opportunity to respond and participate in the discussions. The quality and robustness of results during data collection depended on the moderator. In order to ensure these requirements, the moderator clearly introduced and thoroughly addressed the discussion topic. The moderator also had to avoid some individuals from dominating the group despite their leading role but remained alert and probed participants as a way of encouraging them to participate in the study.

3.6.2 Sampling

The participants of the FGDs were men and women of reproductive age. Men were 18 years and above while women were between 18 and 50 years of age. A key reason for this selection criterion is that the severity of MTCT of HIV in Sub-Saharan Africa, as well as in Zimbabwe, is extremely high due to the high HIV transmission rates among women of reproductive age (Akarro et al., 2011). For this reason, it was important to select women of reproductive age since they are at risk of infection. Men of reproductive age are also within the 'at risk' population of HIV transmission.

Participants for the FGDs were chosen using purposive sampling methods. These participants were obtained from key organisations that exist in the district; where men and women usually convene for various reasons. These include churches, health care centres, humanitarian organisations and community projects. Responsible authorities in different institutions were the entry point that assisted in identifying and inviting potential participants for the FGDs.

A total of eight focus group discussions were conducted between February and May 2015. Of these eight groups, two groups were composed of males only, another set of two had females only and the remaining four groups had a mixture of males and females. A total of 66 males and females gave consent to take part in the focus group discussions. The mean age for males was 31 years and for women 23 years. The majority (60.6%) of the participants were farmers and about eight percent had other forms of employment. The age range for females was between 18 and 50 years, while the age range for males ranged from 25 to 72 years.

3.7 Key informant interviews

Key informant interviews formed part of the first phase of the study. Marshall (1996) defines key informants as expert sources of information in a particular field. These key informants may also occupy a certain position of responsibility or influence in the community, and are assumed to possess a range of first-hand information about the community. The key informants were individuals who were in leadership positions in health institutions. These include nurses in charge of antenatal care, postnatal care, district and provincial medical officers. Other key informants were leaders in organisations that were providing PMTCT and HIV related interventions in their organisations. The aim of interviewing them was therefore to obtain information from a variety of sources that had first-hand knowledge about the community, as well as the PMTCT programmes that were being implemented in the district. Another reason for conducting interviews with these key informants was that they provided data that could not have been obtained by using any other methods of enquiry. For example, at health institutions and non-governmental organisations that implement PMTCT programmes the researcher was provided with statistics, reports and other confidential information regarding HIV counselling and testing, the testimonies of people living with HIV, and other information from their experiences in working with the local communities. Their knowledge and understanding provided insight into the current activities, challenges and successes associated with male involvement in PMTCT programmes in the district. They also provided recommendations on how they thought the PMTCT programmes could be improved from their perspectives.

An unstructured interview guide with probes was developed for one-on-one interviews with the key informants. The interviews were conducted in Shona, English and Ndebele as these were the languages commonly spoken in the district. The key informants were given the choice to use the language they preferred most; the majority chose to use Shona, some English, and some switched between the two languages. Since the main aim of conducting the key informant interviews was to generate suggestions and recommendations on how male partner involvement could be improved in the district, some of the themes that were explored included: the current PMTCT activities, the areas in which male partners or men were engaged in health-related programmes, the challenges of male involvement, success stories of male partner involvement, as well as national or local policies and regulations that supported men's involvement in PMTCT programmes.

3.7.1 Sampling

Participants were selected using purposive sampling methods. Using snow-ball sampling, the researcher accessed participants from different groups and organisations. At the beginning of the field work, the researcher approached informants from a few organisations that implemented the PMTCT programmes in the district. These individuals were consulted and asked if they would be willing to participate in the study, and those who agreed were interviewed. At these interviews the informants were asked to provide other names of potential subjects for interviews. The informants requested access to the questions in advance so that they could have an idea of the interview questions, and these were provided. This facilitated the interviewees preparing materials such as reports, statistics, and manuals to give to the researcher on the day of the interview, in addition to the interview data.

A total of seven key informants were interviewed between June and July 2015. Four of the subjects were from various levels of management within the Ministry of Health at district and provincial level; two were from non-governmental organisations that provided health services such as sexual and reproductive health, HIV and AIDS services, paediatric services and maternal health services; and one key informant was a traditional birth attendant.

3.7.2 Data collection

The key informants were interviewed at their work places and the interviews were audio-recorded. On average, the interviews lasted approximately one and a half hours long. Two of the informants were interviewed in two sessions on different days. This was because one of the informants needed more time to look for information which they deemed important for the research while the other was interrupted by emergencies in the hospital. Notes were taken during the interviews and the researcher was also given the privilege of taking a tour around the health institutions, observing places such as the antenatal clinics, postnatal wards and other areas where the PTMCT activities were carried out.

3.8 Household surveys

Household surveys comprised the second phase of the study. The aim was to collect detailed information on knowledge of PMTCT, the levels and types of male involvement in PMTCT programmes, condom use during pregnancy and breast feeding, HIV testing, couple testing, perceptions regarding male involvement in PMTCT initiatives, as well as the perceived barriers and benefits of male involvement.

According to Creswell and Plano Clark (2011), this step involves refining quantitative research questions as well as the hypothesis. This stage involved updating the questionnaire based on the results obtained from the focus group discussions and the key informant interviews. After refining the questionnaire, the tool was piloted for validation purposes, based on the qualitative results (Creswell and Plano Clark, 2011). The pilot study identified areas that needed to be revised or improved in the questionnaire. Two sets of questionnaires were designed, one set for males and the other for females. Although these were separate questionnaires, the questions were identical. The only difference was found in the use of terms linked to gender. For example, in the male's questionnaire, question number Q6016 was phrased as; *'Have you ever accompanied your partner to the antenatal clinic (ANC) when she was pregnant?'*. In the females' questionnaire, the question was phrased as; *'Did your partner accompany you to the antenatal*

clinic (ANC) when you were pregnant?’ The questionnaire measured variables such as, demographics, knowledge of PMTCT, activities in PMTCT programmes, condom use, family planning, abortion, breast feeding, HIV testing, infant feeding practices, as well as attitudes and perspectives of male participation in PMTCT initiatives.

The questionnaire was divided into seven sections. Section A included socio-demographic information such as age, marital status, education, employment/source of income, as well as the assets possessed. Section B required the respondents to show their basic knowledge of HIV transmission, and the methods of prevention and treatment. In Section C, knowledge of the prevention of mother-to-child transmission of HIV was captured. In section D, the respondents were asked about primary prevention of HIV. This included inter-spousal communication on HIV prevention, and the methods of prevention known and used by the respondents. Section E obtained information on knowledge, opinions and the potential practices regarding the termination of an unwanted pregnancy. Section F presented questions on the lived experiences with the last child, with regards to partner support during the previous pregnancy until the birth of the child. Section G addressed care and support issues for HIV positive women and children, such as their male partner’s support of HIV testing of the baby, the utilisation of health interventions and attitudes towards care and support for HIV positive women, partners and their children.

The questionnaire was 20 pages long, with a total of 180 questions. There were open-ended and mostly closed questions. Given that the questionnaire was long, structured (closed-ended) questions were the major questions presented. This made it easy for the respondents to complete the questions since they only had to circle or tick the appropriate response. For instance, the knowledge questions had only three options; ‘*True*’, ‘*False*’ and ‘*I do not know*’. A three-point Likert scale was used for attitudinal and opinion-oriented questions. The options for the scale were: ‘*Agree*’, ‘*Uncertain*’ and ‘*Disagree*’. In addition to these, multiple response questions were asked and the respondents could choose more than one response.

Most of the questions in the questionnaire were developed after taking and exhaustive literature review on the topic. Questions that were used in articles that were published in scientific journals were used. Although not all the questions were relevant to the study, they did provide a

direction in formulating new questions. A pre-test was conducted with approximately 20 respondents who had similar characteristics with those required in the final survey. This enabled the researcher to identify short-comings such as inconsistencies, unclear questions and those that needed to be reviewed.

3.8.1 Sampling

A multi-stage cluster sampling strategy was used to choose the participants for the household surveys. This sampling method was used for the reason that it made it easy for the researcher and research assistants to access the participants. The majority of households in the district were spatially distributed; as such the cluster sampling method was the most feasible method. Although cluster sampling methods are associated with high levels of sampling bias, certain strategies were used to reduce sampling bias (Babbie, 2012) as explained in the following three paragraphs.

At the first stage, a random selection of clusters was done. The study population was divided into small geographic areas called villages, which were considered as the primary sampling units. The district has 220 villages, of which 70 were selected. A traditional approach that considers 30 percent of the total size of the sample was used to determine the number of clusters required. The number that was obtained was 66, which was rounded to the nearest convenient figure of 70. This helped to avoid conducting interviews with more respondents within one cluster since this was likely to produce homogenous responses. More clusters with a few respondents within a cluster would allow obtaining relatively heterogeneous responses.

At the second level, households within clusters were selected using systematic random sampling. All the households belonging to these clusters were systematically listed. However, these households needed to meet a certain criterion for it to qualify on the list; which was that at least there should be a household member who had had a child in the past ten years. This was done by liaising with headmen and village health workers. After listing the households, the boundaries of the cluster were identified and a random starting point was selected within the cluster, and thereafter every n th household was selected. The sampling interval (n th) was calculated by

dividing the total number of households in the cluster by the required number of interviews from that cluster.

At the last stage, random sampling of one eligible adult from within the household was done. Most households were composed of extended families and therefore had more than one eligible adult. Under such situations, the eligible adults who had agreed to participate in the survey were assigned with numbers which were then randomly selected so as to identify one participant for that household.

The population size of the Gokwe North District is about 245 000, of which 440 (220 men and 220 women³) was the sample size obtained from the initial calculations before data collection. The formula from Cochran (1977) was used to calculate the sample size:

$$n = \frac{Z^2 P (1-P)}{E^2}$$

Where:

n = sample size for the survey

Z = Z-value of 1.96 (confidence level or a probability that a sample will fall within a certain distribution e.g. 1.96)

P = population prevalence: 0.17 percent (statistics of men that attended couple HIV testing in the PMTCT programme in Chitungwiza, Zimbabwe in 2011 (Makani et al., 2012).

E = margin error of 0.05.

Hence, with $Z^2 = 3,8416$, $P = 0.17$ ($1 - 0.17$) and $E = 0.0025$, the sample size was 217. This was rounded to the nearest convenient whole number, namely 220. Cluster sampling is one of the least representative of all sampling techniques and has the chance of having more sampling errors due to the greater statistical variance inherent in it than, for example, in simple random sampling. In order to increase precision, a design effect of two was opted for⁴, which when applied minimised sampling error. Thus the primary sampling size of 220 was multiplied by two

³ Men and women in different types of relationships (married, not married, living together, not living together) were included.

⁴ Shackman, (2001) notes that the design effect generally ranges from 1 to 3.

to come up with a final sample size of 440. Doubling the sampling size enabled reducing the biases associated with non-responses.

In order to ensure that the above sample size was adequate, power calculations were done by referring to a scientific study that was previously conducted on a similar subject. STATA was used to calculate the sample sizes.

Sample Calculation: Koo et al. (2013a) studied the factors impeding male voluntary HIV counselling for PMTCT in Tshwane, South Africa. The proportions used were of men that believed that male partner testing was important.

Proportion 1(Yes) = 98, 6 percent

Proportion 2 (No) = 88.0 percent

Power = 80.

The following output was obtained upon entering the command in STATA: *sampsi 0.986 0.880, power (0.8)*

Test Ho: $p_1 = p_2$, where p_1 was the proportion in population one and p_2 was the proportion in population two

Assumptions:

alpha = 0.0500 (two-sided)

power = 0.8000

p_1 = 0.9860

p_2 = 0.8800

n_2/n_1 = 1.00

Estimated required sample sizes:

n_1 = 105

n_2 = 105

The sample size in this example was 210, however, the sample was doubled by two so as to account for the design effect; hence the final sample size was 420. Based on this finding, the previous calculation that was done to obtain the sample size of 440 using Cochran's formula was validated since the two findings were more or less congruent.

Inclusion criteria for participation in the survey for both men and women were that they were either married, single or divorced, were: a) adults, that is, 18 years and above, b) must have had a child in the last five to 10 years⁵, c) must have been willing to participate in the survey, and d) had stayed in the Gokwe North District for at least six months or longer. Exclusion criteria were men and women who: a) were known to be mentally ill, b) refused to give consent and c) men and women who had participated in focus group discussions previously.

Although HIV positive status was not a requirement to participate, some of the participants disclosed their HIV status, hence, measures were taken to protect their autonomy and prevent stigmatisation.

3.8.2 Field procedures

The field work for this phase occurred between May 2016 and August 2016. A total of four research assistants were trained in April for eight days. The questionnaire was very long; therefore there was a need to train research assistants. These were postgraduate students who were highly competent and well-acquainted with quantitative research methods. The aim of the training was to brief the research assistants about the scope of the study, the aims of the research and the data collection procedures. Although the research assistants had extensive knowledge and experience in quantitative research methods, it was necessary that they familiarise themselves with the questions. During the training sessions all the questions were reviewed and the principal investigator explained the relevance of each question.

⁵ It was anticipated that these may have gone through PMTCT programmes and may have known what they entailed.

Subsequent to the training sessions, the research assistants were allocated to their respective research sites. An additional researcher was recruited to assist the principal investigator with management of the field work. The principal investigator and researcher ensured that the households were selected and all the procedures were done according to plan. They also provided assistance to the research assistants with any challenges that emerged during data collection. Prior to the submission of the completed questionnaires, the research assistants assessed all the questionnaires as a way of verifying if the respondents followed the instructions in responding to the survey questions.

The questionnaire was self-administered. In order to ensure that respondents had enough time to carefully complete the questions, they were left to complete the questionnaire in their homes and at their own time. In terms of collection of completed questionnaires, the researcher arranged with the village headmen that all survey respondents meet on a day that was most convenient for them. Final dates were arranged to meet all the respondents at their village headmen's homestead so as to collect the questionnaire. Respondents submitted the questionnaires to the research team at different village headmen's homes. This platform also enabled respondents to seek further clarity on matters regarding questions in the survey or any other questions linked to the research.

Submitted questionnaires were checked continuously by the principal investigator and researcher to avoid any errors. Out of the 440 questionnaires distributed, 331 were completed and 44 were not completed. A total of 55 were spoilt, and ten respondents were sick and failed to complete the survey. Nonetheless, the response rate of this study was 75 percent, which was above the acceptable rate of 70 percent, according to (Morton et al., 2012).

3.9 Follow-up interviews

In this third phase, follow-up interviews were conducted. The aim was to explore the interviewees' personal experiences and perceptions of male partner involvement in PMTCT activities. After exploring the data from the survey, the researcher identified a few questions that needed further investigation and validation. Most of these questions were suitable for the female

respondents due to the nature of their content. The questions explored women's experiences of their partner's involvement in couple HIV counselling and testing for PMTCT; the forms of communication that women suggested as acceptable when discussing HIV-related matters with spouses; as well as the male support provided during pregnancy, at birth and during the postnatal period.

3.9.1 Sampling

A total of eight interviewees were chosen using non-probability purposive sampling. Respondents were supposed to be female since the questions sought to ask women's experiences and perceptions. Participants were also supposed to be based at antenatal and post-natal wards in clinics and hospitals. This was mostly because some of the questions were based on exploring their views and experiences of male partner support. In addition, interviewing women who were admitted in hospitals and clinics enabled obtaining information on how their partners were accommodated and received by health practitioners during visiting hours or at any other activities where male partners were supposed to be available supporting their spouses. Another criterion for choosing these participants was that they should not have taken part in the household survey and focus group discussions, so that their views could help in validating the data obtained previously.

Respondents for the follow-up interviews were selected using non-probability purposive sampling. Two main hospitals in the district were selected since they had a large number of women admitted in the antenatal and postnatal wards. Of the two hospitals, one specialised in antenatal care while the other in postnatal care. After being granted permission to conduct the research in antenatal and postnatal wards in the hospitals, the researcher liaised with the nurses in charge of these wards so as to obtain women who were willing to take part in the study. The nurses provided an opportunity for the researcher to address the women as a group explaining the aim of the research as well as the request for participation. After the meeting, the nurses approached women who able to attend the interviews based on their health condition. For example, in the antenatal ward, women who were not in labour and had no ailments on the day of interview were asked if they would be willing to participate in the survey. Also, in the postnatal

ward, women who had just given birth were not asked to participate as well as those whose babies had complications after birth. Such considerations were made so as to ensure that the respondents were in a good state of mind and health. A total of eight respondents (four in antenatal and four in postnatal wards) were approached and accepted to be interviewed in their respective hospitals.

3.9.2 Data collection procedures

The interviews were conducted by the principal investigator. The nurses in charge of the wards in the different hospitals provided an office space where interviews were conducted. This allowed the interviews to flow with minimum disturbance as well as providing privacy. All the interviews were conducted in Shona and audio-taped. They were later uploaded onto a computer and transcribed. The average length of each interview was approximately 45 minutes to one hour. The transcribed interviews were subsequently translated into English and checked for errors in spelling and meaning after translation.

3.10 Data processing and analysis

3.10.1 Qualitative data analysis

Analysis of the qualitative data was done by means of thematic analysis. Certain procedures were followed in guiding the process of thematic analysis. The first stage was intense familiarisation with the data. A thorough reading of the notes and verbatim transcripts was done. This enabled the researcher to get familiar with the interviews. Secondly, themes or statements relevant to the study emerging from the data were identified and coded in each text, using the NVIVO software. This process is referred to as ‘delineating units of meaning’ according to the importance and centrality accorded to them’ (Sanders, 1982). This was followed by organising the responses or statements into categories, by way of grouping statements that had the same meaning or idea. This incorporated short and extensive quotes extracted from the interviews.

3.10.2 Quantitative data analysis

Data was analysed using the Statistical Package for Social Sciences (SPSS). A code book was developed so as to recode the variables, their definitions, as well as the numbers that were linked to the response options. Also, all questions or items were provided with a unique variable name. All the responses in the data were converted into forms that could be used for analysis. This was done by assigning numeric values to each of the responses in the questionnaire. Some responses to certain variables were combined into shorter forms during the analysis. For example, the five point Likert Scale responses; *strongly agree, agree, uncertain, disagree and strongly disagree* were merged to three point Likert scale; *agree, uncertain and disagree*. Rigorous checks were done when entering the data to include the cleaning of data entry errors, checking for missing values, duplicates and miscoded entries.

Exploration of the data was done by observing trends that come up in the data using descriptive statistics, namely checking for standard deviation, mean and variance. Performing descriptive analysis facilitated a better understanding of the data. In addition, distribution of the data was observed by determining whether it was normally or non-normally distributed; this enabled choosing of the appropriate statistics for analysis (Creswell and Plano Clark, 2011).

The original 331 cases were used for data analysis, that is, the completed questionnaires. Since the research was conducted in a small district and not across the whole country at large where use of weights are useful for generalisation of findings, there was no need to weight the data. In addition, the sample was so small such that the use of weights was likely to reduce data accuracy.

The data was analysed at various levels. Descriptive statistics was used to display simple summaries from the data, while inferential statistics such as chi-square tests and bivariate analysis to explore the association between the independent and dependent variables. Since the dataset was relatively small and generally used nominal and ordinal scales, selected non-parametric techniques were used. The common non-parametric techniques used in this study

included the chi-square and Mann-Whitney U Test. The chi-square test was used to compare the observed frequencies occurring in each of the categories with expected values to see if any association existed between the variables in question (Pallant, 2010). The study used two levels of statistical significance that are less than 0.05 and 0.001. The Mann-Whitney U test was used to compare the differences between two independent groups against a continuous variable. In this test, SPSS converts the scores under the continuous variable to ranks across two groups and subsequently evaluates if the two groups differ significantly (Pallant, 2010). The logistic regression was used to estimate the probability of a binary response based on one or more predictor (or independent) variables (features). Since the study was composed of one sample, the sample was divided into two distinct groups by gender (male and female). The choice of statistical test used was based on the questions and included the description of trends, the relationship between the variables, as well as the comparisons of groups (Caracelli and Green, 1993, Creswell and Plano Clark, 2011). Exploratory factor analysis was used as a data reduction technique in the development of the index for male partner involvement in PMTCT. Pallant (2010) claims that factor analysis is mostly used by researchers in the development and evaluation of scales and tests. It aims at refining scale items from a large number to form a smaller number of coherent sub-scales. Cronbach's Alpha was used to test the internal consistency of the variables that were retained in the development of the index. The use of Cronbach's alpha facilitated in assessing whether or not the items retained in the scale all hung together, that is, whether or not they were measuring the same underlying construct (Pallant, 2010) of male partner involvement in PMTCT.

3.10.3 Demographic representations

Table 3.1 is a representation of the socio-demographic characteristics of the respondents who completed the survey.

Table 3.1: Socio-demographic characteristics of the respondents

Characteristic	N (%)
Gender	
Female	195 (58.9)
Male	136 (41.1)

N	331(100)
Marital status	
Married	291 (87.9)
Divorced	9 (2.7)
Widowed	17 (5.1)
Separated	9 (2.7)
Single	5 (1.5)
N	331(100)
Age Group	
25 and below	41 (12.4)
26-35	109 (32.9)
36-45	121 (36.6)
46-55	48 (14.5)
55 and above	12 (3.6)
N	331 (100)
Ever attended school	
Yes	314 (94.9)
No	17 (5.1)
N	331 (100)
Highest level of schooling	
Advanced Level	31 (9.4)
Ordinary Level	173 (52.3)
Junior Certificate	18 (5.4)
Primary	83 (25.1)
Standard	7 (2.1)
None	19 (5.7)
N	331 (100)
Post-secondary qualification*	
University	18 (5.5)
Diploma	33 (10.0)
Certificate	47 (14.2)
None	232 (70.3)
N	330 (100)
Occupation	
Farming	186 (56.2)
Government employee	58 (17.5)
Private sector	8 (2.4)
Self-employed	8 (2.4)
Unemployed	67 (20.2)
Studying	3 (2.2)
Other	1 (0.3)
N	331 (100)
Religion/denomination	
Catholic	106 (32)
Methodist	47 (14.2)
Apostolic	97 (29.3)
Zionist	20 (6.0)
Anglican	20 (6.0)
Baptist	19 (5.7)
Traditional	7 (2.1)
Other	15 (4.5)
N	331 (100)

**In categories that do not add up to the total sample, the difference represents the missing data.*

Table 3.1 shows that about 58.9 percent were females and 41.1 percent males. Most of the respondents in the survey were married (87.9%). Very few were widowed (5.1%), divorced or separated (2.7%). About 1.5 percent of the respondents were single. The high rates of marriage are similar to the findings of the Zimbabwe Demographic and Health Survey (ZDHS) which suggest that marriage in Zimbabwe is almost universal (ZDHS, 2015).

Most (36.6%) of the respondents were 36-45 years old and 26-35 years old (32.9%). About 12.4 percent were 25 years and younger while 3.6 percent were 56 years and older. Almost 14.5 percent were 46-55 years old.

A large proportion (94.9%) of respondents reported ever having attended school. Also, 52.3 percent had ordinary education. Approximately 25.1 percent had completed primary education and very few (9.4%) had advanced level as their highest level of education. The majority of the respondents (70.3%) did not have any post-secondary qualification. However, 14.2 percent had a certificate and 10 percent had a diploma. Very few respondents (5.5%) had a university degree.

Most respondents (56.2%) reported farming as their main occupation. Nearly 20.2 percent of respondents were unemployed. There were few respondents who were self-employed or working for the private sector (2.4% for either sectors). About 17.5 percent reported working for a government institution. Also, approximately 0.9 percent were schooling while 0.3 percent indicated having other forms of employment.

Generally, most of the respondents were Christians. About 32 percent were Catholics, 29.3 percent belonged to the Apostolic faith, and only 2.1 percent belonged to the traditional religion. At least 6 percent belonged to either the Zionist or Anglican denominations. Also, 14.2 percent indicated that they belonged to Methodists or other (4.5%) denominations or religions.

3.11 Quality assurance measures

Creswell and Plano Clark (2011) define validity in mixed methods research as the use of approaches or means that deal with possible matters in the process of data collecting, analysis and interpretation that can compromise the integration of both the qualitative and quantitative data, as well as the conclusions from the combination. In order to ensure (both internal and external) validity, various checks were conducted so as to avoid inconsistencies in the data. However, the overarching approach used to ensure validity was choosing a research design that was appropriate in answering the research question(s). The researcher ensured that the procedures followed in conducting the research were consistent with the design, such as the sequence of data collection, analysis and interpretation of the data from both the qualitative and quantitative strands. Rigorous procedures were applied in developing and refining the questionnaire by use of appropriate scales. In the construction of the scales for the survey, the researcher adopted scales that were developed by DeVellis (2011), to ensure that the measurements used were appropriate. In addition, the questionnaire was reviewed to ensure that it addressed the research questions, and a pilot study was conducted to assess the feasibility of the tool in terms of time, clarity of the questions, as well as relevance. In terms of the qualitative tools, the interview schedules and the focus group discussion guide reflected the main research questions and they enabled participants to describe and explain their views or experiences of the subject. Focus group discussions also had manageable numbers which made it possible for the participants to have an equal opportunity to contribute.

Creswell and Plano Clark (2011) assert that one of the potential validity threats in mixed methods is to compare two data sets when they are intended to build rather than merge. The purpose of using the quantitative strand in this study was to build upon the qualitative strand, hence, interpretation of quantitative results was not done with a view to compare groups, but rather to build on the qualitative findings.

3.12 Ethical considerations

Ethical clearance to conduct the research was provided by the University of KwaZulu-Natal, as well as the Zimbabwe Ministry of Health and Child Care (MOHCC) and the Medical Research

Council of Zimbabwe (MRCZ). At provincial level, permission to conduct the study was granted by the Provincial Medical Director (PMD) of the Midlands province, Zimbabwe, and the District Medical Officer (MDO) of the Gokwe North district. At local level, permission to collect data was obtained from the District Administrator (DA) of the Gokwe North district who authorises all the research conducted in the different institutions, namely the local councils, chiefs, village headmen, the Ministry of Health, church organisations and the humanitarian organisations in the district.

Written consent forms were provided to the research participants during data collection. At the beginning of data collection, the researcher explained the purpose of the research. Participation in the research was voluntary and no reward was to be given for participation. It was also explained that they could withdraw from the interviews, should they have changed their minds during the interview process. Participants who agreed to take part in the research were asked to sign the informed consent form before the interview commenced.

3.13 Limitations of the study

The results of this study may to a certain extent have been affected by social desirability. Social desirability bias is described as the tendency of research participants to provide socially desirable responses rather than choosing responses that reflect their selves (Grimm, 2010), and this bias is common in sensitive topics such as HIV/AIDS, religion, sexual behaviour and politics. This study addressed HIV/AIDS issues which are sensitive and can be stigmatising as well, so the chances of the research subjects providing socially desirable responses were high. This bias was offset by recruiting and training highly competent research assistants who ensured that the respondents felt comfortable in responding to seemingly sensitive questions. In addition, the use of the household survey for data collection was useful as the research subjects answered the questions in the absence of the research assistant.

This study used a mixed method research, and an exploratory sequential design, which placed greater emphasis on the qualitative research component, was utilised. The main aim of using mixed methods was for the purpose of triangulation (Plano Clark and Creswell, 2008), in order

to offset the biases in the investigation of the same phenomenon while strengthening the validity of the results (Denzin, 1978, Green and McClintock, 1985). Since male partner involvement was a complex concept to study, the use of mixed methods facilitated getting a deeper and wider understanding of the subject. For example, the use of in-depth interviews and focus group discussions facilitated obtaining a deeper understanding of the information shared by the respondents. During the interviews, the researcher was able to probe the issues that were raised in the interviews. The survey also enabled the researcher to observe the magnitude or extent to which male partners were involved in the various PMTCT activities.

3.14 Summary

This chapter outlined the methodology that was used for this study, as well as the context within which the research was conducted. It described the reasons for using the mixed method research. For example, the use of a mixed methods approach helped to offset the biases of using only the qualitative or the quantitative methods in a single study. The chapter also explained the procedures that were adopted for data collection. Three main phases were followed in conducting the research. Phase one was a qualitative component consisting of focus group discussions and key informant interviews. The data obtained from these two data collection techniques were used to refine the questions in the survey (phase two). The household survey enabled the researcher to establish the extent to which male partners were involved in PMTCT programmes; and the attitudes and perceptions of male partner involvement in PMTCT programmes. An additional phase of in-depth follow-up interviews was added to explore issues that came up in the previous data collection processes which needed a deeper explanation. The chapter also outlined the methods used for data analysis of the qualitative and quantitative data, and explained how validity and ethical issues were addressed.

CHAPTER FOUR: COMMUNITY'S PERSPECTIVES OF MEANINGS ASSOCIATED WITH MALE PARTNER INVOLVEMENT IN THE PMTCT OF HIV

Male involvement is central to improving reproductive health and to the incremental process of achieving gender equity. But "male involvement" is an ambiguous concept, and many responses to the call for involving men are more limited than what was envisioned by the ICPD's Programme of Action or by health and rights advocates. (Greene et al., 1995:8)

4.1 Introduction

Male partner involvement in PMTCT is a concept that has no universal or standard definition (Aluisio et al., 2011, Ditekemana et al., 2012, Montgomery et al., 2011a). Using a standard definition of male partner involvement in the context of PMTCT is complicated due to the fact that what comprises male partner involvement varies among different studies (Montgomery et al., 2011a). Some studies describe male partner involvement in the PMTCT of HIV as male partners' attendance at antenatal clinics (Ditekemana et al., 2012, Mullany et al., 2007, Byamugisha et al., 2010), male partners testing for HIV (Maman et al., 2011, Msuya et al., 2008) and as male partners paying for costs related to ANC without necessarily taking any part in the ANC activities (Montgomery et al., 2011a). In addition to these forms of male partner involvement, (Byamugisha et al., 2010) describe male partner involvement in the following ways; that the male partner knows their partner's antenatal appointment dates; discusses antenatal interventions with their partner; takes the time to discover what happens at an ANC and has sought permission to use condoms during the current pregnancy.

Despite the different meanings attached to male partner involvement in PMTCT of HIV, the concept of male partner involvement is summarised by Ditekemana et al. (2012) as either a positive or a negative manner in which male partners participate in the prevention of mother-to-child transmission of HIV. Some of the positive aspects of male partner involvement include male partner testing in an antenatal care setting (Byamugisha et al., 2011, Msuya et al., 2008)

and couple counselling (Nkuoh et al., 2010, Byamugisha et al., 2010). In contrast, negative meanings of male partner involvement include violence, not discussing HIV testing with their partner as well as preventing their partner from testing for HIV (Farquhar et al., 2001). Since there are different meanings of male partner involvement in PMTCT, this chapter aims to describe what adult men and women and health service providers in the Gokwe North District consider as male partner involvement. Their explanations of what male partner involvement means are based on the positive aspects of involvement. The chapter relies largely on the qualitative evidence obtained from the focus group discussions and in-depth interviews, and a small proportion of complementary evidence is also drawn from the survey.

4.2 Meanings associated with male partner involvement in PMTCT

In this research, the study participants described male partner involvement in various ways. Health service providers, men and women in the focus group discussions, and pregnant women in the follow-up interviews provided a diverse understanding of male partner involvement. Some of the meanings attached to male partner involvement were linked to the activities that male partners were expected to participate in as husbands and fathers in the health facilities.

4.2.1 Male partner tests for HIV during female partner's pregnancy

Most of the respondents associated male partner involvement with HIV testing during their female partner's pregnancy. HIV counselling and testing for couples during pregnancy was considered as one of the most profound ways in which couples were informed of their HIV status and received counselling on how to prevent infecting their unborn child with HIV. The following quote illustrated this view:

The man receives the services offered during pregnancy, especially HIV testing, but they also get at the same time education on HIV prevention and the next steps that are required. If they are HIV positive they may also start on the treatment. For those that are HIV negative, they can learn how to prevent HIV infection... However, male involvement goes beyond just being tested. It also means being able to prevent HIV as well.

(Female, 41 years, KII #1)

The quote showed that HIV testing for male partners played an important role in the prevention of transmission of HIV from the mother to the child. Other than knowing their status, HIV testing also provided an opportunity for men to get educated on prevention and get the necessary treatment if they tested positive. Counselling on prevention of disease transmission was also shown as one of the services that came with HIV testing. Although HIV testing was generally the common way in which male partners were strongly encouraged to participate in the programme, lack of disclosure of an HIV positive status was found to defeat the purpose of HIV testing and prevention among couples. The quote below demonstrated this view:

...We get tested together, he will know his status and the same applies to me, I will also know my status. However, if he has been unfaithful, he may be afraid of testing. Otherwise it is important to get tested so that we get early prevention. If he tests alone it is wise to disclose his status so as to prevent conflict in marriage.

(Female, 28 years, IDI #4)

The two quotes above showed that male partner involvement was directly linked to HIV testing. Most of the initiatives towards male partner participation were done with a view of getting male partners to get tested with their wives. The results also meant that male partner testing during pregnancy formed the basis of male partner involvement, especially within health care institutions. HIV prevention was also emphasised after the couple had learnt of their HIV status, and it was only after learning of their HIV positive status that couples got counselling on prevention methods they could use, depending on their sero-status. It was, however, also found that men were not always keen to get tested.

...This participation means getting consent from males in being tested the same way women are being tested when the female partner is pregnant and upon getting the results. Although men do not generally want to get tested, involving them is critical where the partner is HIV positive.

(Male, 52 years, KII #2)

When the woman gets pregnant, the man should encourage her to go and test on time. So men should play that role to their wives. In addition, they should encourage their wives that they test as a couple and this is what is being advised these days. Some men even deny to get tested. Hence, men should be supportive when it comes to such issues.

(Male, 54 years, FGD #3)

The quotes above showed that HIV voluntary counselling and testing was an important component of male partner involvement in PMTCT. An important observation drawn in these findings was that HIV testing was highly encouraged during pregnancy, but little attention was given to the need to test continuously during the postpartum period for those who tested negative. As much as testing for HIV enabled the people to know their status and take the necessary measures to prevent infection, some men may not have been inclined to test for fear of conflict in their marriage if they received positive results after testing. Regardless of refusal to test or fear of testing that could be experienced by men, the respondents' views demonstrated that HIV testing was a key responsibility that men were expected to fulfil to prevent infection among children. The findings of this study concurred with previous studies that considered male partner involvement in PMTCT as when the male partner tested for HIV with his female partner during pregnancy (Byamugisha et al., 2011, Maman et al., 2011, Msuya et al., 2008, Nkuoh et al., 2010).

Respondents highlighted the advantages associated with HIV counselling and testing. For example, upon testing HIV positive, the individual was counselled and provided with strategies that enabled them to prevent infecting their baby and their partner. However, not all male partners were keen to test for HIV or disclose the test results to their partner when the result was positive, for fear of conflict in their marriage. Previous studies also found that men may not have wanted to test for HIV or to disclose a HIV positive status for fear of stigma and discrimination in the family and society (Bwambale et al., 2008, Larsson et al., 2010, Leta et al., 2012). The findings revealed that voluntary couple counselling in an antenatal care setting was a challenge due to the stigma associated with a HIV positive test result. In addition, most of the respondents in the focus group discussions and follow-up interviews placed the blame on the man for infecting their partner with HIV, a perspective that left men at risk of being labelled as

unfaithful. This belief was more likely to discourage male partners from taking part in couple counselling and testing for PMTCT purposes.

The survey also suggested that male partner involvement entailed the man testing for HIV during his partner's pregnancy. Female respondents were asked if their spouses tested for HIV during their previous pregnancies, while the male partners were asked if they had tested for HIV when their wives were pregnant. The participants were asked if their husbands had tested for HIV during their pregnancy, and if they had disclosed their HIV status to their partners, and the results are represented in Table 4.1.

Table 4.1: Percentages of male partners who tested for HIV in the last pregnancy and disclosure of HIV status

Indicator	Female N (%)	Males N (%)
Male partner tested for HIV:		
Yes	151 (77.4)	128 (94.1)
No	35 (17.9)	8 (5.9)
I do not know*	9 (4.6)	0 (0.0)
N	195 (100)	136 (100)
Disclosed HIV status to partner:		
Yes	189 (96.9)	121 (89.0)
No	6 (3.1)	15 (11.0)
N	195 (100)	136 (100)

The response marked with an asterisk () was meant for female respondents who did not know whether or not their partners had tested for HIV during their previous pregnancy.*

Table 4.1 illustrates the percentages of male partners who tested for HIV during their partners' previous pregnancy as well as those who disclosed their status to their partner. Approximately 94.1 percent of males reported that they had tested for HIV during their partner's pregnancy while about 77.4 percent of females reported that their partners had tested for HIV. A smaller proportion (5.9%) of males did not test for HIV in comparison to approximately 17.9 percent of females who reported that their partners had not tested for HIV during their previous pregnancy.

Levels of disclosure were relatively high and similar between males and females. Almost 89 percent of males disclosed their status to their partners. About 96.9 percent of females reported

that their partners had disclosed their HIV status to their partner. Levels of non-disclosure of HIV status to partners were relatively low. About 11 percent of males did not disclose their status, while almost 3.1 percent of females reported that their partners did not disclose HIV status.

4.2.2. Male partner agreeing to use condoms

Most of the respondents in the focus group discussions as well as in the in-depth interviews highlighted that condom use was an aspect of HIV prevention that men needed to be educated about. They noted that it was not because men had no idea about condoms but rather that they were not keen to use condoms with a married partner. Several of the respondents thus stated in their discussions that there was a specific need to educate male partners on condom use among couples, and the following quotes illustrate this view:

... We believe that the man has more power than the woman. In this regard, it is important that when the couple is HIV positive or if one of them is positive, the man be the first to be taught about safe sex. Once they get that knowledge, they use it in their capacity as men to negotiate for safer sex than for the woman to start negotiating for safe sex. Some of the men are difficult to convince and so if the idea of using condoms is coming from the men it becomes easy. (Female, 35 years, FGD #7)

... As for me, a man can get involved in many ways... For example, a man should use condoms when they go and have extra-marital sexual unions. If some men are told about this issue of protection, they get furious and swear not to be part of the male involvement programme. This is actually killing many women in the homes. (Female, 29 years, IDI #5)

I think use of condoms is very important for most men to learn about. For men who go astray, they should make sure that they use condoms with those women out there so that they do not infect the mother and the child. Also, if the couple is already infected with HIV, they are encouraged not to have unprotected sex. When they want to have a child, they will go to the doctors and get advice on the safe days they can have sexual intercourse with no protection for the purpose of conception. When they are pregnant,

they still have to go back to the doctors and get advice on how to protect their baby but they should practice protected sex. By so doing, their baby can be born HIV-free. However, the problem is that men may not want to use condoms with their wives and this has cost the lives of many children. (Female, 32 years, FGD #1)

The quotes demonstrated the challenges associated with condom use between couples for the prevention of HIV, as well as the importance of using them. They also pointed out that the use of condoms was sometimes associated with extra-marital unions; with mostly females revealing that it was men who were involved in extra-marital relations, rather than the women, and that men should use condoms when they had sexual intercourse with another woman and not with the partner to whom they were married. This was quite an interesting finding as it showed the society's expectations of men and women in marital unions; where traditional, cultural beliefs denoted that a man with many wives was seen as a symbol of virility and manliness. These results could, however, also have meant that women were also involved in such affairs but most likely had under-reported them.

Men were identified as having more power in deciding whether or not to use condoms for HIV prevention among couples. The results revealed that condom use among married couples was not a common practice; rather it was more acceptable for extra-marital affairs and among HIV infected couples, however, there was also no guarantee that condoms were used in these extra-marital unions. This left women at risk of HIV infection if they did not negotiate for safe sex, especially if they assumed that their male partner used condoms in their extra-marital unions. These findings concurred with those of Adetunji and Meekers (2001), who argued that for men who have extra-marital sex, condom use should be highly encouraged as one of the major preventive strategies for disease transmission.

Although condom use was highlighted as a crucial component of male partner involvement in the prevention of HIV, results have shown that some male partners were not prepared to use them.

In this study the respondents were asked how the male partners assisted their wives while they waited for the results of the Polymerase Chain Reaction (PCR) test for HIV. It was learnt that it usually took approximately a month until the results of the PCR test were given to the patients, so the waiting period until the couple knew the HIV status of their baby was relatively long. The

question that was asked of the male respondents was; *‘Please indicate in which of the following ways you assisted your partner while she waited for the PCR test results’*. A similar question directed at the female respondents was phrased as follows; *‘Please indicate in which of the following ways your partner assisted you while you waited for the PCR test results’*. Condom use was one of the options provided among other possible responses. Table 4.2 below details how the respondents answered the multiple - response question.

Table 4.2: Frequencies of the types of partner assistance while waiting for PCR results

Indicator	N %
Assisted with money to go for the PCR test	
Yes	109 (32.9)
No	162 (48.9)
Not applicable	60 (18.1)
N	331 (100)
Accompanied them to the clinic for the PCR test	
Yes	84 (25.4)
No	194 (58.6)

Not applicable	53 (16.0)
N	331 (100)
Attended the consultation	
Yes	66 (19.9)
No	212 (64.0)
Not applicable	53 (16.0)
N	331 (100)
Discussed with their partner the issues raised at the clinic	
Yes	96 (29.0)
No	182 (55.0)
Not applicable	53 (16.0)
N	331 (100)
Reminded to follow the doctor's instructions	
Yes	71 (21.5)
No	206 (62.2)
Not applicable	54 (16.3)
N	331 (100)
Offered emotional support	
Yes	86 (26.0)
No	189 (57.0)
Not applicable	56 (17.0)
N	331 (100)
Agreed to using condoms	
Yes	38 (11.4)
No	237 (71.6)
Not applicable	56 (17.0)
N	331 (100)
Gave medicine to the infant	
Yes	48 (15.2)
No	229 (68.0)
Not applicable	53 (16.4)
Missing	1 (0.4)
N	331 (100)

The results in Table 4.2 show the frequencies of the various forms of support offered by male partners during the postpartum period while the couples waited for the PCR test results. Almost a third stated that the male partner had assisted with money to go for the PRC test. About 29 percent of the respondents indicated that the male partner had discussed with their partner issues that had been raised at the clinic. Generally results show that male partners reported giving limited support as far as giving medicine to their infants is concerned. Approximately 15.2 percent reported that the male partner gave medicine to the infant. Only 11.4 percent of the respondents reported that the male partner agreed to use condoms as an HIV prevention method. Approximately 71.6% of all respondents indicated that the male partners disagreed to the use of condoms for sex during the postnatal period.

In contrast, the results showed that the male partners were keen to use condoms during pregnancy in comparison to the postpartum period. The respondents were asked to indicate to what extent they agreed or disagreed with the statement that their '*partner agreed to use condoms during pregnancy*'. About 82.1% of the respondents reported that the male partner agreed to use condoms during pregnancy. The response of 'uncertain' was answered by respondents for whom condom use was either not one of the methods used to prevent HIV transmission, by females who could not remember their partner's choice to use condoms, and by males who could not recall their behaviour with regards to condom use during their partner's previous pregnancy. Although the questionnaire did not ask the HIV status of the respondents at the time, condom use was reported to be higher during the perinatal period than the postnatal period. This was mostly because the use of condoms during pregnancy was highly encouraged among HIV infected couples as one of the strategies to prevent HIV transmission to their unborn babies.

Drake et al. (2014) investigated HIV incidence rates during pregnancy and postpartum and the risk of mother-to-child transmission (MTCT) of HIV. Their results revealed that the risk of mother-to-child transmission of HIV was higher among mothers who acquired HIV during the postnatal period than among those who were already living with HIV, and the same applied to the pregnancy and postpartum periods combined. Similarly, Coutsooudis (2005) stated that condom use is recommended for pregnant breastfeeding mothers so as to limit the chances of MTCT of HIV. The present study underscores the importance of providing education to male partners on the risk of MTCT during pregnancy and postpartum. In addition, counselling couples on condom use during these periods could facilitate the prevention of new infections.

4.2.3 Male partner knowing how to give infant antiretroviral medicine

Male partner's knowledge of how to administer the medicine prescribed to the child was described by female respondents as an important form of male partner involvement. Most female respondents in the focus group discussions and follow-up interviews explained that an HIV infected mother may become ill to the point that they failed to give medicine to the child, as well as being unable to take care of the child. This study's results showed that respondents were

concerned that most men were not taught how to give nevirapine to the children yet it was an important component of HIV prevention among children. The following quotes illustrated this view:

The man must have knowledge on how to provide medicine to the baby and can also help with collection of the medicine if the mother is not yet strong after delivery.

(Female, 40 years, FGD #2)

... The man must also have knowledge on how to prevent HIV from the child because for instance I can know what is supposed to be done but the man has no idea of how to provide medication to the child. If I die, it will be a problem because he does not know how to ensure that the child is protected.

(Female, 37 years, IDI #1)

The quotes showed that male partners were not being educated or counselled on how to administer HIV treatment to the child in the same way that women were. The results also suggested that allowing men to learn how to manage the children's treatment was not about sharing responsibility, but rather for the purpose of helping when the women were not capable of doing so in the event of their sickness or absence. There were various possible reasons that could explain the male partners' lack of knowledge of how to implement advice given by health practitioners with regards to the children's health. An example of one was that studies conducted in the north showed that male partners came to support their wives at various times during the perinatal, intrapartum and postpartum periods, but they were not provided with any information by the health professionals (Åhman et al., 2012, Longworth and Kingdon, 2011). Hence, this suggested that there was a need for male partners to be educated regarding the treatment and care of children, without necessarily taking over the women's duties with regards child care.

An analysis was conducted to understand respondents' behaviour towards male partner support on counselling and administering infant medication. Table 4.3 illustrates male partner support of infant medication.

Table 4.3: Illustration of male administration and counselling on infant medicine by gender

Indicator	Female N (%)	Males N (%)
Gave medication to infant		

Yes	20 (10.3)	26 (19.1)
No	94 (48.2)	49 (36.0)
Not applicable	81 (41.5)	61 (44.9)
N	195 (100)	136 (100)
Counselled on nevirapine administration		
Yes	84 (43.1)	57 (41.9)
No	54 (27.7)	27 (19.9)
Do not remember	36 (18.5)	25 (18.4)
Not applicable	21 (10.8)	27 (19.9)
N	195 (100)	136 (100)

Results illustrate generally low rates of male support in the form of giving medicine to their infants. Approximately 48.2 percent of females indicated that the male partner did not give medication to their infants. Also, 36 percent of males expressed the same view. About 19.1 percent of males reported that they provided medication to their infants.

As far as counselling on the administration of nevirapine to infants is concerned, about 27.7 percent of females reported that their partners were not counselled. Nearly 41.9 percent of males were counselled on how to give nevirapine to children. Additionally, about 43.1 percent of females indicated that their partners were counselled on how to give nevirapine to their infants. A small proportion of males (18.4%) could not recall if they were counselled on how to give nevirapine to their infants.

4.2.4 The male partner gives financial support

The findings of this study revealed that male and female respondents associated male partner involvement with the financial support that the husband gave to his female partner from the time of pregnancy to breastfeeding. The main duties of the male partner/ within a household pertained mostly to providing for the needs of the family, and as such, the same understanding was applied in the context of PMTCT programmes. It was important to note that some of the respondents (both male and female) were convinced that there was nothing wrong if the man did not attend hospital or clinic service, as long as he paid the necessary hospital bills. This entailed that the

male partner paid for the costs associated with antenatal or postnatal services, as shown in the following quotes:

The man can help to provide healthy food to the mother and child so that their immune system remains strong.
(Female, 24 years, IDI #6)

The man has a role to play in buying the milk for the baby instead of relaxing and saying that there is nothing he can do and let the woman breastfeed, which puts the child at risk of getting infected.
(Male, 45 years, FGD #2)

If the man does not want to go to the clinic with the female partner, he can just give her money for transport. Also, he needs to ensure that his female partner is well-dressed when she goes to the clinic because sometimes women do not want to register the pregnancy because they do not have maternity wear.
(Female, 44 years, FGD #1)

These quotes showed that respondents believed that it was the duty of the male partners to provide financial support for their partners so that they could pay for the necessary costs. Apart from money to buy food, as mentioned above, the male partners were not required to go with their wives for antenatal care as long as they provided money to pay for the necessary care and items. Hence, the provision of money was considered sufficient support, meaning that the male partners were not expected to attend antenatal care sessions. In addition, some of the male respondents in the study also challenged other men by explaining how men could assist in infant feeding by buying infant formula for the baby. These findings concurred with previous studies that stated that male partner involvement in PMTCT has been to provide the money needed to cover costs such as transport, and buying food and clothes for the baby (Maman et al., 2011, Montgomery et al., 2011a). The findings showed that both female and male respondents generally agreed that financial support was one of the crucial forms of male partner involvement.

The respondents were required to provide information about financial support in the survey. Table 4.4 illustrates the responses regarding male partner financial support.

Table 4.4 Responses regarding male partners' financial support

Indicator	N (%)
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Buys condoms to prevent HIV infection	
Agree	223 (67.4)
Disagree	81 (24.5)
Not certain	27 (8.2)
N	331 (100)
Provides transport to ANC	
Agree	294 (88.8)
Disagree	24 (7.3)
Not certain	13 (3.9)
N	331 (100)
Buys ARVs for his infected partner	
Agree	229 (69.2)
Disagree	52 (15.7)
Not certain	50 (15.1)
N	331 (100)
Supports the HIV infected partner and child financially	
Agree	255 (77.0)
Disagree	27 (8.2)
Uncertain	49 (14.8)
N	331 (100)

Table 4.4 illustrates the various ways in which male partners were reported to have financially contributed so as to facilitate the process of HIV prevention. Generally, the respondents agreed that male partners could provide financial support for the costs related to ANC, HIV treatment and care. About 88.8 percent of the respondents agreed that the male partners should provide money for transport of the mother of his child to the antenatal clinic. These results complemented the qualitative findings that emphasised the importance of the provision of money for transport and other ANC related costs by the male partners. Responsibilities such as buying condoms, ARVs, financial care and support were supported by approximately 67.4 percent, 69.2 percent and 77 percent of the respondents respectively. It was interesting to note that there were generally a smaller percentage (8.2%) of respondents who did not support the idea of giving care and support to their HIV infected wives and children. The results above did not, however, explain the reasons why some of the respondents disagreed with the view that this was their responsibility. In addition, the results did not show whether the male partner was HIV infected or not and it was likely that among the sero-discordant couples, the sero-negative men were not willing to bear the burden of taking care of an HIV infected female partner and child if they thought that their female partner was infected as a result of promiscuity. Based on these results, the respondents were more supportive of the view that male partner involvement in the PMTCT of HIV included male partners giving financial assistance to their wives and children.

4.2.5 Faithfulness in marriage

Faithfulness in marriage was described as central to preventing mother-to-child transmission of HIV. Evidence from the study suggested that unfaithful partners contributed to the spread of HIV since they had more than one sexual partner, which put them at risk of HIV infection. Interesting to note was that both male and female respondents in the focus group discussions pointed out that it was men who were usually associated with extramarital affairs. In this regard, they considered faithfulness to one partner as one of the ways in which a male partner could contribute to preventing HIV.

It was mentioned that the two need to be faithful to each other so as to maximise prevention. If the two are not faithful to each other, then it compromises the goal of prevention. Some of our brothers are not content with having one partner, who in this case is the female partner... Now in the era of HIV; the best way a man can save his family from HIV is by sticking to one partner that is, his female partner. It is said that a man cannot stick to one partner but some of us are trying and we are managing. It is just a matter of disciplining yourself and be[ing] with friends that do not lead you into dating other women.

(Male, 43 years, FGD #5)

Most of our men are not committed to one female partner. This puts women and children at risk of getting HIV because at some point I do not know whether we are safe from HIV or not. It is not easy to make him change his behaviour but now that there is HIV, the only thing I expect of him is to be faithful to me only...

(Female, 39 years, IDI #2)

Infidelity in marriage was considered as a practice that put couples at risk of HIV infection which leads to mother-to-child transmission of HIV. It was also important to note here that the percentage of married respondents in the sample was higher as reported to Table 3.1, with 87.9% reporting that they were married. This showed that marriage was highly valued in this community. Infidelity or unfaithfulness in marriage in this context referred to a partner who was involved in multiple sexual partnerships while they were married. A positive way in which male

partners were expected to participate in the prevention of mother-to-child transmission of HIV was thus to ensure that they avoided other sexual partners, as the results suggested that it was the male partners who seemed to be involved in extramarital sexual unions. In some African cultures, it was common for men to have extramarital affairs while the woman should remain faithful to her husband (Spina, 2009). A quote from a male respondent, however, revealed that some men were making efforts to reverse this social construction that perpetuated HIV transmission.

4.2.6 Communication between couples

Communication between couples was an important aspect of male partner involvement. This meant that couples needed to plan together, and share their views, ideas, feelings and thoughts in matters that affected their sexual and reproductive health. The results of this study revealed that couples considered couple communication as crucial when it came to prevention of HIV and other health-related issues. Most of the responses showed that respondents agreed that they would discuss certain issues with their partners, as shown in Table 4.5.

Approximately 96.7 percent of the respondents reported that they had discussed HIV prevention with their partner at least once. The percentage of those who had ever discussed having an HIV test with their partner was also high, although slightly lower (91.5%) than the 96.7 percent who reported having discussed HIV prevention in general. It was also clear that couples were comfortable about communicating their willingness to have a child. About 92.1 percent reported that they had communicated with their spouse regarding their intentions to have a child.

On the other hand, not all couples had discussed HIV prevention, testing and other sexual and reproductive matters. Among the couples who had received couple counselling and testing; only 29 percent reported that they could later discuss issues raised by the health practitioners with their partner; while 55 percent indicated that they would not discuss with their partner any of the counselling information obtained from the health practitioners. Similarly, 83.7 percent reported that they would not discuss abortion of an unwanted pregnancy with their partners, with the exception of 15.7 percent. Table 4.5 illustrates these findings.

Table 4.5 Illustration of acceptance and lack of acceptance of couple's dialogue

Indicator	N (%)
Has ever discussed HIV prevention with partner	
Yes	320 (96.7)
No	11 (3.3)
N	331 (100)
Discussed HIV testing with partner	
Yes	303 (91.5)
No	28 (8.5)
N	331 (100)
Discussed having a child with partner	
Yes	305 (92.1)
No	26 (7.9)
N	331 (100)
Discussed issues raised at the clinic with partner	
Yes	96 (29.0)
No	182 (55.0)
Missing	53 (16.0)
N	331 (100)
Can discuss abortion intentions with partner	
Yes	52 (15.7)
No	277 (83.7)
Not applicable	2 (0.6)
N	331 (100)
Reasons for not discussing abortion	
Husband will not allow it	146 (44.1)
Avoiding conflict	101 (30.5)
Fear of abandonment	21 (6.3)
No need for discussion	9 (2.7)
Not applicable	54 (16.3)
N	331 (100)

Respondents provided various reasons that would lead them to not discuss abortion intentions with their partners. Approximately 44.1 percent indicated that some of the reasons for not discussing abortion intentions were that their husbands would not have supported the idea. Also, 30.5 percent were of the view that discussing abortion with their partners would cause conflict, and almost 6.3 percent thought that women would not discuss their abortion intentions because of the fear of abandonment by their partners. Hence, men and women would rather not discuss the issue at all. It was also interesting to note that 2.7 percent suggested that the women did not need to discuss any intentions to abort their pregnancies with their partners.

4.2.7 Advancement of male partners' knowledge of PMTCT

Respondents from this study elaborated that there had been various invitations sent out in the communities, encouraging male partners to take part in PMTCT services. These included accompanying their spouses to ANC during pregnancy and taking part in HIV couple counselling and testing. The respondents, however, also highlighted that there had been little focus on educating men. They felt that male partner involvement should not only be understood in terms of providing emotional or material support; they should be given education on PMTCT as well. Women thus received more education on PMTCT than men, and concerns regarding the lack of education among the male partners on PMTCT were illustrated in the following quotes:

Those who provide education on health and conduct awareness campaigns do not call meetings specifically for men. It is usually women they invite. We only learn from the radio. They should just organise a day when they teach men alone. Like some of the issues we are discussing here now, we are not sure whether it is true or not because there is none of us who has sufficient education on the subject. This is what we hear from other people and not what we have learnt directly. There was never a day where men only were called to discuss about health issues.

(Male, 37 years, FGD #3)

There are so many meetings where women are invited to attend. For example, they will call them to get family planning tablets and teach them about PMTCT during those encounters. Women are also asked to bring children for immunisation and during that time they teach them. If men are present during those sessions, they will be excused from those meetings because they say they want few minutes with women. Even though they may not excuse men, it feels so weird [for a man] to be among women.

(Male, 45 years, FGD #5)

These findings revealed the importance that was placed on providing information to male partners and engaging them in the health-related activities that were conducted in the

communities. It also appeared that providing education to men by means of creating opportunities where men shared and learned was seen as an important part of male partner involvement in the programmes aimed at HIV prevention. Another interesting point to note was that health practitioners made use of the women's appearances at clinics or villages for family planning programmes and child immunisations as opportunities to provide information and educate them on health matters. These findings underscored the importance of exploring community settings and events where men gathered in order to provide them with information on PMTCT and other health-related matters.

4.3 Discussion

The aim of this chapter was to gain insights into the concept of male partner involvement in PMTCT in the Gokwe North District. The findings presented major descriptions of what the respondents considered as male partner involvement in the PMTCT of HIV. Male partner testing for HIV with their partners during pregnancy was highly considered as a form of male partner involvement. Male partner involvement was also associated with condom use during pregnancy and after birth for breastfeeding couples, as this would help to reduce the chances of mother-to-child infection during those periods. The provision of financial support for PMTCT costs and being faithful to one partner were also considered as male partner involvement.

There is a strong agreement among various researchers and policy makers that male partner involvement in PMTCT is a fluid concept and the definition varies across different contexts (Byamugisha et al., 2011, Maman et al., 2011, Msuya et al., 2008, Nkuoh et al., 2010, Farquhar et al., 2004). In this chapter, a major component that defined male partner involvement in PMTCT was the male partners' attendance at HIV counselling and testing with their wives, and their agreement to being tested for HIV. Female respondents who had gone through HIV counselling and testing during pregnancy without their partners explained how difficult it was when it came to informing their partners about the advice received from the health institution on methods of preventing their baby from getting HIV before and after birth. Hence, male partners' participation in HIV counselling and testing with their wives reduced the burden on the women

in terms of having to explain the requirements and processes to be followed to protect their babies from HIV infection.

These findings are not striking at all as a number of previous studies (Byamugisha et al., 2011, Maman et al., 2011, Msuya et al., 2008, Nkuoh et al., 2010, Aluisio et al., 2011, Ditekemana et al., 2012, Farquhar et al., 2004) also consider male partner counselling and testing for HIV with their wives during pregnancy as one of the forms of male partner involvement in the PMTCT of HIV. The main reason why this study and previous studies consider male partner counselling and testing at ANC as an important aspect of male partner involvement is based on the positive outcomes associated with this practice. For example, in a study in Moshi, urban Tanzania, Msuya et al. (2008) demonstrated that HIV-seropositive women whose partners attended voluntary counselling sessions and tested for HIV were three times more likely to use nevirapine (NVP) prophylaxis, and six times more likely to adhere to the infant feeding method selected than those whose partners did not attend.

One important finding to note is that respondents did not only consider being accompanied by the partner or the partner's mere presence at the ANC as sufficient. Rather, male partner involvement was about the male partner's inclusion in the process of counselling and testing as a couple. In addition, they also highlighted the importance of waiting to get their test results, being advised of their status and getting post-test counselling, education and support which corresponded with their results. Previous studies (Healey et al., 2010) identified low retention rates among patients who had tested for HIV. More than one-half of patients who tested for HIV did not collect their results and thus did not receive any post-test discussion (Healey et al., 2010). These findings underscore the importance of couple counselling and testing so as to ensure that HIV infected persons receive medical care and treatment.

Educating male partners on PMTCT and other services linked to HIV prevention was considered as one of the fundamentals of male partner involvement in the prevention of mother-to-child transmission of HIV. The findings of this study have revealed that the men in the district have not received adequate education on PMTCT when compared to their female counter-parts. In a policy proposal for increasing male partner involvement in PMTCT, van den Berg et al. (2015) suggest that the health departments and civil society organisations make concerted efforts to

educate men and raise awareness of maternal and child health. Educating men is also expected to facilitate the reversing of gender norms that discourage men from accessing health services (van den Berg et al., 2015). The findings thus underscored the importance of ensuring that men were equipped with the necessary information on PMTCT, as well as how their role as partners and fathers was crucial in curbing HIV infections.

The findings also highlighted that male partner involvement was associated with the male partner agreeing to use condoms during pregnancy to reduce the chances of HIV infection. Nonetheless, the respondents stated that there were challenges associated with condom use, as men were not keen to use them. At the same time it was revealed that extramarital sexual unions were common and that this was a practice that exposed women and children to HIV infection. This study showed that condom use among married couples was not always acceptable, compared to when they were used in an extramarital affair or with casual sexual partners. These results were consistent with previous studies that highlighted low condom use and its low acceptability in marriage (Maharaj and Cleland, 2005, Williamson et al., 2006, Chimbiri, 2007, Muhwava, 2004, Mugweni et al., 2015). Some of these studies also suggest that women were more likely to have a positive attitude toward condom use than their male counterparts (Maharaj and Cleland, 2005), but at the same time discussion of condom use in marriage and stable partnerships was relatively non-existent (Muhwava, 2004). Given that marriage in Zimbabwe is common; this study's results suggest the need to broaden HIV prevention interventions to include married men and women.

Although discussion on condom use appeared as an important aspect of male partner involvement, couple communication on HIV was highlighted as paramount. The results of this study showed that most of the activities done to encourage male partners to participate at the health facilities or organised by health staff could be successful if there was good communication between couples. In addition, communication between couples was shown to be an effective tool in encouraging male partners to carry out their own responsibilities in the household and on a personal level in supporting the initiatives aimed at preventing mother-to-child transmission of HIV; such as disclosure of their HIV sero-status, use of condoms, willingness to test for HIV and providing support to their spouses and children. These findings concurred with Orne-Gliemann et al. (2010) who found that although couple communication on HIV was not common in India,

Georgia, Cameroon and the Dominican Republic, it was useful in enabling couples to discuss matters concerning sexual and reproductive matters. Of importance to note is that there was couple communication was reported high across all the age groups of the quantitative results. Although respondents could report socially desirable results, this study has demonstrated that couple communication as an identifier of male partner involvement in PMTCT interventions. Previous studies (Desgrées-Du-Lou et al., 2009, Kilewo et al., 2001, Semrau et al., 2005) also argued that couple communication could facilitate HIV sero-status disclosure, increased adherence of ART regimens and the practice of preventive behaviour.

This study revealed the division of gender roles in households. The first was with respect to child care, which was usually seen as the women's responsibility. However, in the context of HIV, the partner was also expected to know the prevention and care strategies for the PMTCT of HIV, such as knowledge of how the antiretroviral treatment was to be administered to the child. There were various explanations learnt from previous studies on the male partners' lack of involvement in child care; for example, in most African settings traditional gender roles such as child rearing, child health and most of the household chores were viewed as the women's responsibilities (Culley et al., 2013, Walston, 2005, Ramirez-Ferrero and Lusti-Narasimhan, 2012). As such, in the past years the main focus of the health care institutions was aimed at encouraging women to utilise the services offered in the PMTCT settings, with less or no emphasis placed on their male partners (Morfaw et al., 2013, Nyondo et al., 2014), and this acts as a barrier to male partner involvement in the PMTCT of HIV services. The findings of this study suggest that in the context of HIV, it is necessary to engage men and equip them with information on HIV prevention among children, since excluding them in such interventions has witnessed the failure in women's uptake and utilisation of PMTCT services.

The second aspect of gender roles related to the male partner's involvement in the prevention of mother-to-child transmission of HIV was linked to providing financial support to the mother and child. This included buying replacement feeding, transport costs, clothing, and treatment and other costs linked to PMTCT. Various studies in the past showed that one major positive contributor to the male partners' involvement in PMTCT was providing transport to the health facility as well as paying for antenatal costs (Maman et al., 2011, Montgomery et al., 2011a).

This form of male partner involvement was not unusual and it is also one of the duties that define men's roles as a provider for the family in many African settings.

Faithfulness to a partner is a primary means of HIV prevention. In this regard, it was highlighted that the greater the fidelity in marriage, the lower the risk of infection for women and children. This idea came from the understanding that males were more likely than females to have extramarital sexual contacts, and these findings were consistent with previous studies that promoted faithfulness in marriage and partner reduction as a primary method of prevention of HIV infection (Genuis and Genuis, 2005, De Zoysa et al., 1996, Cohen, 2004, Gregson et al., 2006, Painter et al., 2007). Recent studies in Uganda by Green *et al.* (2013), however, noted a shift in the country's AIDS strategy; showing a rise in the promotion of condom use and HIV testing and less emphasis on behaviour change, especially with regard to fidelity. While consistent condom use is an effective means of reducing the risk of HIV prevention in generalised epidemics, (Kajubi et al., 2005) argued that the gains of condom use could be offset by an increase in the number of sexual partners. This study demonstrated that an emphasis on fidelity in marriage or in stable relationships was seen by the respondents as the primary means of HIV prevention. Nonetheless, regular HIV testing can play an important role among couples where faithfulness is compromised.

CHAPTER FIVE: FACTORS INFLUENCING MALE PARTNER INVOLVEMENT IN PMTCT PROGRAMMES

“...to maximise the health outcomes of PMTCT for children, women and men, we must move beyond seeing men as simply “facilitating factors”, to enable women to access health-care services but view them as constituent parts of reproductive health policy and practice”.
(WHO, 2012a:v)

5.1 Introduction

In recent years, there has been increasing interest in research focusing on low male partner involvement in PMTCT as a barrier to women’s access and uptake of these services (Brusamento et al., 2012, Koo et al., 2013b, Byamugisha et al., 2010, Ramirez-Ferrero and Lusti-Narasimhan, 2012). Male partner support of antenatal care (ANC) impacts on women’s ability to accept and utilise interventions for the prevention of mother-to-child transmission of HIV, according to (Msuya et al., 2008), and male partner support and participation in the ANC settings is important because ANC serves as an entry point for these preventative initiatives (Farquhar et al., 2004). It offers interventions that are aimed at the prevention of vertical and sexual HIV-1 transmission (Farquhar et al., 2004). In settings where men make decisions on sexual and reproductive health matters, the importance of male partner support and involvement in PMTCT and ANC services should not be underestimated (Langen, 2005). This underscores the importance of involving male partners in interventions for PMTCT in antenatal care settings from the beginning (Farquhar et al., 2004).

A considerable amount of literature has been published on the barriers that prevent male partners from participating in PMTCT interventions, although these largely focus on male participation in VCT. From a cultural perspective, the antenatal clinic was seen as a place of women and it was shameful for men to be found in such places (Aarnio et al., 2009, Msuya et al., 2008, Ditekemana et al., 2012, Nkuoh et al., 2010, Theuring et al., 2009, Falnes et al., 2011, Byamugisha et al., 2010, Mohlala et al., 2012). Similarly, studies assessing women’s beliefs,

experiences and reactions to their male partner's involvement in ANC demonstrated that men were not aware that they should attend ANC with their partners (Mohlala et al., 2012). In contexts where men were aware of their need to attend ANC, their participation was deterred by inconvenient clinic operating times, as well as structures that were not male-friendly (Ditekemana et al., 2012, Nkuoh et al., 2010, Mbonye et al., 2010, Reece et al., 2010, Tonwe-Gold et al., 2009, Kalembo et al., 2012, Byamugisha et al., 2010, Morfaw et al., 2013), and evidence from previous studies suggested that men who were seen accompanying their pregnant wives to the antenatal clinics were perceived as jealous or overprotective (Nkuoh et al., 2010).

Several attempts have been made to identify areas of improvement as far as male partner involvement in PMTCT is concerned (Kalembo et al., 2012, Aluisio et al., 2011, Byamugisha et al., 2011). A number of studies revealed that couple HIV counselling in antenatal clinics enabled the uptake and acceptability of couple HIV testing, and improved communication between couples (Aluisio et al., 2011, Byamugisha et al., 2011, Byamugisha et al., 2010, Msuya et al., 2008, Farquhar et al., 2004, Desgrées-Du-Lou et al., 2009). Home visits by health workers, and invitation letters sent to male partners were found to be other means by which male partners were motivated to attend ANC programmes (Dunlap et al., 2014). Previous studies demonstrated that male partners responded significantly to indirect approaches used to mobilise them in churches, bars and community meetings (Farquhar et al., 2004, Sherr and Croome, 2012), and the extension of clinic operation hours to accommodate males who had tight schedules at their work places led to an increase in male partner attendance at ANC points (Kalembo et al., 2012).

In Zimbabwe, the Ministry of Health and Child Care (MOHCC) has since 2009 employed various strategies to increase male attendance at antenatal clinics and other PMTCT programmes (OPHID, 2015) but the rates of participation were low, ranging from eight percent in 2010, 14 percent in 2012 and 17 percent in 2013 (MOHCW, 2013, MOHCW, 2014). The Organisation of Public Health Interventions and Development (OPHID) studied the experiences, attitudes and perceptions of male partners' participation in antenatal and PMTCT services in the Mashonaland East Province of Zimbabwe (OPHID, 2015). One of their objectives was to identify the health system factors that facilitated and constrained male partner participation in PMTCT services in the Zimbabwean context. Their study was essential in providing insights into how the health system operations influenced male participation. This current study recognises that male partner

involvement in PMTCT is not only influenced by health systems operations but also by other factors.

Very few studies have documented the factors influencing male partner involvement in the Zimbabwean context. The purpose of this chapter is thus to develop a more rigorous understanding of the various factors that impact on male partner involvement in PMTCT programmes in the Gokwe North District. The chapter is divided into three major sections. It outlines some of the literature from previous studies on factors that are at play in male partner involvement in PMTCT, and draws on literature from local and international experiences on the challenges and successes of male partner involvement. The second part consists of the findings which were collected from the focus group discussions (FGD), the key informant interviews (KII), the follow up in-depth interviews (IDI) and the survey. These findings, which are discussed in light of the existing literature, provide insight into the major enabling and inhibiting factors to male participation in PMTCT programmes in Zimbabwe.

5.2 Traditional leaders' support of PMTCT interventions

Studies conducted in the past on community participation in health interventions utilised opinion leaders and any other form of community leadership whose influence enabled the local community to be involved in the interventions. According to Valente and Pumpuang (2007), opinion leaders influence the opinions, attitudes, motivations, behaviours and beliefs of other community members. The findings of this study revealed that traditional leaders in the district played an important role in encouraging communities to take part in educational programmes conducted by health care workers, as well as in motivating the male partners to participate in the PMTCT programmes.

Traditional leaders (chiefs and village heads) were influential in encouraging men to attend PMTCT programmes in the district. Most of the interventions for PMTCT made use of antenatal clinics as an entry point where couples were encouraged to test together especially when they went to register their pregnancy. It was revealed that traditional leaders would often convene

meetings with the villagers and remind them of the need for the men to accompany their wives to the antenatal clinics to register their pregnancies and get tested for HIV. The study results showed that communities in this district were loyal to their leaders and would consider instructions from their leaders as valuable. About five of the eight key informants interviewed explained how beneficial it was to engage chiefs and headmen who motivated men to attend antenatal programmes that facilitated the prevention of mother-to-child transmission of HIV.

As a district we started by having meetings with the chiefs explaining to them the importance of male partners taking part in the interventions for prevention of mother-to-child transmission of HIV. This helped us to have men involved. If a woman gets pregnant, the village head advises the man to go with his female partner to the clinic, we used to call it 'Operation Perekedza Mukadzi Wako' [Operation Accompany Your Female partner]. But unfortunately as a district fewer men come because most of them go to work but they come afterwards. It is not the same as other clinics. However, as a district we are leading in this operation because chiefs and headmen are also involved.

(Female, 33 years, KII #6)

Our experience on previous projects we implemented in the district tells us that men come forward if they are persuaded or encouraged by their community leaders particularly the headmen and chiefs... We had community sensitisation meetings with the traditional leaders, chiefs, headmen and senior headmen and also church leaders. When we went out to the community, they supported us. And with that I can say that we are one of those districts that is doing well in terms of male partner involvement in PMTCT. In most of the reports that I get on a monthly basis from the Ministry of Health we are well above 50 percent in terms of male partner involvement, which is way above all other districts in the province.

(Male, 52 years, KII #2)

The quotes above demonstrate that male partner involvement in the district has had positive results due to the support provided by community leaders such as the chiefs and village headmen. Leadership in rural areas of Zimbabwe is composed of chiefs and village headmen, and these leaders yield enormous power in influencing activities conducted in the community. The strength of this approach was that it utilised local leadership as they could easily relate to the community and had the power to influence change in the community; and secondly, the approach enabled communities to have a sense of being part and parcel of the PMTCT programme, rather than mere passive recipients of these health interventions. The males in the district welcomed the initiative since it came from their leaders whom they respected and related to on matters that affected their lives.

5.3 Health systems initiatives

The management of the health facilities in the district came up with local policies which emphasised that couples should come together to register their pregnancies. This method facilitated pregnant women having their husbands accompany them for testing during their antenatal visits. The clinics' requirements that women registering their pregnancies for the first time bring their husbands provided the health staff with the opportunity to conduct HIV counselling and testing to the couple. This is illustrated below.

We have tried to find ways of bringing the men by telling their wives to bring the husband if he is around. In situations where we know the couple, we actually send the woman back and inform her husband that he is needed for the registration of the pregnancy to be successful. When the couple comes then we can introduce and provide HIV testing and counselling as a process of registration of pregnancy.

(Male, 41 years, KII #4)

Also, women who were accompanied by their spouses to either antenatal or postnatal clinics were served earlier than those who come without their partners. This study's results showed that most men had responsibilities that made it impossible for them to wait in long queues. They had work and other commitments that demanded their presence, so providing services to couples first enabled women to motivate their partners to go to ANC with them to some extent, as time would not be wasted. The following quotes demonstrate this view:

... Some of the reasons that men were giving for not coming was that they did not want to wait in queues for a long time when they come to the baby clinic. We then thought of facilitating their coming by giving priority to serve women who come with their partners.

(Female, 46 years, KII #5)

We also find that some men cannot come with their wives to the clinic; not because they do not like to do so but it is because they are working. This probably discourages them from coming if they are to stand in queues again. For this reason, we also give preference to women who come with their men, so that these men can go back to their various work places.

(Male, 41 years, KII #4)

Extended clinic operating hours during the weekdays were also made available to accommodate male partners who could not attend the clinic during regular working hours. In addition, weekend consultation hours were introduced to enable men who could not attend during the week to access the services on the weekend.

... As an institution we have set extended operation hours at the clinic so as to allow working men to have an opportunity of being with their wives after work. We are aware that one hour is not enough since some of them have to walk from work to the clinic on foot; some will be coming from afar hence we found it necessary to extend hours for them. This has increased the number of males coming to the hospital to visit their partners.
(Male, 42 years, KII #3)

It was also observed from the survey that the respondents agreed that the antenatal clinic operation times were convenient for men to visit or accompany their wives. Of the 331 respondents interviewed, 80.4 percent agreed that the operation times at the ANC were convenient for men. Only 5.2 percent were not certain with regards to the statement, however, a small percentage (14%) disagreed that the antenatal clinic times were convenient for male partners, as shown in Table 5.1.

Table 5.1: Convenience of antenatal clinic operation times

Indicator	N %
Antenatal clinic times convenient for male partners	
Disagree	49 (14.8)
Uncertain	16 (4.8)
Agree	266 (80.4)
N	331 (100)
Partner accompanied female partner to consult together at health facility (Males)	
Yes	127 (93.4)
No	9 (6.6)
N	136 (100)
Partner accompanied to consult together at health facility (Females)	
Yes	186 (95.4)
No	9 (4.6)
N	195 (100)

Most of the male respondents (93.4%) indicated that they had accompanied their partners to the health facility and consulted together during their pregnancies on one occasion. Almost 95.4

percent of the female respondents had been accompanied by their spouses and also consulted together during their previous pregnancies. Also, about 80.4 percent of all respondents agreed that the antenatal clinic times were convenient for male partners who wanted to consult with their female partners.

Home visits in communities by the nursing staff and village health workers were highlighted as a means of increasing the number of men in PMTCT. These health workers would travel to villages to educate communities about the importance of male partner involvement in PMTCT. In addition, they also got opportunities for educating people and mobilising men during community events such as funerals, farmers' field days, weddings, as well as at meetings organised by chiefs and village headmen. The quotes below confirm this.

However, you are aware that men are afraid of coming and will only push their wives to go alone. This eventually made women come to register at the antenatal clinic at a later stage but with continued health education that was being offered in the communities, men were now coming and this was helping. (Female, 33 years, KII #6)

At this facility there are community health nurses and village health workers that go and assess community's livelihoods and knowledge about HIV. We had meetings with the chiefs, village headmen and ward counsellors requesting permission to educate their people about health issues. Their support was helpful because village headmen went on to gather all adults in their respective villages, including men, to come and attend educational sessions. We also took advantage of these sessions to educate people about the importance of male involvement in PMTCT. (Female, 46 years, KII #5)

The quotations revealed that home visits conducted by health workers in the villages were an essential means of addressing men in their homes regarding the importance of their involvement in PMTCT programmes. Conducting home visits enabled men to attend sessions without any need to travel to the nearest health facility. It is also important to note that home visits provided men with an opportunity to discuss and ask questions in groups, as very few men went to health facilities to seek health services. This poor use of the facilities also meant that very few men were likely to receive education and information on PMTCT, hence, visiting the men in their communities enabled large numbers to benefit from home visits.

Community campaigns and road shows were of significant value in motivating male partners to take part in PMTCT programmes. These were done by the district health institutions in

collaboration with governmental/non-governmental organisations implementing health-related projects, the local community, churches and traditional leaders. The following quotes attest to this:

For our programme to succeed since we embarked on it in Gokwe North district we involved the community. We conducted community campaigns encouraging the men to accompany their wives to the hospital so that they can be tested together. This approach enables men to be involved in whatever activity the woman has been assigned to during pregnancy. So, when they both get tested, they are provided health education on how to prevent the unborn baby from being infected, especially when they are positive.

(Female, 33 years, KII #6)

When we went out for community sensitisation meetings, we would inform the community to mobilise their subjects. Community leaders were also given time to talk and encourage their members during these sensitisation meetings. With this kind of support, it really worked for us in the district.

(Male, 48 years, KII #7)

The findings revealed that outreach programmes such as road shows, field days and village meetings supported by traditional leaders were essential in bringing men to attend PMTCT programmes. In villages where the research was conducted, it was recommended that all the activities that were carried out received authorisation from the chief and the headmen. If the chief or village headman found the activity beneficial to his people, then usually all members of the village were encouraged to participate. With reference to the current study, it could be said that the health workers' approach in involving traditional leaders made it possible for them to have the community participate in campaigns, village meetings and home visits. The current Zimbabwean socio-political environment was known to be sensitive, such that if an outsider conducted meetings without the village headman's consent, villagers usually resisted cooperating. These results highlighted the importance of familiarisation with the structures and processes that operate in a given context when designing and implementing health interventions, as these could influence the outcome of interventions. This study thus suggested that this approach could also be useful in similar settings where male involvement in PMTMT programmes was limited.

Assigning a special title to the male involvement campaign played a role in reminding people about the cause of the campaign. The campaign, 'Operation Perekedza Mukadzi Wako

(Accompany Your Female partner)’ was a slogan used in the community to refer to the same idea of men accompanying their wives to participate in PMTCT initiatives. Under this campaign, a man was expected to be responsible for ensuring that their pregnancy was registered, they were tested for HIV and that their female partner gave birth at a health facility. *Operation Perekedza Mukadzi Wako* therefore aimed to remind the community about this goal, and it played a significant role in bringing awareness to the community regarding male partners taking part in PMTCT programmes. The following quotes illustrate this idea.

If a woman gets pregnant, the village head advises the man to go with his female partner to the clinic, we used to call it ‘Operation Perekedza Mukadzi Wako [Operation Accompany Your Female partner]’.
(Male, 41 years, KII #4)

... Under ‘Operation Accompany Your Female partner’, we have been having meetings with village headmen and chiefs to ask for help in encouraging men to bring their wives to the clinic or hospital for ANC. In this case, every headman would pass an instruction that every man must take his female partner to the antenatal clinic. If not, they have to pay something as a way of encouraging the men to be involved. However, this has not been put into practice; it is in the pipeline encouraging men to bring their wives to the clinic or hospital for ANC.

(Female, 26 years, KII #1)

But one thing that I have known is that in the rural areas, the chiefs and headmen have been encouraging men and women to go to the clinic together. They used to have the saying ‘bhuru nemhou kudhibha’ [the cow and the bull to the dip-tank], meaning that the man should take part in issues that directly affect their lives. (Male, 48 years, KII #7)

These findings provided evidence that campaigns (referred to as ‘Operations’) played a major role as a means of responding to the crisis. The campaign named as ‘Operation *Perekedza Mukadzi Wako*’ was used in road shows, workshops, posters and at village meetings as a means of creating awareness and reminding men to go to the antenatal clinic with their wives. The advantage of conducting campaigns was that most of them were done as a form of entertainment such as drama, music and dance. It was also interesting to note that the chiefs and headmen played an important role in motivating and encouraging their community members to attend these campaigns.

5.4 Couple communication

Communication between couples was one of the ways in which women were able to negotiate with their partners to participate in PMTCT services. The findings of this study revealed that men were more likely to respond swiftly to invitations that were related to work opportunities or to income-generation projects than to HIV/AIDS or any health related matters. It was, however, revealed that HIV related issues were private and confidential, and men preferred to discuss them privately with their partner rather than in public meetings.

Communication between couples was important for reducing the HIV risk of infection. Other benefits associated with couple communication were condom use, as well as adherence to HIV treatment among infected persons. Couples were able to negotiate for condom use during sex. Adherence came as a result of disclosure of HIV status between couples. This study has shown that men were keen to discuss their decisions with regards to HIV testing and prevention with their partner, rather than have such issues discussed at length in public.

The female partner and husband must understand each other and avoid discouragements from peers. The couple must discuss between themselves, otherwise meetings can be conducted, but it is only through discussing as a couple that can help convince the man to go the clinic with his female partner.
(Female, 24 years, IDI #3)

Couples must just be united; agree between themselves on what they want to achieve in their lives and ignore discouragements from people. It does not help to bring people together and tell the men to come to the clinic with his female partner. They will listen and forget about it...
(Female, 30 years, IDI #4)

These results illustrated that men may not always have placed value on the public meetings conducted on PMTCT, whereas communication between couples facilitated getting men to consider participating in PMTCT programmes. This particular finding may require further exploration of the reasons why discussions conducted at community level were not necessarily taken seriously. It could, perhaps, have meant that there had been other programmes that were not successful before, which could have influenced the manner in which communities responded to the current invitations for men to take part in PMTCT programmes. It was also clear that men

tended to co-operate when issues on their health, HIV and other related matters were discussed in private, as explained in the following quote:

If you talk about HIV to men in public, they may not take such issues seriously. If the female partner introduces the subject in private and asks him to help out and accompany her to the clinic, he may respect her request and go with her.

(Female, 38 years, FGD #3)

This quote highlighted that dialogue between couples was a necessary tool that enabled male partners to co-operate on the issues raised by their spouses. It was also important to note that in such discussions, men preferred that the woman persuaded them or asked for support, rather than just giving instructions. The quote above revealed that men tended to respect their wives if they asked with humility and introduced the discussions in their private space.

The results from the survey also confirmed that couples discussed HIV testing and made efforts to get themselves tested. About 93.8 percent of females discussed HIV testing with their partners. Also, almost 88.2 percent of males discussed HIV testing with partner.

Table 5.2 Percentages of couple HIV testing and discussion by gender

Indicator	Female N (%)	Male N (%)	Total N (%)
Discussed HIV testing with partner			
Yes	183 (93.8)	120 (88.2)	303 (91.5)
No	12 (6.2)	16 (11.8)	28 (8.5)
N	195 (100)	136 (100)	331 (100)
Husband tested for HIV during last pregnancy			
Yes	151 (77.4)	128 (94.1)	279 (84.3)
No	35 (17.9)	8 (5.9)	43 (13.0)
I do not know	9 (4.6)	0 (0.0)	9 (2.7)
N	195 (100)	136 (100)	331 (100)

In Table 5.2, approximately 77.4 percent of females reported that their partners had tested for HIV during the previous pregnancy. About 94.1 percent of males reported that they had tested for HIV during their wives' last pregnancy. Interesting to note is that the rates of disclosure between the different groups were relatively high. Nearly 88.2 percent of males disclosed their HIV status to their partners. In addition, a high proportion of females (93.8 %) reported that

their partners had disclosed their HIV status to them. Though conclusions could not be drawn to establish the link between HIV testing and discussion of the issue with partners, the qualitative findings of this study illustrated that couple communication was a factor that enabled male partners to participate in PMTCT programmes. These findings thus underscored the importance of couple communication in increasing male partner involvement in PMTCT services.

5.5 Stigmatisation

Participants in the study revealed that stigmatisation against men who often accompanied their wives to a health facility was highly discouraging. They highlighted that there was a common belief that it was only women who should have been going to the clinic or hospital. Once a man accompanied his female partner to the health facility frequently, the couple were labelled as HIV positive. From the community's perspective, when couples visited the health facility together it meant that they would be going to seek HIV treatment, care and support, as shown below.

... The people in the community will suspect that the couple is HIV positive. It gives the impression that the couple has not been faithful to each other. However, they cannot say it aloud because it is not permitted by law to discriminate against someone or to label them on the grounds of HIV status.
(Female, 22 years, IDI #6)

They (the community) may not understand because they may think that the couple is HIV positive and going to collect ARVs. Most people mock and may want to destroy the marriage, basing on what they think of the previous behaviour of either the man or the woman. They will usually conclude that the man had extra marital affairs and got HIV from there.
(Female, 42 years, IDI #5)

People quickly conclude that we are HIV positive. They even begin to question whether we also go together because we love each other or not. They also think that we will be going to take tablets together. This makes most men to hesitate about testing with female partner and the child.
(Female, 31 years, IDI #3)

These results demonstrated that HIV-related stigma discouraged men from participating in PMTCT programmes, and that HIV was strongly regarded as an infection that resulted from promiscuity. In addition, the male partner was considered as the one responsible for introducing the infection among couples. HIV-related stigma could also be damaging to marriages: since the community associated HIV infection with infidelity, this perception could influence divorce among the affected and infected couples. HIV-related stigma could discourage couples from participating in PMTCT programmes together for fear of being labelled as being HIV positive, thereby lowering the likelihood of men participating in these programmes. These results demonstrated that stigmatisation against people living with HIV remained a problem in the district.

Additionally, a man who was often seen going to a health facility with his female partner could also be labelled as having been charmed by his female partner, and it was pointed out that it was mostly men who were charmed. The use of charms is an African traditional practice where specific herbs are believed to have supernatural powers that enable manipulation of an individual(s) or a situation. In the context of this study, the results showed that male partners who accompanied their wives were in some way labelled as having been charmed by their wives so that they would do whatever their wives wanted them to or go wherever their wives wanted them to go. As such, men who may have wanted to participate in PMTCT intervention programmes feared being mocked; as one respondent explained,

... The man becomes a laughing stock as people conclude that he has been charmed by his female partner (...dzinenge dzakadyiswa, meaning 'seems like he was charmed').

(Female, 45 years, FGD #1)

According to the Shona traditional practices and beliefs, the use of charms is known to have the effect of diminishing a man's ability to discern what is wise and not, and what he is supposed to do as a man or not. By using charms, his female partner will have authority over him. As a result of this belief, the men ended up refraining from attending PMTCT activities for fear of stigmatisation.

Respondents in the study also explained that as a result of being charmed, a man's ability to reason and make decisions became limited and his female partner controlled the affairs of the family;

... Some people will say that he cannot do anything on his own. He is being ruled by the female partner and has become a toy.

(Female, 36 years, FGD #2)

Other men could also discourage them, saying;

We begin to say that he is not in his mind any more, he is insane and mad.

(Male, 48 years, FGD #4)

Women could also stigmatise men who participated in PMTCT programmes;

They will say, 'What does he want among women? These issues are for women.'

(Male, 33 years, FGD #4)

It was also stated that,

Some will say he has nothing to do. It is because he has nothing to do so he is always loitering around with the female partner.

(Female, 26 years, FGD #8)

These results show how traditional beliefs, customs and practices may negatively impact men's participation in PMTCT programmes. The use of charms on men is believed to diminish their ability to discern and behave in ways they are expected as men, and their ability to make decisions as the head of the household is also known to be reduced. These results show that the belief in the use of traditional charms and supernatural powers is rife in the community, and these beliefs have been shown to act as a barrier to men's access and uptake of PMTCT services. It was also evident that men were not always welcome in spaces that were traditionally viewed as being for women, and these beliefs also made it difficult for men to participate in PMTCT services for fear of stigmatisation.

5.6 Social and cultural barriers

The study revealed that certain cultural practices among the different ethnic groups prevented the male partner from following the recommendations given by health professionals regarding their participation in PMTCT programmes with their wives. For example, in the Shona culture a woman goes to her parent's house to give birth if it is her first pregnancy, as stated below.

Some cultures, especially the Shona culture, require that if the woman is pregnant with the first child, at some point the woman needs to go to their home and leave her husband. So, you can imagine they can only get the support from their family members and not necessarily the husband. Even if the husband will want to support the female partner, depending on their location, jobs and resources, they may not make it.

(Female, 46 years, KII #3)

Among Shona people, if a woman gets pregnant for the first time, she goes and gives birth at her parent's home. In this case, the man may not be there, living far away and so it means that the woman has to go alone for antenatal services.

(Male, 48 years, KII #7)

This practice was identified as a hindrance to male partner involvement in PMTCT if the women's parents' home was far away from where they and their husbands lived, as the husbands could then not accompany their wives for ANC at the clinics. This common practice among the Shona speaking people thus presented a dilemma for these men and women as they were unable to test for HIV together due to their temporary separation. This then suggested the need to ensure that couples were tested together whenever the opportunity arose during the pregnancy, before the women returned to their maiden homes just before delivery. Couples could still test for HIV together and attend a number of antenatal sessions before the women left. These results underscored the importance of ensuring that couples accessed and utilised ANC services as soon as they discovered that they were pregnant.

One of the major concerns mentioned by male partners was their unwillingness to be taught by a woman on issues that dealt with sexual and reproductive health. There were very few male village health workers, and this discouraged men from attending most of the health-related

programmes. Most of the topics discussed in the community meetings led by village health workers included cancer awareness; HIV prevention, care and treatment; as well as PMTCT. It was found that men felt comfortable expressing themselves or asking questions of a male village health worker on issues that related to men's health, rather than a female village health worker:

There should be more men trained as village health workers because they will accept it when it comes from another man than from a woman (Male, 49 years, FGD #3)

Let there be more male village health workers because men will not accept being taught by a woman especially on such subjects, they are sensitive and cultural. (Male, 53 years, FGD #6)

In addition, the study found that in situations where men were taught by women on matters of sexual and reproductive health, there were language restrictions; meaning that there were some words that men would not be able to utter in their presence due to cultural taboos surrounding sex. Thus having a male peer educator would enable men to express themselves fully without refraining from saying some terms or words relating to sex. The following quote demonstrates this view:

The man will use the language of men and will not just talk anyhow ... We can just debate and will find ways of educating each other without worrying about how to say certain words, as it would be the case with a female educator... (Male, 36 years, FGD #5)

These results revealed that the shortage of male village health workers could act as a deterrent to male partners' involvement in discussions related to PMTCT. The concern arose from traditional norms whereby it was usually not acceptable that a woman addressed men on issues that had to do with their sexual and reproductive health. The findings of this study thus revealed the need to ensure that men's concerns were also addressed by means of recruiting male peer educators. In addition, influential men in the community such as leaders at various levels could act as role models by actively participating in PMTCT programmes. This can help to reverse cultural and

social norms that viewed PMTCT as the women's realm. Such approaches are likely to encourage more men to take part in the PMTCT programmes as male peer educators and role models may motivate other men to join and take part.

5.7 Lack of knowledge of HIV testing

Participants in this study also identified a lack of knowledge regarding HIV testing. PMTCT programmes considered couple HIV counselling and testing as an entry point for couples to benefit from the PMTCT of HIV services. It was revealed that some men did not go and obtain these services as they thought that once their wives were tested and obtained negative test results, that their wives' results automatically reflected their own HIV status:

They always say that women's results reflect theirs as well. "zvauri ndozvandiri" [your status and mine are the same] ...yet it is not like that. The answer is simple, lack of knowledge. If one says your results are a reflection of mine, then it is simply a lack of knowledge. But lack of knowledge is the first reason but there could be other reasons.

(Male, 52, KII #2)

Also, they would conclude that the woman's HIV result resembles theirs and so they would find no need for testing.

(Male, 41 years, KII #4)

The study also revealed that when a woman tested HIV positive, her spouse may not even have considered going to be tested as well; he will simply have concluded that he had a positive HIV status as well. The respondents highlighted that the understanding of the possibility of sero-discordant couples seemed to be limited.

...They say that the status of their female partner will be the same as theirs. If the female partner tests positive, they will consider themselves as positive. If the female partner tests negative, they will consider themselves as negative, which is not that because they could be discordant.

(Female, 26 years, KII #1)

These ideas illustrated that some men would not consider testing for HIV as long as the female partner was tested. This was because some men considered their female partner's HIV status as a proxy for their own and due to this perception they saw no need for going to the antenatal clinics with their pregnant wives for an HIV test. It also emerged from the data that for them, PMTCT was synonymous with testing for HIV as a couple during pregnancy, so they saw no need to attend any of the programmes related to PMTCT. These findings highlighted the importance of basic education on HIV and the possibilities of having a sero-discordant status among couples. In addition to couple counselling and testing, these findings highlighted the importance of creating awareness in the community about the various services offered via the PMTCT programmes.

5.8 Fear of an HIV positive test result

Results from the study revealed that some men were not participating in activities related to PMTCT, such as HIV testing, as they feared being diagnosed as HIV positive. This fear resulted from previous or current risky behaviour, such as having sexual intercourse with multiple partners. In addition to that, they also feared the negative social consequences associated with a HIV positive test result.

Fear is also a problem among men as some have multiple concurrent relationships. Men consider themselves as 'bulls' and so they can have many partners. Hence, they know that they are at risk of infection and yet they fear to come for testing.

(Female, 26 years, KII #1)

According to this quote it was a common understanding and was widely acceptable for men to have more than one sexual partner, although this behaviour puts them at risk of getting infected with HIV due to their exposure to many sexual partners. It was widely believed that it was men rather than women who had extra-marital affairs, and men feared being told that they were HIV positive, as this would expose them as having had an affair. When a couple or the female partner tested positive, the man would be blamed for infecting his spouse, as explained in the quote below.

Men do not want to know their status. Should they test HIV positive, there will be conflict in the house. For example, I am faithful and he is the definitely the one who would have brought the virus between us.
(Female, 23 years, IDI #3)

This quote illustrated that society does not expect married women to be involved in extra marital relations, yet no such restrictions are applied to married men and it was socially acceptable and expected for them to do so. As a result, men were blamed for infecting their partners with HIV. The view that men were usually associated with extramarital unions made it difficult for the researcher to draw conclusions, as women who had extra-marital relations were not likely to admit their behaviour readily as it was socially unacceptable for women to behave in this manner.

The study identified the concerns surrounding the fear of HIV testing among men. Treatment for their HIV was thus a challenge as they could not be provided with medication unless they got tested and prescribed the medication. A male respondent explained this view.

The main problem is that most of us who are here do not want to know our HIV status. That is the problem. It is also difficult to prevent something when we do not know whether we have [it] or not, it is a problem. So the main issue is that we need to go and get tested so that we know how to take care of our children and make plans for anything in future.

(Male, 40 years, FGD #7)

The study identified a challenge that was associated with sero-discordant couples, specifically where a woman received a positive test result *vis-à-vis* her husband's result. Fear of conflict as a result deterred women from testing or disclosing their positive test results to their husbands lest they get divorced. What was also interesting to note in this study was that women would accept their partner's positive result and take care of him while the opposite was not common among men, as explained in the following quote.

The biggest difficulty is that when a woman tests HIV positive and her husband tests HIV negative, it creates social discord in the community. There are some men in the community whose behaviour is [such] that when he tests negative while his female partner tests HIV positive he divorces her; but if he tests positive and the female partner negative, the female partner will not divorce her husband.

(Male, 41 years, KII #4)

These results underscored the importance of education regarding couple counselling for partners, as well as for the community at large, regarding HIV sero-discordancy among couples. This would mean that the couples that had a sero-discordant status received all the counselling necessary for them to understand the implications of their status; including the possibility of the window period within which HIV could not be detected being the cause for the discordance. Further HIV testing could help couples to confirm their results in this regard. What was also evident was the need for strong support and counselling, as fear of the HIV test was identified as common due to the negative social consequences associated with it.

5.9 Infrastructural challenges

A lack of resources to effectively reach all communities in order to mobilise male partners was identified as a challenge. The inaccessibility of the roads in the most remote parts of the district made it difficult for the health workers to reach all the parts of the district, particularly during the rainy seasons for reasons, because of inadequate off-road vehicles that could not operate in bad terrain. Additionally, it was very costly to maintain the vehicles due to the frequent damage caused to them by the roads. As a result, organisations that conducted PTMCT programmes in the district failed to implement their activities as intended.

Our main challenge is that we cannot carry out these campaigns across the district. We can only go to places where the road is accessible. We do have village health workers in all parts of the district including the remotest areas but we cannot always access places where the roads are bad. For instance if it is now raining, our vehicles may not be able to cross some rivers. Hence, we have to wait for convenient times. As a result we find that the proportion of males taking part in PMTCT programmes in far areas is lower than that residing in areas we have frequently visited. (Male, 48 years, KII #7)

The fact that some of the health institutions that provided PMTCT services could not easily reach people residing in the remoter parts of the district presented a challenge and meant that the people in these communities were deprived of not only the education regarding the PMTCT but also of their right to good health. It was also interesting to learn that there were no health

facilities located in the remote areas, another challenge that left communities with limited access to health services. The following quote demonstrates this view.

Also, the distance between hospitals and clinics is very far from where they stay. The nearest clinic could be about 20 km, and transport is not available and they have to walk.

(Male, 42 years, KII #3)

These findings indicated that communities tried to participate in PMTCT programmes within the health institutions, but the long distances they had to travel to reach the clinics were quite discouraging. As a result, most men residing in the more remote areas failed to attend these workshops.

5.10 Discussion

The purpose of this chapter was to determine the factors facilitating and inhibiting male partner involvement in PMTCT programmes in the Gokwe North District. Understanding the views of the different stakeholders that contributed to the success of the PMTCT programmes was important as it allowed learning about the barriers and opportunities that impacted on male partners' involvement in PMTCT services.

The involvement of traditional leaders, namely chiefs and village headmen, was important in encouraging men to take part in PMTCT programmes. Support from this leadership facilitated the success of other programmes conducted by the health practitioners and other organisations implementing the PMTCT programmes in the district. Health facilities came up with strategies that helped to motivate men to come to the antenatal clinics with their wives. These results concurred with the finding of a study in Malawi by Kululanga et al. (2011), which found that involving the traditional and local leaders of Malawi in strategies to improve male partner involvement in PMTCT yielded positive results. These findings implied that health institutions seeking to improve male partner involvement in PMTCT needed to seek approaches that were appropriate and acceptable in the unique contexts within which they operated.

The provision of a first and fast service to women who brought their partners to the antenatal clinics or for postnatal services proved to be one of the factors that facilitated male partner involvement in PMTCT programmes. This study's findings concurred with those of Kululanga et al. (2011), who reported a similar approach in Malawi which resulted in considerable numbers of male partners accompanying their wives. This study's results suggested the need for health facilities to come up with more long-term strategies which could make men participate in the PMTCT programmes, without having to be motivated with incentives. The motivation to participate in the PMTCT programmes should be driven by the understanding that it is essential for male partners to respond to calls that are aimed to improve the health of their children, without the expectation of a reward or any special treatment/favours. Such approaches are likely to be beneficial in the long run, especially in the event that the number of couples attending PMTCT programmes increases, thereby making it difficult to provide the same incentives. In the context of the problem of low male partner involvement, it could be argued that the strategies to motivate male partners at the time of the study were still relevant to the time and setting within which they were being applied.

Sensitisation campaigns played a vital role in encouraging male partners to take part in the PMTCT initiatives that were conducted in the communities and at the health facilities. Various campaigns have been conducted in Zimbabwe as a result of different social, political and economic calamities. Although some of these campaigns have had negative consequences on the livelihoods of the affected people (Bratton and Masunungure, 2007, Jones, 2010), they were an influential means of addressing problems faced in the country. Some of the operations such as Operation *Murambatsvina* (Restore Order), Operation *Garikai/Hlalani Kahle* (Live Well), Operation *Chinyavada* (Scorpion) and Operation *Pendi Iripa* (Where is the Electoral Ink) were conducted in a military style to respond to the social, economic and political problems facing the country (Sachikonye, 2006, Potts, 2006).

While Operation Accompany Your Female partner was not of a military style, it created awareness of the need for male partners to take part in PMTCT programmes; therefore it contributed to the success of the goal of increasing the number of male partners participating in PMTCT programmes. The findings of this study concurred with Kululanga et al. (2011), who

utilised sensitisation campaigns to encourage male partners to take part in maternal health in the rural and urban health facilities in Malawi. Their findings revealed that upon conducting sensitisation campaigns, some community members sought information on male partner involvement in their respective locations. Brown and Singhal (1999) argued that entertainment education was known to be one of the powerful means of promoting change in health beliefs, behaviour and practices, however, Kululunga et al. (2011) added that campaigns were in essence short-lived and may not influence long-term behaviour change.

The study also revealed how couple communication played a role in advancing the male partner involvement agenda. Male partners were not only motivated by public invitations but considered their participation crucial if the issue was addressed directly to them by their wives. One of the plausible explanations for this finding was that some men only considered responding to the invitation if their wives raised the issue and asked them to participate. Previous studies (Dunlap et al., 2014, Kululunga et al., 2011, Kalembo et al., 2012) demonstrated that the use of invitation letters addressed to males from the health facilities encouraged males to take part in PMTCT programmes. This current study showed that women could openly invite their partners to attend PMTCT activities, a contrasting finding from a study by Njunga and Blystad (2010) which showed that women were scared of taking invitation letters to their partners for fear of violence and confrontation.

Conducting education sessions within the communities and in their households was identified as one of the factors that enabled men to have a better understanding of the importance of their role and participation in PMTCT initiatives. Previous studies (Kripalani and Weiss, 2006, Hawthorne and Tomlinson, 1997) pointed out that most health education programmes were conducted with patients receiving healthcare services within health facilities, and that there were fewer men who presented themselves at health facilities in comparison to the numbers of women (Möller-Leimkühler, 2002, Smith et al., 2006). This approach implied that men thus had less access to health education as they hardly visited health facilities to obtain health care services. The present study demonstrated that home visits conducted by health workers to educate the communities about PMTCT and male partner involvement made it possible for them to access men in their homes and as a result, more men were able to learn and exchange ideas regarding PMTCT.

Efforts to involve men in PMTCT programmes also encountered challenges, however. Social stigma acted as a barrier to male involvement programmes as couples who were seen frequently visiting the clinic together were assumed to have HIV. Men who accompanied their wives to obtain PMTCT services were labelled as jealous, overprotective or charmed. In most African traditional settings, domestic responsibilities regarding child care, the seeking of health care services and other activities related to children's well-being were considered as women's duties; while the men were only required to provide what was needed in the home (Culley et al., 2013, Ramirez-Ferrero and Lusti-Narasimhan, 2012, Walston, 2005). Results in this study showed that men who took part in PMTCT programmes, especially accompanying their wives to the clinics, could be viewed as having been charmed by their woman in order to reduce their masculine powers. A study conducted by Nkuoh *et al.* (2010) in Cameroon to identify the barriers to male partner involvement in ANC in that setting also found that men who accompanied their pregnant wives to antenatal clinics were viewed as overprotective or jealous of their wives.

Although the quantitative results of this study showed high levels of male partners testing for HIV as well as discussing about HIV testing with partner, the qualitative results portray that HIV testing for males is still a challenge. These results are not new as previous studies widely documented challenges associated with male partner HIV testing in general (Orne-Gliemann et al., 2013, Koo et al., 2013b). Two reasons could explain these results. Firstly, respondents in the survey could perhaps provide results that are socially desirable so that they are considered as having been responding to PMTCT activities. Secondly, it is possible that the respondents in the quantitative sample benefited from PMTCT programmes to the extent that they were able to respond to the activities accordingly. The qualitative responses came from adult men and women who may not have been beneficiaries of PMTCT programmes. Hence, chances that they fail to consider HIV testing and discussing with partner are low. What these findings portray is that HIV testing for male partners is still a challenge that needs to be dealt with at all levels in the communities.

Cultural practices during the first pregnancy were reported as hindering male partner involvement in PMTCT initiatives towards delivery period. Traditionally, a woman that is pregnant for the first is expected to stay with her family for approximately two months before delivery as a way of preparation for birth. Subsequently, most of these first time pregnant women

cease to receive antenatal care and support as couples such as continued counselling on protecting the baby from HIV. Very little is known about these practices and how they influence male partner involvement during pregnancy within the context of PMTCT of HIV. However, Maimbolwa et al. (2003) conducted a study in Zambia and describes cultural boundaries that should be maintained during birth. Also, it was a taboo for the mother-in-law to avail herself during her daughter-in-law's labour (Maimbolwa et al., 2003). In a study conducted in Zimbabwe regarding pregnancy, child birth as well as subsequent maternal and child care, Mutambirwa (1985) found that most women even in areas with easy access to Western-type delivery services opted for traditional birth attendants who were members of their families. The current study illustrates how male partners may fail to participate in certain PMTCT activities during pregnancy and or after birth due to these cultural birth practices that temporarily separate them from their partners.

Fear of a positive HIV test result was highlighted as a deterrent, preventing men from utilising PMTCT programmes. This fear was described as emanating from their risky sexual behaviour of having unprotected sex with multiple partners (past and present). Additionally, the negative social consequences associated with a positive result included stigma and discrimination. This study's findings concurred with earlier research which stated that people who did not return to collect their HIV test results usually feared stigma, divorce and discrimination (Sullivan et al., 2004, Molitor et al., 1999, Meiberg et al., 2008). In light of these findings, it could be said that sufficient counselling on the implications of an HIV test result was important. Additionally, strategies that helped to reduce and get rid of the social stigma were an urgent issue that needed to be addressed.

Fear of HIV positive results was identified as a deterrent factor for HIV testing. Most of the respondents who stated fear of knowing HIV results were from different age groups. Although this study did not interrogate the causes of fear of HIV status results, previous studies in Sub Saharan Africa found even with the availability of lifelong antiretroviral therapy, an HIV positive status was still associated with death (Chirawu et al., 2010, Schwarcz et al., 2011, Dowson et al., 2012). These studies do not necessarily consider age as a determinant of fear of HIV positive results. However, they highlight on the importance of strengthening interventions for HIV couple testing and counselling. These results underscore the importance of provision of

sufficient counselling support services to married couples as well as men and women of child-bearing age in general so as to rid of the negative myths associated with HIV positive test results.

A lack of knowledge of the whole concept of PMTCT was identified as a reason why male partners did not take part in most of the PMTCT services. This study found that the involvement of male partners in activities or services offered at hospitals or clinics was only known to be that of testing for HIV during pregnancy. Interestingly, it was only at the first time of registration of a pregnancy, usually during the first trimester, that the male partners came to test for HIV with their partners. This finding was identified by most of the stakeholders who took part in the study. The idea of emphasising male partner participation in PMTCT services as testing for HIV was thus misleading and it diminished the role of the male partners in PMTCT programmes. This study therefore underscored the danger of providing misleading or biased information regarding what male partner involvement entailed. It became apparent that it was crucial to educate communities that couple HIV counselling and testing during pregnancy was not the end but rather an entry point through which couples continuously sought counselling and advice on how to prevent their baby from contracting HIV.

The study revealed that poor road networks were associated with high vehicle maintenance costs, which made it impossible for successful implementation of the programmes as the most remote areas of the district were not accessible. These findings were consistent with previous research that demonstrated how bad infrastructure deprived communities of health care services (Fay et al., 2005, Gage, 2007). By and large, development interventions were also often impossible to implement in areas that had poor road access due to high transport costs (Mercer, 2013, Mbaku, 2013, Calderón and Servén, 2014); suggesting the need for policy and development specialists to come up with strategies aimed at improving infrastructure to the district so as to enable easy access to health services by the rural communities.

It was also determined that very few males worked in the outreach programmes in the villages, and male study participants highlighted the importance of discussing sexual and reproductive issues with the same sex as them for cultural reasons. The present study was consistent with the study conducted by Kululanga et al. (2011), which also found that men were more keen to listen to another man who had experience in maternal health care programmes than to a woman. One

major reason that was identified to explain this tendency was that sensitive discussions to do with sexual and reproductive health were regarded as taboo with members of the opposite sex. These findings highlighted the importance of prioritising the norms, practices and beliefs of the local communities when recruiting village health workers that were meant to work in the communities.

The current study's findings have added substantially to the growing body of literature involving men's sexual and reproductive health issues, and PMTCT initiatives also forms part of these issues. The findings have also enhanced the researcher's understanding of the strategies that can be used to increase the numbers of male partners getting involved in PMTCT programmes; as the challenges that prevent men from taking part have been highlighted. The implications of these findings are that organisations and health institutions implementing PMTCT programmes in the country should also consider adopting strategies that suit their context, in order to achieve the goal of improving male partner involvement.

CHAPTER SIX: ATTITUDE AND PERCEPTIONS OF MALE PARTNER INVOLVEMENT IN PMTCT ACTIVITIES

Their [male partners] constructive involvement and support in the elimination of paediatric HIV and the promotion of women's and family health would not only enable men and women to share responsibility for family health (currently borne disproportionately by women), but would also accelerate global progress towards the achievement of the MDGs. (WHO, 2012a:5)

6.1 Introduction

Male partners' positive involvement is crucial in the prevention of mother-to-child transmission of HIV. Ample evidence suggests that male partner involvement is important for scaling up prevention and elimination of PMTCT of HIV (Walston, 2005, WHO, 2012a). Male partners play an important role in increasing women's utilisation of ANC services such as HIV couple counselling and testing (Bajunirwe and Muzoora, 2005, Maman et al., 2011) and condom use (Cicconi et al., 2013, Kajubi et al., 2005, Maharaj and Cleland, 2005, Morfaw et al., 2013, Mugweni et al., 2015). Studies reveal that there is an association between men who attend HIV testing and counselling and adherence to antiretroviral therapy, (Farquhar et al., 2001, Msuya et al., 2008) as well as appropriate infant feeding practices (Alio et al., 2011, de Paoli, 2004, Farquhar et al., 2001, Msuya et al., 2008). However, male partner support in ANC services and interventions for PMTCT is also influenced by a number of factors. For example, a negative attitude towards their involvement in ANC can deter them from utilising the services. Also, positive attitudes or perceptions towards condom use can encourage men to agree to use them for PMTCT of HIV purposes.

Male partners' attendance in voluntary couple counselling and testing remains low at antenatal clinics (Aarnio et al., 2009, Montgomery et al., 2011b, Msuya et al., 2008, Auvinen et al., 2014, Kalembo et al., 2012, Byamugisha et al., 2010). Studies have shown that male partners are discouraged from attending ANC because they feel ignored by health service providers (Auvinen

et al., 2014, Fenwick et al., 2012, Mbekenga et al., 2011). Also, traditional gender roles expect that women take the responsibility of ensuring that children are healthy while the male partner is considered the provider for the family. Such perspectives deter male partners from attending ANC with their partners for fear of stigmatisation, since pregnancy, child birth and infant care is culturally known as a woman's area of responsibility (Aarnio et al., 2009, Ditekemana et al., 2012, Homsy et al., 2006, Msuya et al., 2008). On the other hand, progress has been made in a bid to increase male partners' attendance in ANC settings. For example, Kululanga et al. (2011) describe various strategies that were used in rural and urban southern Malawi for inviting husbands to take part in maternal healthcare. Provision of incentives at healthcare facilities was identified as one of the ways to increase male partner involvement (Theuring et al., 2009, Kululanga et al., 2011).

In the Zimbabwean context, male partner involvement in HIV counselling and testing at ANC is low. A report by the Ministry of Health and Child Care (MOHCC) (2013) states that an average of one in ten men reported having accompanied their partners for HIV testing during pregnancy. Very few studies have examined the attitudes and perceptions towards male partner involvement in different aspects of PMTC services in Zimbabwe. In this chapter, the perceptions and attitudes of adult men and women are explored in focus group discussions. Although men's attitudes are paramount in this chapter, incorporating women's attitudes is important in triangulating the different views in the same study. The strength of this chapter is that it draws ideas directly from men. Males in this study were able to express their concerns, experiences and expectations as far as their involvement in PMTCT interventions is concerned. A number of studies utilise female subjects as a proxy for males; but few studies have utilised men as the subjects of enquiry.

6.2 Measurement of validity and reliability of attitudinal statements

Attitudes towards male support for women and children living with HIV were summarised by creating scores from the responses to nine statements. The items (responses) were ranked on a three point Likert-scale from 1 (disagree), 2 (Uncertain) to 3 (agree). There were no negatively worded statements, hence no need for reverse coding. The scores were computed so as to come

up with a total approximation of the attitudes towards male support of women and children living with HIV. Scores ranged from 9 to 27. Low scores indicated less positive attitudes while high scores indicated more positive attitudes. Using cronbach's alpha coefficient, a reliability analysis was conducted to assess the internal consistency of all nine items in the scale.

The most common acceptable level of reliability is 0.7 (Cronbach, 1951). Values of the alpha coefficients range from 0 to 1. The cronbach's alpha for the nine items was 0.88, suggesting a very strong internal reliability. Table 6.1 shows the values on the corrected item-total correlation and the alpha if an item is deleted. The values in Table 6.1 ranged from 0.43 to 0.75, suggesting that all the items in this scale were measuring one common aspect, since none of the items was less than 0.3⁶. The column: Alpha if Item is Deleted estimates what the cronbach's alpha would be if one particular item is removed. Should any of the values in this column be higher than the final alpha value, a decision can be made to remove that item as it will facilitate in increasing the value of the final alpha. In the same way, if an item with a value smaller than the final alpha is removed from the scale, the final alpha will be reduced to the same value of the item that would have been dropped. For example, if the second item '*Buys/helps partner seek ARV*' is removed, the final alpha will drop from 0.88 to 0.86.

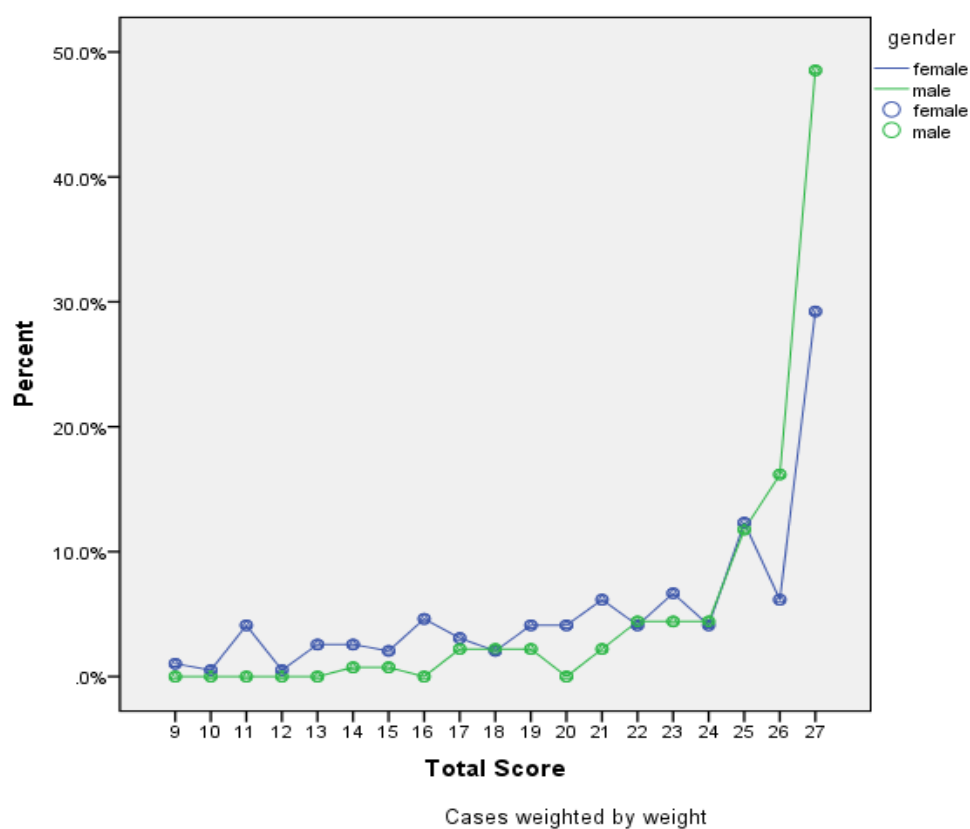
Table 6.1 Correlated item-total relation and alpha if item is deleted

⁶ An item with a value of less than 0.3 suggests that the item attached to this value is measuring an aspect that is different from what the scale is measuring. Hence it is removed from the scale (PALLANT, J. 2010. *SPSS Survival Manual 4th edition-A step by step guide to data analysis using the SPSS program*, Crows Nest: Australia, Allen and Unwin.).

Statement	Corrected Item- Total Correlation	Cronbach's Alpha if Item is Deleted
Support of female partner after she discloses status	0.64	0.86
Buys/helps female partner seek ARVs	0.70	0.86
Accompanies female partner to collect ARVs	0.76	0.85
Reminds female partner of ARV instructions	0.75	0.85
Supports female partner on lifelong ART	0.69	0.86
Cares for sick female partner and child	0.48	0.87
Provides nutritious food	0.56	0.87
PMTCT programmes involve men	0.43	0.88
PMTCT programmes provides male services	0.50	0.87

Figure 6.1 illustrates the distribution of scores according to gender. The scores of the females were noticeably higher than those of the males, indicating that they generally had more positive attitudes towards male partner support for women and children infected with HIV. It was also clear that there were more scores for females on the lower part of the scale, while males dominated the upper end of the scale.

Figure 6.1: Distribution of scores on attitudinal scale according to gender



Male partners who participated in PMCT programmes were likely to be given support and applauded if the community had a positive attitude towards men's involvement. In contrast, negative attitudes towards male partner participation could discourage them from participating. It is important to note that attitudes towards male partner involvement were influenced by the community's beliefs and cultural practices. This was illustrated in the language use, labels and terms associated with men who took part in PMTCT services.

6.3 Attitudes to couple counselling and testing

HIV couple counselling and testing is an important component of PMTCT. It allows couples to gain awareness of their HIV status and ensure that they are provided with support and care. In order to understand the attitudes towards HIV couple counselling and testing, a question was asked in the survey, *"Are you at any point in the future willing to undergo HIV couple*

counselling and testing?” Two options were provided; ‘Yes’ and ‘No’, as shown in Table 6.2. In addition, gender, marital status, level of education and type of occupation were used in the analysis in order to understand if there was any association between these variables and the willingness to receive HIV couple counselling and testing (HCCT).

Table 6.2: Willingness to receive HCCT by selected characteristics

Variable	Yes N (%)	No N (%)	Total N (%)
Gender			
Female	185 (59.7)	10 (47.6)	195 (58.9)
Male	125 (40.3)	11 (52.4)	136 (41.1)
N	310 (100)	21 (100)	331 (100)
Marital status			
Married	274 (88.4)	17 (81.0)	291 (87.9)
Single	4 (1.3)	1 (4.8)	5 (1.5)
Divorced	8 (2.6)	1 (4.8)	9 (2.7)
Separated	9 (2.9)	0 (0.0)	9 (2.7)
Widowed	15 (4.8)	2 (9.5)	17 (5.1)
N	310 (100)	21 (100)	331 (100)
Level of Education			
None	18 (5.8)	1 (4.8)	19 (5.7)
Standard	7 (2.3)	0 (0.0)	7 (2.1)
Primary School	80 (25.8)	3 (14.3)	83 (25.1)
Junior Certificate	15 (4.8)	3 (14.3)	18 (5.4)
Secondary School	162 (52.3)	11 (52.4)	173 (52.3)
High School	28 (9.0)	3 (14.3)	31 (9.4)
N	310 (100)	21 (100)	331 (100)
Occupation			
Unemployed	66 (21.3)	4 (19.0)	70 (21.1)
Employed	69 (22.3)	6 (28.6)	75 (22.7)
Farming	175 (56.4)	11 (52.4)	186 (56.2)
N	331 (100)	21 (100)	331 (100)

The results show that generally respondents had a positive attitude to HIV couple counselling and testing. The attitudes of males and females towards HIV couple counselling and testing were relatively similar. Of those who indicated that they would be willing to test for HIV with their partners, 59.7 percent were females and 40.3 percent were males. Approximately 9 percent of the respondents who attended high school were willing to go for HIV couple counselling and testing

in the future. Overall, more than half of the respondents (52.3%) were willing to receive HCCT in future had secondary education while only a few (5.8%) had not received any formal education.

Approximately 88.4 percent of those willing to attend HIV couple counselling and testing were married, 4.8 percent were widowed and 2.9 percent were separated. In terms of occupation, about 56.4 percent were farmers, 22.3 percent were employed and 21.3 percent were unemployed respondents who indicated their willingness to attend HIV couple counselling and testing.

6.3.1 Forms of male partner support in HIV prevention

Respondents were asked about the different ways in which men are expected to participate in PMTCT programmes. For example, there are activities conducted at ANC centres where male partners are encouraged to participate in activities that form part of HIV counselling and testing. Other forms of support that male partners can give are emotional support and financial support for the costs that relate to the prevention of MTCT of HIV.

Table 6.3 Attitudes towards male partner support

Variable	Female N (%)	Male N (%)	Total N (%)
Partner can provide emotional support			
Disagree	38 (19.5)	7 (5.1)	45 (13.6)
Agree	130 (66.7)	122 (89.7)	252 (76.1)
Uncertain	27 (13.8)	7 (5.1)	34 (10.3)
N	195 (100)	136 (100)	331 (100)
Partner can buy condoms			
Disagree	48 (24.6)	33 (24.3)	81 (24.5)
Agree	135 (69.2)	88 (64.7)	223 (67.4)
Uncertain	12 (6.2)	15 (11.0)	27 (8.2)
N	195 (100)	136 (100)	331 (100)
Partner can agree to use condoms			
Disagree	27 (13.8)	16 (11.8)	43 (13.0)
Agree	160 (82.1)	112 (82.4)	272 (82.2)
Uncertain	8 (4.1)	8 (5.9)	16 (4.8)
N	195 (100)	136 (100)	331 (100)
Partner can attend counselling sessions			
Disagree	5 (2.6)	6 (4.4)	11 (3.3)
Agree	182 (93.3)	127 (93.4)	309 (93.4)
Uncertain	8 (4.1)	3 (2.2)	11 (3.3)
N	195 (100)	136 (100)	331 (100)
Partner agrees to couple's HIV testing			
Disagree	8 (4.1)	8 (5.9)	16 (4.8)
Agree	181 (92.8)	126 (92.6)	307 (92.7)
Uncertain	6 (3.1)	2 (1.5)	8 (2.4)
N	195 (100)	136 (100)	331 (100)
Partner can give money for clinic			
Disagree	19 (9.7)	5 (3.7)	24 (7.3)
Agree	171 (87.7)	123 (90.4)	294 (88.8)
Uncertain	5 (2.6)	8 (5.9)	13 (3.9)
N	195 (100)	136 (100)	331 (100)
Partner can consult at health facility			
Disagree	19 (9.7)	7 (5.1)	26 (7.9)
Agree	169 (86.7)	126 (92.6)	295 (89.1)
Uncertain	7 (3.6)	3 (2.2)	10 (3.0)
N	195 (100)	136 (100)	331 (100)

The results in Table 6.3 show that generally respondents had a positive attitude towards the different ways in which male partners could contribute to the prevention of MTCT of HIV. About 92.6 percent of males indicated that they would agree to test for HIV with their partners. Also, about 93.3 percent of females agreed that the male partner could attend counselling

sessions. Approximately 86.7 percent of females and 92.6 percent of males agreed that the male partner would accompany their partners to a consultation at a health facility.

In contrast, there were strong negative attitudes expressed at the idea of male partners buying condoms. About 24.6 percent of females and 24.3 percent of males did not support the idea. Approximately 82.1 percent of females and 82.4 percent of males indicated that the male partner would agree to use condoms during sex with spouse

A positive attitude was expressed towards male partners' financial support of costs associated with ANC. Nearly 87.7 percent of females and 90.4 percent of males agreed that a male partner should provide money for the partner to get to the antenatal care facilities. Very few respondents (2.6% of females and 5.9% of males) were not certain about male partner's provision of money to cover for clinic costs

There were strong positive attitudes towards male partners' provision of emotional support. About 66.7 percent of females agreed that the male partner could give emotional support to their partners during pregnancy. Interestingly, almost 89.7 percent of males supported this idea. A higher proportion of females (13.8%) than males (5.1%) were not certain. In response to a survey question (Q6024 Appendix B), emotional support was also reported as one of the reasons why male partners accompanied their partners to the health facility at the time of birth.

The seven statements representing attitudes towards male support in ANC in Table 6.4 were summarised by creating scores. The items were ordered on a three-point Likert scale from 1 (disagree), 2 (uncertain) to 3 (agree). There were no negative statements among the items, thus reverse coding was not necessary. Scores were computed in order to obtain a total approximation of attitudes towards male support in ANC. The scores ranged from seven to 35, and the mode score was 35. High scores denoted high positive attitudes while low scores indicated less positive attitudes towards male partner support in ANC. A reliability analysis was conducted to assess the internal consistency of all seven items in the scale.

According to Cronbach (1951), the minimum acceptable level of reliability is the value of 0.7. The coefficient values range from zero to one. The closer the values are to one, the greater the reliability of the scale, while in contrast lower scores depict a less reliable scale (Suhr and Shay, 2009). A reliability analysis for the seven items was conducted and a value of 0.73 was obtained, demonstrating a strong internal reliability of the scale. This was also an indication that the items were measuring a common aspect. Table 6.4 is an illustration of the values on the correlated item-total correlation and the alpha if an item was removed. The ‘Corrected Item-Total Correlation’ column provides an indication of the degree to which items correlate with the total score (Pallant, 2010). If any values in this column are low, (less than 0.3), this is an indicator that the item with such a value is measuring something different from what the scale is measuring (Pallant, 2010). Values in Table 6.4 ranged from 0.36 to 0.54, implying that all items in this scale could be retained since they were above the minimum value of 0.3.

The column, ‘Alpha if Item is Deleted’ provides an estimate of what the cronbach alpha would be, should any particular item be removed. In essence, it shows the impact of deleting any of the items from the scale. Should a particular item be removed, the final value of the Alpha will adjust to the value of the removed item. However, the purpose of this column is to facilitate an increase in the value of the final alpha value. Thus, should any value in this column be higher than that of the final alpha, a decision can be made to remove that item so as to increase the value of the final Alpha. For example, the item, ‘Attends counselling sessions’ has the value of 0.68; should this item be deleted from the scale, the final alpha will adjust from 0.73 to 0.68.

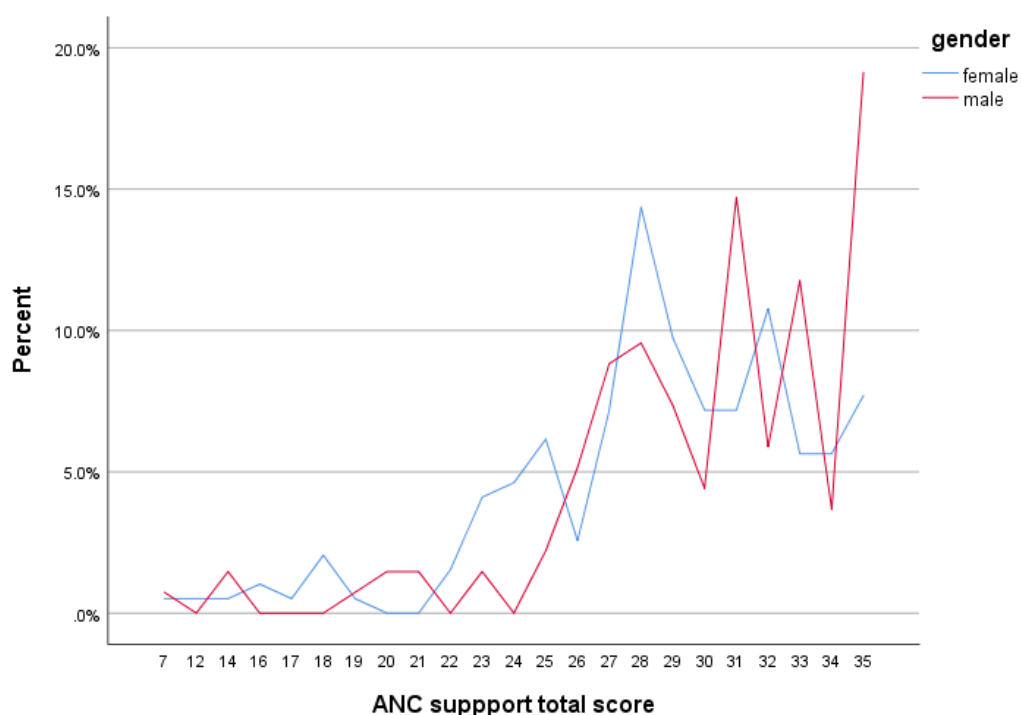
Table 6.4 Corrected item-total correlations and Cronbach’s Alpha if item is deleted

Statement	Corrected Item- Total Correlation	Cronbach's Alpha if Item is Deleted
Partner can provide emotional support	0.44	0.69
Partner can buy condoms	0.41	0.71
Partner agrees to use condoms	0.47	0.68
Partner can attend counselling sessions	0.54	0.68
Partner agrees to couple HIV testing	0.36	0.71
Partner can give money for clinic	0.54	0.67
Partner can consult with his female partner at a health facility	0.42	0.69

Figure 6.2 is an illustration of the distribution of scores according to gender. It can be noted that the scores of both males and females overlap at various levels on the lower part of the scale as well as towards the end suggesting very little difference in terms of attitudes towards male partner support in ANC. However, there are more scores for females on the middle part of the scales while male scores dominated the upper end of the scale.

The attitudinal scores demonstrate the different predispositions of the males and females regarding male partner support in various activities and services provided to females and their partners in the ANC facilities. As illustrated in Figure 6.2, there are generally more positive attitudes towards the different forms of support that male partners can provide their partners with in terms of the ANC activities. It can be noted that males seem to have more positive attitudes than females towards male support as they have higher scores towards the upper part of the graph.

Figure 6.2: Distribution of scores on attitudinal scale of male partner support in ANC



It is important to note that male partners' support in ANC can also determine their understanding, as well as utilisation of various preventive actions that are available in health facilities to prevent vertical transmission of HIV. For example, their participation in HIV couples counselling and testing may create an opportunity for them to understand and utilise various HIV prevention strategies provided at health facilities. This includes the decision to use condoms for safe sex during pregnancy and breast feeding.

6.3.2 Condom decision-making

The study identified that the decision on whether or not to use condoms for safe sex between couples by and large rested on the male partner. Male partners were responsible for buying the condoms and would ultimately make the decisions on whether they would use condoms or not. Hence, this study revealed that men dominated decision-making, as illustrated in the following comment.

We can have access to the condoms at the clinic, and the condoms we get are male condoms. However, if I as a woman bring that condom to my husband, I do not have the authority to tell him that we need to use condoms, but he can do that to me. In my case, I will have to plead and explain why I suggest using condoms during sex. Based on the experiences of women who have been battered for initiating a condom-use discussion, many women tend to leave the responsibility of bringing and initiating use of condoms to the men.

(Female, 38 years, FGD #4)

This quotation reveals three major concerns regarding condoms use. Firstly, it identifies the scarcity or absence of female condoms. The male condom is most common and available. This is also another challenge which leaves women to rely on men totally as far as condom use is concerned. The second challenge illustrated in this quote is the power-dynamics regarding decision-making in the use of condoms. It is the male partner who makes the ultimate decision on whether condoms will be used or not. However, it is also noted that there is also room for women to negotiate for their use, as long as they can justify the need to use condoms. Nonetheless, it is clear that the final decision comes from the man. The last aspect is the negative consequences associated with women introducing condom use in their relationships. These findings reveal the potential dangers of abuse that women face with regards to condom use, which makes them resort to not suggesting its use.

6.3.3 Attitudes towards condom use

Condom use for safe sex during pregnancy and postpartum is highly recommended among HIV infected partners so as to reduce the chances of HIV transmission. The uptake of such interventions for PMTCT of HIV underscores the importance of male partner participation in ANC programmes. Studies reveal that condom use was found to be more common during pregnancy and postpartum among HIV positive women who reveal their status to their partner (Byamugisha et al., 2010). However, challenges associated with acceptance and uptake of condom use by male partners are well-documented (Adetunji and Meekers, 2001, Carter et al., 2007, Chimbiri, 2007, Cicconi et al., 2013, Kenyon et al., 2010, Muhwava, 2004), yet it is one of the preventive strategies against HIV transmission. In this study, attitudes towards condom use for the purpose of PMTCT during pregnancy and postpartum were assessed in three different contexts. All respondents were asked if they agree with particular statements; *'Even trustworthy*

partners need to use condoms’, ‘I will use condoms only when my partner is HIV positive’ and ‘I will use condoms even when I test HIV negative’.

Table 6.5 Attitudes towards condom use

Indicator	N (%)
Trustworthy partners need to use condoms	
Disagree	56 (16.9)
Uncertain	15(4.5)
Agree	260 (78.5)
N	331 (100)
Will use condoms when partner has HIV and I am negative (Sero-discordance)	
Disagree	112 (33.8)
Uncertain	35 (10.6)
Agree	184 (55.6)
N	331 (100)
Need to use condoms when partner and I are HIV negative	
Disagree	98 (29.6)
Uncertain	22 (6.6)
Agree	211 (63.7)
N	331 (100)

Attitudes towards condom use in the three different situations were similar. Generally, respondents reported mixed attitudes to the use of condoms during pregnancy and postpartum. Almost 78.5 percent agreed that even trustworthy partners needed to use condoms for PMTCT, while only 16.9 percent disagreed. About 33.8 percent disagreed to the use of condoms when they are HIV negative and yet their partner is infected with HIV, whereas 55.6 percent agreed to using condoms in sero-discordant relationships. Respondents also had mixed feelings with regard to the use of condoms during pregnancy and postpartum when both partners tested negative. Almost 63.7 percent felt the need to use condoms even when they were HIV negative. What these results mean is that sexual unions among HIV positive individuals are complex in the sense that if both partners are HIV positive, they are less likely to use condoms, as observed in previous studies (Cicconi et al., 2013). Hence, these results underscore the importance of educating and promoting awareness among people of reproductive age on HIV transmission risks during pregnancy and postpartum.

Results from the qualitative component of this study show that condoms have previously been viewed as a method of preventing pregnancy and transmission of infectious diseases by sex workers (referred to as prostitutes in this study). Due to this view, the use of condoms with regular partners and in marriage remains unappreciated, as explained by one male respondent.

We have known condoms for a long time as a mechanism used by prostitutes to prevent pregnancy. Married partners who get involved in extra-marital sexual intercourse with these prostitutes would use condoms so as to prevent HIV. That is why it has not been easy for married couples to use condoms. For instance, in this place, condoms were mostly common in the beer halls than in the health facilities.

(Male, 48 years, FGD #7)

This quotation illustrates the negative perspectives associated with condom use among married or regular sexual partners. Contrary to the survey, respondents portrayed more positive attitudes towards the use of condoms in marriage. For instance, in Table 6.2, 49.3 percent of the females and 50.7 percent of the males agreed to the use of condoms as a method of HIV prevention. A possible explanation for the varying attitudes towards condom use between survey respondents and focus group discussions could be that the survey consisted of males and females who at some point were recipients of PMTCT services. Condom use may thus perhaps have been provided as one of the interventions for PMTCT through voluntary couples counselling and testing programmes and during ANC visits. In contrast, focus group discussions were composed of adult men and women, and some of these may not have been directly involved in any PMTCT programmes.

These results have shown the attitudes linked to services that are offered with regards to voluntary couples counselling and testing in ANC services for PMTCT. It is important to note that the attitudes can have an influence on the manner in which male partners take part in or utilise ANC services such as condom use for PMTCT of HIV among infected partners. The next section illustrates common perspectives of male partner involvement in the prevention of unwanted pregnancies. Prevention of unwanted pregnancies among women of reproductive age is one of the four prongs of the PMTCT programme. Through voluntary counselling and testing, men and women of reproductive age learn of their HIV status and make informed choices about future pregnancies.

6.4 Perspectives on male partner involvement in preventing unwanted pregnancies

The study revealed that, of the various forms of prevention of unwanted pregnancies, especially among HIV positive women, abortion was raised as a cause of concern. Women who wish to abort are confronted with complications when the male partner is involved in the decision on whether or not to terminate. Respondents were asked whom they think should make the decision about terminating an HIV related pregnancy among couples.

She should ask for permission from the husband and then he tells her what he thinks should be done.
(Male, 51 years, FGD #1)

The woman should ask the father of the baby for permission to abort so as to prevent conflict. Otherwise if I am the husband I will not give her permission to abort my baby.
(Male, 45 years, FGD #5)

The woman has no right to abort. She should not even be given permission to abort even if she is HIV positive.
(Male, 42 years, FGD #8)

The quotes show that male partners would expect to be the ultimate decision makers in matters of abortion of pregnancy among HIV positive women, and that men have an influence on women's reproductive choices. It is clear that the woman will not have the opportunity to abort an unwanted pregnancy unless the partner gives her permission to do so. On the one hand, there appears to be the option to either terminate or not, especially where respondents state that the pregnant woman should ask for permission, while on the other hand there is a strict condition that points to no possibility for termination. These quotes reveal complex power dynamics that exist between men and women as far as decisions about termination of pregnancy are concerned. It is also important to note here that male partners not only control women's choices in abortion but also in the use of condoms for safe sex practices. These results illustrate the influence of men on women's access and utilisation of services that affect their health.

Although male partners yield a lot of power in decision making, results show that women often terminate pregnancy without their partner's consent. The quantitative findings provide different

reasons as to why some women would abort without discussing it with their partner. The female respondents' questionnaire asked; *“What could be the reasons of not discussing with your partner your decision to terminate an unwanted pregnancy?”* The male questionnaire asked, *“What could be the possible reasons of not discussing with you her decision to terminate an unwanted pregnancy?”*

Table 6.6 Reasons for not discussing the decision to terminate the pregnancy

Indicator	Female N (%)	Male N (%)	Total N (%)
Reason for not discussing			
Partner opposition	72 (36.9)	74 (54.4)	146 (44.1)
Conflict	71 (36.4)	30 (22.1)	101 (30.5)
Abandonment	16 (8.2)	5 (3.7)	21 (6.3)
Not necessary	7 (3.6)	2 (1.5)	9 (2.7)
Not applicable	29 (14.9)	25 (18.4)	54 (16.3)
N	195 (100)	136 (100)	331 (100)

Table 6.6 shows some of the possible reasons that influence women to terminate pregnancies without discussing it with their partners. The results highlight that one of the leading reasons among those provided was that the male partner would oppose the female's decision to terminate pregnancy. However, a relatively higher proportion of males (54.4%) than of females (36.9%) agreed with this reason. Avoiding conflict was also identified as a reason for not discussing the topic. In contrast, a higher proportion of females (36.4%) than of males (22.1%) felt that discussing intentions to abort would lead to conflict. Approximately 8.2 percent of females and 3.7 percent of males thought that the woman would choose not to disclose to her partner her intentions to terminate the pregnancy because of the fear of abandonment. Also, 3.6 percent of females and only 1.5 percent of males considered that it is not necessary for a woman to discuss abortion decisions with her partner. It can be surmised from these results that avoiding conflict and opposition from their partners were stated as the major reasons why women may not disclose their abortion intentions to their partners.

In order to understand the reason why male partners would not allow their wives to terminate an unwanted pregnancy after testing HIV positive during pregnancy, a question was asked to explain this position. In the focus group discussions, the following reasons were mentioned to explain men's unwillingness to terminate the pregnancy.

Abortion is not allowed. We all know about it. For some of you who have been to towns you even see they write on trees along the streets that 'abortion is a crime'.

(Female, 44 years, FGD #7)

Abortion is like killing. Therefore, it is illegal to abort... It is only doctors who have a right to decide on abortion after undertaking medical assessments.

(Male, 39 years, FGD #1)

Abortion is not acceptable at all, that is why if someone is contemplating aborting, they should consult doctors and follow the recommended procedures.

(Male, 41 years, FGD #5)

It is dangerous to abort unless it is advised by [a] health worker and they can find better ways of doing it. The mother can also die in the process of abortion, especially if they do it illegally.

(Female, 48 years, FGD #2)

The quotes reveal that abortion was a practise that was not allowed unless it was sanctioned by the law. This was common knowledge, as evidenced by the quotation which specifically described that messages against illegal abortion were displayed in public places. As explained in the quotes, abortion was considered murder except when it was conducted for health-related reasons and was approved by legal and medical practitioners. Hence, should one decide to terminate a pregnancy without observing the recommended procedures, they will be considered to have committed murder of an unborn child who had a right to life. Also, some of the consequences associated with illegal abortions were death and ill-health, as most of them were conducted under unsafe conditions.

The survey also tried to understand the reasons against termination of a pregnancy. This question was directed to the respondents who indicated that they would not terminate pregnancy, even after obtaining a HIV positive test result during pregnancy. Female respondents were asked,

‘Which of the following reasons will cause you not to terminate pregnancy?’ and the male respondents were asked, *‘Which of the following reasons will cause your female partner not to terminate pregnancy?’* The options provided were; 1= avoiding conflict, 2= it is not allowed, 3= fear of poor health effects associated with an unsuccessful abortion, 4= need another child and 5= I will seek means of preventing transmission of HIV infection to the child. The option of ‘not applicable’ was an option for those whose reason was not provided on the list. Table 6.7 shows the results.

Table 6.7 Reasons for not terminating pregnancy

Indicator	N (%)
Reason for not terminating	
Fear of violence	14 (4.2)
It is not allowed	68 (20.5)
Poor health	46 (13.9)
Need another child	30 (9.1)
Will seek HIV prevention	156 (47.1)
Not applicable	17 (5.1)
N	331 (100)

Table 6.7 shows the various reasons as to why women would not terminate pregnancies by women infected by HIV. Respondents generally indicated that they would not terminate pregnancy as they would rather seek other means of preventing the baby from contracting HIV. One of the main reasons for not terminating the pregnancy was the consideration of the use of prevention of mother-to-child prevention strategies. Approximately 47.1 percent of respondents share this view. In the qualitative results, some of the means mentioned were use of replacement feeding (infant formula), receiving antiretroviral treatment and ensuring that they gave birth at a health facility and received adequate healthcare. Most of the female respondents stated that ARVs were available in all the health facilities; therefore, fear of mother-to-child transmission of HIV would not be a reason for termination.

About 20.5 percent answered that termination of pregnancy was not allowed. Almost 13.9 percent of respondents did not support the idea of abortion as they feared poor health would result from

an unsuccessful abortion. The results also showed that an HIV positive status may not discourage one from having more children. It is also interesting to note that both males and females had similar dispositions with regards to wanting another child as a reason for not terminating pregnancy. About 9.1 percent of females shared this view. A possible explanation was that the availability and access to ART and other HIV prevention strategies gave hope that prevention of mother-to-child transmission of HIV was possible. About 4.2 percent of respondents viewed fear of violence as one of the reasons leading women not to disclose decisions to terminate pregnancy.

The findings of this study have revealed that abortion was a complex issue in the context of HIV, due to the legal and social factors that were a play. Results have shown that abortion was not allowed and was considered a crime unless it had been examined for its suitability by legal and medical practitioners. Male partners were by and large not supportive of abortion and they expected their wives to consult with them on whether they should abort or not. In contrast, HIV positive women may not disclose their intentions to abort for fear of opposition and violence from their male partners. However, with the availability of ARVs for both mothers and children, results have shown that intentions to abort among women living with HIV could be reversed due to the availability of treatment. What this study showed was the interest of male partners in supporting and caring for children exposed to HIV, which was one of the findings of this study.

6.5 Male partners' care and support of HIV positive women and children

Care and support of HIV infected women and children are important components of the PMTCT programme (Betancourt et al., 2010, Peacock, 2003). The context in which the study was conducted was a largely traditional patriarchal society in which men were regarded as the family heads and they controlled access to the resources in their families; hence, male support of children and women living with HIV was crucial.

6.5.1 Male support of HIV infected mothers and children by gender

In order to understand males' and females' attitudes and perceptions towards male support of women and children living with HIV, a number of questions were asked to assess male partner's support of a HIV infected female partner and child. An option of three answers was provided namely, 1= disagree, 2= uncertain, 3=agree. Table 6.8 shows results of male partner support of HIV infected mothers and children according to gender.

Table 6.8 Attitudes towards HIV infected partner and child

Variable	Female N (%)	Male N (%)	Total N (%)
Supports partner on ART			
Disagree	42 (21.5)	6 (4.4)	48 (14.5)
Uncertain	23 (11.8)	17 (12.5)	40 (12.1)

Agree	130 (66.7)	113 (83.1)	243 (73.4)
N	195 (100)	136 (100)	331 (100)
Buys and provides ART			
Disagree	46 (23.6)	6 (4.4)	52 (15.7)
Uncertain	35 (17.9)	12 (11.0)	50 (15.1)
Agree	114 (58.5)	103 (84.6)	229 (69.2)
N	195 (100)	136 (100)	331 (100)
Accompanies partner for review			
Disagree	46 (23.6)	6 (4.4)	52 (15.7)
Uncertain	27 (13.8)	7 (5.1)	34 (10.3)
Agree	122 (62.6)	123 (90.4)	245 (74.0)
N	195 (100)	136 (100)	331 (100)
Reminds partner of ART			
Disagree	50 (25.6)	5 (3.7)	55 (16.6)
Uncertain	26 (13.3)	12 (8.8)	38 (11.5)
Agree	119 (61.0)	119 (87.5)	238 (71.9)
N	195 (100)	136 (100)	331 (100)
Supports partner on Option B+			
Disagree	40 (20.5)	6 (4.4)	46 (13.9)
Uncertain	41 (21.0)	8 (5.9)	49 (14.8)
Agree	114 (58.5)	122 (89.7)	236 (71.3)
N	195 (100)	136 (100)	331 (100)
Cares for sick female partner and child			
Disagree	25 (12.8)	2 (1.5)	27 (8.2)
Uncertain	35 (17.9)	14 (10.3)	49 (14.8)
Agree	135 (69.2)	120 (88.2)	255 (77.0)
N	195 (100)	136 (100)	331 (100)
Provides food			
Disagree	42 (21.5)	6 (4.4)	48 (14.5)
Uncertain	34 (17.4)	24 (17.6)	58 (17.5)
Agree	119 (61.0)	106 (77.9)	225 (68.0)
N	195 (100)	136 (100)	331 (100)
PMTCT is male-oriented			
Disagree	28 (14.4)	11 (8.1)	39 (11.8)
Uncertain	22 (11.3)	24 (17.6)	46 (13.9)
Agree	145 (74.4)	101 (74.3)	246 (74.3)
N	195 (100)	136 (100)	331 (100)
Men's needs provided in PMTC			
Disagree	25 (12.8)	7 (5.1)	32 (9.7)
Uncertain	11 (5.6)	19 (14.0)	30 (9.1)
Agree	159 (81.5)	110 (80.9)	269 (81.3)
N	195 (100)	136 (100)	331 (100)

The results illustrate the respondents' attitudes with regard to a male partner's support and care of his HIV infected partner and child. Generally, respondents showed positive attitudes towards male partner care and support for the HIV infected partner and child. From these results, it is interesting to note that 88.2 percent of males and 69.2 percent of females agreed that the male

partner can take care and support an infected partner and child. However, females had relatively higher (12.8%) negative attitudes than males (1.5%) towards the same statement. With regard to assistance with antiretroviral adherence, almost 87.5 percent of males agreed that they could help their female partners to follow the instructions for antiretroviral drugs. Also, about 62.6 percent of females and a significantly high proportion of males (90.4%) agreed that the male partner would accompany his spouse for medical review and monitoring of the viral load. Approximately 13.8 percent of females and 5.1 of males were not certain.

Results show that male respondents had relatively high positive attitudes towards provision of nutritious food to HIV infected partner and child. Approximately 61 percent of females and 77.9 percent of males agreed that the male partner would provide nutritious food to his HIV positive female partner and child. Similar findings were observed on attitudes towards accompanying partner to collect antiretroviral drugs. Almost 90.4 percent of males and 62.6 percent of females agreed that the male partner can accompany his partner to check viral load and collect drugs. In comparison, only 4.4 of males disagreed while about 23.6 percent of females disagreed with this statement.

There were generally positive attitudes towards provision of male-oriented services within PMTCT settings and programmes. Similar proportions of females (74.4%) and males (74.3%) agreed that PMTCT programmes provide male-oriented services. About 14.4 percent of females and only 8.1 percent of males disagreed with this view. Also, 80.9 percent of males and 81.5 percent of females agreed that PMTCT programmes provide health services for men. Approximately 14 percent of males and about 5.6 percent were not uncertain about the availability of male services in PMTCT programmes. Interestingly, 12.8 percent of females and only 5.1 percent of males disagreed.

A Mann-Whitney U Test was used to test for differences between female and male groups on male partners' support for their HIV infected partners and children. Firstly, the data was split into two independent groups based on gender, and then the total scores for attitude towards male support were generated separately for the two groups. In this parametric test, a comparison of the median was used. Tables 6.9a and 6.9b illustrate the results of the Mann-Whitney U Test.

Table 6.9a: Mann-Whitney U test - ranks

Variable	Gender	N	Mean	Sum of Ranks
Antenatal total support Scores	Female	195	151.91	29622.00
	Male	136	186.21	25324.00
	Total	331		

Table 6.9b: Mann-Whitney U test – test statistics

Item	Total care and support
Mann-Whitney U	10512.000
Wilcoxon W	29622.000
Z	-3.221
Asymptomatic Significance. (2-tailed)	0.001

Table 6.9a provides information on the mean rank and the sum of ranks for the two groups tested (females and males). It also shows the group that can be considered as having the higher antenatal total support scores, which is, the group with the highest mean rank. In this case, the male group had the highest scores. Therefore, it could be concluded from these results that the male group had statistically significant more positive attitudes towards care and support of HIV infected partners and children than the female group ($U = 1052.00$, $p = 0.001$). Table 6.9b illustrates that mean scores of males were higher than that of the females; males (mean = 186), females (mean = 152). Low scores denoted negative attitudes while high scores denoted positive attitudes. Therefore, the results from the Mann-Whitney U Test showed that males had more positive attitudes when compared to females on male's support of a HIV infected female partner and child.

6.6 Terms associated with male partners who participated in PMTCT programmes

Results from this study show that male partners who participated in PMTCT activities were viewed in two distinct ways that carried positive and negative connotations. Respondents were asked how their community perceived men who took part in PMTCT programmes, such as a man accompanying his partner to ANC. In the focus group discussions and follow-up interviews with women, the question read, “*What does your community say when they see a man often going to antenatal care with his partner?*” The following quotes demonstrated positive perceptions towards men who took part in PMTCT programmes.

“I want to think that these are the real men, who love and give a good example in their community. As we mentioned earlier on that our tradition suppresses such activities as people would say that some sort of magic was used to control the man or something else because this is women’s business. So, men who go with their wives to the antenatal or baby clinic to get knowledge are those that have separated themselves, they love their wives and are an example of men who love their wives.” (Female, 46 years, FGD #3)

Such are the men who should stand up with confidence among other men. If they say ‘all men should stand up’ he must do so with confidence because he is doing what is expected of a real man. (Female, 51 years, FGD #6)

I think these men are wise and faithful because they want to take care of their families and ensure that their children grow well and that their wives and children are safe. (Female, 40 years, FGD #1)

The quotations demonstrate that male participation in PMTCT programmes was limited to a few men. One of the reasons given for men’s limited involvement was gender roles that stipulated the responsibilities of men and women. Household chores and child-rearing were seen as women’s responsibilities, while men were responsible for providing resources for the family such as food, financial support, taking care of livestock and major family assets such as land, transport and livestock, among others. However, in the context of HIV, men were expected to take part in PMTCT and HIV prevention activities, but not all men were keen to do so. The terms associated with these men such as ‘*real man*’, ‘*confident*’, ‘*faithful*’, ‘*loving*’, ‘*caring*’, ‘*wise*’, ‘*role model*’ and ‘*bold*’ encouraged male partners to get more involved in the PMTCT programmes. These findings revealed the changing nature of how masculinity was viewed in the context of HIV. It was the men who could share with their wives the responsibilities of ensuring that their families and children were healthy who were considered role models, or caring.

Negative perceptions with regard to male partner involvement in PMCT programmes were identified. Male partners who were seen taking part in ANC or attending meetings organised by health practitioners within households and villages were given derogatory names and labels. For example, a man who attended ANC with his partner was considered as being unable to notice that he was carrying out women's duties. It was believed that a traditional charm was used on him. Traditional charms are known as medicine that a woman gives to her spouse (without the spouse's consent) so as to diminish his sense of reasoning, to the extent that he submits to her. Hence, when a man was seen attending ANC, traditionally known as women's space, some (men) concluded that he was charmed and he thus became a laughing stock. The following quotes demonstrated this view.

Some men will think that you are stupid and an idiot.

(Male, 27 years, FGD #2)

For some men, he becomes a laughing stock saying that 'dzinenge dzakadyiswa' [use of supernatural power or magic to control someone's behaviour and reasoning]. It is because they will not be having an idea of why we are doing so.

(Male, 34 years, FGD #4)

Some will say he is so weak that he cannot do without his female partner, 'ane ruchengera' [he is jealous].

(Male, 31 years, FGD #7)

The negative perceptions of male partners who took part in PMTCT interventions and in other related services revealed that male partner participation could be a challenge for men who would want to do so. It was clear that the traditional gender roles which defined men's and women's duties played a part in influencing how people perceived male partners who got involved in such activities. This was because child care and health are traditionally seen as women's roles. Thus, the terms that are used to describe men who get involved in PMTCT such as, '*stupid*', '*an idiot*', '*weak*', '*jealous*', '*controlled by woman*' were discouraging and some were offensive. Under such circumstances, male partner participation in the PMTCT programmes became compromised; however, men who did not believe in the traditional charms and assisted their spouses in carrying out roles that were meant for women, such as feeding or bathing their

children, reported not being influenced by these negative terms. It was found that male partners who did not believe in the use of charms were more likely to present themselves at ANC or any other organised event for PMTCT. Such behaviour encouraged other men to come along and give support to their spouses, without fear of stigmatisation.

6.7 Exclusion of male partners

Results from focus group discussions, especially those composed only of males, showed that there was dissatisfaction among them with regards to how PMTCT matters were organised. According to the findings, organisers of the PMTCT programmes focussed more on women than they did on men. The quotes below illustrated this view.

They do not call meetings specifically for men; it is usually women they invite. We only learn from the radios. They should just organise a day when they teach men alone. We may respond to some questions about PMTCT but we are not sure whether our answers are correct or appropriate or not because there is no one amongst us [men] who has sufficient education on the subject. This is what we hear from other people and not what we have learnt directly. There was never a day where men only were called to discuss about health issues.

(Male, 49 years, FGD #8)

This quote suggests that PMTCT programmes had not been engaging with male partners, yet they were critical role players in HIV prevention. It also illustrated that male partners were eager to learn about PMTCT. Given that males received less education on PMTCT services, men were less likely to be able to give their full support of the HIV prevention strategies, unlike their female counterparts.

When they call us to come with our wives, there should also be some health services that aim to improve men's health as well. So if they keep referring to women only, very few men will cooperate. For instance, the male circumcision introduced to this place was good.

(Male, 34 years, FGD #9)

Addressing men's health concerns was an important aspect that health practitioners could focus on. This quote demonstrated that when males attended ANC or PTMCT programmes, there was little or no attention given to men's health. This was stated as one of the reasons deterring males

from being fully involved in the PMTCT programmes. It is important to note here that the numbers of males attending ANC and other PMTCT services was highly influenced by the nature of the interventions provided by the healthcare workers; hence these results underscored the importance of ensuring that both women's and men's health services are provided in health facilities.

These quotations revealed that most of the messages with regard to male partner participation in PMTCT have focused largely on improving women's and children's health, with little or no attention on men's wellbeing. The results highlight the need to ensure that PMTCT services are inclusive and provide male-oriented services in antenatal care settings and other programmes related to the prevention of mother-to-child transmission of HIV.

6.8 Discussion

In Sub-Saharan Africa where heterosexual sexual intercourse is the major route of HIV transmission, voluntary couples counselling and testing is the most effective and cost-effective means for HIV prevention (Mlay, 2008). Previous studies examined outcomes associated with voluntary counselling and testing in antenatal care centres for PMTCT (Chomba et al., 2007, Iwanowski, 2003, Farquhar et al., 2001). Couples counselling and testing has many benefits that include an increase in condom use, adherence to infant feeding practices and the uptake of antiretroviral treatments by HIV infected women (Kalembo et al., 2012, Farquhar et al., 2004).

In this study, willingness to participate in voluntary HIV couples counselling and testing of HIV was explored. Results showed that respondents had positive attitudes towards HIV counselling and testing, although it was lower (37.8%) among males than females (55.9%). These findings are similar to studies conducted in the past on the acceptability of voluntary couples counselling and testing for HIV. For example, Allen *et al.*, (2007) conducted a community-based programme for the promotion of voluntary couples counselling and testing in Rwanda and Zambia by distributing invitations to couples in the two countries. Of the 9,900 invitations distributed, with fewer invitations sent in Rwanda than in Zambia (2,680 vs. 7,220), Rwanda had a higher

response rate than Zambia (26.9% vs. 9.6%) (Allen et al., 2007). Although there was a low uptake of couples counselling and testing in Zambia, results in this present study confirmed the results from Rwanda, which demonstrated the possibility of couples counselling and testing for HIV.

Findings of this study revealed positive attitudes towards male partner participation in antenatal care at the antenatal clinics. This was evident in men's willingness to take part in interventions such as HIV couple counselling and testing, condom use during pregnancy and breastfeeding among HIV infected couples, and supporting their spouses in adhering to treatment. It is essential to note that male partners' attitudes towards involvement in these aspects were influenced by a number of factors such as personal, societal as well as health facility practices. Based on the findings, male partners demonstrated a willingness to participate in antenatal care activities to include, where necessary, couples counselling, agreeing to consult with their partner and attending counselling sessions with their partner. These findings confirmed previous studies that highlighted a positive turnout of male partners at the antenatal clinics as a result of convenient health facility operating times and a male-friendly environment within the ANC centres (Kululanga et al., 2011, Ditekemana et al., 2012, Byamugisha et al., 2010, OPHID, 2015). For example, OPHID (2015) assessed men's satisfaction with service delivery at a health facility within the antenatal care setting. Half of the men (39%) who participated in the study were satisfied with the waiting period before consultation and 36 percent were satisfied with the overall time spent at the facility during the ANC visit (OPHID, 2015). In the same study, participation by male partners in ANC activities was high (72%), with some reporting having entered examination rooms with their partners and 96 percent reporting having felt comfortable during the examination (OPHID, 2015). Earlier studies also suggested that negative socio-cultural factors tended to discourage male partners' willingness to participate in ANC activities (Aluisio et al., 2011, Byamugisha et al., 2010). These results underscored the importance of creating positive social, cultural and health systems that promoted male partners' attendance and participation in ANC activities.

Provision of transport money for partners to get to the antenatal care centres was one of the highly reported forms of male partner involvement. This finding was not new at all but it confirmed what previous studies pointed out as the common form of male involvement in sexual

and reproductive health, as well as in maternal and child health (Nkuoh et al., 2010, Greene et al., 1995, Walston, 2005). In the context of PMTCT, provision of financial support in terms of money for transport, buying infant formulae and payment for antenatal costs was well-documented as a key practice in male partner involvement (Aarnio et al., 2009, Morfaw et al., 2013, Katz et al., 2009, Theuring et al., 2009). Theuring et al. (2009) assessed male attitudes towards male partners in ANC and PMTCT activities in the Mbeya district of Tanzania. Among the men interviewed, 97 percent believed that their role in PMTCT was to ensure that they provided food, security, and other material needs, while the women carried out household chores. This was consistent with the dominant notions of masculinity; of men being the providers for the family and the decision-makers within the households. These results could also be understood in the context of traditional gender roles where it is the man's duty to provide for the needs of family and the woman's to ensure that housework is conducted.

Emotional support was perceived as one of the ways in which a male partner could care for his partner during and after pregnancy. Previous studies found that social and emotional support had a positive influence on health behaviours, especially adherence to treatment, and an improvement in communication (Sullivan, 2006, Reblin and Uchino, 2008). Maman et al. (2011) described various ways in which male partners provided emotional support to their partners, such as being with them while they waited for HIV test results, staying with them after a positive HIV diagnosis, and in making infant feeding decisions. In a recent study, Kaye et al. (2014) investigated involvement in partners' healthcare during pregnancy and childbirth. Interviews were conducted with 16 men who came to the hospital to visit their spouses who had been admitted upon developing severe obstetric complications. The findings revealed that an emotional bond was considered as one of the ways in which a man showed that he loved his partner and was committed to the relationship during critical moments of her sickness (Kaye et al., 2014).

Condom use among those who are HIV infected is highly recommended during pregnancy and breast feeding. This is because there is a high chance of HIV transmission among sero-discordant couples during the postnatal period and pregnancy (Dunn et al., 1992). Studies found that HIV-1 incidences were high among women during pregnancy, as well as during the early postpartum period (Mugo et al., 2011, Mbizvo et al., 2001), hence, consistent condom use was deemed

important during these periods to prevent possible infections. Condom use among married couples or regular sexual partners, however, remained a practice that was not highly accepted, regardless of the HIV status of the partner (Mumtaz et al., 2005, Chimbiri, 2007). Results showed that respondents were not in complete support of condom use among couples that trusted each other, whether the partner was HIV positive or HIV negative. Attitudes towards condom use could be best explained in the context of marital status. Out of 336 respondents, 297 were married, nine divorced, 16 widowed, eight separated and six single. Non-acceptance, low use or inconsistent use of condoms in marriage or among regular sexual partners was not uncommon. Ngunjiri et al. (2012) examined barriers to consistent condom use among HIV positive sero-discordant couples who knew their HIV status and were informed about preventing HIV re-infection. They found that inconsistent condom use resulted from a male partner's reluctance to use condoms, a female partner's inability to negotiate sex safe, a desire for more children, as well as myths on HIV positive sero-discordance. In other studies, low acceptance of condoms in marriage was influenced by the association of condom use with promiscuity, thus, their use in marriage often led to conflict or divorce (Muhwava, 2004). Also, condoms were less likely to be utilised among couples that trusted each other and had been in long-term relationships (Mtenga et al., 2016). These findings thus confirmed the challenges associated with condom use among married couples or regular sexual partners for PTMTCT purposes.

The prevention of unwanted pregnancies among HIV positive women is one of the approaches to prevent mother-to-child transmission of HIV recommended by the World Health Organisation. However, among other methods of preventing unwanted pregnancies, termination of unintended pregnancy seems to be rife and is mostly practiced under unsafe conditions in countries with restricted abortion laws (Rasch and Lyaruu, 2005). The current study sought to examine the respondents' attitudes with regards to this practice, and findings in this study showed that regardless of the HIV status of the mother, abortion was not acceptable and was considered a crime unless it was recommended by medical practitioners. These results were consistent with a study by Johnson et al. (2002) who observed that Zimbabwe had very restricted abortion laws,

and if abortion was to be performed, the patient needed to meet certain requirements stipulated in the Termination of Pregnancy Act of 1977⁷.

In addition, women who intended to terminate pregnancy on the basis of their HIV positive status had difficult choices to make. Firstly, men yielded power over the women's intentions to terminate their pregnancies, as they were supposed to ask for permission from their male partners, and it was unlikely that they would be given this permission. Furthermore, if these women followed the legal route, the terminations had to be approved by legal and medical practitioners, and once again their partners, who may not have supported their intentions. The consequences of such restricted environments led women to terminate their pregnancies illegally, and without their male partners' consent. This was consistent with previous studies which found that women may not tell their partners about their intentions to abort (Moore et al., 2011). Woo et al. (2005) identified the fear of domestic violence and abuse as primary reasons for nondisclosure. In their study, Woo et al. (2005) identified a history of physical and/or emotional abuse as being significantly associated with the nondisclosure of intentions to abort. These results underscored the importance of dialogue among couples and health education regarding sexual and reproductive health decisions, especially in the context of HIV.

Social stigmatisation against male partners who engaged in PMTCT activities was identified as one of the factors that hindered male partner participation in ANC. Men who utilised PMTCT services were negatively labelled by the community. For example, it was believed that when a man was involved in such activities, supernatural powers were being used (most probably) by the female partner to control him, and society stigmatised him for his participation in the ANC activities. These results are consistent with previous research conducted to determine the barriers to male partner involvement in PMTCT (Kululanga et al., 2012b, Nkuoh et al., 2010, Ditekemana et al., 2012, Byamugisha et al., 2010). Aarnio et al. (2009) explored men's perceptions of husbands' involvement in pregnancy and voluntary counselling and testing in

⁷ “1) where the continuation of the pregnancy so endangers the life of the woman concerned or so constitutes a serious threat of permanent impairment of her physical health that the termination of the pregnancy is necessary to ensure her life or physical health, as the case may be; or 2) where there is a serious risk that the child to be born will suffer from a physical or mental defect of such a nature that he will permanently be seriously handicapped; or 3) where there is a reasonable possibility that the foetus is conceived as a result of unlawful intercourse” (JOHNSON, B. R., NDHLOVU, S., FARR, S. L. & CHIPATO, T. 2002. Reducing Unplanned Pregnancy and Abortion in Zimbabwe Through Postabortion Contraception. *Studies in Family Planning*, 33, 195-202.)

Malawi; their results demonstrated that it was shameful for men to attend ANC and such men were derided by their peers for being jealous. Such negative attitudes towards male partner participation in ANC can be linked to most African traditional cultural norms and practices that consider ANC and pregnancy as women's responsibilities (Aarnio et al., 2009, Ditekemana et al., 2012, Homsy et al., 2006, Msuya et al., 2008, Theuring et al., 2009).

On the contrary, this study's results also revealed that male partners who participated in ANC activities such as HIV counselling and testing, or accompanied their partner to ANC were commended by the community for such efforts. These men were seen as brave, committed, caring and role models in the community for supporting their children's health. It was discussed earlier that one of the reasons why some men did not want to test with their partners was due to their fear of a HIV positive test result. Thus the concept of bravery was associated with men who could handle the HIV test results. The terms used to describe the 'real' men were a portrayal of what was expected of male partners in the PMTCT programmes.

The study has also shown that male respondents had high positive scores as far as attitude towards male partner is concerned. Previous studies highlight that environment that promote male partner participation in maternal and child health as well as in HIV programmes facilitate communities to encourage and support male partner involvement (Kululanga et al., 2012a, Kululanga et al., 2012c). In the present study, some of the areas that had high percentages of male partner support were '*male partner can provide emotional support*' and '*male partner can give money to the female partner to go the clinic*'. Despite the occurrence of stigmatisation and labelling of male partners who take part in PMTCT interventions, these results show that there are high possibilities of changing negativity towards male partners in the community. The study underscores the importance of providing community education aimed at ridding stigma and labelling of male partners in PMTCT programmes. In addition, educating communities is expected to promote positive attitude of male partner participation in HIV prevention programmes in general.

The results of this study revealed that little attention was given to male partners as far as their health was concerned. Most of the meetings conducted in the communities focussed mainly on women, and the respondents stated that the health needs of men were thus not addressed

sufficiently. These results concurred with various previous studies (van den Berg et al., 2015, Mullick et al., 2005, Chandisarewa et al., 2007, Kalembo et al., 2012, Katz et al., 2009, Kululanga et al., 2012a, Msuya et al., 2008, Kaye et al., 2014) which argued that some of the reasons for low male partner involvement in PMTCT and other sexual and reproductive health matters were the traditional gender roles that treated women as the only means through which change could occur. As a result, policies for PMTCT purposes excluded men or couples to a large extent (Koo et al., 2013a, Ramirez-Ferrero and Lusti-Narasimhan, 2012, Koo et al., 2013b). While these results highlighted the need for health institutions to create a male-friendly environment in ANC settings, they also underscored a need for the formulation of policies that consider men or the male partners as the primary agents in HIV prevention programmes. It could be argued that the involvement of male partners should not only be aimed at increasing utilisation of PMTCT services by women, but also so that male partners are able to utilise the same services for their own benefit. The same approach could thus be applied to sexual and reproductive health to ensure male partner inclusion.

One of the interesting findings was the positive attitudes towards male partners' support of HIV infected partners and children. The involvement of male partners in the care and support of the HIV infected helped to reduce the burden that women faced in the household. Women usually cared for the sick in their families, hence the assistance offered by the male partner helped to reduce the work. Muriisa et al. (2016) state that men's involvement in HIV programmes is crucial because they control the financial, social, political and economic systems within which HIV treatment, care and prevention take place. They argue that when men take care of the sick, they come to know the challenges associated with care and support of the HIV infected (Muriisa et al., 2016).

CHAPTER SEVEN: DEVELOPING AN INDEX FOR MALE PARTNER INVOLVEMENT

It is difficult to measure male involvement in a way that captures both the practical assistance provided by men to women, and the many ways that men can challenge prevailing gender norms (Ampt et al., 2015:2).

7.1 Introduction

The study of male partner involvement in maternal and child health has increased over the past decades. In particular, various studies have documented the benefits associated with the involvement of male partners in the prevention of mother-to-child transmission of HIV (Farquhar et al., 2001, Aarnio et al., 2009, Byamugisha et al., 2011), although male partner involvement is low (Msuya et al., 2008, Katz et al., 2009). As mentioned previously, male partner involvement is a concept that has no standard definition (Montgomery et al., 2011a). The lack of a clear and standard definition of male involvement has a direct impact on the measurement of the concept, as there is no established or universal instrument for measuring male partner involvement in PMTCT (Byamugisha et al., 2010).

Ampt et al. (2015) made progressive efforts in analysing the different definitions and indicators that have been employed by scholars in an effort to define and measure male partner involvement in maternal and child care research. They categorise the literature on male partner involvement into two broad theoretical approaches: Firstly, male involvement as an emblem of gender equity in accordance with the social determinants of the health framework (Marmot et al., 2008). This approach towards male partner involvement entails shared responsibilities between parents in raising their children. Ampt et al. (2015) emphasise that,

Adopting more equitable gender roles such as joint decision-making within couples and shared control of household tasks or parenting is posited to lead to healthier behaviours and improved care-seeking (Ampt et al., 2015:2).

According to the 2008 Commission on the Social Determinants of Health, gender inequality impacts negatively on health in ways such as, giving men the ultimate power in household decision-making, male dominance in sexual and reproductive decisions, unequal distribution of work, as well as violence and abuse against women and children (Marmot et al., 2008).

The second is an instrumental approach that considers male involvement where men provide direct assistance to their partners, so as to improve the health of mothers and children (Ampt et al., 2015, Montgomery et al., 2011a). Some of the indicators under this approach include male partners' physical presence at the antenatal clinics, the provision of money for transport and accompanying their partners to the ANCs, among others. According to Ampt et al. (2015) these two approaches to male involvement cannot be used in isolation and it is not sufficient to consider one indicator as a complete measure of male partner involvement. Hence, a comprehensive measure that includes inter-spousal dialogue and the instrumental indicators is likely to incorporate a number of aspects necessary for the measurement of male partner involvement in PMTCT. Table 7.1 is a representation of indicators that different scholars have used to measure male partner involvement.

Table 7.1: Summary of indicators measuring male partner involvement

Author	Gender equity/inter-spousal communication	Instrument
Ampt et al. (2015)	Discussed pregnancy with health provider. Shared decision regarding healthcare. Shared decision regarding contraception.	Man accompanied partner to ANC. Man was present at the place of birth.
(Byamugisha et al., 2010)	The man discusses ANC interventions with female partner. The man has taken time to find out what happens in ANC. The man sought permission to use condoms during pregnancy.	Man attends ANC with partner. Man knows partner's ANC appointment. Man supports partner's ANC visit financially.
Mangeni et al. (2014)	Whether or not the man considered it important for his partner to be attended to by a skilled birth attendant. Whether or not the man considered child bearing as a woman's responsibility.	Man accompanied partner at least once to ANC during pregnancy.
Sahu et al. (2016)	Husband and female partner jointly make decisions on women's own healthcare, or health visits. Husband told by health provider or health worker about the signs of pregnancy complications (vaginal bleeding or convulsions or prolonged labour). Husband told by health provider or health worker about the importance of delivery in a health facility.	Man was present at the time of antenatal care (ANC).
Mullany et al. (2005)	Communication and negotiation within couples in decision making.	
Carter (2002a)		Man's attendance at prenatal care, delivery and postpartum well-baby care.
Aluisio et al. (2011)		Man's physical appearance at ANC with partner. HIV testing of male partner at ANC.
(Iliyasu et al., 2010)		Male partner's birth preparedness and complication readiness. Accompany female partner to antenatal care. Donating blood. Man's presence at delivery. Man providing money for transport and drugs. Accompanies female partner to routine postnatal care.

The blank spaces indicate that the specific form of male involvement was not captured in that study.

As shown in Table 7.1, different scholars use various indicators to measure male partner involvement. As shown in the table, Ampt et al. (2015), Mangeni et al. (2014) and Sahu et al. (2016) consider male partner involvement in terms of inter-spousal communication as well as instrumental support. Semmer et al. (2008) define instrumental support as providing help in a

tangible or physical way. This includes the provision of money, transport or any form of support for the material needs of his spouse and child. On the other hand, Aluisio et al. (2011), Carter (2002b) and (Iliyasu et al., 2010) use indicators that are more instrumental, whereas Mullany et al. (2005) consider joint-decision making among couples as an indicator in measuring male partner involvement. It is important to note that one indicator cannot be used independently to denote male partner involvement as there are some indirect contributions made by male partners that also lead to the support of their partner in PMTCT (Ampt et al., 2015). Hence, it is difficult to measure male partner involvement.

The indicators discussed above are important as they provide guidance on measuring male partner involvement in PMTCT. Nevertheless, the indicators are limited to only one or two aspects of PMTCT services. For example, most of the studies' indicators only apply to antenatal and intrapartum care. These indicators for measuring male partner involvement during perinatal were not necessarily associated with PMTCT of HIV but with general maternal and child care. Male partner involvement after the birth of the baby is vital as HIV transmission can also occur during breast feeding (Coutsoudis and Rollins, 2003, Coovadia et al., 2008). Hence, it is important that indicators to monitor male partner involvement during breastfeeding are included. The aim of this chapter is to create an index that can be used to measure male partner involvement in PMTCT using the data that was obtained from the Gokwe North District. Literature on the measurement of male partner involvement in PMTCT services in Zimbabwe is scarce yet there is an urgent need to increase their involvement. Without an existing scale that includes various aspects of male partner involvement in PMTCT, measuring the pattern and extent of male partner involvement is difficult. In this study, a total of 331 men and women who had had a child in the past 10 years at the time of data collection, were used as survey respondents. The reason for choosing this group is mainly because PMTCT programmes were initiated in Zimbabwe over a decade ago and thus it is assumed that they were most likely recipients of PMTCT intervention services.

7.2 Components of the male participation index

The proposed index is composed of indicators that previous studies have used to measure male partner involvement, mostly in ANC programmes and maternal healthcare. The difference between the proposed index and existing ones is that the proposed index is composite in nature as it is made up of indicators to measure male partner involvement in different PMTCT services. Previous indicators cover male partner involvement during pregnancy and at the birth with less attention on the perinatal period and breast feeding, where some of the HIV transmissions can occur. The different indicators used in this index and the rationale for including each indicator are provided below:

1. *Man discussed reproductive desire with his partner:* Couples who share their reproductive desires are more likely to be able to agree on the method of contraception that suits their choice, and are likely to seek help from health providers regarding methods of contraception than those who do not communicate. Also, a challenge associated with this indicator is that there is likely to be gender imbalances where one person dominates in the decision-making.
2. *Man discussed HIV testing with his partner:* Couple communication is key to HIV testing and is associated with an uptake of HIV prevention methods such as condom use. Although couple communication may not always automatically result in HIV testing, it facilitates partners to consider testing in the future. This indicator is however likely to be associated with the dominance of one partner over the other.
3. *Man tested for HIV during previous pregnancy:* This is one of the common indicators cited in the literature on measuring male partner involvement in ANC settings. The advantage of a male partner testing for HIV is that he will know his status and perhaps get counselling on the methods of HIV prevention during pregnancy.
4. *Man disclosed HIV status to his partner:* In literature, disclosure of HIV status by women is common though disclosure of an HIV-positive status usually brings conflict in relationships. However, disclosure of status by a male to his partner is rare yet important.
5. *Man counselled on preventing HIV during pregnancy:* An indicator showing that the male partner acquired some knowledge and is aware of HIV prevention methods that can

be used during pregnancy. Hence, his perception and behaviour towards PMTCT of HIV during pregnancy are likely to be informed by the advice received during counselling.

6. *Man accompanied his partner to ANC:* This indicator is commonly used in literature to define male partner involvement. However, the male partner may not necessarily join the female partner in the consultation but wait outside until she is done with the consultation. Sometimes accompanying also means that the male partner provides transport or escort to the ANC facility and then waits outside until the end of consultation. Hence, in a broad sense, accompanying his partner is not a specific measure (Ampt et al., 2015).
7. *Man present at the birth of the child:* This indicator has been used before to measure male partner involvement. The presence of the male partner at the birth of the child can be understood as a sign of giving emotional support and comfort to the partner. Ampt et al. (2015) assert that the weakness associated with this indicator is that the meaning of ‘presence’ is broad and is a non-specific measure.
8. *Man counselled on infant feeding:* This indicator shows that the male partner is informed of appropriate infant feeding practices. Male partner support in infant feeding leads to improvement in women’s uptake and adherence to infant feeding.
9. *Man counselled on HIV prevention following the child’s birth:* This indicator implies that the male partner continues to be involved in various ways in HIV prevention methods that are recommended that the couples should opt for when the child is born.
10. *Man accompanied partner for Polymerase Chain Reaction Test:* Although this indicator does not necessarily state what the male partner did during the process of testing, his presence for the child’s HIV diagnosis test is a sign of support and concern for the child.

Table 7.1 is a representation of the index showing the indicators of male partner involvement in PMTCT services. Binary responses were used in the ten indicators to show whether or not the respondent participated in any of the aspects of the index. Responses were given the same weight where ‘1= yes’ (participated) and ‘0 = no’ (did not participate). The table was adopted from Ampt et al. (2015) who constructed indicators of male involvement in maternal and new-born health in Myanmar.

Table 7.2: Representation of scores for the indicators

Indicator	Binary Variables
<i>Man discussed reproductive desire with his partner</i>	1= discussed reproductive desire with partner 0= did not discuss reproductive desire with partner
<i>Man discussed HIV testing with his partner</i>	1= discussed HIV testing with partner 0 = did not discuss HIV testing with partner
<i>Man tested for HIV during previous pregnancy</i>	1 = tested for HIV during previous pregnancy 0 = never tested for HIV during previous pregnancy
<i>Man disclosed HIV status to his partner</i>	1 = disclosed HIV status to partner 0= did not disclose HIV status to partner
<i>Man counselled on preventing HIV during pregnancy</i>	1 = counselled on preventing HIV during pregnancy 0 = was not counselled on preventing HIV during pregnancy
<i>Man accompanied his partner to ANC</i>	1 = accompanied partner 0 = never accompanied partner
<i>Man was present at the birth of the child</i>	1 = present 0 = not present
<i>Man counselled on infant feeding</i>	1 = counselled on infant feeding 0 = not counselled
<i>Man counselled on HIV prevention following the child's birth</i>	1 = counselled on HIV prevention after child's birth 0 = never counselled on HIV prevention after child's birth
<i>*Man Accompanied partner for Polymerase Chain Reaction Test</i>	1 = present for the test 0 = not present

** This indicator only applies to those respondents whose babies were exposed to HIV at the time of birth.*

7.3 Exploring the relationship between the variables for the composite scale

Factor analysis, also known as exploratory factor analysis (EFA), was used to validate the proposed index for measuring male partner involvement in PMTCT activities. Williams, Onsman and Brown describe factor analysis as, “... *an important tool that can be used in the development, refinement, and evaluation of tests, scales, and measures that can be used in*

education and clinical contexts by paramedics” (Williams et al., 2010). For the purpose of this study, factor analysis was used to create an index, and to assess the relationship between the variables that represent the latent variable ‘*male partner involvement*’.

7.3.1 Assessment of variables

Pallant (2010) outlines the three major steps involved in factor analysis that are the assessment of the suitability of data for factor analysis, factor extraction and factor rotation. Following this guide, an examination was done to assess whether or not the data was suitable for factor analysis. Results showed that the data consists of 331 cases which is sufficient for the analysis. Although scholars vary in terms of sample size and its relevance, the sample size for the study is above the 150 recommended by Pallant (2010) and the 300 by Tabachnick and Fidell (2007).

The strength of the relationship between variables was assessed. Tabachnick and Fidell (2007) cited in Pallant (2010) states that for a factor analysis to be appropriate, some of the variables should have a correlation matrix of evidence greater than 0.30. Bartlett’s test of sphericity was conducted and generated a significant output ($p = <0.001$). A result of 0.703 Kaiser-Meyer-Olkin (KMO) measure of adequacy was obtained, while a qualifying requirement was that the KMO measure should be from 0 to 1, with a minimum of 0.6 (Pallant, 2010; Tabachnick & Fidell, 2007).

7.3.2 Factor extraction

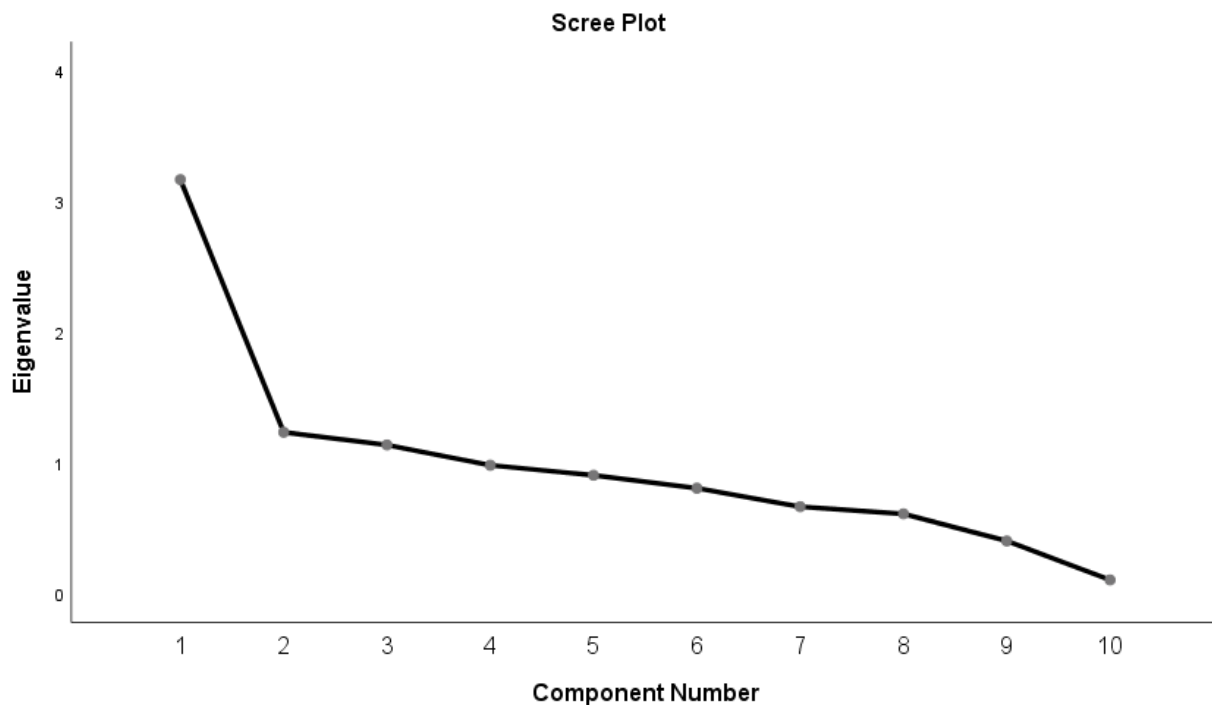
A combination of various factor extraction criteria were used to identify the number of factors that could be retained in the scale. The first method used is the Kaiser’s criterion, also known as the eigenvalue⁸ rule in which only factors that have an eigenvalue of 1.0 or more are retained for further analysis (Pallant, 2010). Table 8.5.1 (Appendix) is a representation of the results

⁸ The eigenvalues are mathematical attributes of a symmetric matrix (such as a correlation or covariance matrix) and in this context, represent the amount of variance explained by the factor. The sum of the eigenvalues is equal to the sum of the variances of the original variables. PASTA, D. J. & SUHR, D. Creating scales from questionnaires: PROC VARCLUS vs. factor analysis. Proceedings of the Twenty-Ninth Annual SAS Users Group International Conference (Paper 205-29), 2004.

generated from the analysis to determine how many factors to retain in the scale according to Kaiser's criterion. According to these results, components (variables/factors) one to three have eigenvalues ranging from 3.166 to 1.136. These components were retained for further investigation. However, components four to ten have eigenvalues ranging from 0.981 to 103. According to Kaiser's criterion these may not be considered for analysis. However, this criterion has been criticised for over extraction of components in some situations (Pallant, 2010), hence it is also used against other methods such as the Scree test for verification purposes.

Cattell (1966) Scree test was also used in the extraction of factors. As the name, 'Scree' suggests, it ideally refers to the debris that collects at the foot of a steep hill (Pasta and Suhr, 2004). The plot is an SPSS output generated during the principal component analysis (PCA) with values distributed on the plot and a line drawn to connect the values. Usually the plot has a physical resemblance to the slope of a hillside that has an elbow at the bottom. The values that appear beyond the elbow are considered as debris, hence, are not suitable for retention. Figure 7.1 is a representation of the results from the Scree Plot test.

Figure 7.1: Scree Plot (SPSS Output)



According to the results in Figure 7.1, only two components above the break can be retained for further analysis. However, this test is criticised for at least two reasons. The problem associated with relying on the Scree Plot alone is that there can be multiple breaks on the line and this leaves a question of whether or not to include the succeeding breaks. Other techniques such as the parallel analysis are thus also recommended.

An additional analysis used was the Horn (1965) parallel analysis. Parallel analysis compares the size of the eigenvalues obtained in the principal component analysis with those obtained from a randomly generated data set (Pallant, 2010). In this method, the eigenvalues that exceed those obtained from random generated data set were retained for further analysis. The Monte-Carlo PCA programme for parallel analysis was used to generate the eigenvalues. Appendix A (Table 8.5.2) shows the results of the Monte-Carlo parallel analysis. Results of the comparison of eigenvalues principal component analysis and parallel analysis are shown in Table 7.3.

Table 7.3: Comparison of eigenvalues from PCA and criterion values from parallel analysis

Component number	Actual Eigenvalue from PCA	Criterion value from parallel analysis	Decision
1	3.166	1.2800	Accept
2	1.233	1.1899	Accept
3	1.136	1.1288	Accept
4	0.981	1.0697	Reject
5	0.904	1.0178	Reject
6	0.805	0.9676	Reject

Table 7.3 shows that the eigenvalues of components one to three are the only ones greater than one when compared with the criterion value from the parallel analysis. Based on this analysis, we retain these factors and reject components four to ten. These results support Kaiser's criterion shown in the Scree Plot in Figure 7.1 that retains only three components. According to these two methods, one can confirm that the first three components qualify to form part of the scale.

However, there are other methods that are also recommended to be useful in factor retention as explained below.

The Commonalities in Appendix A (Table 8.5.8) show the variance explained in each item. Values that are less than 0.3 may indicate that the item does not fit perfectly with other items found in its components (Pallant, 2010) and a decision can be made to remove it from the list. Removal of items with low communalities can consecutively increase the loadings on the total variance explained (Pallant, 2010). In Appendix A (Table 8.5.8), the items '*Man discussed reproductive desire with his partner*', '*Man present at the birth*' and '*Man received counselling after the birth of the child*' have low communality values of 0.130, 0.061 and 0.159 respectively. Accordingly, these items can be removed, thus retaining seven components with coefficients greater than 0.3.

Pallant (2010) argues that before making a final decision on the factors to be retained, an examination of the unrotated loadings of the component matrix is essential. In this case, only three components were loaded in the component matrix. This is because by default, SPSS will only load components whose eigenvalues are greater than one (Pallant, 2010). The Component Matrix had most of its components loading well above 0.5 and only two variables have no items above 0.5 loaded on them. At least two components have only one item loaded. Thus, a two-factor rotation was opted for. However, an examination of the SPSS output of the Pattern Matrix in Appendix A (Table 8.5.3) also shows that very few items were loaded on components two and three, with only four items loaded on component one. This led to a decision to force a two-factor solution so as to increase the number of items on the Components and Pattern Matrix.

After running the two-factor solution, there was an increase in the number of items loaded on component two in the components matrix and the pattern matrix, however, there was an increase in the weight on a few loadings in the two factor component matrix (Appendix A, Table 8.5.4) and as well as in the two factor pattern matrix (Appendix A, Table 8.5.5). The total variance explained for the two-factor was only 44 percent (Appendix A, Table 8.5.6) compared to over 55.3 percent total variance explained by the four-factor solution (Appendix A, Table 8.5.1). Additionally, results from the component correlation matrix suggest that the strength of the

relationship in the two-factor was low (-0.0106). Table 7.4 is a combination of Communalities, Pattern and Structure Matrix tables which result from Oblimin rotation.

Table 7.4: Representation of pattern and structure of the PCA for the items on male partner involvement index

Item	Pattern coefficients		Structure Coefficients		Communalities
	Component 1	Component 2	Component 1	Component 2	
1. Man tested for HIV on previous pregnancy	0.840	0.171	0.821	0.082	0.703
2. Man disclosed status to his partner	0.739	0.156	0.722	0.077	0.546
3. Man discussed HIV testing with his partner	0.703	0.171	0.684	0.096	0.497
4. Man accompanied his partner for PRC	0.508	-0.217	0.531	-0.271	0.329
5. Man counselled on infant feeding	0.489	-0.737	0.567	-0.789	.0858
6. Man accompanied his partner to ANC	0.458	-0.741	0.537	-0.790	.0831

7. Man counselled on HIV after the child's birth	0.390	-0.054	0.407	-0.385	0.159
8. Man counselled HIV during pregnancy	0.371	-0.345	0.395	-0.096	0.301
9. Man discussed reproductive desire with his partner	0.113	0.355	0.075	0.343	0.130
10. Man present at the birth	0.091	0.240	0.065	0.231	0.061

In Table 7.4, the Pattern Matrix shows the factor loadings for each of the variables. The highest factor loadings on component one are on items 1, 2 and 3. These items deal with HIV testing and disclosure; '*man tested for HIV during previous pregnancy*', '*man disclosed HIV status to his partner*' and '*man discussed HIV testing with his partner*'. Loadings on component two are much lower than those in component one. However, the main item on component two is item nine, '*man discussed reproductive desire with his partner*'. The Structure Matrix shows the correlation of each item with each component. Results in the Structure Matrix are similar to the Pattern Matrix; hence they yield similar conclusions.

In the Commonalities table, the variance of each item is explained. As shown in Table 7.4, there are only three items (7, 9 and 10) with values lower than 0.3. In terms of scale refinement, Pallant (2010) suggests that items with low communality values and Pattern Matrix values could be eliminated and this in turn tends to increase the total variance explained. Following Pallant's idea, only seven items can be retained for the scale. Accordingly, only seven items were retained.

Another method used to extract variables is the criterion of substantive importance in which minimum proportions of total variance are explained as the basis of factor retention. In terms of this criterion, Pasta and Suhr (2004) state that factors can be retained if "*Minimum proportion of variance explained for each factor keeps a factor if it accounts for a predetermined amount of the 10 percent variance*" (Pasta and Suhr, 2004:4). The first three components have a minimum of 10 percent variance (Appendix A, Table 8.5.1), hence according to this criterion, components one, two and three can be considered for further analysis. The second criterion is that factors can be retained if "*Minimum proportion of variance explained overall keeps factors until the total variance explained reaches a threshold of at least 80 percent*" (Pasta and Suhr, 2004:4).

Similarly, Rietveld and Van Hout (1993) and (Field, 2000) suggest that factors which in total have 70-80 percent variance can be retained. Results (Appendix A, Table 8.5.1) reveal that the first six components can be retained for analysis since their eigenvalues have a total cumulative percentage of more than 80 percent.

7.4 Provisional male partner involvement index

Various methods were used to extract the variables for scale development. Some of the methods overlap. The following table presents the male involvement index developed from the list of variables that were retained for the male partner involvement index. All the indicators carry the same weight. If the respondent participated in any of the items, they are marked with either a Yes / 1 and or a No / 0. A 'Yes' denotes participated while a 'No' denotes did not participate.

Table 7.5 Male involvement index

	Indicator	Value
1	Man disclosed HIV status to his partner	Yes = 1 No = 0
2	Man tested for HIV during previous pregnancy	Yes = 1 No = 0
3	Man discussed HIV testing with his partner	Yes = 1 No = 0
4	Man accompanied his partner for polymerase chain reaction	Yes = 1 No = 0
5	Man accompanied his partner to ANC	Yes = 1 No = 0
6	Man counselled on infant feeding	Yes = 1 No = 0
7	Man counselled on HIV prevention during pregnancy	Yes = 1 No = 0

A combination of the following criteria was used to retain the variables that will be used to measure male partner involvement in PMTCT.

1. The first two variables: components were above the elbow on the screen plot (Cattell, 1966, Kim and Mueller, 1978, Pallant, 2010, Pasta and Suhr, 2004).
2. The first three variables: eigenvalues from the original Principal Component Analysis were larger than values from the Parallel Analysis (Horn, 1965)
3. The first three variables: eigenvalues were greater than one (Pallant, 2010, Pasta and Suhr, 2004) and the criterion of substantive importance where the minimum proportion of variance explained for each factor explains a factor 10 percent of the variance (Kim and Mueller, 1978, Pasta and Suhr, 2004).
4. The first six variables: the cumulative percentage of total variance explained reaches the threshold of at least 80 percent (Pasta and Suhr, 2004, Field, 2000, Rietveld and Van Hout, 1993).
5. The first seven variables: following the communalities rule, all the items whose eigenvalues are greater than 0.3 can be retained in the scale (Pallant, 2010).

A reliability test was conducted using Cronbach's Alpha to assess internal consistency of the scale. According to the researcher's knowledge, little is known about literature in which reliability tests were used to measure male partner involvement in PMTCT. A scale developed on male involvement in family planning and reproductive health had a cronbach alpha coefficient of 0.73 (Kamal et al., 2013). Since there was no existing study that utilises reliability tests in measuring male partner involvement in PMTCT, the study by Kamal et al. (2013) was the most relevant. The cronbach alpha coefficient of this study was 0.74, which is above the 0.73 value proposed by Kamal *et al.* (2013). Table 7.5 illustrates the reliability statistics of the seven items.

The cronbach's alpha of 0.74 was the most appropriate because it utilised the covariances among the seven items while the cronbach's alpha based on standardised items used correlations among items. The standardised alpha assumes that all seven items have equivalent variances, which may not be the same in practice. Also, an inter-item correlation was sought so as to assess the value of alpha if outstanding items were deleted. Table 7.6 illustrates the SPSS output for this assessment.

Table 7.6: Representation of item-total statistics (SPSS Output)

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Discussed about HIV testing with partner	7.34	1.533	0.357	0.228	0.578
Disclosed status to partner	7.36	1.533	0.436	0.315	0.564
Counselled on infant feeding	7.36	1.479	0.551	0.810	0.539
Counselled on preventing baby from HIV	7.28	1.457	0.334	0.180	0.581
Went to ANC with partner	7.37	1.524	0.502	0.795	0.554
Went for polymerase chain reaction with partner	6.51	1.232	0.154	0.030	0.747
Tested for HIV during previous pregnancy	7.31	1.396	0.484	0.394	0.536

Table 7.6 shows that the item '*Went for polymerase chain reaction with partner*' was the only item whose cronbach alpha value was greater than the alpha of all items with a value of 0.743. This means that if this item was to be deleted, the cronbach alpha for all items would go up to 0.743, which was not very different from the original value, which was 0.74. Nonetheless, the alpha was good enough for reliability purposes and there was thus no need to delete any of the items in order to increase the value of alpha. Levels of male partner involvement were measured using the scale according to different categories such as gender, occupation and age groups.

7.6 Measuring male partner involvement

Frequencies were generated in order to assess the levels of male partner participation in the various PMTCT initiatives among respondents in the survey. Table 7.7 illustrates the numbers and percentages of respondents in each of the items in the scale. As shown in Table 7.7, the level of male partner involvement in the various activities was generally high. Approximately 94.6 percent of the respondents indicated that the male partners accompanied their partners to ANC. About 94 percent indicated that the male partners were counselled on infant feeding and 88.8 percent stated that men were tested for HIV during the previous pregnancy.

Table 7.7: Levels of male partner involvement

Item	N (%)
Man discussed HIV testing with his partner	
Yes	303 (91.5)
No	28 (8.5)
N	331 (100)
Man disclosed status to his partner	
Yes	310 (93.7)
No	21 (6.3)
N	331 (100)
Man counselled on infant feeding	
Yes	311 (94.0)
No	20 (6.0)
N	331 (100)
Man counselled on HIV prevention during pregnancy	
Yes	285 (86.1)
No	46 (13.9)
N	331 (100)
Man accompanied his partner to ANC	
Yes	313 (94.6)
No	18 (5.4)
N	331 (100)
Man accompanied his partner for polymerase chain reaction test	
Yes	270 (81.5)
No	61 (18.5)
N	331 (100)
Man tested for HIV during previous pregnancy	
Yes	294 (88.8)

No	37 (11.2)
N	331 (100)

However, fewer men (81.5%) accompanied their partner for polymerase chain reaction test. Approximately 94 percent of all respondents indicated that the male partner was counselled on infant feeding and about 86.1 percent of all respondents reported that male partners were counselled on how to protect the baby from HIV during pregnancy.

Male partner involvement in PMTCT was also analysed according to occupation. Table 7.8 illustrates the level of involvement of the respondents by occupation using the categories employed, unemployed and farmer. In the study setting, the farmers do not define themselves as employed. At the same time, they would not define themselves as completely unemployed since they had a source of income while looking for a job. Due to this complexity, it was important to use this category as an independent variable. It is also important to note that the nature of farming is on a small scale and is purely subsistence yet the majority rely on it. Table 7.8 is an illustration of levels of male partner involvement according to occupation.

Table 7.8 Male involvement and occupation

Item	Employed N (%)	Unemployed N (%)	Farmer N (%)	Total N (%)
Man discussed HIV testing with his partner				
Yes	65 (86.7)	66 (94.3)	172 (92.5)	303 (91.5)
No	10 (13.3)	4 (5.7)	14 (7.5)	28 (8.5)
N	75 (100)	70 (100)	186 (100)	331 (100)
Man disclosed HIV status to his partner **				
Yes	63 (84.0)	69 (98.6)	178 (95.7)	310 (93.7)
No	12 (16.0)	1 (1.4)	8 (4.3)	21 (6.3)
N	75 (100)	70 (100)	186 (100)	331 (100)
Man counselled on infant feeding				
Yes	67 (89.3)	67 (95.7)	177 (95.2)	311 (94.0)
No	8 (10.7)	3 (4.3)	9 (4.8)	20 (6.0)
N	75 (100)	70 (100)	186 (100)	331 (100)
Man counselled on HIV prevention during pregnancy				
Yes	62 (82.7)	61 (87.1)	162 (87.1)	285 (86.1)
No	13 (17.3)	9 (12.9)	24 (12.9)	46 (13.9)
N	75 (100)	70 (100)	186 (100)	331 (100)
Man accompanied his partner to ANC				
Yes	68 (90.7)	67 (95.7)	178 (95.7)	313 (94.6)

No	7 (9.3)	3 (4.3)	8 (4.3)	18 (5.4)
N	75 (100)	70 (100)	186 (100)	331 (100)
Man accompanied partner for PCR **				
Yes	66 (88.0)	50 (71.4)	169 (90.8)	285 (86.1)
No	9 (12.0)	20 (28.6)	17 (9.1)	46 (13.9)
N	75 (100)	70 (100)	186 (100)	331 (100)
Man tested for HIV during previous pregnancy **				
Yes	55 (73.3)	64 (91.4)	175 (94.1)	294 (88.8)
No	20 (26.7)	6 (8.6)	11 (5.9)	37 (11.2)
N	75 (100)	70 (100)	186 (100)	331 (100)

*statistically significant at <0.05

**statistically significant at <0.01

A total of three items showed that there was an association between occupation and the level of male involvement in PMTCT initiatives. Results showed that testing for HIV during the previous pregnancy was associated with the nature of their occupation ($\chi^2 = 23.792$, $p < 0.001$). Under this item, about 94.1 percent of farmers tested for HIV during the previous pregnancy. Nearly 91.4 percent of the unemployed and 73.3 percent of the employed also tested for HIV during their partners' previous pregnancies. There was also evidence of an association between disclosure of HIV status to partner and occupation ($\chi^2 = 15.922$, $p < 0.001$). Farmers tended to report significantly higher levels of male partner involvement than those who were employed and not employed. There was, however, no evidence of an association found between occupation and three of the distinct items namely; male partner going to ANC ($\chi^2 = 11.29$, $p = 0.801$), male partner counselled on preventing baby from contracting HIV ($\chi^2 = 0.957$, $p = 0.620$) and male partner being counselled on infant feeding ($\chi^2 = 3.680$, $p = 0.159$).

Male partner involvement was also assessed against marital status. Table 7.9 illustrates the results.

Table 7.9 Male partner involvement according to marital status

Item	Married N (%)	Other N (%)	Total N (%)
Man discussed HIV testing with his partner *			
Yes	270 (92.8)	33 (82.5)	303 (91.5)
No	21 (7.2)	7 (17.5)	28 (8.5)
N	291 (100)	40 (100)	331 (100)
Man disclosed HIV status to his partner			
Yes	271 (93.1)	39 (97.5)	310 (93.7)
No	20 (6.9)	1 (2.5)	21 (6.3)
N	291 (100)	40 (100)	331 (100)

Man counselled on infant feeding			
Yes	272 (93.5)	39 (97.5)	311 (94.0)
No	19 (6.5)	1 (2.5)	20 (6.0)
N	291 (100)	40 (100)	331 (100)
Man counselled on HIV prevention during pregnancy			
Yes	253 (86.9)	32 (80.0)	285 (86.1)
No	38 (13.1)	8 (20.0)	46 (13.9)
N	291 (100)	40 (100)	331 (100)
Man accompanied his partner to ANC			
Yes	274 (94.2)	39 (97.5)	313 (94.6)
No	17 (5.8)	1 (2.5)	18 (5.4)
N	291 (100)	40 (100)	331 (100)
Man accompanied his partner for polymerase chain reaction test			
Yes	270 (92.8)	35 (87.5)	305 (92.2)
No	21 (7.2)	5 (12.5)	26 (7.8)
N	291 (100)	40 (100)	331 (100)
Man tested for HIV during previous pregnancy			
Yes	259 (89.0)	35 (87.5)	294 (88.8)
No	32 (11.0)	5 (12.5)	37 (11.2)
N	291 (100)	40 (100)	331 (100)

**statistically significant at <0.05*

Results show that overall, 91.5% of respondents reported that the male partner had discussed their HIV status with their female partners. About 92.8 percent of those who were married indicated that the male partners discussed HIV testing with their partner. Results from the chi-square tests showed that there was an association between marital status and male partners discussing HIV testing with their partners ($\chi^2 = 4.802$, $p = 0.028$). Hence, marital status was an important factor in influencing discussion on HIV testing. Married men tended to discuss HIV testing with their partners more than the divorced, single or separated men.

Disclosure of HIV status to partner was reported to be highest among the married (93.1%). A chi-square test was conducted to assess the association between marital status and disclosure of HIV status to partner. However, marital status was not associated with male partners' disclosure of their HIV status ($\chi^2 = 1.132$, $p = 0.287$). Similar findings were obtained for men who were counselled on infant feedings. Chi-square test results were also not statistically significant ($\chi^2 = 1.006$, $p = 0.316$).

Table 7.10 Male involvement and level of education

Item	High school N (%)	Secondary School N (%)	Primary School N (%)	None N (%)	Total N (%)
Man discussed HIV testing with his partner					
Yes	29 (93.5)	173 (90.6)	83 (92.2)	18 (94.7)	303 (91.5)
No	2 (6.5)	18 (9.4)	7 (7.8)	1 (5.3)	28 (8.5)
N	31 (100)	191 (100)	90 (100)	19 (100)	331 (100)
Man disclosed HIV status to his partner					
Yes	29 (93.5)	176 (92.1)	87 (96.7)	18 (94.7)	310 (93.7)
No	2 (6.5)	15 (7.9)	3 (3.3)	1 (5.3)	21 (6.3)
N	31 (100)	191 (100)	90 (100)	19 (100)	331 (100)
Man counselled on infant feeding					
Yes	30 (96.8)	176 (92.1)	87 (96.7)	18 (94.7)	311 (94.0)
No	1 (3.2)	15 (7.9)	3 (3.3)	1 (5.3)	20 (6.0)
N	31 (100)	191 (100)	90 (100)	19 (100)	331 (100)
Man counselled on HIV prevention during pregnancy					
Yes	27 (87.1)	161 (84.3)	82 (91.1)	15 (78.9)	285 (86.1)
No	4 (12.9)	30 (15.7)	8 (8.9)	4 (21.1)	46 (13.9)
N	31 (100)	191 (100)	90 (100)	19 (100)	331 (100)
Man accompanied his partner to ANC					
Yes	30 (96.8)	177 (92.7)	88 (97.8)	18 (94.7)	313 (94.6)
No	1 (3.2)	14 (7.3)	2 (2.2)	1 (5.3)	18 (5.4)
N	31 (100)	191 (100)	90 (100)	19 (100)	331 (100)
Man accompanied his partner for polymerase chain reaction testing					
Yes	29 (93.5)	169 (88.5)	81 (90.0)	17 (89.5)	298 (90.0)
No	2 (6.5)	22 (11.5)	9 (10.0)	2 (10.5)	33 (10.0)
N	31 (100)	191 (100)	90 (100)	19 (100)	331 (100)
Man tested for HIV during previous pregnancy					
Yes	24 (77.4)	168 (88.0)	85 (94.4)	17 (89.5)	294 (88.8)
No	7 (22.6)	23 (12.0)	5 (5.6)	2 (10.5)	37 (11.2)
N	31 (100)	191 (100)	90 (100)	19 (100)	331 (100)

Table 7.10 illustrates levels of male partner involvement according to respondents' level of education. Results showed that 90.6 percent of those who had secondary school, 94.7 percent of those who had no formal education and about 93.5 percent of those who had high school education reported that the male partner discussed HIV with his female partner. Chi-square tests were conducted to assess the relationship between male partner discussing about HIV testing and level of education. Results were not statistically significant and showed that there was no association between level of education and discussing HIV testing ($\chi^2 = 3.429$ $p = 0.634$).

Overall, disclosure of HIV status by male partners was high (93.7%). About 96.7 percent of those who had completed secondary education and 93.5 percent of those who had high school education reported that the male partner had disclosed HIV status to the female partner. Of those who had no formal education, 94.7 percent indicated that the male partner had disclosed his HIV status to his female partner.

Results showed that about 94.7 percent of those who had no formal education and 96.8 percent of those who had high school were counselled on infant feeding. Overall, it was clear that the majority of respondents reported that the male partners had received counselling on infant feeding (94%). However, from the chi-square tests conducted, results were not statistically significant, showing no evidence of association between the level of education and accessing counselling on infant feeding ($\chi^2 = 2.720$ $p = 0.437$).

Nearly 87.1 percent of those with high school education, 78.9 percent of those with no education and 84.3 percent of those with secondary education reported that the male partner was counselled on how to prevent HIV transmission to the baby. About 91.1 percent of those with primary education indicated that the male partner was counselled on how to prevent HIV transmission to the baby. Chi-square tests were conducted to assess if being counselled on HIV prevention during pregnancy was associated with level of education, and the results from the tests were not statistically significant ($\chi^2 = 3.248$ $p = 0.355$). Hence, level of education was not an important factor in influencing on male partners' access to counselling on HIV prevention during pregnancy.

About 92.7 percent of those who had attained a secondary education, 96.8 percent of those who had a high school education and 97.8 percent of those who had a primary education reported that the male partners had accompanied their partners to ANC. Chi-square test results also showed no statistical significance between the level of education and accompanying a partner to ANC ($\chi^2 = 3.435$ $p = 0.329$).

Similar results were obtained for male partners who had accompanied partners for polymerase chain reaction tests. Generally, the levels of male partner involvement were high (90%) for the

male partner accompanying his female partner for the polymerase chain reaction test. For example, 90 percent of those with primary education and 93.5 percent of those with high school education reported that the male partner accompanied his partner for the polymerase chain reaction test. Chi-square tests were conducted to determine whether there was an association between each of the variables and level of education. No evidence of association was found between accompanying partners for polymerase chain reaction tests ($\chi^2 = 3.042, p = 0.385$). This implied that other factors might have influenced male partners to take part in this PMTCT activity.

Male partner involvement was also measured according to age. Respondents were grouped into five categories that are; 25 years and below, 26-35, 36-45, 46-55 and 56 and above. Table 7.11 provides an illustration of respondents from these age groups with regards to how the male partner participated in different items of the scale.

Table 7.11 Male involvement and age

Item	25 and below	26-35 N (%)	36-45 N (%)	46-55 N (%)	56 and above	Total N (%)
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	N (%)				N (%)	
Man discussed HIV testing with his partner**						
Yes	39 (95.1)	101 (92.7)	111 (91.7)	40 (83.3)	12 (100)	303 (91.5)
No	2 (4.9)	8 (7.3)	10 (8.3)	8 (16.7)	0 (0.0)	28 (8.5)
N	41 (100)	109 (100)	121 (100)	48 (100)	12 (100)	331 (100)
Man disclosed HIV status to his partner**						
Yes	39 (95.1)	104 (95.4)	114 (94.2)	41 (85.4)	12 (100)	310 (93.7)
No	2 (4.9)	5 (4.6)	7 (5.8)	7 (14.6)	0 (0.0)	21 (6.3)
N	41 (100)	109 (100)	121 (100)	48 (100)	12 (100)	331 (100)
Man counselled on infant feeding						
Yes	39 (95.1)	103 (94.5)	112 (92.6)	45 (93.8)	12 (100)	311 (94.0)
No	2 (4.9)	6 (5.5)	9 (7.4)	3 (6.3)	0 (0.0)	20 (6.0)
N	41 (100)	109 (100)	121 (100)	48 (100)	12 (100)	331 (100)
Man counselled on HIV prevention during pregnancy*						
Yes	35 (85.4)	93 (85.3)	106 (87.6)	39 (81.3)	12 (100)	285 (86.1)
No	6 (14.6)	16 (14.7)	15 (12.4)	9 (18.8)	0 (0.0)	46 (13.9)
N	41 (100)	109 (100)	121 (100)	48 (100)	12 (100)	331 (100)
Man accompanied his partner to ANC						
Yes	40 (97.6)	104 (95.4)	112 (92.6)	45 (93.8)	12 (100)	313 (94.6)
No	1 (2.4)	5 (4.6)	9 (7.4)	3 (6.3)	0 (0.0)	18 (5.4)
N	41 (100)	109 (100)	121 (100)	48 (100)	12 (100)	331 (100)
Man accompanied his partner for polymerase chain reaction testing*						
Yes	35 (85.4)	101 (92.6)	111 (91.7)	41 (85.4)	10 (83.3)	298 (90.0)
No	6 (14.6)	8 (7.3)	10 (8.3)	7 (14.6)	2 (16.7)	33 (10.0)
N	41 (100)	109 (100)	121 (100)	48 (100)	12 (100)	331 (100)
Man tested for HIV during previous pregnancy**						
Yes	38 (92.7)	93 (85.3)	112 (92.6)	39 (81.3)	12 (100)	294 (88.8)
No	3 (7.3)	16 (14.7)	9 (7.4)	9 (18.8)	0 (0.0)	37 (11.2)
N	41 (100)	109 (100)	121 (100)	48 (100)	12 (100)	331 (100)

*Statistically significant at <0.05

**Statistically significant at <0.001

Table 7.11 shows that older respondents (56 years and older) indicated that the male partners were more likely to discuss HIV testing with his female partner. All the respondents (100%) who were 56 years and above reported that the male partners discussed HIV testing with their females partners. About 91.7 percent of those who were 36-45 years old and 95.1 percent of those who were 25 years and younger reported that their male partners had discussed HIV testing with female partners. A chi-square test was conducted to determine if there is an association between

age and male partner discussing HIV with his partner. The results show a strong association between age and male partner discussing HIV testing with his partner ($\chi^2 = 21.188$, $p < 0.001$).

Also, respondents were asked to report if their male partners were tested for HIV during their female partners' pregnancy among the different age groups. In total, the rate of HIV testing was relatively high (88.8%). Almost 92.7 percent of those of those who were 25 years and younger, 85.3 percent of those who were 26-35 years and about 92.6 percent of those who were 36-45 years old reported that their male partners tested for HIV during their partners' previous pregnancy. Chi-square tests were conducted to determine whether there was an association between age and testing for HIV during previous pregnancy. Results showed evidence of an association between age and testing for HIV during pregnancy ($\chi^2 = 30.918$, $p < 0.001$).

Respondents were asked if the male partners were counselled. The two forms of counselling were infant feeding counselling as well as how to prevent HIV during pregnancy. About 94.5 percent of those who were 26-35 years old and 93.8 percent of those who were 46 to 55 years old indicated that the male partners were counselled on infant feeding. Chi-square tests conducted to determine the association between age and getting counselling on infant feeding did not show any evidence of an association ($\chi^2 = 5.309$, $p = 0.257$). Regarding counselling on how to prevent HIV transmission to the baby during and after pregnancy, generally most respondents (86.1%) reported that the male partners were counselled. All the respondents (100%) who were 56 years and older indicated that the male partners were counselled on how to prevent HIV transmission. Other age groups had similar rates. For example, 85.4 percent of those aged 25 years and below, 85.3 percent of those who were 26-35 years as well as 81.3 percent of those who were 46-55 years indicated that their male partners were counselled on how to prevent the baby from HIV infection. Chi-square tests were done to assess the relationship between age and counselling on HIV prevention. Results showed that there was evidence of an association between age and counselling on HIV prevention during pregnancy ($\chi^2 = 14.465$, $p = 0.006$).

Respondents were asked to report on male partner support in terms of accompanying the female partner to ANC. Almost 97.6 percent of those who were 25 years old and younger, 95.4 percent of those who were 26-35 and about 93.8 percent of those who were 46-55 years old reported that the male partner had accompanied their female partner for ANC. After conducting chi-square tests, there was no evidence of an association between age and accompanying female partner to the antenatal care center ($\chi^2 = 7.063$, $p = 0.133$).

Similarly, results show that the majority of respondents (90%) reported that the male partners accompanied their partners for the polymerase chain reaction test. About 92.6 percent of those who were 26-35 years and 91.7 percent of those who were 36-45 years indicated that the male partners had accompanied the partner for the polymerase chain reaction test. There was however an association between age and male partner accompanying their female partner for the polymerase chain reaction test ($\chi^2 = 10.977$, $p = 0.027$).

7.7 Discussion

The aim of the chapter was to develop an index that can be used for measuring male partner involvement in PMTCT. It was highlighted that there is no clear definition of male partner involvement (Montgomery et al., 2011a) as well as no clear measurements of this construct (Byamugisha et al., 2010). Hence, in this chapter, an index was developed that can be used to measure male partner involvement in the Gokwe North district and similar settings. It is also important to mention that the index has some of the strengths and weaknesses that are highlighted in this section.

One of the strengths of the index is that it captures some of the aspects of HIV testing by male partners which are considered as crucial in terms of their involvement in the prevention of mother-to-child transmission of HIV. For example, the indicator linked to this argument is; '*Man tested for HIV during previous pregnancy*'. Benefits associated with these measures are well-documented (Bwambale et al., 2008, Ditekemana et al., 2012, Ekanem and Gbadegesin, 2004). The decision to include HIV testing at ANC by male partners as one of the indicators is also

supported in previous studies (Aluisio et al., 2011) that consider it as one of the indicators in measuring male partner involvement in ANC.

Couple communication is an important aspect of male partner involvement and it also forms part of indices that have been developed in the past. Indicators used to represent couple communication include; shared decision-making on contraception (Ampt et al., 2015), couples' discussion on ANC interventions (Byamugisha et al., 2010), joint decision-making on women's healthcare (Sahu et al., 2016) as well as negotiation between couples in decision-making (Mullany et al., 2005). Results in this study also emphasise the aspect of couples' communication in the prevention of mother-to-child transmission of HIV. Two indicators from the index developed in this study that refer to couples communication are; '*Man discussed HIV testing with his partner*' and '*Man disclosed HIV status to his partner*'. It is assumed that the two indicators can be a proxy of inter-spousal communication which is expected to facilitate positive male partner involvement in PMTCT programmes. The findings of this study revealed that there is a strong association between disclosure of HIV status and gender, the same applies to disclosure of HIV status and occupation. These results underscore the importance of strengthening services that are designed for couples such as HIV couple counselling and testing, as it is most likely to be one an opportunity which healthcare workers can utilise to facilitate access and utilisation of PMTCT services by couples.

The index developed in this study acknowledges the importance of measuring male partner support both during antenatal care as well as the postnatal care period. The two indicators used to refer to this idea are; '*Man accompanied his partner to ANC*' as well as '*Man accompanied his partner for Polymerase Chain Reaction*'. These indicators partially represent the instrumental form of male involvement where male partners offer assistance in the form of money or accompanying their partner to receive antenatal and postnatal services. It also represents male partners as clients and recipients of PMTCT interventions. Most of the scales used previously on male involvement assess male partners' company during the antenatal care visits (Aluisio et al., 2011, Ampt et al., 2015, Mangeni et al., 2014, Sahu et al., 2016, Byamugisha et al., 2010) with the exception of a few studies (Carter, 2002a, Iliyasu et al., 2010) whose indices include male partners' presence during ANC, at delivery and during postpartum. In the context of HIV, this

research is among the few studies whose index includes male partner participation at healthcare settings after the birth of the child for further HIV diagnosis of the baby.

Two aspects of counselling were included in this study's scale; '*Man counselled on HIV prevention during pregnancy*' and '*Man counselled on infant feeding*'. These two indicators are important in measuring male partner participation in PMTCT of HIV. The indicator on counselling on preventing the baby from contracting HIV cuts across all the stages of child development from pregnancy to infancy, while counselling on infant feeding is specifically after the birth of the baby. According to the researcher's knowledge, there have not been indicators that specifically focus on male partner counselling in these forms, especially on infant feeding for HIV prevention. A study that seeks to measure counselling of male partners does not necessarily focus on PMTCT but whether the male partner is counselled by healthcare workers on signs of pregnancy complications and the importance of giving birth at a healthcare centre (Sahu et al., 2016). Traditionally, infant feeding practices were considered to be the responsibility of women (Tamis-Le-Monda and Cabrera, 1999) and so PMTCT programmes focused on their access to these services paying little attention to men's needs (Morfaw et al., 2013). However, in the context of HIV, it is crucial for couples to be counselled on how to practise safe infant feeding for maximum protection of the baby against HIV during breast-feeding.

The study explored levels of male partner involvement according to different age groups. The results in this study displayed that there are a number of activities that indicate an association between age and male partner involvement in some PMTCT activities such as male partner testing for HIV and disclosure of HIV status to female partner. Previous studies (Negin et al., 2012) conducted in some countries in the Sub Saharan Africa found that there were lower levels of HIV-related knowledge and awareness among people aged 50 years and older than those aged 25 to 49. The findings of this study have significant implications for HIV services in the district and in similar settings that are burdened with HIV.

The study revealed high levels of male partner involvement in the PMTCT and ANC initiatives as illustrated in the different analyses using the index. There are various possible explanations for these results. One of the views is that most of the respondents of the survey might have been

recipients of the PMTCT programmes in the area. Also, the approaches that were used by healthcare workers to involve men in PMTCT programmes might have played a key role in encouraging the male partners to participate in these programmes. These include the involvement of chiefs and village headmen, improving efficiency within healthcare settings and use of campaigns among others. Hence, their understanding of the importance of male participation is substantial. On the other hand, it should be noted that respondents are likely to give socially desirable responses. Hence, they may provide responses which they think are expected of them and this however, distorts the true reflection of their perspectives and behaviour.

Another weakness that the index is likely to have is loss of granularity. Ampt et al. (2015) argues that combining various indicators in measuring male involvement as a single construct is likely to lead to misrepresentation or oversimplification of the construct. This also has a bearing on the reliability of the scale. In an attempt to avoid this limitation, previous studies suggested a generation of subscales measuring the different domains of male partner involvement (Ampt et al., 2015). Separating the different domains of male partner involvement can be considered in future research. This aspect was not considered in this study mainly because there has not been an index used to measure male partner involvement in Zimbabwe, hence, a simple index was opted for.

It should be noted that the male partner involvement scale is only at the initial stages of development. Although it was tested for internal consistency, its validity is yet to be assessed in future research. Also, the indicators that were considered for the scale are not exhaustive of male partner involvement, nor are they a perfect representation of the construct. Although the items in the scale capture the major components that make up the construct, it may need to be validated on a larger scale than the one on which it was developed.

CHAPTER EIGHT: DISCUSSION AND CONCLUSION

8.1 Introduction

In recent years, there has been an increasing interest in the study of male partner involvement in the prevention of mother-to-child transmission of HIV. Many countries in Sub-Saharan Africa have integrated HIV prevention strategies such as HIV couples counselling and testing into routine maternal and child health services (Farquhar et al., 2004) but very few male partners utilise these services (Bwambale et al., 2008, Byamugisha et al., 2011, Msuya et al., 2008, Theuring et al., 2009). Support from male partners and their utilisation of prevention of mother-to-child transmission of HIV services is crucial in many African societies including those in Zimbabwe because men head the households, they make decisions and control the flow of resources in the family (Bwambale et al., 2008). Also, women who test HIV positive fail to disclose the results to their partners for fear of the negative consequences associated with disclosure (Leta et al., 2012, Medley et al., 2004, Mlay, 2008, Morfaw et al., 2013, Sahin-Hodoglugil et al., 2009, Yashioka and Schustaek, 2001). This impedes their uptake of interventions to prevent vertical and sexual HIV-1 transmission (Bwambale et al., 2008, Farquhar et al., 2004). Many studies document the outcomes associated with male partner support such as appropriate infant feeding practices, uptake and adherence to treatment and consistent condom use (Maman et al., 2011, Ramirez-Ferrero and Lusti-Narasimhan, 2012, Theuring et al., 2009, WHO, 2012a, Aarnio et al., 2009, Katz et al., 2009, Farquhar et al., 2004, Montgomery et al., 2011a).

The main aim of this thesis was to shed greater insight into male partner involvement in PMTCT programmes in the Gokwe North district in Zimbabwe. It is important to note that recent statistics show that the HIV epidemic in Zimbabwe remains generalised with declining new infection rates, but they are high in rural districts (UNAIDS, 2015). With regards to geographical distribution of HIV prevalence, the global AIDS response progress report of 2015 states that,

“... [in Zimbabwe] there are localised areas (11 districts, described as hot spots) of high HIV transmission which includes border districts, growth points, small scale mining areas, fishing camps and commercial farming settlements” (UNAIDS, 2015:para 2).

Given that HIV transmission rates are high in rural districts, male partners play an important role in the prevention and elimination of HIV infections among children. It was essential to explore the meanings and understandings attached to the concept of male partner involvement as this has a bearing on attitudes and behaviours, as well as expectations of male partners in PMTCT initiatives. Due to the common challenge of having very few male partners taking part in PMTCT services offered in healthcare institutions, factors influencing their involvement in such activities were investigated. This study has demonstrated that it is difficult to define male partner involvement because of the various activities that relate to male partner involvement. These findings concur with previous studies that have identified the challenge of studying male partner involvement due to the lack of consensus in defining the term (Montgomery et al., 2011b). Lack of a standard definition also makes it difficult to measure male partner involvement (Ampt et al., 2015, Byamugisha et al., 2010). Thus, this study attempted to establish the meanings of male partner involvement in the Gokwe North district. In doing so, the study developed an index to measure male partner involvement in PMTCT programmes.

While considerable studies have been published on male partner involvement in antenatal couple HIV counselling and testing, very few have explored attitudes, understanding and expectations of men and women regarding male partner involvement in PMTCT activities. In recent years, clinical studies have been conducted to assess the feasibility of including male partners in voluntary counselling and testing in antenatal centres (Ditekemana et al., 2012, Msuya et al., 2008, Theuring et al., 2009). In as much as these studies are useful in our understanding of the outcomes associated with involving male partners in HIV couple counselling and testing, they do not interrogate the underlying structures influencing men's attendance or lack thereof. Studies conducted in some Southern African countries (Malawi, Uganda) explore married men's perspectives on HIV during pregnancy and in HIV counselling and testing within ANC centres (Aarnio et al., 2009, Bwambale et al., 2008). These studies are important in drawing men's own views with regards to HIV testing procedures and disclosure, the importance of spousal communication and supporting their spouses during pregnancy. Various studies were conducted with women attendees in ANC settings in determining male support; the women were requested

to bring their partners to their next ANC visit for HIV counselling and testing (Aluisio et al., 2011, Byamugisha et al., 2011, Katz et al., 2009, Farquhar et al., 2004). The findings of these studies highlight the benefits associated with involving male partners in HIV testing and counselling in ANC for the prevention of mother-to-child transmission of HIV as well as the challenges associated with lack of attendance at ANC. Most of these studies focus on male partner attendance and HIV testing in ANC for PMTCT purposes, yet there is more to PMTCT than HIV testing and counselling. Hence, this study was conducted to aid in the understanding of male partner involvement in some of the PMTCT interventions beyond pregnancy. This chapter provides the main findings of the study on male partner involvement in the prevention of mother-to-child transmission of HIV in the Gokwe district in Zimbabwe. It concludes by stating the limitations associated with the study as well as implications for practice, and suggests possible areas for further studies.

8.2 Discussion

A common explanation about the meaning of male partner involvement in PMTCT programmes was that the male partner accompanies his pregnant spouse to the antenatal care centre so that they get tested for HIV together. It is important to note that the respondents in this study portrayed an understanding of the importance of visiting ANC with their partner once they realise that they are pregnant. One major explanation was that they want to make sure that their unborn child is prevented from getting HIV. After HIV counselling and testing, they are also made aware of the measures that can be taken to avoid their unborn child from acquiring the virus. Additionally, female respondents in the study revealed that when couples test for HIV together, it reduces the burden women have to bear should they test alone, such as disclosing HIV positive results to partners. The consequences associated with disclosure of such results can be very negative. On the other hand, if she receives negative test results the man may not be willing to go for HIV testing but rather use his partner's results as a proxy for his own HIV status. These results concur with previous studies that underscore the importance of male partner attendance at ANC for the purpose of HIV couples counselling and testing (Aluisio et al., 2011, Ditekemana et al., 2012, Maman et al., 2011, Msuya et al., 2008, Farquhar et al., 2004). When

male partners attend ANC, and get tested for HIV together with their partners, it is likely that they will learn about how to prevent their unborn babies from being infected with HIV.

Condom use for the prevention of mother-to-child transmission of HIV was found to be a controversial issue especially in marital unions. Results in this study showed that condom use among married couples is not a common practice as compared to extra-marital unions. In situations where the woman suspects that her partner is involved in an extra-marital affair, she would prefer that the husband uses condoms in the affair. These results are not uncommon as previous research also highlights how condom use is not a common practice among married and cohabiting couples (Chimbiri, 2007, Maharaj and Cleland, 2005, Mugweni et al., 2015, Muhwava, 2004). However, it was learnt that male partners were keen to use condoms for PMTCT if they had received ANC services with their partner, such as HIV counselling and testing. These results are consistent with previous research that reveals that male partners who had attended VCT in antenatal care centres played an active role in facilitating exclusive breastfeeding and adherence to antiretroviral therapy (Kalembo et al., 2012, Farquhar et al., 2004). The findings in this current research thus emphasise the importance of male partner participation in voluntary couple counselling and testing in ANC settings as it facilitates uptake of interventions for PMTCT.

Male partner involvement was seen as the financial support provided by the man to his female partner to cover the antenatal care costs, at birth and after the birth of the child. Examples of such expenses are transport, food and clothing for the mother and child and purchasing infant formula. It appears that this form of involvement is common. Unlike other characteristics of male involvement such as male partner testing for HIV at ANC and condom use, the provision of financial needs was a commonly cited form of male partner support. These activities conform to the traditional gender roles and ideologies which provide a framework of how men and women are expected to behave in society or within the context of marriage. Some of these roles are that the man is considered as the head of the family, the primary decision-maker, and provider of the family's needs, while the woman's duty is child care, housework and she is largely reliant on her partner's support (Greene et al., 1995). In exploring various forms of male support during pregnancy, Maman et al. (2011) state that partners of HIV positive and negative women provided food or money to their wives while waiting for antenatal appointments. During the postnatal

period, male partners provided diapers, food, infant formula and clothes (Theuring et al., 2009, Maman et al., 2011). Traditionally, the role of men in the family was to provide for the needs of the family while the woman assumed responsibility for the care of children and household chores (Ramirez-Ferrero and Lusti-Narasimhan, 2012, Walston, 2005). This aspect of male partner involvement is well-documented even outside the context of PMTCT (Button et al., 2001, Hemsing et al., 2011, Misri et al., 2000, Thorp et al., 2004). Similarly, in the context of PMTCT, previous research also shows that the common way in which male partners participate in ANC is providing financial support to his partner (Maman et al., 2011, Montgomery et al., 2011b). According to our knowledge, there is scarce literature that highlights the resistance of male partners in providing financial support to their partners. These findings are not new at all but they only confirm similar views on the concept of male partner involvement in the PMTCT of HIV.

Male partners that were in stable relationships or married were expected to be faithful to their partners, however, the study found that it was not uncommon for married men to have other sexual partners. It is also interesting to point out here that this perspective came from both male and female respondents in the study. In some instances, male respondents highlighted that it is mostly men that have extra-marital partners. Hence, male partners were aware of the infidelity of men. Respondents were most concerned about infidelity in marriage because faithfulness to one partner was considered as the most common means of HIV prevention. Engaging in multiple sexual partners thus exposes married couples, who do not rely on condom use, to the risk of HIV infection. The results of this study concur with studies conducted in the past that discuss how the reduction of sexual partners is key to HIV prevention (De Zoysa et al., 1996, Genuis and Genuis, 2005, Gregson et al., 2006, Painter et al., 2007). Given the high levels of marriage in Zimbabwe, as reflected in this study sample, the study suggests a need for HIV prevention strategies to be revisited and ensure that behaviour change with regards to faithfulness is given preference among other methods of prevention.

With reference to public health interventions, Blankenship et al. (2006) claim that; “*Structural interventions refer to public health interventions that promote health by altering the structural context within which health is produced and reproduced*” (Blankenship et al., 2006:59). Accordingly, a number of strategies were employed by the district health institution in order to

promote male partner involvement in PMTCT services. The health institution leaders in the district teamed up with village headmen and chiefs in an effort to draw men to take part in PMTCT programmes arranged in the district. It appears that most of the activities that are conducted in the district all revolve around the influence of traditional chiefs and village headmen. In addition, any event that occurs in a household such as death, relocation, fatal illness, birth of a child and other family events are reported to the village headmen. Also, households often convene at the village headmen's compound at least once a month for meetings and there seems to be a strong union between the village headmen and villagers. In light of this scenario, the leaders were taught about HIV and how it is negatively affecting the community's well-being. Also, male partners were educated on how to play a major role in the prevention of mother-to-child transmission of HIV, and the chiefs were instrumental in mobilising men in their villages to attend all PMTCT related meetings organised by the health service providers. The results in this study indicate the importance of partnering with local leadership in implementing programmes. An interesting point to make is that the headmen and chiefs are very much respected by the communities, hence, most of the proposals and decisions they make are usually welcomed by their subjects. In the context of PMTCT, this is the second study that demonstrates that traditional leaders work towards mobilising male partners to take part in PMTCT services. A recent study in Malawi describes how traditional chiefs facilitated male partners' involvement in PMTCT programmes (Kululanga et al., 2011). This current research highlights the importance of health project planners and implementers to seek approaches that are favourable in the context within which they work.

Male partners seem to be willing to attend ANC if the service provided is quick and efficient. The results in the study reveal that health practitioners within the antenatal settings were providing services first to women who have brought their partners along. This approach had two ripple effects. Firstly, more males were now interested in coming to receive the ANC services because they knew that they would not wait in long queues as they had to return to work. Secondly, women would not want to spend time in long queues so they would ask their partners to come along. The results are consistent with previous studies (Kululanga et al., 2011) that used a similar approach to enable males to participate in PMTCT programmes. It is important that health institutions improve services such that clients feel encouraged to utilise the services. A shorter waiting period is important because most men are busy with work, either in their fields or

are employed by someone, and they may not be able to wait for long hours before they return to work.

Inter-spousal communication was identified as one of the factors that facilitate male partners to take part in PMTCT services. The findings report that meetings and campaigns were conducted in the district to sensitise the community about male partners in PMTCT programmes but not all men were keen to respond to these initiatives. Meetings and campaigns brought awareness to couples about the need for male partners to take part in PMTCT programmes but further dialogue between couples enabled men to consider taking part in the initiatives. Hence, it was found that men who had attended antenatal care had discussed it with their partners. These findings concur with previous studies that established high condom use among couples who discussed sexual risk (Zamboni et al., 2000, Desgrées-du-Loû et al., 2009, Kululanga et al., 2011). It was during these dialogues that couples discussed their intentions to test for HIV, methods of HIV prevention and other issues that affect their sexual and reproductive health. This study underscores the importance of strengthening couple-oriented services within healthcare facilities such as HIV couples counselling and testing.

The findings of this study illustrate that HIV/AIDS is a sensitive subject between couples. Due to its sensitive nature, male partners prefer to discuss it with their partners in private. These findings concur with previous research (Ampt et al., 2015, Mullany et al., 2007, Sahu et al., 2016) that demonstrate the importance of inter-spousal communication in sexual and reproductive health matters. In the context of PMTCT of HIV, (Byamugisha et al., 2010) it is important consider the discussion between the male partner and his spouse on ANC interventions as one of the markers of male partner involvement. This study thus emphasises the importance of couple communication for it is through negotiation that they can mutually embrace and utilise services offered for preventing mother-to-child transmission of HIV.

Fear of HIV-positive test results seems to be one of the deterrents of male partners receiving HIV testing and counselling services. It also appears that it is not only fear of a HIV-positive test result that the male partner worries about, but the negative consequences associated with it. These include conflict and being labelled as a promiscuous partner among others. Results also show that some male partners fear testing for HIV if they were once involved in risky sexual

behaviours such as unprotected sex with multiple partners. These findings build upon previous studies that report that male partners fear the negative consequences associated with a positive HIV test result such as being labelled as a HIV victim and denial of sexual rights just to mention a few (Bwambale et al., 2008). This current study hence underscores the importance of structural interventions that aim at encouraging HIV couple counselling and provide adequate education on sero-discordant couples which is likely to be a controversial issue among married or cohabiting couples. Also, pre-test counselling can facilitate clients' preparedness to test and receive HIV test results.

Stigmatisation against men who accompany their wives to ANC and other appointments at the baby clinic is a cause of concern. Male partners who accompany their wives to receive various PMTCT services are at risk of being labelled as HIV positive. Due to this perception, some men get discouraged and stop accompanying their partners for antenatal or postnatal appointments. Another aspect of stigma identified is that men who frequently attend ANC programmes with their partner are considered as jealous and overprotective. This study's results concur with previous studies (McMahon et al., 2016, Turan and Nyblade, 2013, Peltzer et al., 2007) that highlight how social stigmatisation can discourage men and women from utilising PMTCT and HIV prevention services.

The shortage of male peer educators or village health workers was identified as a barrier in male partners' attendance of meetings and workshops conducted in their villages. While the district keeps recruiting and training peer educators, there seems to be fewer men than women among the trainees. It was stated that men feel more comfortable with other men especially with regard to issues of sexuality and reproduction. An important perspective raised in the research was the importance of respecting taboos and customs. In the traditional Zimbabwean cultures, it is a taboo for a woman to openly discuss sexuality issues with men and the opposite is true unless they are a couple. It is important to note here that the research setting observes traditional norms and values which consider sexual issues as taboo and not to be discussed in public. However, given that HIV is generally sexually transmitted and it is a public health problem in the area, societal norms and values are changing as these issues on HIV prevention are addressed in public spaces. Findings in this study highlight the shortage of male peer educators who can discuss such issues with men and this makes it difficult for men to express themselves fully to the peer

educators who are, in most cases, female. These results are consistent with other studies (Kululanga et al., 2011, Kululanga et al., 2012b) which found that men were more comfortable discussing with male health staff on male health care issues than with a woman. On the other hand, the dearth of male village health workers and peer educators can also be understood in the context of traditional gender roles, which may also perhaps influence the choices of professionals where more women than men are likely to take on roles of caring for the sick. Aspects of care-giving were traditionally women's responsibilities in the household (Greene et al., 1995, Greene et al., 1991, Ramirez-Ferrero and Lusti-Narasimhan, 2012). This study accentuates the need for health institutions to encourage males to train as care-givers and peer educators so as to create an environment where men in the community can openly discuss sexual and reproductive matters in male-led dialogues.

The study identified a biased understanding of male partner involvement in PMTCT services offered at healthcare settings. It was striking to find that male partner involvement in PMTCT services was almost synonymous with male partners testing for HIV in ANC settings. This means that their understanding of male partner involvement is mainly focused on male partner testing for HIV during pregnancy. In terms of practice, most attention is given to mobilising male partners to get tested together with their spouse during pregnancy and little attention is given to continued counselling and testing (for those with negative test results). As much as HIV couples counselling and testing forms the basis of PMTCT of HIV and is an entry point through which couples receive PMTCT services, it is also important to consider that male partners' support and participation in PMTCT centres continues even after the birth of the child. This is because HIV can also be transmitted during breastfeeding. Hence, this research emphasises the importance of male partners' continued support and participation within PMTCT care centres during the postnatal phases.

Age was identified as a determinant of male partner involvement in some of the PMTCT activities. In the quantitative results, levels of male involvement were high across the different age groups. In contrast, qualitative results reflect a myriad of challenges associated with male partner participation in PMTCT. This was expressed by a few older men and women respondents in focus group discussions. These findings are an indicator that the older adults seem to be excluded in sexual and reproductive health matter, with an inclusion of HIV. As such, their level

of engagement in PMTCT programmes is low. As observed in previous studies, older adults are also a population at risk of HIV transmission as long as they are sexually active. Literature shows that HIV prevention education and awareness by and large focuses on the younger population and less is known about older adults (Negin et al., 2012).

Poor physical infrastructure was identified as a hindrance in the even implementation of PMTCT programmes across the district. The Gokwe North district is one of the least developed districts in the province in terms of road networks, transport services as well as access to water (Mvumi and Marimo, 2011). Given the rugged nature of the terrain, access to remote areas was noted as difficult, especially in the rainy season. Additionally, vehicle maintenance under such conditions was said to be costly. This meant that health service providers could not convene meetings and conduct workshops aimed at facilitating male partners in PMTCT programmes. Similar findings were observed in the past where communities could not access healthcare services due to poor road and transport networks systems (Fay et al., 2005, Gage, 2007, Mbaku, 2013). As such, improvement of road networks in the district may facilitate access to health services in remote parts of the district.

The study reveals that male partners are willing to take care of HIV-positive partners and children if they are also given an opportunity to learn how to administer the antiretroviral drugs. By the time the study was conducted, a few men were identified as home-based care workers. These men collaborate with other female home-based care workers providing services such as bathing and dressing male patients who have no one taking care of them. Unfortunately, it was learnt that little is known about how to give drugs to the child and it is usually the woman who is taught at the health institution how to administer the drugs to the baby. This emphasises the importance of involving male partners in the other events that follow HIV testing during pregnancy until postnatal. The importance of providing instructions on how to provide medicine to the baby was emphasised as a way of equipping the male partner with the skills to be able to assist when the female partner fails to do so.

Male partners who take part in PMTCT interventions are considered as role models in the fight against HIV in their families and communities. Although there is prevailing social stigma against

male partners who take part in PMTCT programmes, the study shows that generally men who take part in PTMCT initiatives are commended for their involvement. The stigma surrounding HIV/AIDS is due to the belief that most people who get HIV infection have been promiscuous. In addition, to this, the study has revealed that a man who participates in PMTCT programmes is labelled as HIV-positive and this deters other men from participating. However, calls for male partners to take part in preventing HIV was well received in the district, as most families were affected or have a member infected or die of HIV/AIDS. It is also important to note that most of the male partners explained that the major fear that men have with regards to HIV is the fear of the results. For this reason, any man who gets tested and continues to take part in PMTCT services is considered as brave since he can do what other men fail to do due to fear of knowing their test results and the fear of being stigmatised for taking part in PMTCT programmes. On the same note, such men are considered as role models due to the belief that male partners who work towards the prevention of diseases in their family are considered as responsible and caring fathers and spouses.

The study demonstrated that although stigma, fear of knowing HV status, labelling and other factors may inhibit male partner participation in PMTCT, male respondents' attitudes towards male partner support were generally positive as compared to females'. This was portrayed in activities such as willingness to provide emotional support to female partner, provision of healthy food and transport to female partner. These findings show that communities need more support in encouraging male partners to take part in HIV and other health-related interventions. The results have important implications on institutions and organisations that conduct education and awareness on HIV in communities so that they provide education to communities on the importance of male support in such interventions. In so doing, they facilitate removal of stigmatisation and other socio-cultural barriers to men's involvement in PMTCT programmes.

Little focus on men's health is an issue of concern. Results showed that men are interested in taking part in PMTCT activities but that there is little attention paid to their own health. Instead, much focus is on maternal and child health. These results are not new as previous studies observe that family planning and sexual reproductive health interventions were designed to serve women's needs (Ramirez-Ferrero and Lusti-Narasimhan, 2012, Koo et al., 2013b). Participants in this study highlighted the importance of including elements that pertain to men's health during

educational sessions conducted at antenatal and post-natal care centres as this will encourage men to come and learn about how to protect themselves and their families against HIV. These findings concur with previous studies that assert that some of the reasons leading to a low turnout of male partners in antenatal care settings and other workshops on sexual and reproductive health is the lack of attention to the male partners' health (Kalembo et al., 2012, Kululanga et al., 2012b, Mullick et al., 2005, van den Berg et al., 2015). Such approaches have a bearing on the formulation of policy and practise that tends to minimise the role of men in bringing about change, yet they are the decision-makers in most African family settings.

One of the major achievements in this study was the development of an index that is proposed to measure male partner involvement in the district and perhaps in similar settings. The measurement which was used in the district was a headcount of males who had accompanied their partners to ANC for HIV only. The index developed was designed to measure a number of aspects that may be considered as critical in PMTCT services. It has a total of seven aspects of PMTCT that are: *man accompanied his partner to antenatal care; man counselled on infant feeding; man disclosed HIV status to his partner; man discussed HIV testing with his partner; man accompanied his partner for polymerase chain reaction (PCR) test; man tested for HIV during previous pregnancy; and man counselled on HIV prevention during pregnancy.* Results from the study show positive participation of men in a range of activities. Tests for significance were conducted for example, to assess the association between gender and each of the seven items of the index. Generally, there were high positive responses in each of the activities, indicating high levels of involvement. Some of the items that form part of the index are similar to the scales used in a previous study to assess determinants of male involvement in PMTCT in Uganda. The indicators used are important though they only revolve around pregnancy. Other indices developed earlier measured maternal health outcomes, male involvement during pregnancy and in ANC activities only (Aluisio et al., 2011, Ampt et al., 2015, Carter, 2002b, Iliyasu et al., 2010, Mangeni et al., 2014, Mullany et al., 2005, Sahu et al., 2016) but they mention little about PMTCT. The strength of this proposed index is its inclusion of different aspects of PMTCT from pregnancy until after the birth of the child. Lastly, it captures post-natal aspects that are scarce in preceding indices such as infant feeding counselling and HIV testing for infants (PCR).

8.3 Conclusion

The aim of the study was to explore male partner involvement in the prevention of mother-to-child transmission of HIV. It set out to explore meanings attached to the concept of male partner involvement, factors influencing involvement, as well as an attempt to develop an index that can be used to measure male partner involvement in the district or other similar settings. Participants of the study demonstrated their personal experiences, actual participation and attitudes towards participation of male partners in the prevention of mother-to-child transmission of HIV. One of the limitations in this study is, like other studies related to HIV/AIDS, the possibility of providing socially desirable responses which may lead to social reliability bias. In taboo topics such as sexual activities and behaviour, social reliability bias is a common key factor that affects the accuracy of self-reports (Chillag et al., 2006, Gregson et al., 2002, Van de Mortel, 2008). It is therefore usually the case that respondents under-report socially undesirable activities while over-reporting socially desirable ones (Krumpal, 2013). In order to minimise social desirability bias for the survey, the study utilised self-administered questionnaires to ensure confidentiality, and this facilitated obtaining honest responses. With the exception of two focus group discussions, which were a mixture of males and females, the other six had males and females separated. This was done to allow respondents to feel comfortable enough to articulate their views in the absence of the opposite sex. Also, it was only in the one-on-one in-depth interviews that respondents were required to share their personal experiences.

Recall bias is another challenge that the study faced. Although the researcher expected that all the respondents in the study remember their activities or experiences with regards to male partner involvement in PMTCT programmes, there could be high levels of recall bias in the survey. This is primarily because one of the inclusion criteria was that the youngest child must be ten years of age and below. It is likely that some respondents could not recall all activities they were previously involved in, given the time period. In order to minimise the problem, a large sample size was utilised. Choosing a large sample size ensured that should the response rate fall to 70 percent, the results of the survey would still be acceptable. According to Morton et al. (2012), there is no simple answer for an appropriate response rate but over the past decades, response rates in population-based studies have fallen from about 90 percent to 70 percent and below. In

the study, the response rate was 75 percent, which is expected to minimise the problems associated with recall bias as well as non-responses.

As much as this cross-sectional study was inexpensive and can be useful to public health planning, its findings cannot be generalised for various reasons. For example, cross-sectional studies may give different results if another time is chosen, implying that it is only a snapshot and does not provide a sequence of events (Levin, 2006). As a result, causal inferences or valid statistical associations cannot be made (Maharaj and Cleland, 2008, Mahajan, 2015). In this regard, special care has to be taken should one decide to generalise findings of this study. Firstly, the results cannot be generalised within the Zimbabwean context. Similarly, cross-sectional studies are descriptive in nature, for that reason, the study can be used as a basis for a subsequent case control or cohort study (Jepsen et al., 2004).

The study highlighted that social stigma regarding male partners who take part in PMTCT services prevail in the district and that this discourages males from utilising the services. The study however, highlighted the influence of traditional leaders in influencing men to take part in PMTCT programmes conducted in their respective villages. It is recommended that the healthcare staff continue to work closely with the local traditional leaders and devise ways of providing continued education against discrimination of people living with HIV, as well as against men who are actively involved in PMTCT activities.

Further, lack of male-oriented health services was described as an aspect which demotivates male partners from utilising PMTCT services. Male partners indicated that it would be helpful to discuss men's health using additional educational materials within the antenatal settings. The current services by and large focus on maternal and child health and pay little attention to the paternal side. These findings reflect the principles of the Gender and Development (GAD) theory which, according to Parpart et al. (2000), adopts a two-pronged approach to the study of women and development by examining structures or processes that maintain women's subordination to men, while at the same time focuses on the relationships between men and women without excluding men. As such, inclusion of men can be one way of motivating them to take part in PMTCT initiatives. In addition to the important information that is disseminated in the clinics and hospitals in the form of flyers, pamphlets and magazines, information on men's health can

be an area that health institutions can consider in the design and development of such educational materials.

The research demonstrated that few men are trained as village health workers or peer educators in their villages. It is also important to note that the setting within which the research was conducted is deeply rooted in traditional customs and norms. Hence, issues dealing with sexuality and reproductive are also treated as a taboo where people of opposite sex may not converse openly. Training more men as mentors, peer educators or village health workers can be a way of mobilising men to be involved in PMTCT and other health-related issues. Also, recruiting men would also shed light on the view that once provided with an opportunity, men can take an active role in improving community and family health. The goal of capacity building and enabling men to take an active role in improving health is directly linked to the structure–agency theory that describes agency as the ability to make choices or socialise in a given resource context within which they exist (Giddens, 1984). Enabling male partners to take an active role in PMTCT includes equipping more men with skills in health education, an area that has women as a majority. In an effort to motivate male partners to participate in PMTCT initiatives, increasing the number of men who can spearhead these activities in their communities could influence male partners’ response in making a positive change in PMTCT of HIV in the communities in which they exist.

This thesis has also illustrated a common understanding that is shared by most of the respondents in the study on the concept of male partner involvement in PMTCT. Male involvement in PMTCT was mainly understood as when the male partner and his female partner tests for HIV during pregnancy or when they register their pregnancy for the first time. Hence, the idea of male partner involvement was emphasised during pregnancy only. Kululanga et al. (2012c) studied how male partner involvement is viewed in the rural Mwanza district in Malawi. Among the five explanations provided as male partner involvement was couple counselling for HIV in an antenatal care setting, which is similar to the findings of the current study. It is interesting to note that their description of male partner involvement does not mention other activities provided beyond pregnancy (Kululanga et al., 2012c). In this present study, other services and assessments done on the mother and baby, especially after the birth of the baby, were not highlighted as critical areas in which male partners should be involved. It is important that couples get

continued guidance on how to prevent their baby from contracting HIV regardless of their HIV status. This study therefore recommends that strategies for motivating male partners to attend antenatal care centres be applied even after the birth of the child, so as to ensure the appropriate infant feeding practices. The importance of male partner involvement during the post-natal period is emphasised here due to the fact that HIV transmission can also occur during breastfeeding. In addition, couples who would have tested negative can also have an opportunity to have their test repeated where necessary. The findings of this research suggest that stakeholders who are responsible for educating, mobilising and encouraging male partner involvement in PMTCT could ensure that male partners continuously receive PMTCT services after the birth of their child instead of only emphasising HIV testing and counselling during pregnancy.

In addition, the research has not only shown the need to review and strengthen strategies for increasing male partner involvement in PMTCT programmes but also the importance of targeting men and women of child bearing age, including older adults in HIV education and prevention. Older adults are a population at risk as they are also sexually active. Also, they play a key role educators and caregivers of those infected and affected with HIV. As such, the findings of this study suggest that organisations that promote, educate and disseminate knowledge on HIV prevention should broaden their target population to include older adults especially in countries where HIV prevalence is high.

Lastly, it was discussed that there is no universal index that measures male partner involvement in PMTCT and it is a challenge to get male partners to take part in PMTCT activities conducted in health facilities. This study highlighted the challenges associated with measuring male partner involvement due to the various meanings attached to the concept. In order to estimate the trends and nature of male partner involvement in PMTCT in the district, the study developed an index after assessing various variables or aspects that related to the concept of male partner involvement. According to the researcher's knowledge, this is the first study in Zimbabwe that has managed to develop an index for measuring male partner involvement in PMTCT programmes. It has used the meanings drawn from the community's views, perspectives, experiences and knowledge on what constitutes male partner involvement in PMTCT of HIV programmes. The index is useful in order to come up with approximate levels of male partner

involvement in PMTCT activities that are organised within healthcare institutions and other organisations that provide such services. Using the index to measure current levels of male partner involvement facilitated the obtaining of approximate rates and establishing the trends of male partner involvement across the district.

8. 3.1 Recommendations

The findings of this study have implications for future research. The study has demonstrated that an array of personal, interpersonal, organisational and cultural factors play a role in male partner involvement in PMTCT. These findings relate to the propositions of Eaton et al. (2003) regarding sexual behaviour. According to Eaton et al. (2003), understanding sexual risk behaviour requires one to take into consideration interactive effects of factors at three levels which are; within the person, within her or his proximal context as well as within the distal context. Using this model of understanding sexual behaviour in Southern Africa, the study examined some of the distal factors influencing male partner involvement in PMTCT programmes. Within the personal context, the study illustrated an array of factors that enable and inhibit male partners from taking part in PMTCT programmes. At a proximal level for example, couples' communication motivated male partners' involvement. The study revealed that a distal level such as culture plays a role in the processes and attitudes surrounding male partner involvement in PMTCT. However, structural interventions within the context of health institutions were explored but little is known on how laws and politics influence interventions aimed at PMTCT. Hence a further analysis can be done using either the structure-agency analysis and/or Eaton model to interrogate national political, economic and legal aspects that surround male partner involvement in PMTCT. It would be essential to explore how the nation is responding to the challenge of low male partner involvement in PMTCT interventions.

The study has revealed that there are various challenges which inhibit male partners from taking part in PMTCT programmes. These include the absence of male-oriented services which may also be a cause for the lack of knowledge by men on some of the services offered within antenatal and postnatal centres. Other challenges include scarcity of male peers who can mobilise men to take part in PMTCT and other health-related programmes in the community. In order to

ensure that the objective of involving male partners in PMTCT is realised, both the government and private health institutions should work towards mainstreaming male partner involvement into ANC and PMTCT within their institutions.

The study also highlighted that despite the stigma that is associated with male partner participation in PMTCT activities, there were also high positive attitudes among males with regard to male partner support. These findings show that efforts to engage and involve male partners in PMTCT programmes have a potential to grow and be realised in this district. It is evident that the role played by chiefs and headmen who are also males can act as a strong support for male partners. This study recommends collaborated efforts between the local leadership and institutions providing HIV/AIDS care services to educate and build communities that discourage stigma and encourage maximum male partner involvement.

The study identified complex issues that deter men from taking part in PMTCT programmes. One of the most striking findings was social stigma against male partners who take part in PMTCT and other programmes linked to HIV. This study has highlighted that traditional leaders such as chiefs and village headmen have a strong influence in motivating communities to attend PMTCT. Health institutions and organisations that are implementing HIV programmes in the Gokwe North district have collaborated with local traditional leaders in their programmes. This proved to be a useful tool to encourage men to participate in PMTCT programmes. Hence, at a local level, organisations that conduct HIV programmes can utilise similar approaches or can devise strategies that are applicable to their social contexts in dealing with stigma and discrimination against male partners or any individuals that participate in HIV programmes.

8.4 References

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8.5 Appendix A: Factor analysis SPSS output

Table 8.5.1: Representation of results on total variance explained^a (SPSS Output)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	3.166	31.663	31.663	3.166	31.663	31.663	2.661
2	1.233	12.331	43.993	1.233	12.331	43.993	2.284
3	1.136	11.356	55.349	1.136	11.356	55.349	1.242
4	0.981	9.806	65.156				
5	0.904	9.038	74.193				
6	0.805	8.048	82.241				
7	0.663	6.633	88.874				
8	0.608	6.085	94.959				
9	0.401	4.014	98.973				
10	0.103	1.027	100.000				

Extraction Method: Principal Component Analysis.

^a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 8.5.2: Monte Carlo parallel analysis (SPSS Output)

3/12/2018 8:44 AM		
Number of variables: 10		
Number of subjects: 331		
Number of replications: 100		
+++++		
Eigenvalue #	Random Eigenvalue	Standard Dev
+++++		
1	1.2800	0.0488
2	1.1899	0.0320
3	1.1288	0.0260
4	1.0697	0.0242
5	1.0178	0.0223
6	0.9676	0.0216
7	0.9133	0.0246
8	0.8667	0.0212
9	0.8101	0.0217
10	0.7540	0.0367
+++++		
3/12/2018 8:44 AM		
Monte Carlo PCA for Parallel Analysis		
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Table 8.5.3: Pattern matrix^a (SPSS Output)

Item	Component		
	1	2	3
Man counselled on infant feeding	0.931		
Man accompanied his partner to ANC	0.925		
Man accompanied partner for polymerase chain reaction test	0.472		
Man tested for HIV in previous pregnancy	0.395	0.307	
Man discussed HIV testing with his partner		0.756	
Man disclosed status to partner		0.718	
Man present at birth		0.695	
Man counselled on preventing baby from contracting HIV			0.601
Man received counselling after birth of child			0.593
Man discussed reproductive desire with his partner			-0.590
Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalisation.			
^a . Rotation converged in 9 iterations.			

Table 8.5.4: Two-factor component matrix^a (SPSS Output)

Item	Component	
	1	2
Man counselled on infant feeding	0.802	-0.463
Man accompanied his partner to ANC	0.776	-0.479
Man tested for HIV in previous pregnancy	0.696	0.468
Man disclosed status to partner	0.610	-0.417
Man accompanied partner for polymerase chain reaction test	0.573	
Man discussed HIV testing with his partner	0.569	0.416
Man counselled on preventing baby from contracting HIV	0.507	
Man discussed reproductive desire with his partner		0.355
Man present at birth		
Man received counselling after birth of child	0.386	
Extraction Method: Principal Component Analysis.		
^a . Two components extracted.		

Table 8.5.5: Two-factor pattern matrix^a (SPSS Output)

Item	Component	
	1	2
Man counselled on infant feeding	0.489	-0.737
Man accompanied his partner to ANC	0.458	-0.741
Man counselled on preventing baby from contracting HIV	0.371	-0.345
Man accompanied partner for polymerase chain reaction test	0.508	
Man tested for HIV in previous pregnancy	0.840	
Man discussed HIV testing with his partner	0.703	
Man disclosed status to partner	0.739	
Man present at birth		
Man received counselling after birth of child	0.390	
Man discussed reproductive desire with his partner		0.355
Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalisation.		
^a . Rotation converged in 15 iterations.		

Table 8.5.6: Two-factor total variance explained (SPSS Output)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	3.166	31.663	31.663	3.166	31.663	31.663	2.889
2	1.233	12.331	43.993	1.233	12.331	43.993	1.669
3	1.136	11.356	55.349				
4	0.981	9.806	65.156				
5	0.904	9.038	74.193				
6	0.805	8.048	82.241				
7	0.663	6.633	88.874				
8	0.608	6.085	94.959				
9	0.401	4.014	98.973				
10	0.103	1.027	100.000				
Extraction Method: Principal Component Analysis.							
^a . When components are correlated, sums of squared loadings cannot be added to obtain a total variance.							

Table 8.5.7: Commonalities

Item	Initial	Extraction
Man discussed HIV testing with his partner	1.000	0.497
Man tested for HIV in previous pregnancy	1.000	0.703
Man disclosed status to partner	1.000	0.546
Man accompanied his partner to ANC	1.000	0.831
Man counselled on preventing baby from contracting HIV	1.000	0.301
Man counselled on infant feeding	1.000	0.858
Man accompanied partner for polymerase chain reaction test	1.000	0.329
Man discussed reproductive desire with his partner	1.000	0.130
Man present at birth	1.000	0.061
Man received counselling after birth of child	1.000	0.159
Extraction Method: Principal Component Analysis.		

8.6 Appendix B: Data collection tools

8.6.1: Males' questionnaire

Date of interview ... / ... /

Name of Village : Ward Number :

SECTION A: Socio-demographic information

Please answer the following questions or put a circle on the number against the appropriate responses e.g. (2)

Q1001. How old were you at your last birthday?

Q 1002. Gender

1 Female 2 Male

Q 1003. What is your marital status?

1 Married 2 Divorced 3 Widowed
4 Separated 5 Single

Q1004. Age of spouse/partner

Q1005. Have you ever attended school?

1 Yes 2 No (skip to Q1009)

Q 1006. What is the highest grade/form/ standard passed in school?

Q 1007. In which year was it?

Q1008. What was your post school education?

1 None 2 Certificate 3 Diploma
4 University 6 Other (specify).....

Q1009. What is your occupation? (Multiple responses are permissible)

1 Still at school 2 Unemployed
3 Self-employed 4 Government employee
5 Private sector employee 6 Own business
7 Work on farm/field 8 Other (specify).....

Q 1010. Do you have enough money for monthly expenses?

- | | | | |
|---|------------------------|---|------------------------|
| 1 | Enough with saving | 2 | Enough without saving |
| 3 | Not enough but no debt | 4 | Not enough and in debt |

Q 1011. How much to do you spend on a monthly basis?

Q1012. What is your religion?

- | | | | | | |
|---|----------------------|---|-----------|---|-----------|
| 1 | Catholic | 2 | Methodist | 3 | Apostolic |
| 4 | Zionist | 5 | Anglican | 6 | Baptist |
| 7 | Traditional | | | | |
| 8 | Other (specify)..... | | | | |

Q1013. How many adults are you in your household?

Q1014. How many children do you have?

..... If nil, skip to Q1016

Q1015. What is the age of your youngest child?

Q1016. Which of the following major assets do you own? (Multiple responses are permissible)

- | | | | |
|---|------------------|---|-----------------------------|
| 1 | House/plot/stand | 2 | Livestock |
| 3 | Field/farm | 4 | Shop/supermarket/ beer hall |
| 5 | Car/cart/bicycle | 6 | Other (specify)..... |

Q1017. Please indicate how many of the following assets you have.

- | | | |
|---|--------|-------|
| 1 | House | ..... |
| 2 | Stands | ..... |

Q 1018. Please indicate how many of the following livestock you own.

- | | | | | | |
|---|---------|-------|---|-----------------|-------|
| 1 | Cattle | ..... | 2 | Sheep | ..... |
| 3 | Goats | ..... | 4 | Donkeys | ..... |
| 5 | Chicken | ..... | 6 | Other (specify) | ..... |

Q 1019. Please show how many of the following you own.

- | | | | | | |
|---|--------|-------|---|-------|-------|
| 1 | Fields | | 2 | Plots | |
|---|--------|-------|---|-------|-------|

Q1020. How many of the following businesses do you own? (if applicable)

- | | | | | | |
|---|----------------------|-------|---|-------------|-------|
| 1 | Tuck-shop | ..... | 2 | Supermarket | ..... |
| 3 | Beerhall | ..... | 4 | Canteen | ..... |
| 5 | Other (specify)..... | | | | |

Q1021. Please indicate how many of the following modes of transport you own.

- | | | | | | |
|---|---------|-------|---|-----------------|-------|
| 1 | Cars | ..... | 2 | Cart | ..... |
| 3 | Bicycle | ..... | 4 | Other (specify) | ..... |

Q1022. Which of the following sources of information do you have access to? (Multiple responses are permissible)

- | | | | |
|---|------------|---|----------------------|
| 1 | Television | 2 | Radio |
| 3 | Newspaper | 4 | Other (Specify)..... |

SECTION B: Knowledge of HIV

Q2001. I have heard about HIV/AIDS.

- | | | | |
|---|-----|---|--------------------|
| 1 | Yes | 2 | No (skip to Q2003) |
|---|-----|---|--------------------|

Q2002. From which of the following sources did you first learn about HIV/AIDS?

- | | | | |
|---|----------------------------|---|-----------------------------|
| 1 | Health facility | 2 | Church |
| 3 | School | 4 | From a friend/family member |
| 5 | Radio/newspaper/television | | |
| 6 | Other (specify)..... | | |

For each statement, please tick the appropriate answer from the following choices “True”, “False”, or “I don’t know”. If you do not know, please do not guess; instead, please circle “Don’t Know.”

No.	Statement	True	False	Don't Know
Q2003	A person can get HIV infection by sharing a meal with someone else who is infected with HIV.			
Q2004	A person can get HIV infection by sharing needles and syringes.			
Q2005	HIV can be transmitted from one person to another by touching their body.			
Q2006	HIV can be transmitted through sexual intercourse.			
Q2007	A person can get HIV/AIDS through witchcraft.			
Q2008	Anyone can contract HIV regardless of their age or gender.			
Q2009	A healthy-looking person can be infected with HIV.			
Q2010	Having sex with a virgin or a baby can cure HIV.			
Q2011	HIV can be prevented by using condoms properly during sex.			
Q2012	A person can know his/her status by testing their blood.			

Q2013	Coughing and sneezing DO NOT spread HIV.			
Q2014	A person can get HIV by sharing a glass of water with someone who has HIV.			
Q2015	Douching after sex will keep a woman from getting HIV.			
Q2016	A woman can get HIV if she has anal sex with a man.			
Q2017	Showering, or washing genitals/private parts after sex keeps a person from getting HIV.			
Q2018	People who have been infected with HIV quickly show serious signs of being infected.			
Q2019	There is a vaccine that can stop adults from getting HIV.			
Q2020	People are likely to get HIV by deep kissing/putting their tongue in their partner's mouth, if their partner has HIV.			
Q2021	A woman cannot get HIV if she has sex during her period.			
Q2022	There is a female condom that can help decrease a woman's chance of getting HIV.			
Q2023	A person can get HIV by giving blood.			
Q2024	A person will NOT get HIV if she or he is taking antibiotics.			
Q2025	Having sex with more than one partner can increase a person's chance of being infected with HIV.			
Q2026	Taking a test for HIV one week after having sex will tell a person if she or he has HIV.			
Q2027	A person can get HIV by sitting in a hot tub or a swimming pool with a person who has HIV.			
Q2028	A person can get HIV from oral sex.			
Q2029	Using Vaseline or baby oil with condoms lowers the chance of getting HIV.			

SECTION C: Knowledge of PMTCT

Q3001. Have you heard about PMTCT before?

1 Yes 2 No (skip to Q3003)

Q3002. From which of the following sources did you first learn about PMTCT?

- | | | | |
|---|----------------------------|---|-----------------------------|
| 1 | Health facility | 2 | Church |
| 3 | School | 4 | From a friend/family member |
| 5 | Radio/newspaper/television | 6 | Other (specify)..... |

Q3003. Which of the following organisations implement/teach PMTCT programmes in your area? (Multiple responses are permissible)

- | | | | |
|---|-----------------|---|----------------------|
| 1 | Health facility | 2 | Churches |
| 3 | NGOs | 4 | Other (Specify)..... |

Q3004. Have you ever heard about couples counselling and testing for HIV to prevent mother-to-child transmission?

- | | | | |
|---|-----|---|----|
| 1 | Yes | 2 | No |
|---|-----|---|----|

Q3005. What do you understand 'couples counselling and testing for HIV' to mean?

1. Partners (man and a woman that are in a relationship) receiving HIV counselling and testing together.
2. Partners (man and a woman that are in a relationship) that test for HIV separately and share their results.
3. Other (specify)

Q3006. From which of the following sources did you get to hear about couples counselling and testing? (Multiple responses are permissible)

- | | | | |
|---|----------------------------|---|-----------------------------|
| 1 | Health facility | 2 | Church |
| 3 | School | 4 | from a friend/family member |
| 5 | Radio/newspaper/television | 6 | Other (specify)..... |

Q3007. Are you at any point in the future willing to undergo couples counselling?

- | | | | |
|---|-----|---|----|
| 1 | Yes | 2 | No |
|---|-----|---|----|

Q3008. Did you get any advice on prevention of mother-to-child transmission of HIV when your female partner was pregnant?

- | | | | |
|---|-----|---|--------------------|
| 1 | Yes | 2 | No (skip to Q3010) |
|---|-----|---|--------------------|

Q3009. From whom did you get the advice? (Multiple responses are permissible)

- | | | | |
|---|-----------------------|---|---------|
| 1 | Health staff | 2 | Husband |
| 3 | Relatives | 4 | Friends |
| 5 | Others (specify)..... | | |

Q3010. Are you aware of the policies that are implemented to prevent mother-to-child transmission of HIV?

- | | | | |
|---|-----|---|---------------------|
| 1 | Yes | 2 | No (skip to Q 3012) |
|---|-----|---|---------------------|

Q3011. If yes, how did you come to know them? (Multiple responses are permissible)

- | | | | |
|---|----------------------------------|---|----------------------------------|
| 1 | Through a nurse/doctor at clinic | 2 | Through a family member/relative |
| 3 | Through a friend | 4 | At work |
| 5 | Other (Specify)..... | | |

For each statement, please tick the appropriate answer from the following choices “True”, “False”, or “I don’t know”. If you do not know, please do not guess; instead, please circle “Don’t Know.”

No.	Statement	TRUE	FALSE	DON'T KNOW
Q3012	All pregnant women infected with HIV will have babies born with AIDS.			
Q3013	A woman can transmit HIV to her baby at birth.			
Q3014	A woman with HIV can transmit HIV to her baby through breastfeeding.			
Q3015	If an HIV positive pregnant mother takes antiretroviral drugs, she can prevent transmission to her baby.			
Q3016	An HIV positive partner/husband of a pregnant woman can transmit the virus to his female partner and baby.			
Q3017	Use of condoms by an expecting couple during sex can prevent mother-to-child transmission of HIV to the unborn child.			
Q3018	If a mother and baby get HIV infection, they can have normal lives by taking antiretroviral drugs.			
Q3019	Giving water to a baby newly born to an HIV positive mother can cause transmission of HIV to the baby while she breastfeeds.			

SECTION D:

Primary prevention of HIV

Q4001. Have you ever discussed preventing HIV infection between yourselves with your partner?

1 Yes 2 No

Q4002. If yes, who often leads the discussion?

1 Myself 2 My partner 3 Both of us

Q4003. How often do you give your views regarding this when you discuss it?

1 Always 2 Sometimes 3 Uncertain
4 Seldom 5 Never

Q4004. Who makes the decision as to whether to use protection or not?

1 Myself 2 My partner

3 Both of us 4 Other (specify)

Q4005. Who makes the decision regarding which method of protection to be used?

1 Myself 2 My partner
3 Both of us 4 Other (specify)

Q4006. Which of the following methods of preventing HIV transmission are you familiar with?

1 Male condom 2 Female condom (diaphragm)
3 Being faithful 4 Microbicides
5 None 5 Other (specify).....

Please indicate how often you use the following means of preventing HIV transmission:

No.	Question	Always	Sometimes	Uncertain	Seldom	Never
Q4007	Male condom	5	4	3	2	1
Q4008	Female condom	5	4	3	2	1
Q4009	Microbicides	5	4	3	2	1
Q4010	Being faithful	5	4	3	2	1

Please show to what extent you agree or disagree with the possible ways in which you think you can be of help with regards to the prevention of HIV among women:

No.	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Q4011	Provide emotional support	5	4	3	2	1
Q4012	Bring/buy condoms	5	4	3	2	1
Q4013	Agree to use condoms	5	4	3	2	1
Q4014	Attend a counselling session	5	4	3	2	1
Q4015	Agree to test for HIV as a couple	5	4	3	2	1
Q4016	Provide money to get to the clinic	5	4	3	2	1

Q4017	Accompany her to consult at health service as a couple	5	4	3	2	1
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Please show your opinion towards the following statements:

No.	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Q4018	Couples that trust each other also need to use protection against HIV.	5	4	3	2	1
Q4019	It is only when your partner is HIV positive that you should use protection.	5	4	3	2	1
Q4020	When you test HIV negative, you still need to use protection against HIV.	5	4	3	2	1
Q4021	Avoiding multiple partners helps to reduce the risk of HIV infection.	5	4	3	2	1
Q4022	Condoms are easily accessible in health facilities.	5	4	3	2	1
Q4023	HIV prevention programmes meet needs for men.	5	4	3	2	1

SECTION E: Prevention of unwanted pregnancies among HIV positive women

Q5001. Have you ever discussed your reproductive desire with your partner?

1 Yes 2 No

Q5002. If you are to test HIV positive, how many more children would you wish to have?

.....

Q5003. If your female partner becomes pregnant and is HIV positive, would you consider terminating the pregnancy?

1 Yes (skip to Q5005) 2 No

Q5004. If no, which of the following reasons will cause you not to terminate? (Multiple responses are permissible)

- 1 Avoiding conflict
- 2 It is not allowed
- 3 Fear of poor health effects associated with unsuccessful abortion
- 4 Need another child
- 5 I will seek means of preventing transmission to the child
- 6 Other (specify).....

(Skip to Q5009)

If yes in (Q5003), to what extent would you agree or disagree with the following reasons for terminating pregnancy?

No.	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Q5005	I am worried that my child will be infected.					
Q5006	Concerned about the future of the infant.					
Q5007	Her health will deteriorate with pregnancy.					
Q5008	My child will not live long due to HIV.					

Q5009. Are you aware of any services for termination of pregnancy at your clinic/hospital?

- 1 Yes
- 2 No (skip to Q5011)

Q5010. If yes, is contraceptive counselling for HIV positive women available in your clinic/hospital?

- 1 Yes
- 2 No
- 3 I do not know

Q5011. Would your partner discuss with you her decision to terminate an unwanted pregnancy?

- 1 Yes (skip to Q5013)
- 2 No

Q5012. If no, what could be the possible reasons of not discussing this with you? *Please show your opinion towards the following statements:*

- 1 She may think that I will not allow her to abort
- 2 To avoid conflict
- 3 She may think that I will abandon her
- 4 She does not need to discuss this with me
- 5 Other (specify).....

Please show to what extent you agree or disagree with the possible ways in which you think you can be of help with regards to termination of pregnancy for an HIV positive partner:

No.	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

Q5013	Provide emotional support.	5	4	3	2	1
Q5014	Provide money to cover possible costs.	5	4	3	2	1
Q5015	Accompany her to the consult at the health services.	5	4	3	2	1
Q5016	Attend counselling sessions.	5	4	3	2	1
Q5017	Encourage her to seek medical attention.	5	4	3	2	1
Q5018	Remind her to take any prescribed medication.	5	4	3	2	1
Q5019	Suggest the method of abortion.	5	4	3	2	1

Q5020. If you are to decide to prevent an unwanted pregnancy, which one of the following options would you prefer to use?

- 1 Medical abortion 2 Surgical abortion
3 Traditional abortion 4 Not certain
5 Other (specify).....

Please show what your opinion is towards each of the following statements below regarding termination of unwanted pregnancy among HIV-positive women:

No.	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Q5021	Termination of unwanted pregnancy is the best option to prevent mother-to-child transmission for HIV positive women.	5	4	3	2	1
Q5022	Safe abortion is available at my clinic/hospital.	5	4	3	2	1
Q5023	Once a woman is infected with HIV she should not get pregnant again.	5	4	3	2	1
Q5024	Termination of unwanted pregnancy is accepted in my community.	5	4	3	2	1

Q5025	I will support my partner if she decides to terminate pregnancy.	5	4	3	2	1
Q5026	A pregnant woman who is infected with HIV can decide to terminate pregnancy without her partner's consent.	5	4	3	2	1
Q5027	A woman that discusses her intention to abort with her partner will get support from him.	5	4	3	2	1
Q5028	Knowing my HIV status will help me and my female partner decide on whether or not to have a child.	5	4	3	2	1
Q5029	Family planning programmes provide needs for men.	5	4	3	2	1

SECTION F: Prevention of transmission from women living with HIV to their Infants (during pregnancy and birth)

Q6001. Did you discuss having this baby with your partner?

1 Yes 2 No

Q6002. How many times did your partner attend an antenatal clinic during her last pregnancy?

.....

Q6003. Did you and your partner discuss whether you should be tested for HIV?

1 Yes 2 No

Q6004. Did you test for HIV during her last pregnancy?

1 Yes 2 No (skip to Q6006)

Q6005. (If YES on Q6004) Reasons for testing (Multiple responses are permissible)

- 1 I was sick
 - 2 I wanted to know my status
 - 3 Nurse advised me to test
 - 4 Other (Specify).....
- (Skip to Q6007)

Q6006. (If NO on Q6004) Reasons for not testing. (Multiple responses are permissible)

- 1 Lack of sickness
- 2 Being faithful
- 3 Knowing partner's negative status
- 4 Lack of time
- 5 Lack of money

- 6 Fear of positive test results
- 7 Not knowing where to test
- 8 Other (Specify)

Q6007. Have you disclosed your status to your partner?

- 1 Yes
- 2 No (skip to Q6009)

Q6008. How did your partner react after you disclosed your status?

- 1 Angry
- 2 Shocked
- 3 Disappointed
- 4 Happy
- 5 Do not remember
- 6 Other (specify).....

Q6009. Did you receive counselling before testing?

- 1 Yes
- 2 No

Q6010. Did you receive counselling after testing?

- 1 Yes
- 2 No

Q6011. Was your female partner tested for HIV at the clinic when she was pregnant?

- 1 Yes
- 2 No
- 3 Don't know

Q6012. What type of counselling did you and your female partner receive?

- 1 Alone
- 2 As a couple
- 3 As a group
- 4 Other (specify).....

Q6013. Were you counselled on how to prevent HIV transmission to your unborn baby?

- 1 Yes
- 2 No
- 3 I do not remember

Q6014. Which of the following methods did you use to prevent HIV transmission to your unborn baby?

- 1 Condom
- 2 Abstaining
- 3 Being faithful
- 4 None
- 5 Other (specify).....

Q6015. Can you please indicate which of the following you were counselled about when she was pregnant? (Multiple responses are permissible)

- 1 How to prevent the baby from being infected with HIV
- 2 Infant feeding methods
- 3 Family planning methods
- 4 Taking antiretroviral drugs during pregnancy
- 5 Other (specify).....

Q6016. Have you ever accompanied your partner to the antenatal clinic (ANC) when she was pregnant?

- 1 Yes
- 2 No

Q6017. If yes, how many times did you accompany her?

Q6018. For which of the following reasons did you accompany her to the ANC? (Multiple responses are permissible)

- 1 Providing transport
- 2 Wanted to know about ANC activities
- 3 Was asked to come by health professionals
- 4 She asked me to come
- 5 Local community leaders advise men to go
- 6 Other (Specify).....

Q6019. Where did she give birth?

- 1 At hospital/ clinic
- 2 At home
- 3 At the traditional midwife's home
- 4 Other (specify)

Q6020. Did you accompany her when she went to give birth?

- 1 Yes
- 2 No (skip to Q6022)

Q6021. If yes, for which of the following reasons did you accompany her? (Multiple responses are permissible)

- 1 Providing transport
- 2 To give her emotional support
- 3 Was asked to come by health professionals
- 4 She asked me to come
- 5 Other (Specify).....

Q6022. Were you present during your labour?

- 1 Yes
- 2 No

Q6023. Were you present at birth?

- 1 Yes
- 2 No (skip to Q6025)

Q6024. If yes, for what reason did you come? (Multiple responses are permissible)

- 1 To give her emotional support
- 2 Wanted to know how the process of giving birth unfolds
- 3 Was asked to come by health professionals
- 4 She asked me to come
- 5 Local community leaders advise men to be there
- 6 Other (Specify).....

Q6025. If no (in Q6023), why were you not present?

- 1 I was busy
- 2 I did not know that she was giving birth
- 3 She did not inform me
- 4 Other (specify).....

Q6026. How soon after birth did you go to see her?.....

Q6027. Did you accompany your partner and the baby home?

1 Yes 2 No (skip to Q2029)

Q6028. For which of the following reasons did you accompany her? (Multiple responses are permissible).

- 1 Providing transport
- 2 To give her emotional support
- 3 I was asked to do so by health professionals
- 4 She asked me to come
- 5 Local community leaders advise men to do so
- 5 Other (Specify).....

Please show what your opinion is towards each of the following statements below regarding antenatal care:

No.	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Q6029	The antenatal clinic operating times are convenient for men to attend with their wives.					
Q6030	Healthcare providers allow men to come with their wives to the antenatal clinic.					
Q6031	Men are provided with education on PMTCT at clinics.					
Q6032	The ANC staff attend to the health problems of men when they accompany their wives.					
Q6033	If my female partner is HIV-positive I will encourage her to take antiretroviral drugs during pregnancy.					
Q6034	Knowing my HIV status will help me and my husband to decide on methods of feeding our baby.					
Q6035	A man who accompanies his female partner to ANC is considered by my community as jealous.					
Q6036	If a man accompanies his female partner to the antenatal clinic the community stigmatises him.					
Q6037	The antenatal clinic is supposed to be a place for women only.					

SECTION G: Care and support for HIV positive women and children

Q7001. Did you receive counselling on infant feeding after the birth of your child?

1 Yes 2 No 3 I do not remember

Q7002. If yes, please show which of the following you assisted with in terms of infant feeding.

- 1 Giving the woman money to get to the clinic

- 2 Accompanying the woman to the clinic
- 3 Sitting in the consultation room
- 4 Discuss the issues raised by the healthcare worker at that point
- 5 Remind her how to implement the advice of the healthcare worker
- 6 Other (specify).....

Q7003. Was your child prescribed nevirapine?

- 1 Yes
- 2 No (if no, skip to Q7010)

Q7004. If yes, did you get counselling on how to take the medication?

- 1 Yes
- 2 No
- 3 I do not remember

Q7005. Please show how you have been involved since your child was on nevirapine.

- 1 Accompanying my female partner to get the medication
- 2 Providing the treatment to the child
- 3 Reminding my female partner to take the medication
- 4 Reminding her to follow the correct measures as advised by the health worker
- 5 Giving her money to get to the clinic
- 6 Offering emotional support
- 7 Other (specify).....

Q7006. Did you go for a Polymerase Chain Reaction (PCR) test with your partner?

- 1 Yes
- 2 No (skip to Q7008)
- 3 I do not remember (skip to Q7009)

Q7007. If yes, for what reasons did you accompany her?

- 1 To provide transport
- 2 To give emotional support
- 3 To know how the process is conducted
- 4 She asked me to come
- 5 The nurse encouraged me to come
- 6 Other (specify).....

(Skip to Q7009)

Q7008. If no (in Q7005), what were the reasons for not accompanying her?

- 1 I had no time
- 2 She did not inform me about it
- 3 She did not expect me to come
- 4 Other (specify).....

Q7009. Please indicate in which of the following ways you assisted your partner while she waited for the PCR results.

- 1 Gave her money to get to the clinic
- 2 Accompanied her to the clinic
- 3 Sat in on the consultation room
- 5 Discussed the issues raised by the healthcare worker at that point
- 6 Reminded her on how to implement the advice of the healthcare worker

- 7 Offered emotional support and encouragement to take the next step in the process
 8 Agreed to use condoms throughout
 9 Assisted in giving the infant drops
 9 Other (specify)

Q7010. Are there any HIV prevention (from mother-to-child) programmes in your area?

- 1 Yes 2 No 3 I do not know

Q7011. If Yes, which of the following involve men in their activities?

- 1 Clinic/hospitals 2 Churches
 3 Non-governmental organisations 4 Village health workers
 5 Other (specify).....

Please indicate to what extent you agree or disagree with the following statements regarding care and support for care and support for HIV positive women, partners, and their children.

No.	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Q7012	A woman who is HIV positive should get emotional support from her partner if she discloses her status.	5	4	3	2	1
Q7013	I will assist my partner and child to get ARVs if they test HIV-positive.	5	4	3	2	1
Q7014	If my female partner tests HIV-positive, I will always accompany her to test for viral load and other medical tests at the clinic.	5	4	3	2	1
Q7015	I can remind my partner to implement the healthcare worker's advice when taking the medication.	5	4	3	2	1
Q7016	I can provide childcare when my partner fails to work due to sickness.	5	4	3	2	1
Q7017	If my child and partner are HIV-positive, I can provide them with appropriate nutrition.	5	4	3	2	1
Q7018	HIV programmes in my area provide male-oriented services.	5	4	3	2	1

Q7019	HIV programmes encourage men to take care of HIV-positive family members.	5	4	3	2	1
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~Thank you~

8.6.2: Females' questionnaire

Date of interview ... / ... /

Name of Village Ward Number :.....

SECTION A: Socio-demographic information

Please answer the following questions or put a circle on the number against the appropriate responses e.g. (2)

Q1001. How old were you at your last birthday?

Q 1002. Gender

1 Female 2 Male

Q 1003. What is your marital status?

1	Married	2	Divorced	3	Widowed
4	Separated	5	Single		

Q1004. Age of spouse/partner

Q1005. Have you ever attended school?

1 Yes 2 No (skip to Q1009)

Q 1006. What is the highest grade/form/ standard passed in school?

Q 1007. In which year was it?

Q1008. What was your post school education?

1	None	2	Certificate	3	Diploma
4	University	6	Other (specify).....		

Q1009. What is your occupation? (Multiple responses are permissible)

1	Scholar	2	Unemployed
3	Self-employed	4	Government employee
5	Private sector employee	6	Work on farm/field
7	Other (specify).....		

Q 1010. Do you have enough money for monthly expenses?

1	Enough with saving	2	Enough without saving
3	Not enough but no debt	4	Not enough and in debt

Q 1011. How much to do you spend on a monthly basis?

Q1012. What is your religion?

- | | | | | | |
|---|----------------------|---|-----------|---|-----------|
| 1 | Catholic | 2 | Methodist | 3 | Apostolic |
| 4 | Zionist | 5 | Anglican | 6 | Baptist |
| 7 | Traditional | | | | |
| 8 | Other (specify)..... | | | | |

Q1013. How many adults are you in your household?

Q1014. How many children do you have?
..... (If nil, skip to Q1016)

Q1015. What is the age of your youngest child?

Q1016. Which of the following major assets do you own? (Multiple responses are permissible)

- | | | | |
|---|------------------|---|-----------------------------|
| 1 | House/plot/stand | 2 | Livestock |
| 3 | Field/farm | 4 | Shop/supermarket/ beer hall |
| 5 | Car/cart/bicycle | 6 | Other (specify)..... |

Q1017. Please indicate how many of the following assets you have.

- | | | |
|---|--------|-------|
| 1 | House | ..... |
| 2 | Stands | ..... |

Q 1018. Please indicate how many of the following livestock you own.

- | | | | | | |
|---|---------|-------|---|-----------------|-------|
| 2 | Cattle | ..... | 2 | Sheep | ..... |
| 3 | Goats | ..... | 4 | Donkeys | ..... |
| 5 | Chicken | ..... | 6 | Other (specify) | ..... |

Q 1019. Please show how many of the following you own.

- | | | | | | |
|---|-------|----------|---|-------|-------|
| 2 | Field | | 2 | Plots | |
|---|-------|----------|---|-------|-------|

Q1020. How many of the following businesses do you own (if applicable)

- | | | | | | |
|---|----------------------|-------|---|-------------|-------|
| 2 | Tuck-shop | ..... | 2 | Supermarket | ..... |
| 3 | Beerhall | ..... | 4 | Canteen | ..... |
| 5 | Other (specify)..... | | | | |

Q1021. Please indicate how many of the following mode of transport do you own

- | | | | | | |
|---|---------|-------|---|-----------------|-------|
| 1 | Cars | ..... | 2 | Cart | ..... |
| 3 | Bicycle | ..... | 4 | Other (specify) | ..... |

Q1022. Which of the following sources of information do you have access to? (Multiple responses are permissible)

- | | | | |
|---|------------|---|-----------------------|
| 1 | Television | 2 | Radio |
| 3 | Newspaper | 4 | Other (Specify).....4 |

SECTION B: Knowledge of HIV

Q2001. I have heard about HIV/AIDS.

1 Yes

2 No (skip to Q2003)

Q2002. From which of the following sources did you first learn about HIV/AIDS?

1 Health facility

2 Church

3 School

4 From a friend/family member

5 Radio/newspaper/television

6 Other (specify).....

For each statement, please tick the appropriate answer from the following choices “True”, “False”, or “I don’t know”. If you do not know, please do not guess; instead, please circle “Don’t Know.”

No.	Statement	TRUE	FALSE	I DON'T KNOW
Q2003	A person can get the HIV infection by sharing a meal with someone who is infected with HIV.			
Q2004	A person can get the HIV infection by sharing needles and syringes.			
Q2005	HIV can be transmitted from one person to another by touching their body.			
Q2006	HIV can be transmitted through sexual intercourse.			
Q2007	A person can get HIV/AIDS through witchcraft.			
Q2008	Anyone can contract HIV regardless of their age or gender.			
Q2009	A healthy-looking person can be infected with HIV.			
Q2010	Having sex with a virgin or a baby can cure HIV.			
Q2011	HIV can be prevented by using condoms properly during sex.			
Q2012	A person can know his/her HIV status by testing blood.			
Q2013	Coughing and sneezing DO NOT spread HIV.			
Q2014	A person can get HIV by sharing a glass of water with someone who has HIV.			

Q2015	Douching after sex will keep a woman from getting HIV.			
Q2016	A woman can get HIV if she has anal sex with a man.			
Q2017	Showering, or washing one's genitals/private parts, after sex keeps a person from getting HIV.			
Q2018	People who have been infected with HIV quickly show serious signs of being infected.			
Q2019	There is a vaccine that can stop adults from getting HIV.			
Q2020	People are likely to get HIV by deep kissing/putting their tongue in their partner's mouth, if their partner has HIV.			
Q2021	A woman cannot get HIV if she has sex during her period.			
Q2022	There is a female condom that can help decrease a woman's chance of getting HIV.			
Q2023	A person can get HIV by giving blood.			
Q2024	A person will NOT get HIV if she or he is taking antibiotics.			
Q2025	Having sex with more than one partner can increase a person's chance of being infected with HIV.			
Q2026	Taking a test for HIV one week after having sex will tell a person if she or he has HIV.			
Q2027	A person can get HIV by sitting in a hot tub or a swimming pool with a person who has HIV.			
Q2028	A person can get HIV from oral sex.			
Q2029	Using Vaseline or baby oil with condoms lowers the chance of getting HIV.			

SECTION C:
Knowledge on PMTC

I

Q3001. Have you heard about PMTCT before?

1 Yes 2 No (skip to Q3003)

Q3002. From which of the following sources did you first learn about PMTCT?

1 Health facility 2 Church
3 School 4 From a friend/family member
5 Radio/newspaper/television 6 Other (specify).....

Q3003. Which of the following organisations implement/teach PMTCT programmes in your area? (Multiple responses are permissible)

1 Health facility 2 Churches

3 NGOs 4 Other (Specify).....

Q3004. Have you ever heard about couples counselling and testing for HIV to prevent mother-to-child transmission?

1 Yes 2 No

Q3005. What do you understand ‘couples counselling and testing for HIV’ to mean?

4. Partners (man and a woman that are in a relationship) receiving HIV counselling and testing together
5. Partners (man and a woman that are in a relationship) that test for HIV separately and share results.
6. Other (specify)

Q3006. From which of the following sources did you get to hear about couples counselling and testing? (Multiple responses are permissible)

- | | |
|------------------------------|-------------------------------|
| 1 Health facility | 2 Church |
| 3 School | 4 From a friend/family member |
| 5 Radio/newspaper/television | 6 Other (specify)..... |

Q3007. Are you at any point in the future willing to undergo couples counselling?

1 Yes 2 No

Q3008. Did you get any advice on prevention of mother-to-child transmission of HIV when you were pregnant?

1 Yes 2 No (skip to Q3010)

Q3009. From whom did you get the advice? (Multiple responses are permissible)

- | | |
|-------------------------|-----------|
| 1 Health staff | 2 Husband |
| 3 Relatives | 4 Friends |
| 5 Others (specify)..... | |

Q3010. Are you aware of the policies that are implemented to prevent mother-to-child transmission of HIV?

1 Yes 2 No (skip to Q 3012)

Q3011. If yes, how did you come to know them? (Multiple responses are permissible)

- | | |
|------------------------------------|------------------------------------|
| 1 Through a nurse/doctor at clinic | 2 Through a family member/relative |
| 3 Through a friend | 4 At work |
| 5 Other (Specify)..... | |

For each statement, please tick the appropriate answer from the following choices “True”, “False”, or “I don’t know”. If you do not know, please do not guess; instead, please circle “Don’t Know.”

No.	Statement	E	SE	W

Q3012	All pregnant women infected with HIV will have babies born with AIDS.			
Q3013	A woman can transmit HIV to her baby at birth.			
Q3014	A woman with HIV can transmit HIV to her baby through breastfeeding.			
Q3015	If an HIV positive pregnant mother takes antiretroviral drugs, she can prevent transmission to her baby.			
Q3016	An HIV positive partner/husband of a pregnant woman can transmit the virus to his female partner and baby.			
Q3017	Use of condoms by an expecting couple during sex can prevent mother-to-child transmission of HIV to the unborn child.			
Q3018	Although a mother and baby get the HIV infection, they can still have normal lives by taking antiretroviral drugs.			
Q3019	Giving water to a baby newly born to an HIV-positive mother can cause transmission of HIV to the baby while she breastfeeds.			

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mary prevention of HIV

Q4001. Have you ever discussed preventing HIV infection between yourselves with your partner?

1 Yes 2 No (Skip to Q4004)

Q4002. If yes, who often leads the discussion?

1 Myself 2 My partner 3 Both of us

Q4003. How often do you give your views regarding this when you discuss it?

1 Always 2 Sometimes 3 Uncertain
4 Seldom 5 Never

Q4004. Who makes a decision as to whether to use protection or not?

1 Myself 2 My partner
3 Both of us 4 Other (specify)

Q4005. Who makes a decision regarding which method of protection to be used?

1 Myself 2 My partner
3 Both of us 4 Other (specify)

Q4006. Which methods of preventing HIV transmission are you familiar with?

- | | | | |
|---|----------------|---|---------------------------|
| 1 | Male condom | 2 | Female condom (diaphragm) |
| 3 | Being faithful | 4 | Microbicide |
| 5 | None | 6 | Other (specify)..... |

Please indicate how often you use the following means of preventing HIV transmission:

No.	Question	Always	Sometimes	Uncertain	Seldom	Never
Q4007	Male condom	5	4	3	2	1
Q4008	Female condom	5	4	3	2	1
Q4009	Microbicide	5	4	3	2	1
Q4010	Being faithful	5	4	3	2	1

Please show to what extent you agree or disagree to the possible ways in which you think a partner can be of help with regards to prevention of HIV among women:

No.	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Q4011	Provide emotional support	5	4	3	2	1
Q4012	To bring/buy condoms	5	4	3	2	1
Q4013	Agree to use condoms	5	4	3	2	1
Q4014	Attend counselling sessions	5	4	3	2	1
Q4015	Agree to test for HIV as a couple	5	4	3	2	1
Q4016	Provide money to get to the clinic	5	4	3	2	1
Q4017	Accompany me to consult at the health service as a couple	5	4	3	2	1

Please show your opinion towards the following statements:

No.	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Q4018	Couples that trust each other also need to use protection against HIV.	5	4	3	2	1
Q4019	It is only when your partner is HIV positive that you should use protection.	5	4	3	2	1
Q4020	When you test HIV negative, you still need to use protection against HIV.	5	4	3	2	1
Q4021	Avoiding multiple partners helps to reduce the risk of HIV infection.	5	4	3	2	1
Q4022	Condoms are easily accessible in health facilities.	5	4	3	2	1
Q4023	HIV prevention programmes meet the needs of men.	5	4	3	2	1

SECTION E: Prevention of unwanted pregnancies among HIV positive women

Q5001. Have you ever discussed your reproductive desire with your partner?

1 Yes 2 No

Q5002. If you are to test HIV positive, how many more children would you wish to have?

.....

Q5003. If you would be pregnant and are HIV positive, would you consider terminating the pregnancy?

1 Yes (skip to Q5005) 2 No

Q5004. If no, which of the following reasons will cause you not to terminate? (Multiple responses are permissible)

- 1 Fear violence once partner discovers 2 It is not allowed
- 3 Fear of poor health effects associated with unsuccessful abortion
- 4 Need for another child
- 5 I will seek for means of preventing transmission to child
- 6 Other (specify).....

If yes in (Q5003), to what extent would you agree or disagree with the following reasons for terminating pregnancy?

No.	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Q5005	I am worried that my child will be infected.	5	4	3	2	1
Q5006	Concerned about the future of the infant.	5	4	3	2	1
Q5007	My health will deteriorate with pregnancy.	5	4	3	2	1
Q5008	My child will not live long due to HIV.	5	4	3	2	1

Q5009. Are you aware of any services for termination of pregnancy at your clinic/hospital?

1 Yes 2 No (skip to Q5011)

Q5010. If yes, is contraceptive counselling for HIV positive women available in your clinic/hospital?

1 Yes 2 No 3 I do not know

Q5011. Would you discuss your decision to terminate an unwanted pregnancy with your partner?

1 Yes (skip to Q5013) 2 No

Q5012. If no, what could be the possible reasons of not discussing with him? (Multiple responses are permissible).

- 1 He will not allow me to abort 2 I want to avoid conflict
- 3 I am concerned that he will abandon me
- 4 I do not need to discuss with him
- 5 Other (specify).....

Please show to what extent you agree or disagree to the possible ways in which you think a partner can be of help with regards to termination of pregnancy among HIV positive women:

No.	Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Q5013	Provide emotional support.	5	4	3	2	1
Q5014	Provide money to cover possible costs.	5	4	3	2	1

Q5015	Accompany me to the consult at the health service/	5	4	3	2	1
Q5016	Attending counselling sessions.	5	4	3	2	1
Q5017	Encourage me to seek medical attention.	5	4	3	2	1
Q5018	Remind me to take any prescribed medication.	5	4	3	2	1
Q5019	To suggest the method of abortion.	5	4	3	2	1

Q5020. If you are to decide to prevent an unwanted pregnancy, which one of the following options would you prefer to use?

- 1 Medical abortion 2 Surgical abortion
3 Traditional abortion 4 Not certain
5 Other (specify).....

Please show what your opinion is towards each of the following below regarding termination of unwanted pregnancy among HIV positive women:

No.	Statement	Strongly Agree	Agree	Uncertain	Uncertain	Strongly Disagree
Q5021	Termination of unwanted pregnancy is the best option to prevent mother-to-child transmission for HIV positive women.	5	4	3	2	1
Q5022	Safe abortion is available at my clinic/hospital.	5	4	3	2	1
Q5023	Once a woman is infected with HIV she should not get pregnant again.	5	4	3	2	1
Q5024	Termination of unwanted pregnancy is accepted in my community.	5	4	3	2	1
Q5025	My partner will support me if I decide to terminate pregnancy.	5	4	3	2	1
Q5026	A pregnant woman who is infected with HIV can decide to terminate pregnancy without her partner's consent.	5	4	3	2	1

Q5027	A woman that discusses her intention to abort with her partner will get support from him.	5	4	3	2	1
Q5028	Knowing my HIV status will help me and my partner decide on whether or not to have a child.	5	4	3	2	1
Q5029	Family planning programmes provide needs for men.	5	4	3	2	1

SECTION F: Prevention of transmission from women living with HIV to their Infants (during pregnancy and birth)

Q6001. Did you discuss having this baby with your partner?

1 Yes 2 No

Q6002. How many times did you attend antenatal clinic during your last pregnancy?

.....

Q6003. Did you and your partner discuss whether you should be tested for HIV?

2 Yes 2 No

Q6004. Did you test for HIV during your last pregnancy?

1 Yes 2 No (skip to Q6006)

Q6005. (If YES on Q6004) Reasons for testing (Multiple responses are permissible)

- 1 Was sick
- 2 Wanted to know status
- 3 Nurses advised him to test
- 4 Other (Specify).....

(skip to Q6007)

Q6006. (If NO on Q6004) reasons for not testing. (Multiple responses are permissible)

- 1 Lack of sickness
- 2 Being faithful
- 3 Knowing partner's negative status
- 4 Lack of time
- 5 Lack of money
- 6 Fear of positive test results
- 7 Not knowing where to test.
- 8 Other (specify).....

Q6007. Have you disclosed your status to your partner?

1 Yes 2 No (skip to Q6009)

Q6008. How did your partner react after you disclosed your status?
 2 Angry 2 Shocked 3 Disappointed
 4 Happy 5 Do not remember
 6 Other (specify).....

Q6009. Did you receive counselling before testing?
 1 Yes 2 No

Q6010. Did you receive counselling after testing?
 1 Yes 2 No

Q6011. Was your husband tested for HIV at the clinic when you were pregnant?
 1 Yes 2 No
 3 Don't know

Q6012. What type of counselling did you and your husband receive?
 1 Alone 2 As a couple
 3 As a group 4 Other (specify).....

Q6013. Were you counselled on how to prevent HIV transmission to your unborn baby?
 1 Yes 2 No 3 I do not remember

Q6014. Which of the following methods did you use to prevent HIV transmission to your unborn baby?
 1 Condom 2 Abstaining 3 Being faithful
 4 None 5 Other (specify).....

Q6015. Can you please indicate which of the following were you counselled about when you were pregnant? (Multiple responses are permissible)
 1 How to prevent the baby from being infected with HIV
 2 Infant feeding methods
 3 Family planning methods
 4 Taking antiretroviral drugs during pregnancy
 5 Other (specify).....

Q6016. Has your partner ever accompanied you to the antenatal clinic (ANC) when you were pregnant?
 1 Yes 2 No (skip to Q6019)

Q6017. If yes, how many times did he accompany you?

Q6018. For which of the following reasons did your husband accompany you to the ANC? (Multiple responses are permissible)
 1 Providing transport
 2 Wanted to know about ANC activities
 3 Was asked to come by health professionals
 4 I asked him to come

- 5 Local community leaders advised him to go
- 6 Other (Specify).....

Q6019. Where did you give birth?

- 5 At hospital/ clinic
- 6 At home
- 7 At the traditional midwife home
- 8 Other (specify)

Q6020. Did your partner accompany you when you went to give birth?

- 2 Yes 2 No (skip to Q6022)

Q6021. If yes, for which of the following reasons did your husband accompany you? (Multiple responses are permissible)

- 1 Providing transport
- 2 To give me emotional support
- 3 Was asked to come by health professionals
- 4 I had asked him to come
- 5 Other (Specify).....

Q6022. Was he present during your labour? 1 Yes 2 No

Q6023. Was he present at birth? Yes 2 No (skip to Q6025)

Q6024. If yes, for what reason did he come? (Multiple responses are permissible)

- 1 To give me emotional support
- 2 Wanted to know how the process of giving birth unfolds
- 3 Was asked to come by health professionals
- 4 I had asked him to come
- 5 Local community leaders advise men to be there
- 6 Other (Specify).....

Q6025. If no (in Q6023), why do you think he was not present?

- 5 He was busy
- 6 He did not know I that I was giving birth
- 7 I did not inform him
- 8 Other (specify).....

Q6026. How soon after the birth did he come to see you?.....

Q6027. Did you partner accompany you and the baby home?

- 2 Yes 2 No

Q6028. For which of the following reasons did your husband accompany you? (Multiple responses are permissible).

- 1 Providing transport
- 2 To give me emotional support

- 3 He was asked to do so by health professionals
- 4 I had asked him to come
- 5 Local community leaders advise men to be there
- 6 Other (Specify).....

Please show what your opinion is towards each of the following statements below regarding antenatal care:

No.	Statement	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
Q6029	The antenatal clinic operating times are convenient for men to attend with their female partners.	5	4	3	2	1
Q6030	Healthcare providers allow men to come with their female partners to the antenatal clinic.	5	4	3	2	1
Q6031	Men are provided with education on PMTCT at clinics.	5	4	3	2	1
Q6032	The ANC staff attend to health problems of men when they accompany their female partners.	5	4	3	2	1
Q6033	Knowing my HIV status will help me to use antiretroviral drugs during pregnancy.	5	4	3	2	1
Q6034	Knowing my HIV status will help me and my husband to decide on methods of feeding our baby.	5	4	3	2	1
Q6035	A man who accompanies his female partner to ANC is considered by my community as jealous.	5	4	3	2	1
Q6036	If a man accompanies his female partner to the antenatal clinic the community stigmatises him.	5	4	3	2	1
Q6037	The antenatal clinic is supposed to be a place for women only.	5	4	3	2	1
Q6037	Antenatal programmes offer male-oriented services.	5	4	3	2	1

SECTION G: Care and support for HIV positive women and children

Q7001. Did you receive counselling on infant feeding after the birth of your child?

- 1 Yes 2 No 3 I do not remember

Q7002. If yes, please show which of the following your partner assisted you with in terms of infant feeding. (Multiple responses are permissible).

- 7 Give the woman money to get to the clinic
- 8 Accompany the woman to the clinic
- 9 Sit in the consultation room
- 10 Discuss the issues raised by the healthcare worker at that point you
- 11 Remind me how to implement the advice of the healthcare worker

12 Other (specify).....

Q7003. Was your child prescribed nevirapine?

1 Yes 2 No (if no, skip to Q7010)

Q7004. If yes, did you get counselling on how to take the medication?

1 Yes 2 No 3 I do not remember

Q7005. Please show how your partner has been involved since your child was on nevirapine (Multiple responses are permissible).

- 8 Accompanying me to get the medication
- 9 Providing the treatment to the child
- 10 Reminding me to take the medication
- 11 Reminding me to follow the correct measures as advised by the health worker
- 12 Giving money to get to the clinic
- 13 Offering emotional support
- 14 Other (specify).....

Q7006. Did you go for a PCR test with your partner?

1 Yes 2 No (skip to 7008) 3 I do not remember
(skip to 7009)

Q7007. If yes, for what reasons do you think he accompanied you? (Multiple responses are permissible).

- 7 To provide transport
- 8 To give emotional support
- 9 To know how the process is conducted
- 10 I asked to come
- 11 The nurse encouraged him to come
- 12 Other (specify)..... (skip to 7009)

Q7008. If no (in Q7005), what do you think were the reasons for not accompanying you?

- 10 He had no time
- 11 I did not inform him about it
- 12 I did not expect him to come
- 13 Other (specify).....

Q7009. Please indicate in which of the following ways your partner assisted you while you waited for the Polymerase Chain Reaction test results. (Multiple responses are permissible).

- 1 Gave me money to get to the clinic
- 2 Accompanied me to the clinic
- 3 Sat in on the consultation room
- 14 Discussed the issues raised by the healthcare worker at that point
- 15 Reminded me on how to implement the advice of the healthcare worker
- 16 Offered emotional support and encouragement to take the next step in the process
- 17 Agreed to use condoms throughout
- 18 Assisted in giving the infant drops

9 Other (specify)

Q7010. Are there any HIV prevention (from mother-to-child) programmes/activities in your area?

1 Yes 2 No 3 I do not know

Q7012. If Yes, which of the following involve men in their activities?

1 Clinic/hospitals 2 Churches
3 Non-governmental organisations 4 Village health workers
5 Other (specify).....

Please indicate to what extent you agree or disagree with the following statements regarding care and support for HIV positive women, partners, and their children:

No.	Statement	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
Q7013	A woman who is HIV positive should get emotional support from her partner if she discloses her status.	5	4	3	2	1
Q7014	My partner would help in buying ARVs if I test positive.	5	4	3	2	1
Q7015	If I am HIV positive, my partner will always provide company when I go for viral load testing at the clinic.	5	4	3	2	1
Q7016	I think my partner will help me to take the medication as advised by the healthcare worker.	5	4	3	2	1
Q7017	My partner can provide childcare when I fail to work due to sickness.	5	4	3	2	1
Q7018	If my child and I are HIV-positive, my partner can provide us with appropriate nutrition.	5	4	3	2	1
Q7019	HIV programmes in my area provide male-oriented services.	5	4	3	2	1
Q7020	HIV programmes encourage men to take care of HIV-positive family members.	5	4	3	2	1

~Thank you~

8.6.3: Focus group discussions

Name of the institution: _____

Date: ____/____/____

Name of Moderator: _____

Names of note takers: _____

Demographic information of participants:

Partici pant	Age	Level of education	Occupation	Number of children	Marital Status	Religious Denomination	Number of female partners/partner s husband has

Guiding questions

1. Introduction and purpose of the discussion:

As part of the introduction, participants will be asked to respect one another's confidentiality by not discussing the content of the discussion after the focus group.

2. Which are the ways in which HIV can be transmitted from mother to child?

3. How do you think this transmission can be prevented?

4. Could you explain who you think is responsible for making sure that the child is prevented from being infected?

5. Are there any organisations in your area that are aimed at helping to prevent mother-to-child transmission of HIV? (Probe: their names and what they do, who takes part in these programmes?)
6. What should men's involvement, be in PMTCT, if any?
7. What do you understand by male involvement in PMTCT?

Can you list the possible results/outcomes that their involvement will bring: to the mother, the child and themselves as well?

8. Do men attend these programmes? If they are involved, in what ways are men taking part in these programmes?

What do you think are their reasons for attending these programmes?

If they are not, what would you think are the reasons for not taking part?

9. In your opinion, in what aspects do you think men should be involved to help their HIV positive female partners in accessing PMTCT services?

10. After delivery how can men help their HIV positive female partners and ensure that a child does not get infected?

11. Would you explain what a partner's reaction will be if his female partner discusses PMTCT issues with him?

12. If a woman is pregnant would she tell her husband to accompany her to antenatal clinic for testing? Why?

13. If she is to test for HIV, would she ask for permission from her partner/husband? Why?

14. If she tested positive would she tell her husband? Why?

15. a) What do you think her husband's reaction would be? Would they be supportive? Why?

b) How about a pregnant woman who may want to terminate pregnancy after they test HIV positive? Do they need approval from their husband/partner? (Probe: who should decide on what should be done? Why?)

16. In your opinion, do you think there are some beliefs which deter men from being involved in reproductive issues? Can you mention them?

17. How do you perceive women who get tested without the approval of their husband?

Could you provide any of the means you are aware of that women can use to prevent themselves from getting HIV. (Probe: availability of these methods; who makes decisions for what or when to use them; possible consequences of use with/without partner's consent).

18. What do you think of men who are involved in PMTCT programmes?

19. What would other villagers say once they know that a man is involved in PMTCT?

20. Can you share, if you know what problems women who are on PMTCT programme face in their families?

21. Would you think condom use during sex among expecting couples can help to prevent HIV infection? If so, would you use it? If not, why?

22. What other issues/suggestions do you think are important if men are to be actively involved in PMTCT programmes?

23. If you are to list the areas in which you think men should take part in PMTCT, which ones would you include? (Probe)

24. How do you feel about involving men in PMTCT? What are the advantages and disadvantages of involving them?

.....
.....

~Thank you~

8.6.4: Key informant interview guide

Name of the institution: _____

Location: _____

Date: ____/____/____

Position of interviewee _____

A. introduction

1. What do you think the term “male involvement” in PMTCT means?
2. What are the issues of male involvement in PMTCT in the district?
3. Are there any Ministries/Agencies/Working Groups that have been specifically supporting male involvement in PMTCT? If yes, what issues are they focused on?
4. Could you explain your experience in your organisation as far as male involvement in PMTCT is concerned?

B. Background on organizations’ current male involvement work

5. Please describe briefly your organization’s work in PMTCT (including family planning, maternal health, STI prevention, diagnosis and treatment, and HIV/AIDS).
6. Who are the beneficiaries of your organization?
7. Does your organization include men in any of its PMTCT activities? (e.g., as partners of women, as direct clients) Please describe.

If men are not included in any of your activities, please go to Question 8a.

If men are included in your activities, please go to Question 8b.

8a. Do you have any plans to work with men in your PMTCT programs?

Yes_____ No_____

If not, why not?

8b. What were the reasons your organization started to work with men?

When did the organisation start to PMTCT programmes with men?

9. Besides your beneficiaries, in what *other* ways does your organization have contact with men? (e.g., as service providers, policymakers, program managers, or community leaders). Please describe.

10. Do the women beneficiaries of your PMTCT programs want men to be more involved?

How?

C. Possible areas in which to expand work with men

To respondents of 8a: The questions in section “C” are optional.

11. Would your organization like to work more extensively with men in PMTCT?

12. In what additional ways would you like men to be involved in your PMTCT programs?

13. What would make it easier to work more extensively with men?

14. Would it help your organization if there were guidelines on working with men in PMTCT?

How?

D. Overall benefits and challenges

15. What are the benefits of working with men?
16. What are the difficulties of working with men?
17. How do you think this can be improved?

E. Policies, laws, and regulations and the development of guidelines

18. Are there any policies, laws, or regulations that you are aware of that are related to male involvement in PMTCT? If so, which ones?
19. Are there any policies, laws, or regulations that could make it more difficult to involve men in PMTCT? If so, which ones?
20. Is there anything in the Shona/Ndebele culture that could be a barrier to male involvement in PMTCT? How do you think these barriers could be overcome?
21. What do you see as the most important components of a program that works with men in PMTCT?
22. To which sources did/do you look for guidance on working with men in PMTCT? (e.g., documents, websites, organizations)

Thank you!

8.6.5: Follow-up interview guide

Date: ____/____/____

Demographic information of the participant:

Age	Sex	Level of education	Occupation	Number of children	Marital Status	Religious Denomination	No. Of partners

Introduction

1. From your understanding, would you explain how you think the HIV virus can be transmitted from mother to the child.
2. Are there any means of preventing this transmission? (Probe response: if yes- how is this prevented. If No- why is it not possible?)
3. Would you explain (if any) the kinds of support you received regarding prevention of HIV between mother and child.
4. Can you explain if you think it is important to involve male partners in programmes that deal with the prevention of mother- to-child transmission (PMTCT) of HIV? (Probe for both negative and positive outcomes)
5. What do you think are the duties/roles that male partners are expected to take in the prevention of mother-to-child transmission of HIV? (Probe why such roles/duties/actions should be done by them)
6. From what you know about HIV and how it is transmitted to children/ do you think these roles should remain the same? (Probe what they suggest; why should they or should they not change?)

7. In terms of HIV testing, what are your views about the feasibility of couple counselling and testing? (Probe with reference to previous experience)
8. Would you explain how your community/family will react if men take part in PMTCT programmes?
9. Do you have any comments or recommendations to give on men's involvement in PMTCT programmes?
10. What are advantages and disadvantages of involving men? Are there any problems that may arise if they get involved? (Probe).

Observations

.....

.....

.....

.....

~Thank you~

8.6.6: Informed consent form

MEDICAL RESEARCH COUNCIL OF ZIMBABWE

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MRCZ No. MRCZ/A/1859



INFORMED CONSENT FORM: SURVEY

PROJECT TITLE: Male partner Involvement in the Prevention of Mother-to-Child Transmission (PMTCT) of HIV: A mixed methods study of the Gokwe North District, Midlands Province, Zimbabwe.

Principal Investigator: Vimbai Chibango,
Phone number(s): +263772788072

What you should know about this research study:

- We give you this consent so that you may read about the purpose, risks, and benefits of this research study.
- You have the right to refuse to take part, or agree to take part now and change your mind later.
- Whatever you decide, it will not affect your regular care.
- Please review this consent form carefully. Ask any questions before you make a decision.
- Your participation is voluntary.

PURPOSE

You are being asked to participate in a research study of male partners' involvement in the prevention of mother-to-child transmission of HIV. The purpose of the study is to understand what men and women's perspectives, beliefs, practices and attitudes are regarding the involvement of male partners in programmes that

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MRCZ No. MRCZ/A/1859

are aimed at the prevention of mother-to-child transmission of HIV. It is assumed that increased male-partner involvement in these programmes will facilitate the uptake of interventions designed to eliminate and prevent transmission of mother-to-child transmission of HIV. You were selected as a possible participant in this study because of the following reasons; you are one of the adults in the district above the age of 18, and you have a child in the past 10 years. You are among approximately 525 participants that were selected to take part in this study in the Gokwe North District of Midlands Province in Zimbabwe.

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MRCZ No. MRCZ/A/1859

PROCEDURES AND DURATION

If you decide to participate, you will undergo an interview where you will be asked to give your opinion and understanding, perspectives and other aspects that relate to men's involvement in the prevention of mother- to-child transmission of HIV. The interviews will take approximately 30-45 minutes. Follow-up interviews will be done at least a month later with only a few individuals. These interviews will be audio-taped. Information that will be recorded is that which is provided during the course of interview only. This information will only be used for the purposes of research. Should you require listening to your audio-taped interview; this will be provided on demand. These tapes will be stored for approximately five (5) years after completion of research and will be destroyed thereafter.

RISKS AND DISCOMFORTS

There is no serious foreseen risk that is likely to arise during the research. Possible risks that may occur are that there could be questions that may lead the participant to be emotional, especially in terms of those associated with HIV. Some participants might be HIV-positive and some questions may cause them to be re-traumatised. When this occurs, the researcher will assess the needs of the participant and refer them to the nearest social worker or counsellor for psychological support.

BENEFITS AND/OR COMPENSATION

There are no benefits or compensation that is given to participants for this research. Their participation is entirely voluntary.

ALTERNATIVE PROCEDURES OR TREATMENTS

Not Applicable

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MRCZ No. MRCZ/A/1859

CONFIDENTIALITY

If you indicate your willingness to participate in this study by signing this document, we plan to disclose your information in the final report that will be written by the principal investigator, copies of this report will be provided to implementers of PMTCT at all levels in the country. The purpose of disclosure will be to inform implementers on how best they can implement PMTCT programmes in their workplace using the ideas that will have been raised by participants in the study. Any information that is obtained in connection with this study that can be identified with you will remain confidential and will be disclosed only with your permission.

ADDITIONAL COSTS

Participants will not be asked to pay any costs when they participate in this research. Those required for focus discussions will be accessed at the usual place they always convene for their regular activities. Those who will take part in the survey will be accessed from their homes. Hence, there will no costs they will need to pay.

IN THE EVENT OF INJURY

In the event of injury resulting from your participation in this study, treatment shall be offered by the study.

In the event of injury, the principal investigator will always be available to carry the affected participant to the nearest healthcare centre. Contact details: Vimbai Chibango, Phone number: +263772788072.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. If you decide not to participate in this study, your decision will not affect your future relations with the University of KwaZulu-Natal, its personnel, and associated hospitals. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time without penalty.

ADDITIONAL ELEMENTS

Should you decide to withdraw from participating in this research, there are no consequences associated with this decision. You will only inform the principal investigator of your decision to withdraw when necessary.

With the nature of this research, the investigator does not anticipate circumstances that lead to the termination of participants' participation without their consent to occur.

Should you be willing to continue participating in this research, significant new findings developed from this research will be provided to you.

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SIGNATURE PAGE

PROJECT TITLE: Male Partner Involvement in the Prevention of Mother-to-Child Transmission (PMTCT) of HIV: A mixed methods study of the Gokwe North District, Midlands Province, Zimbabwe.

Protocol Version Number/date

OFFER TO ANSWER QUESTIONS

Before you sign this form, please ask any questions on any aspect of this study that is unclear to you. You may take as much time as necessary to think it over.

AUTHORISATION

You are making a decision whether or not to participate in this study. Your signature indicates that you have read and understood the information provided above, have had all your questions answered, and have decided to participate.

Name of Research Participant (please print)

Date

Signature of Participant or legally authorised representative

Time

Relationship to the Participant

[the above two lines should appear on forms signed by legal representatives of the participant, for example the parents of a minor.]

Name of Staff Obtaining Consent

Signature

Date

Name of Witness (*if required*)

Signature

Date

YOU WILL BE OFFERED A COPY OF THIS CONSENT FORM TO KEEP.

If you have any questions concerning this study or consent form beyond those answered by the investigator, including questions about the research, your rights as a research participant or research-related injuries; or if you feel that you have been treated unfairly and would like to talk to someone other than a member of the research team, please feel free to contact the Medical Research Council of Zimbabwe (MRCZ) on telephone (04)791792 or (04) 791193 and cell phone lines 0772 433 166 or 0779 439 564. The MRCZ offices are located at the National Institute of Health Research premises at Corner Josiah Tongogara and Mazowe Avenue in Harare.

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Audio, Video Recording and Photography

Statement of consent to be audiotaped.

I understand that photographs / audio recordings / video recordings will be taken during the study. *(For each statement, please choose YES or NO by inserting your initials in the relevant box)*

- I agree to **being audio recorded**

Yes ☐

No ☐

Name of Participant (please print)

Signature

Date

8.6.7: Ethical Clearance- Medical Research Council - Zimbabwe

Telephone: 791792/791193
Telefax: (263) - 4 - 790715
E-mail: mrcz@mrcz.org.zw
Website: <http://www.mrcz.org.zw>



Medical Research Council of Zimbabwe
Josiah Tongogara / Mazoe Street
P. O. Box CY 573
Causeway
Harare

APPROVAL

Ref: MRCZ/A/1859

10 October, 2014

Vimbai Chibango
University of KwaZulu-Natal
Howard Campus
Shepstone level 7, Durban 4041
South Africa

RE:- Male partner involvement in the Prevention of Mother-to-Child Transmission (PMTCT) of HIV: A mixed methods study of Gokwe North District, Midlands Province, Zimbabwe

Thank you for the above titled proposal that you submitted to the Medical Research Council of Zimbabwe (MRCZ) for review. Please be advised that the Medical Research Council of Zimbabwe has reviewed and approved your application to conduct the above titled study. This is based on the following documents (among others) that were submitted to the MRCZ for review:

- Research Protocol
- Informed Consent forms for Survey (English, Shona and Ndebele)
- Informed Consent forms for FGDs and Follow-up Interviews (English, Shona and Ndebele)
- Informed Consent forms for Key Informant interviews (English, Shona and Ndebele)
- Questionnaires and interview guides (English, Shona and Ndebele)

- APPROVAL NUMBER** : MRCZ/A/1859
This number should be used on all correspondence, consent forms and documents as appropriate.
- TYPE OF REVIEW** : Full Board
- EFFECTIVE APPROVAL DATE** : 10 October, 2014
- EXPIRATION DATE** : 09 October, 2015

After this date, this project may only continue upon renewal. For purposes of renewal, a progress report on a standard form obtainable from the MRCZ Website should be submitted three months before the expiration date for continuing review.

- SERIOUS ADVERSE EVENT REPORTING:** All serious problems having to do with subject safety must be reported to the Institutional Ethical Review Committee (IERC) as well as the MRCZ within 3 working days using standard forms obtainable from the MRCZ Website.
- MODIFICATIONS:** Prior MRCZ and IERC approval using standard forms obtainable from the MRCZ Website is required before implementing any changes in the Protocol (including changes in the consent documents).
- TERMINATION OF STUDY:** On termination of a study, a report has to be submitted to the MRCZ using standard forms obtainable from the MRCZ Website.
- QUESTIONS:** Please contact the MRCZ on Telephone No. (04) 791792, 791193 or by e-mail on mrcz@mrcz.org.zw
- Other**
- Please be reminded to send in copies of your research results for our records as well as for Health Research Database.
- You're also encouraged to submit electronic copies of your publications in peer-reviewed journals that may emanate from this study.

Yours Faithfully

8.6.8: Ethical Clearance – University of KwaZulu-Natal



28 October 2014

Ms Vimbai Chibango (209520884)
School of Built Environment &
Development Studies Howard College
Campus

Project reference number: HSS/0003/014D

Project title: Male partner involvement in the Prevention of Mother-to-Child Transmission (PMTCT) of HIV: A mixed methods study of Gokwe North District, Zimbabwe

Dear Ms Chibango,

Full Approval Notification - Committee Reviewed Protocol

This letter serves to notify you that your response to our letter dated 13 May 2014 in connection with the above was reviewed by the Humanities & Social Sciences Research Ethics Committee, has now been granted Full Approval.

Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach/Methods must be reviewed and approved through an amendment /modification prior to its implementation. Please quote the above reference number for all queries relating to his study. PLEASE NOTE: Research data should be securely stored in the school/department for a period of 5 years.

The ethical clearance certificate is only valid for period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

Best wishes for the successful completion of your research protocol

Yours faithfully

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Dr Shenuka Singh (Chair)

/ms i

cc Supervisor: Professor P Maharaj
cc Academic leader Research: Professor MP Sithole
cc School Administrator: Ms Geeta Jhagroo

Humanities & Social Sciences Research Ethics Committee Dr Shenuka Singh (Chair)

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