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UNIVERSITY OF WITWATERSRAND
FACULTY OF HEALTH SCIENCES
SCHOOL OF PUBLIC HEALTH

ROLE OF MEN IN PROGRAMME TO PREVENT MOTHER-TO-CHILD TRANSMISSION OF HIV IN JWANENG, BOTSWANA.

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A report submitted to the Faculty of Health Sciences, University of the Witwatersrand, in fulfillment of the requirements for the degree

Of

Master in Public Health (field of Health Measurements)

Johannesburg, 2005

DECLARATION

I, Kayembe Kazadi Nshindanyi declare that this research is my own work. It is being submitted for the degree of Master in Public Health (Health Measurement) at the Faculty of Health Sciences of the University of Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

Dr Kayembe Kazadi Nshindanyi

8th day of August, 2005

DEDICATION

To my wife Jeannine Mumba for her understanding and tolerance, and to my two talented and well adjusted children, Sarah Ngombe and Joshwa Kayembe.

EXECUTIVE SUMMARY

Background - The programme of prevention of mother- to-child transmission of HIV (PMTCT) was rolled out to the entire country in November 2001 after its launch in April 2000. The role of men had not been clearly defined.

According to the progress report of February 2002 from PMTCT national coordination unit at family health division ministry of health, countrywide, out of 85% of pregnant women who came for antenatal care (ANC), less than 1% of these women were accompanied by their partners. However, in Jwaneng, 81% (526) of women agreed PMTCT counselling for HIV in 2003. Less than 5% (6/526) of women who agreed to be counseled, were accompanied by their men since the programme was launched in October 2001 in Jwaneng. In addition, less than 1% (2/160) of women who tested for HIV came with their partners for HIV test.

Out of them, 30.5% (160/526) women agreed and tested for HIV. This testing rate was far less than the national targets of 70%.

Then, 33% (52 women) tested HIV positive and 108 tested HIV negative. Of the 52 HIV positive women, 70% (36 women) joined the PMTCT programme and 4 women did not adhere. Furthermore, of 52 HIV positive women, 60% (32) of women agreed to receive AZT, adhered and chose one of the recommended methods of infant feeding.

No study in Botswana had been done in a mining town to establish whether, there was a need for men to play a role in PMTCT in Jwaneng.

The researcher did not know whether Jwaneng pregnant women want their men or family members to come with them for PMTCT services as a motive for easy acceptance and increase of the programme uptake.

Objectives - The study purpose was to address the following questions: Do men have a role to play in programme to prevent mother-to-child transmission of HIV? Is the poor success of the PMTCT programme in Jwaneng due to non-participation of men? To answer the questions, three specific objectives were formulated. These were to: – 1. To determine men's knowledge of and experience with the PMTCT programme in Jwaneng. -2. To determine the knowledge and experience of women in the PMTCT programme. - 3. To ascertain men's and women's perception of what the role of men in the PMTCT programme might be.

Design: - In order to achieve the study objectives, two phases were designed. Phase 1 was descriptive quantitative and qualitative but phase 2 was purely qualitative (the focus groups discussions). Part of qualitative data was collected during focus group discussions, while other data from in-depth questions in the questionnaires from respondents (men and pregnant women).

Settings: - Jwaneng Town at Ditsweletse clinic, Tshimologo clinic and shopping centres.

Methods: After piloting the questionnaire in Sese village, this study first collected data from 384 men in Jwaneng shopping centres and 326 pregnant women at ANC of the local clinics who completed anonymously self-administered

questionnaires. Data were collected from the socio-demographic characteristics, knowledge about PMTCT, men's and pregnant women's experience, perception of PMTCT and on what respondents should do to improve men's involvement in programme to prevent mother-to-child transmission of HIV in Jwaneng.

In the second phase, the researcher selected 60 men, 48 pregnant women and 18 community leaders who participated in focus groups discussions. 11 focus groups discussions were conducted: five with men, four with pregnant women and two with community leaders. Data from these focus groups discussions were audiotaped, and then recorded.

Results: The findings of this study indicate that men's and women's knowledge of PMTCT is high. That 82% (315/384) of men are aware about the mode of transmission of HIV to an unborn baby during pregnancy. That, there is an association between the level of education and men's knowledge of PMTCT programme (X^2 = 15.09, df = 3, P = 0.001). Men's knowledge is not all accurate and perhaps the fact that they get it from media could mean that they do not understand their involvement. For example, results have shown from respondents who answered that they knew PMTCT that: only 39% (122/315) chose artificial milk (formula) as the only method for infant feeding (X2 = 2.05, df = 3, P = 0.56).

In all 11 focus groups discussions, participants agreed that men are poorly involved in the programme to prevent mother-to-child transmission of HIV and felt that men have a role to play. The role of men as perceived in the focus group discussions was: agreeing to come for counseling, accompanying women for HIV

results, agreeing to be tested as well for HIV, provide psychosocial and materials support.

In general, the PMTCT national targets were not met in Jwaneng. 66.7% of women (217/326) who underwent PMTCT counselling agreed to be tested for HIV. In addition to that, 77.5% (255/326) women have identified a desire for men to be involved while 75% (288/384) of men have also identified a desire to be involved in PMTCT programme.

78% (255/326) of women would like to be accompanied by their partners. The marital status of pregnant women does not influence their decision to ask their partner to come (X^2=1.98, df=2, P=0.37). 7.6% of these women did come with their men.

Both men and women face barriers that block men to get involved in PMTCT in Jwaneng. Men face the following barriers: 1. Men do not come for PMTCT services, partly because they are at work and partly because they are afraid of HIV test and partly feel that government had excluded them in the past. 2. In addition, Barriers to men's participation are of different origins: lack of policy encouraging use of PMTCT services by both partners during normal working hours, lack of clear message on mutual benefits encouraged by power imbalance in relationships; multiplicity of sexual partners and lack of support from employers and labour policies. The success of PMTCT in Jwaneng depends on addressing these barriers.

At the other hand, women face the following barriers: 1. fear of unpredictable reactions from men, lack of men's commitment to health issues and usual

absence from one another have been blocking the willingness of women to decide when exposed to PMTCT issues.

One of the much-neglected barriers found during the focus group discussions is the type of languages used in the fight against the HIV infection by media. Theses languages give the impression that those who are infected do carry the enemy to the nation and ipso facto are enemies to everybody. For example:“our enemy is HIV”, “war against HIV”, “accepting people with HIV”, “disease of unfaithful people”.

Women lack autonomy to make decisions about HIV testing. Hence they resort to seeking permission as supported by 20% of men (197) who want to be asked for permission to test for HIV.

Despite the barriers faced, results showed that 84% (279/333) of men acknowledged the importance of HIV test andthat men should participate in PMTCT (OR=23.54, 95% CI: 2.57-8.43, P<0.01). Most interestingly, participants in all focus groups discussions and 71% (272) of men felt that there would be a negative impact if men do not participate in PMTCT. Therefore, men and women should change their attitude towards PMTCT and employers and the government of Botswana should help by finding solutions to the above-mentioned barriers.

Conclusion – From this study, the researcher has learned that men’s role in programme to prevent mother-to-child transmission of HIV in Jwaneng needs to cut across the disciplines and sectors (public, private and NGOs) . Having found that men have a role to play is not sufficient to make lasting and sustained improvements. In Jwaneng men, women and community leaders have

expressed the desire to see fellow men play a participatory role in order to improve the uptake of PMTCT. Risks of mother-to-child transmission of HIV can't be reduced unless barriers to services utilization are addressed through combined approaches: medical, social, employer-labour regulations and policies.

ACKNOWLEDGEMENTS

In the course of the research, I benefited from the assistance and hospitality of an innumerable number of persons at various institutions in- and-out of Jwaneng. This research constitutes part of a wider question on role of men in programme to prevent the MTCT of HIV in Jwaneng.

I sincerely thank Dr. Julia Moorman, former coordinator of reproductive health and lecturer at Witwatersrand University and currently coordinator of the micronutrient project in Southern Africa, for her patience and co-supervision of this research.

I gratefully thank Mercy Hlungwani, lecturer at school of public health faculty of health sciences Witwatersrand University for having taken charge of supervising this study and has made it a success.

My appreciation must be extended to Dr Ngoy Mpoyo Francois for his encouragement.

During the course of the fieldwork, I received the cooperation of several individuals and companies. I trust they will accept my gratitude. I would like to record my gratitude to workers of Thutano center in Jwaneng for their enormous assistance at different stages in the development of the study.

Finally, I owe personal thanks to my parents: My father Kazadi Muanabute and my mother Ngombe Ilunga.

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Abbreviations

ANC: Antenatal care

AIDS:Acquired immunodefisciency syndrome

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ARVT: Antiretroviral therapy

AZT: Zidovudin

CJSS: Community junior secondary school

DHS: District health services

IEC: Information, education and communication

HIV: Human immunodefisciency virus

KAP: knowledge, attitudes and practices

NACA: National AIDS coordinating agency

NGOs: Non governmental organizations

PMTCT: Prevention of mother-to-child transmission of HIV

STI: Sexually transmitted infections

UDC: Urban development committee

CHAPTER ONE: ORIENTATION TO THE STUDY

In this part of the report, the orientation and background information are provided.

1.1 Introduction

Men's involvement and support for women during pregnancy, delivery and the postpartum period has not yet been promoted effectively in many parts of the world. Indeed, some health facilities are set up in a way that prevents men who wish to be involved from getting involved, Botswana is no exception [5].
Jwaneng Town is a diamond-mining town located almost in the middle of what is generally referred to as the Southeast region, consisting of the districts of kgatleng, Kweneng, Southeast and the towns of Lobatse and Gaborone.
Jwaneng is located within the Southern District and its planning area occupies approximately 340 square kilometres and it is the second smallest town in Botswana after Sowa township [8].
With 15179 people, Its population structure according to the 2001 District Census is that 80% of the population is less than 50 years old and about 53% are males and 47% females [55]. The general coordination of departmental and local authorities' plans and activities is carried out via the urban development committee, and the multi-sectoral HIV/AIDS committee.
Jwaneng mine has a tremendous economic impact nationally, the overall role of Jwaneng in the development of economic activities in the region seems to be

restricted to being an employment center for mining activities and a commercial center for western Kweneng, Ngwaketse, Kgalagadi and Gantsi Districts.

Health services are provided at the Mine Hospital and at 4 clinics. Amongst the above mentioned, antenatal care are provided at 3 health facilities. Apart from the health facilities, HIV counseling is provided also by NGOs such Tebelopele and by various private and parastatal organizations. As part of sexual and reproductive health, PMTCT counseling for pregnant women and their partners is provided at Ditsweletse, Tshimologo clinics and at Jwaneng Hospital.

According to PMTCT programme handbook (2002:109), women are encouraged to come with their partners or as couples.

According to UNICEF (1995), the involvement of men in sexual and reproductive health is crucial, because of their role in decision-making. Special efforts must be made to strengthen for example the sexual and reproductive health services to include men and build positive male attitudes toward them. Programmes about reproductive health could reach men in their work places; at home; where they gather for recreation; through youth programmes, school education, and peer counselling. Men also can play an important role in the family by sharing responsibility for child rearing [53].

One major obstacle is men's reluctance to use services. Men know little about their own or women's sexuality, communicate about sexuality very little in their relationships, and often believe many sexual myths. Many men are suspicious of family planning programs because they see them as a conspiracy to undermine their power [5]. Because of such a view on men, planners of health programmes

must also overcome false assumptions and generalizations about men. It is easy to say that men always want more children, are not interested in using contraception, do not care about spreading sexually transmitted diseases (STDs), never share in responsibility of raising children, and perpetuate violence against women. Some programmes have been designed on these assumptions and therefore exclude men routinely, preventing men from getting help to understand their needs and to change harmful behaviours [37].

1.2 Background information

HIV has become a serious social, health and development problem in many countries around the world, particularly in Sub Sahara Africa.

In 2002, 42 million people were estimated to be infected with HIV, and, of these, 29.4 million lived in Sub- Saharan Africa. In the same year, the joint United Nations Programme on AIDS reported that an estimated 3.1 million of people died that year of AIDS. More than 85 per cent were Sub- Saharan Africans. Over 2 million HIV-infected women become pregnant each year, the majority in Africa and Asia, with more than half a million of their children infected with HIV by the year 2000. MTCT is the main mode of infection [51].

Botswana, like other Southern African countries, was concerned about the burden of HIV/AIDS amongst his people. A breakthrough study in 1994 showed that use of AZT leads to a reduction in transmission of HIV to the baby by up to 70% when taken from 14 weeks pregnancy and during labour in a non-breastfeeding population and given to the infant for 6 weeks [53]. A subsequent study in Thailand demonstrated a 50% reduction in transmission from mother to

baby using a shorter course of AZT followed by formula feeding [52]. A later study in Uganda showed that a single dose of Nevirapine given to the mother and the baby could achieve a similar reduction [51]. The first HIV/AIDS case in Botswana was reported in 1985. The emergence and rapid spread of HIV/AIDS in the country over the last 18 years has been phenomenal and alarming [4]. Botswana now is leading the world with the highest proportion of 15-24 year-old people living with HIV. 36.2% of women and 16% of men, followed by Lesotho with 26% of females and 12 %of males [54].

A survey done at Nyangabwe Referral Hospital in Botswana indicated that HIV was responsible for 34% of all admission in paediatric wards and 70 % of paediatric deaths. AIDS related deaths were expected to increase from 2% of all in 2000 to 6% by the year 2007, and AIDS deaths among the health providers per annum are expected to increase from 200 in 2001 to 550 in 2007 [30].

The 2002 Botswana Sentinel Survey revealed that 35.4 per cent of pregnant women in the age group 15 - 49 attending Antenatal Clinics were living with the virus. Results revealed that 63.4 % of pregnant women attending antenatal clinics appeared to be of secondary education, the age group 15 – 29 years was the most affected by HIV. Single women and women living together with a man had a high prevalence of HIV nationwide. The epidemic, at this high prevalence rate, is impacting negatively on the country and is reversing the social-economic achievements that have been made over the last decade. People of productive and reproductive ages in the country are hardest-hit by the epidemic.

Botswana was concerned about the burden of HIV / AIDS among its people so that in 1999, the government embarked on a pilot project in the two main cities (Gaborone and Francistown), to assess the capacity for the health care system to deliver a modified short course of AZT to pregnant women. This programme was rolled out to the entire country in all health facilities offering antenatal care services [30].

The national targets of the PMTCT programme are:

HIV/PMTCT counselling rate	80%
HIV testing rate	70%
Women started on AZT	80%
Infants on AZT	90%

This programme of PMTCT was rolled out to Jwaneng in October 2001. Looking at the Jwaneng HIV prevalence of 30.5% (the national rate 35.4%) makes HIV/AIDS a serious social and health problem in Jwaneng [30]. Although a number of HIV/ADS related services are offered such as Prevention of mother-to-child transmission of HIV, Antiretroviral therapy, Voluntary Counselling and Testing, Information-Education-Communcation, condom promotion and distribution the overall HIV prevalence rates among ANC attendees is increasing. In Botswana it is estimated that 40% infected pregnant women will pass the HIV virus over their babies during pregnancy, delivery or through breastfeeding. About half of these occur during labour and delivery. Given the annual number of live births of 62,000 about 9,500 babies are infected

annually. With PMTCT this can be reduced to 10% (2400 babies per year), thus preventing approximately 7000 babies from being HIV infected annually.

Data from the routine monitoring of the PMTCT programme nationwide [PMTCT progress report, 2001], indicated that only 69% of women registering for antenatal care in public health facilities agreed to be counselled on the PMTCT programme. Only 53% of those counselled agree to be tested for HIV. These achievements are significantly lower than the national targets.

Although the programme encourages women to bring their partners right from the beginning, nationally only 1% of women actually come with their partners [36]. Although there are many reasons for women not to participate in PMTCT programme, experience in the two pilot sites indicates that the percentage of women who consent to HIV testing increases to 85% if women come with their partner and they receive counselling as well [36].

1.3 Problem Statement

In Jwaneng, an average of 51pregnant women register for antenatal care at one of the government facilities each month (Ditsweletse clinic). A total of 650 women registered in 2003. All of these women were introduced to PMTCT of HIV counseling as per government policy. Although 81% (526) of these women agreed PMTCT counselling for HIV, only 30.5% (160 women) agreed and tested for HIV. Out of those who tested, 33% (52/160) women test HIV positive and 108 tested HIV negative. Only 70% (36/52) women of these HIV positive women accepted to join the PMTCT programme and 4 women did not adhere.

Less than 5% (6/526) of women who agree to be counseled, were accompanied by their men since the programme was launched in October 2001 in Jwaneng. Less than 1% (2/160) of women who tested for HIV came with their partners for HIV test. Of 52 HIV positive women, 60% (32) of women agreed to receive AZT, adhered and chose one of the recommended methods of infant feeding. Midwives interviewed pregnant women who did not enroll in the programme during the routine ANC. It transpired that they feared to take decision to use AZT because either their partners do not want them to or women had not told them about the HIV test.

With the above information, the national targets for PMTCT are not met in Jwaneng. And women do not come with their partners for PMTCT. Statistics from the maternity ward at Ditsweletse clinic show that despite the programme, 57% (276 women) deliver annually with unknown HIV status as recorded in their ANC cards. Therefore, constitute in way a barrier to the enrollment of eligible women PMTCT.

Because of poor PMTCT uptake in Jwaneng, suspicion on barriers to acceptance of services, absence of formal-local study on this matter, success of some international reproductive Health programme through men involvement, the researcher strongly felt that there was a need to determine whether men have a role to play in the PMTCT programme in Jwaneng and whether the poor success of the PMTCT programme in Jwaneng could be due to the non-participation of men.

1.4 Study Purpose

The overall objective of the study is to determine whether men have a role to play in the PMTCT programme in Jwaneng and whether the poor success of the PMTCT programme in Jwaneng could be due to the non-participation of men.

1.5 Study objectives

- To determine men's knowledge of and experience with the PMTCT programme in Jwaneng
- To determine the knowledge and experience of women in the PMTCT programme.
- To ascertain men's and women's perception of what the role of men in the PMTCT programme might be.

1.6 Justification of the study

The PMTCT programme in Botswana forms an integral part of Sexual Reproductive Health Services offered at health facilities. Being a District medical officer of the District Health Team, poor PMTCT programme uptake during monitoring-evaluation became a major concern comparing it to the national targets. Stigma associated to HIV was revealed as one of major obstacles [36]. In addition, partners and family members to the pregnant women were suspected to be hostile to the utilization of available PMTCT services.

No study in Botswana had been done in a mining town to establish whether, there was a need for men to play a role in PMTCT in Jwaneng.

The researcher do not know whether Jwaneng women want their men or family members to come with them for PMTCT services as a motive for easy acceptance and increase of the uptake. As shown by the results of the 1998 study conducted as part of the Horizons Project of the Population Council that involving men in the counselling and care offered to their pregnant partner is of importance. Without that, men might remain suspicious of the services and act as barriers to their partners' involvement [37].

In near future, policy makers will be presented with information on areas that needs to be prioritized for increase men involvement in programme to prevent mother-to-child transmission of HIV. The research findings will also add to the knowledge of role of men in PMTCT.

1.7 Concept and definition of terms

Programme to prevent mother-to-child transmission of HIV :

Refers to an intervention method used in clinical practice to prevent the transmission of Human immunodeficiency virus from an infected mother to an unborn baby or during breastfeeding. The Botswana PMTCT consists of:

- Information and education for women, partners and families
- Counselling and voluntary testing for HIV for all pregnant women and their husbands/partners and families

- Counselling, support and antiretroviral therapy for the prevention of mother-to-child transmission for all pregnant women who test positive
- Prevention counselling and support for women who test negative
- Counselling about infant feeding choices for all pregnant women
- Offering all HIV-positive women free infant formula

Role of men:

Refers to participation, involvement, taking responsibilities in use of health care services.

Knowledge:

Refers to respondents' (men and pregnant women) level of awareness and understanding of PMTCT issues.

Men' s experience of PMTCT:

Refers to what PMTCT issues men respondents experienced or had done concerning theirs and their women's sexual and reproductive health opportunities. For example: going together to a health facility to seek for reproductive health services.

Pregnant women's experience of PMTCT:

Refers to what role her partner played during the current or past pregnancy but after launch in April 2000.

Perception of PMTCT:

Refers to how men and pregnant women perceive PMTCT services.

1.8 Conclusion

In this chapter, the background to this research has been discussed. The problem statement, the main objective, specific objectives and the justification of the study have been discussed. Terms used have been identified and defined. In the next chapter, the literature review will be discussed.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This subject of men's role in health programmes is being studied from a variety of perspectives, from encouraging partner involvement to understanding those situations where women do *not* want their partners involved. In this chapter, research studies previously done on men involvement in sexual and reproductive health and in HIV are presented.

2.2 Literature review

Needs are expressed for men to play a role in reproductive health.

Around the world, there is a growing interest in increasing men's partnership and involvement in all reproductive health issues [12]. There is a growing appreciation of need to increase activities targeted to sexually active males because of their own health risks and the potential effect of their sexual behaviour on the reproductive health of their partners [17]. There has been also an increased recognition of the need for men to share more responsibility in reproductive health matters by taking a more active role in areas, such as: concern over increasing rates of STIs and HIV/AIDS, recognition of men's influencial role in the sexuality and reproduction of couples [32]. Engaging men as partners is critical component in AIDS prevention and care as, in many contexts, men are the decision makers in matters related to reproductive health.

As reflected in the theme of world AIDS campaign of 2000 – Men make a difference- men's role and responsibilities in the relation to health of their female partners and families have a significant bearing on the course of the epidemic [52].

Where programs had reached men, male attitudes had changed and contraceptive use has increased. Men had been found having a strong interest in family planning and other reproductive health issues. Men influence contraceptive use [38].

In Botswana, the ministry of health, the national youth council in collaboration with the Norwegian board of health launched a project named: Men, Sex and AIDS that aimed at men between 15-19 years old. This project was designed to encourage men to become more actively involved in discussing issues relating to sexual and reproductive health after observation of absence of men involvement in most of national health programmes. The finding was that men do not commonly discuss sexual health issues and many are very set in their ways in terms of how they think about sex and gender. However, men reported a feeling of being left out in the past and many wanted to get more involved. Project workers soon realized that successful work with men involves taking the project to the client [50]. Indeed, Women have been both the principal targets and beneficiaries of international reproductive health programmes. Policy makers, health planners and health providers had overlooked and even ignored the influencial role that men play in the sexual and reproductive health of their families, and especially of their partners. The failure to incorporate men has had

a serious impact on their health, health of their women, and the success of the programmes themselves [11]. A study conducted as part of the Horizons Project of the Population Council has shown the importance of involving men in the counselling and care offered to their pregnant partner. Without such outreach, men remain suspicious of the services and act as barriers to their partners' involvement. Men may also impose their preferences about infant feeding on their partners. In this study, some of the women who refused voluntary counselling and testing or who took an HIV test and did not return for the results stated that the reason was the disapproval of their male partners [25].

UNAIDS global report in 1999 had shown that at the end of 1999, out of 34.3 million HIV infected, men accounted for 17.3 million [48]. Hence, without appropriate inclusion of men, it will be difficult to meet women's reproductive health needs and ensure their welfare [17].

Since gender power relations in much of Africa are skewed in favour of men and African men wield a lot of power in the home and within society, they are the key gatekeepers to decisions relating to contraceptive use and fertility control [43].

Why men were not more involved? Gender roles – masculinity and femininity were internalised early in life, it is expected in the society that men will be knowledgeable of reproductive health issues. In reality, boys and men were frequently either uninformed or misinformed, but do not seek information for fear of appearing inexperienced. In this region, it is men who decide when to have children, and how many children a couple should have [62].

HIV knows no gender, race nor age. AIDS is everyone's problem. Intervention with men could and might make a difference in the fight against HIV. Hence, men are better targets for HIV prevention, promotion of responsible and safer sexual practice [49].

Both men and women had variety of experiences of reproductive health

In October 2000, WHO recommended: "The prevention of mother-to-child HIV transmission should be part of the minimum standard package of care for women who are known to be HIV-infected and infants" [59]. By then, there was a striking exclusion of male interest in reproductive health in most of the countries, enough so to suggest a similar level of male interest elsewhere. Women have had easy access to reproductive health services. Hence, their awareness had been high as compared to men [52]. In light to the above, since 1970 the Bengladesh national family planning programme primarily focused on motivating women to use modern contraceptive methods and encouraging them to seek services from clinics. In addition, female field workers were recruited to deliver contraceptive methods at homes and clinics. The programme design facilitated women's access to information and medical care. In the process, medical needs for men were marginalized [62].

Indeed, some health facilities are set up in a way that prevents men who wish to be involved from getting involved [53]. For example, in 1996 at a community workshop in Santa Cruz / Bolivia at Casa project on reproductive health for

couples, only one man appeared. He quickly left, embarrassed to be the only man present. [38].

Contrary to the above, the health policy encourages to have in Botswana, health facilities that are set in a way men and women could feel comfortable to receive services [4&5]. Other studies have shown that the absence of inter-spousal communication and discussions could inhibit men from using reproductive health services; they remained sticked to their beliefs system [38].

Men have been found to face difficulties in broaching the subject of contraception use or even initiating discussions of STIs for fear of accusations of infidelity from their partners. Even where a man suffers from an STI, he may seek collaboration of the local doctor in packaging treatment for a more acceptable illness or even lie to the sexual partner to ensure that they all get treatment. In addition, African men have also been found to hold onto certain beliefs, which inhibit their active involvement in reproductive health programmes. For example, African men value women's quietness and silence in sexual issues because they see silence and sexual passivity as the attributes of a good woman. These beliefs are particularly stronger among less-educated men. Where such ideas and notions are pervasive, inter-spousal communication may be greatly impaired. There was, however, a strong association between inter-partner communication and contraceptive usage in many settings [25]. These limitations inhibit men from taking appropriate reproductive health decisions even when the risks are apparent.

In India, as in many other countries, men are subject to conflicting messages about sexual matters and there is an overall lack of information about reproductive health [50]. Many men see MCH clinics and their staffs as serving only women and children and feel uncomfortable seeking information or services in that setting. But, in places where clinics exist and are easily accessible, problems such as lack of privacy, comfort, convenience, confidentiality, and poor provider behaviour adversely affect men's capacity to use reproductive health services [62].

Some researches have identified effects of not including men in voluntary counselling and tesing. In a study done by Sowell R et al in 2001, they found that 61.8% of women who were lost to follow-up (p=0.068), reported violence with their current partner. It was also found that more than one in four women who were interviewed agreed with the statement, "violence is a major problem in my life." According to the study done by Andrews S in 1995, a small proportion of women who disclosed their serostatus to partners reported a negative reaction. He found that women's HIV status was strongly associated with partner violence. Because, most women said that partners showed support and understanding when told the test results. However, the proportion of women who reported this positive reaction was significantly greater among HIV-negative women compared to HIV-positive women [1].

Another study had shown that partners violence was a serious problem among many female VCT clients. The percentage of HIV-positive women who disclosed

was 64.0% which was significantly lower than 79.5% of HIV negative who disclosed their test results to a partner ($p<.03$). Overall, the major reason for non-disclosure (52%) among all women, regardless of HIV serostatus, was fear of partner's reaction; principally fear of abuse and abandonment [42].

As violence had been the major barrier for women to utilize reproductive health services, women had resorted to seek for permission from their partners. Women lack autonomy to make decisions about HIV testing while men made decision to test on their own without soliciting prior consent [3].

Despite men hindering women in health related matters because of their dominant role in homes, studies had shown that this was not always an indicator of lack of knowledge on a particular health programmes. For instance, 44 countries have asked men, questions about their awareness and perceptions of AIDS, and about their behaviour in response to the AIDS crisis. Most of these surveys about HIV/AIDS had been conducted in sub-Saharan Africa and Latin America, South East Asia and the Caribbean. Findings were that Awareness of AIDS was widespread in surveyed countries. In 36 of 44 countries with survey data on men, at least 90% of men have heard of AIDS [40]. Their main sources of information are: radio, television and magazines. In 33 of the 44 countries with data on both men and women, more men than women had heard of AIDS—by at least 20% points in Chad, Haiti, Niger, and Nepal. In the other 11 countries, men and women had similarly high levels of awareness of AIDS. In the same surveys, it had been found that where knowledge of AIDS is relatively low, differences in awareness among groups of men and women was occasionally large. In

addition, knowledge of AIDS is lower among men and women with little or no schooling than those with more schooling. Another study done on integration of reproductive health services for men in health and family welfare centres in Bengladesh revealed that men's and women's sources of information about STI services provided at the clinics were from different sources. Among the 220 male clients that were interviewed, 191 (87%) had heard about the availability of treatment for STIs at the facilities. The common sources of information for men were groups discussions (72%), field workers (57%), health workers (55%), and IEC materials such posters, leaflets and signboards (21%). On the other hand, among the 201 female clients who heard about STIs services, more than 90% had heard about them. From health workers (95%) and from field workers (91%) [62].

Views of men by women in matters related to sexual and reproductive health

In most societies of Africa, a generalized view of men as providers of economic support and women as care takers of the family members has had important effects on the design of past programme activities concerning reproductive health issues. The relative exclusion of males from the activities of reproductive health programmes is also evident in the criteria for measuring the success of programme activities [5]. In the same way, to understand how men behave and how they perceive their role in sexuality and reproduction has important implications for various aspects of reproductive health: prevention and treatment

of STDs, HIV… it is important to understand men's behaviour and their point of view because, given the gender asymmetry prevalent in most societies, they still have a dominant role in reproductive health-related decisions and outcomes [33]. Contrary to the above observation, All these aspects of how men were viewed had been also studied from the female perspective through questions put to women about their experiences with men and about what they believed about what men could do and think [38]. The male partner's characteristics had been generally treated as an attribute of the female: "In methods for interpreting fertility among women, males ended up as just another variable, despite their important role in fertility (...). Males appeared as a kind of secondary factor and their participation in the reproductive process is undervalued" [33].

Before the sexual revolution initiated by the pill, men were an integral part of family planning and other reproductive health concerns than they are today. If a couple wished to use contraception, their options were limited primarily to methods requiring a man's participation--periodic abstinence or condoms. Hormonal methods for women, beginning with the first oral contraceptives in 1960, and the subsequent development of intrauterine devices and modern surgical sterilization, led to the development of a family planning services community focused on women, often to the exclusion of men. Today's challenge, as expressed by the 1994 International Conference on Population and Development (ICPD) held in Cairo, is to enhance male responsibility for family planning by expanding services in ways that protect the reproductive health of both men and women, and by encouraging greater sensitivity to

gender issues and view men as partners. This was related to the fact women's knowledge of family planning services was high but they were facing some barriers due to lack of interspousal communication [56].

But a study by De Cock KM et al in 2000 found that: to improve HIV/AIDS communication between men and women, men should be targeted as fathers, husbands, workers and community members, and not merely as sexual beings [14].

While most of studies had been accusing men as obstacle to success of health programmes, others had shown that in the area of HIV test, barriers to VCT uptake had been summarized as follow: (i) problems with the methods of reporting and issues of confidentiality; (ii) fear of disclosure of HIV status and the risk associated with an unfaithful regular partner; (iii) lack of time for a pregnant women to wait and make informed decision [51].

In a study conducted in Tanzania on VCT for HIV and partner violence, amongst those who decided to test, men and women perceived HIV test not as a means of planning for the future, but had different perceptions. Some men used HIV testing as a way to confirm their suspected HIV-negative serostatus and the serostatus of a partner before committing to a relationship. Men described HIV testing as a way to regain a partner's trust after being suspected of infidelity. At the other hand, women's decision to test for HIV was motivated by the sickness or death of either a child or a partner. Couples perception of HIV was similar to men's perception [39].

Given information and better place, men can play a bigger role by participating in health programmes

A descriptive qualitative research was conducted in Bolivia to investigate men's participation during pregnancy, childbirth, and the postpartum period in order to provide a basis for developing strategies to promote the effective participation of men in maternal and family health care. Findings from the study revealed diverse but active involvement of men in different aspects of women's health during pregnancy, labour/delivery, and the postpartum period. Interestingly, the research had revealed that in some cases, men were the ones who urged their wives to obtain formal antenatal care, while women often cited poor treatment and quality of care as reasons not to pursue public-sector care [34]. Remaining on the same note, a government-affiliated insurance agency for low-income workers in India, conducted a study on the effect of men's involvement in their partner's pregnancy. Findings were that men were interested in participating in maternity care. Husbands were significantly more likely to attend the informational consultations at experimental clinics than at control clinics (28% versus 13%, respectively). Couples in the experimental sites reported more communication on family planning than control couples (84% versus 64%, respectively) and more joint decision-making on the issue (91% versus 71%) [37]. Other encouraging findings in a survey done by PAHO were that in Brazil, men are even more likely than women to say that they do not want to have more children while in Haiti, 92% of men surveyed approve of contraceptive use and in Brazil, 86% approve [32].

Another study was conducted by Frontiers under Population Council in India on assisting men to get involved in family planning by sharing in decision-making about family size and contraceptive use revealed that men supported their partners to use contraceptive methods, if need arise. This support eased women's burden, as well as contribute to the emotional development and well being of their children [37]. From the same Indian experience, men also benefit when they care for their children and many expressed emotional satisfaction and increased confidence in their care-giving skills.

This approach was encouraged by UNICEF (1995), when it announced that participation of fathers in child rearing reduces the burden that women face in providing financial support for families and in performing household chores and childcare [53].

Men, women and organizations want men to participate in public health programmes

Historically, men chose not to be part of family planning programmes, as it was understood societally that family planning was women's responsibility. For example, at a community workshop on reproductive health for couples in Santa Cruz, Bolivia:" Casa project" only one man appeared. He quickly left, embarrassed to be the only man present [34]. However, with the growing needs as suggested in the study: Modern contraception use in Ethiopia: does involving men make a difference? It was found that most of reproductive health

programmes fail because of lack of men's participation and recommended that there was need for men to get involved in Contrception programme [43].

According to some case studies under Pati Sampark program in India in 1992, there were a number of very practical reasons why women wanted their partners to be involved in their health education. For example, in many parts of India it is thought that women should not eat too much during pregnancy in order to have a smaller baby and thus an easier delivery. When Center for Health Education, Training and Nutrition Awareness (CHETNA) workers talked to women about the need to eat more and better food, women‘ s knowledge of feeding was high. But these women would frequently reply:" you give this advice to my family members. If I start eating what you suggest, my husband and my mother in-law will beat me". The evaluation of the programme showed that the increase of both knowledge and interest in men about ANC had increased in the attendance of their wives at antenatal clinics and it changed their attitude to eating. The effects of the Pati Sampark program had demonstrated that the attitudes and behaviors of men could change over time [37].

According to Dr Andrew Kosia, the World Health Organization, Regional Office for Africa had identified reproductive health as a priority area in the delivery of health care services in the African region. This was in response to the persistently high levels of maternal and neonatal morbidity and mortality and infection with the Human Immunodeficiency Virus (HIV). The long-term vision of the Organization in the region on reproductive health was to ensure that every woman goes safely through pregnancy and childbirth and infants are born alive

and healthy. Mother-to-child transmission of HIV, also known as vertical transmission and perinatal transmission is responsible for about 1500 new HIV infections in infants daily. In the absence of specific interventions, including men involvement, the rate of MTCT varies from 15-20% in Europe and USA to 25-40% in Sub-Saharan Africa. In pursuance of this vision, the reproductive health strategy for the African region was developed in 1998. The strategy is aimed at assisting member states and partners to identify priorities and plan their programmes and interventions at various levels, particularly at the district level. Male involvement and participation is one of the strategic directions of the reproductive health strategy for the African region [62]. Findings of the study on programming for male involvement in reproductive health in 1998 by WHO had shown the approaches used for male involvement by countries:

- Formation of men's clubs.
- Running of the male clinic.
- Public sensitization through sports and printed (couple-friendly antenatal care handbook) and electronic media.
- Holding of seminars, workshops targeting opinion leaders (men).
- Group counselling sessions for men with their pregnant partners.
- Development of policy guidelines.

There is enormous untapped potential for using men as advocates of reproductive health in various communities due to existing assumptions that men are not interested in family planning. In Colombia, research findings among men showed that men wanted more than just information about health, but also

wanted to know how to communicate with children and partners as well as foster new ideas about being gender-sensitive in a changing society. They were also concerned about the relationship between their sexual role and their behaviour [32]. Men also need information to participate responsibly in family planning decision-making. Men can learn more about family planning by accompanying their partners on clinic visits and by taking advantage of special clinic hours for men, where available [53]. In the present context, involvement of males would be critical in their (i) direct role in making positive family life decisions and reflecting a proactive personal behaviour towards their achievement as well as a broad spectrum of (ii) supportive role as sex partners.

The first set would cover: adherence to the small family norm; acceptance of male methods of contraception; and diligent care of own sexual and reproductive health, including risk-free behaviour with respect to STDs and HIV/AIDS. Importantly, the second would encompass commitment to women's sexual and reproductive health; avoiding risk behaviour that could jeopardize the health and safety of the spouses; and compassionate support to spouses in the choice, acceptance and continuation of specific family planning methods [59].

Full male involvement would culminate in a focus on men and women as couples and partners, rather than separate entities and individuals, in reproductive health norms, behaviour and initiatives. Because of the above, women receiving VCT had adequate time to discuss their own needs such as: counselling on the advantages and disadvantages of disclosure particularly to her partner, involving the partner in counselling and decision-making…[49].

There are benefits of men's involvement in sexual and reproductive health

Recent studies in the sub-Saharan region have shown that where men have been involved in programme design and implementation, such programmes have recorded remarkable success [38].

In India, between 2000 and 2003, frontiers and the employee's State Insurance Corporation (ESIC), a government-affiliated insurance agency for low-income workers, conducted a study on the effect of men's involvement in their partner's pregnancy. The study assessed the effect of men's involvement during antenatal and postnatal care on the couple's use of family planning and STI prevention. The intervention took place at six ESIC clinics in New Delhi, with three clinics serving as experimental sites and three as control sites. At the experimental clinics, a total of 2,836 consenting women and 1,897 of their husbands received couple, individual, or same-sex group counseling on pregnancy care and danger signs, family planning, postpartum infant care, breastfeeding and lactational amenorrhea method (LAM), the symptoms and prevention of STIs, and correct condom use. They also received antenatal testing and, if necessary, treatment for syphilis. Couples were seen during the pregnancy and at six weeks postpartum. At control clinics, pregnant women received standard care. The findings were that men were interested in participating in maternity care. Husbands were significantly more likely to attend the informational consultations at experimental clinics than at control clinics (28% versus 13%, respectively). Couples in the experimental sites reported more communication on family

planning than control couples (84% versus 64%, respectively) and more joint decision-making on the issue (91% versus 71%). Family planning use increased significantly at intervention sites compared to control sites. Use of family planning by women six months postpartum was 14 % points higher in the intervention sites as compared to the control sites. The corresponding figure for men was 17% points greater. Condoms were the most frequently used method, used by 66% of women and 71 % of men among the subset using any method in experimental clinics. The proportion of men and women who intended to use a method in the future was also higher in the experimental sites [37].

Other studies have shown the positive impact of including men and how their acceptance and support to their partners needs, choices and rights, or in the way they modify their own sexual and reproductive behaviour, or through their active involvement in policy and programme formulation [20].

Studies have shown that when husbands approve of family planning or when wives think that husbands support it, the wives are more likely to use contraception. When both partners take reproductive health decisions jointly, these decisions are more likely to be implemented. Men become supportive by helping their partners to receive reproductive health services when needed and by providing the resources needed to obtain these services. For example, in 1994 a family planning campaign in Bolivia sought to increase communication, using the slogan, "Let's talk together." During the promotion, the number of new contraceptive users and the number of men reporting their intention to seek reproductive health services increased dramatically [34].

In Ghana for example, because of increased men awareness of family planning, the percentage of men who approve of family planning rose from 77% in 1988 to 90 % in 1993. In some of the countries (Ghana, Malawi and Pakistan) men are actually more likely than women to approve of family planning. In nearly all countries surveyed, better-educated men express greater approval of family planning than do men with less education [25].

The Ford foundation funded a social development research at De La Salle University in Manilla in 1998 a project with a dual aim of improving understanding about men's household-based violence. For having left men out of the show, violence could not decrease until they realize the need for men to play a role in the fight against domestic violence. Very quickly, project staff realized that many men are extra-sensitive about their pride and about loosing face in public. This project had difficulties in enlisting men's participation because of latter's perceptions that they would be shamed. This realization led to development of a programme of workshops that were non-judgemental and avoided moralizing or finger pointing. Skills were given to them on management of anger, communication and awareness. This helped to reduce domestic violence [50].

Left out, African men have also been found to hold onto certain beliefs, which inhibit their active involvement in reproductive health programmes. African men value women's quietness and silence in sexual issues because they see silence and sexual passivity as the attributes of a good woman. These beliefs are particularly strong among less-educated men. Where such ideas and notions are pervasive, inter-spousal communication may be greatly impaired [33].

Topping up on the above findings, data collected from men in the research Triangle Park survey 1996, in 15 countries (Burundi, Kenya, Malawi, Rwanda, Tanzania, Burkina Faso, Cameroon, Ghana, Mali, Niger, Senegal, Egypt, Morocco, Bangladesh, Pakistan) found, 11 in sub-Saharan Africa, concluded that:" If programmes could find better ways to reach men as individuals and as members of couples, contraceptive use might rise considerably" [17].

Researchers concerns

Getting men involved in any reproductive health effort is often difficult. What does men's involvement mean and how should it be operationalised? What does shared responsibility mean for various reproductive health problems subsumed within the reproductive health framework? Programmes to involve men should be designed to address three major goals: (1) Improve the sexual and reproductive health of men and women, (2) generate men's support for women's actions related to reproduction and respect for their reproductive and sexual rights, and (3) promote responsible and healthy reproductive and sexual behaviour in young men and boys [62].

2.3 Conclusion

In this chapter, the literature available and studies done on men's role in reproductive health and PMTCT were presented. The following chapter describes the research methodology used in this study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research methodology used to assess whether men have a role to play in the programme to prevent mother-to-child transmission of HIV in Jwaneng. The area of study, sampling technique, and the procedures used for data collection are outlined. The tools used and issues of reliability and validity are described. Furthermore, ethical considerations and measures taken to protect the rights of the study participants are presented in this chapter.

3.2 Study design

In order to achieve the objective of the study, two phases were designed. Phase 1 was descriptive quantitative and qualitative but phase 2 was purely qualitative (the focus groups discussions).

Part of qualitative data was collected during focus group discussions, while other data from in-depth questions in the questionnaire. The focus group discussions involve a number of people meeting in a group in which the participants talk to one another under the guidance of a facilitator. The purpose is to generate relevant ideas and information around a pre-arranged topic [21].

Such a mixed study design will enable a researcher to collect sufficient data and provides complete and accurate information for proper generalization of findings from a sample of responses to a population. Mouton and marais (1990) said: “one of the most important considerations in descriptive studies is to collect

accurate information or data on the domain, phenomena which are under investigation".

Based on the findings of the study, to determine whether there is an association and / or differences existing between different variables, respondents' age, level of education and marital status, quantitative analytic statistic methods were used (t statistic tests, 2x2 tables or odd ratio at 95% of significance level, chi-square).

3.3Study population

3.3.1 Research setting

Jwaneng is situated at 167km from Gaborone. Population according to the 2001 census is 15179. The majority of people in this area are employed. Most of them work as labourers earning a minimum wage of 600 Pula (Botswana currency). All people have access to water and basic sanitation facilities. Few have no access to electricity. Jwaneng has four shopping centers (2 big and 2 small).

Health services are provided at the Mine Hospital and at 4 clinics. Amongst the above mentioned, antenatal care are provided at 3 health facilities (Mine hospital, Ditsweletse and Tshimologo clinics). Data from men were collected in two shopping centres. While data from pregnant women were collected at Ditsweletse and Tshimologo clinics.

Jwaneng plays a role as a service center for the villages along Sir Seretse Khama highway commonly known as Trans-Kgalagadi highway. The shopping

centers are always crowded by residents and visitors during normal working hours.

The reason for selecting Jwaneng shopping centers as men's site for data collection is that they are neutral points where everybody goes for buying necessities and most of informal traders do their businesses around shopping malls. It can be concluded that members of the population under study were men and pregnant women residents of the town.

3.3.2 Target population

In this study, the population was defined as men residents, pregnant women clinic users at either Tshimologo or Ditsweletse clinics. In addition to the above mentioned were the community leaders. The criteria of inclusion were:

1. Men residents of Jwaneng between the ages of 18 and 50 years being highly the reproductive age.
2. Pregnant women who have undergone HIV counselling for PMTCT purpose and are attending antenatal care.
3. Community leaders in Jwaneng.

Mornings during weekends and weekdays were the target time.

Ditweletse and Tshimologo clinics are the only facilities offering both ANC and PMTCT.

3.4 Sampling

3.4.1 Sampling methods

Three sampling techniques were used. Stratified sampling was used for shopping centers, Jwaneng organizations and for selection of men and women participants to the focus group discussions. Systematic sampling was used for selection of men and pregnant women. Purposive sampling was made for convenience of covering all subgroups of population, by targeting level of education during focus groups of pregnant women and men.

3.4.1.1 Selection of Shopping centers

The four shopping centres were stratified into large and small. Then was a random selection of one shopping centre from each stratum such that selection of subject was done proportionally to the size of shopping centres. The selected strata can either be included fully in the sample, or further sampling within the selected stratum must still occur [15].

3.4.1.2 Selection of men

A systematic selection of men shoppers to be interviewed was done from a random starting point, and then every fifth male until required number was selected.

We excluded men under 18 and above 50, as they are not likely to have had babies since the start of the PMTCT programme. We needed to have more than one day for interviews so that we could reduce the bias of having people of a certain socio-economic status or people of the same areas coming shopping on certain days. From the big shopping centre 260 men participated in the study and from the small centre 124 participants did participate in the study.

At the end of the interview, participants were asked whether they would be prepared to volunteer for focus group discussion. Those who were willing to participate in the focus group discussions (272 men) provided the interviewers with their contact details so that they were stratified by education level (primary, secondary and tertiary). Then a systematic sampling starting from a random 5^{th} was done to selected randomly 15 people from each strata for the focus-group discussions. Finally, a non-probability sample of 3 participants from each strata were invited to be part of one of the 5 focus group discussions depending on their work schedules. The focus-group discussions were facilitated by trained Family Welfare Educators from Jwaneng Town Council.

3.4.1.3 Selection of pregnant women

All women attending ANC for the second or more visits and had been offered counselling for HIV were selected. The team of trained field workers spent 6 months collecting data to meet the sample size during weekdays excluding holidays.

From a random starting point, every fifth women in the ANC queue was selected until the sample size was met. For those who refused to participate for various reasons, they were given the freedom to not participate. Women under the age of 18 were included in the study only after consent from parents or guardians. 99 women were selected at Tshimologo clinic, which is small but offers ANC services, but from Ditsweletse clinic, the research team selected 217 pregnant women.

At the end of the interview of those who had agreed to complete the questionnaire by field workers (265), were asked to participate in the focus group discussions. Those who agreed provided the interviewers with their contact details.

They were stratified by education level (primary, secondary and tertiary). Then a systematic sampling starting from a random 5th was done to selected randomly 12 people from each strata for the focus-group discussions. Finally, a non-probability sample of 3 participants from each strata were invited to be part of one of the 4 focus group discussions depending on their work schedules. The focus-group discussions were facilitated by trained Family Welfare Educators from Jwaneng Town Council.

3.4.1.4 Selection of community leaders

There are several statutory and private bodies with community representation. The table below shows different types of organizations found in Jwaneng. These organizations meet as members of Urban Development Committee, in full council

meetings and in the district HIV/AIDS multisectoral committee. The number of representatives from each organization at these meetings depends on the size of population represented by organization.

Table 1. Organizations in Jwaneng		
Community leaders	Institution	Total No. of leaders
Customary court president	Customary court	2
Magistrate	Magistrate court	1
Station commander	Botswana Police	2
Councilor	Local politician	1
Jwaneng Mines	Jwaneng Mines	3
District Commissioner	Jwaneng District	1
Representatives of Town council	Town council	3
District HIV/AIDS coordinator	Southern district Council	1
Head Teachers	Morama CJSS	1
	Kgosimpe CJSS	1
Pastors	Ministry fraternity /church	2
Principal Technical college	Jwaneng Technical college	3
Youth officer	Youth office	1
Masedi	NGO	1
Representative of UDC	Urban Development Committee	3
Power Corporation Manager	Power Corporation	1
Water Utilities Manager	Water Utilities	2
Total		**29**

Institutions were stratified in big, medium and small. As per table, 3 people do represent big institution, 2 people represent medium institution and 1 person represent each small institution at this committee. Three Institutions in each stratum were randomly selected, and 18 participants were drawn from this list. These selected people were invited for special meetings where the focus group discussions were organized. These group discussions were facilitated by the

Health Educator from Thutano Centre. All 18 selected community leaders came for focus groups discussions.

3.4.2 Sample Size

The sample size was determined in consultation with a statistician from Botusa (Botswana-USA health partnership). The statistician estimated that the level of men's lack of involvement in programme to prevent mother-to-child transmission of HIV in Jwaneng could be as high as 85%. Assuming 50% of men are involved. To estimate this involvement the conservative route is followed where men's involvement at 50% is assured and needed to be estimated following the formula below:

$$\text{Sample size (n)} = \frac{\text{estimated level of involvement x (1- estimated level of involvement)}}{e \times e}$$

$$\text{At 95\% CI of 5\% either side, the standard error (e)} = \frac{0.05}{1.96} = 0.0255$$

Since we don't know the percentage of men who are involved in PMTCT programme among men, we assume it is 0.5.

$$\text{Sample size (n) for men is: } \frac{0.5 \times (1-0.5)}{0.0255 \times 0.0255} = 384$$

As the percentage of women who are involved in PMTCT programme at health facilities is 30.5%, the sample size:

$$\frac{0.305 \times (1-0.305)}{0.0255 \times 0.0255} = 326$$

Sample sizes of 384 men and 326 pregnant women will be needed for the study populations at a confidence interval of 95% (P=0.05) and power of 80%.

3.5 Measurement

The development of the tool and use of instrument are described.

3.5.1 Methods

The interview technique was used for data collection. According to Mouton and Marais (1990), the interview method allows the interviewer to interact directly and develop rapport with the interviewee. The questionnaire was translated in Setswana. For those who knew not how to read or write, field workers assisted them to complete the questionnaire.

The response rate was high and in-depth responses were obtained as the interviewer had an opportunity to rephrase questions where confusion or lack of understanding is indicated. The nine research assistants are employed. Eight are Jwaneng Town Council workers and one works from the mines. All have been involved in the past in household STI survey 3 years back, and were recruited for assisting in data collection. Information was given verbally about the research project, the role of the research assistance in data collection and focus group discussions. An agreement was reached.

This training was offered to ensure standardized data collections. Communication skills and code of conduct was also discussed with them.

3.5.2 Data collection tool

Some questions were closed-ended, where the respondents had only one choice among answers given in a section's questionnaire. Other questions were open-ended questions, and in-depth questions were used to assess pregnant women and men residents of Jwaneng (Appendix B). The instruments used were developed by the researcher. Permission for the tool was granted by postgraduate assessors at school of public health, Witwatersrand University and the Town council. The tool for pregnant women was divided into 5 sections: section A recorded demographic data: to describe characteristics or attributes of women under study. Section B was designed to explore their behaviour. Section C explored the perception and experience of pregnant women in programme to prevent mother-to-child transmission of HIV. Section D explored women's experience with men support during pregnancy and section E explored women's opinion on how to improve men participation in PMTCT in Jwaneng. The tool for men was divided into 4 sections: section A described socio-economic characteristics of men. Section B identified men's knowledge of PMTCT. Section C described views and participation and section D explored opinion on how to improve men participation in PMTCT in Jwaneng.

3.6 Pilot study

According to Katzenellenbogen, Joubert and Abdool Karim (1999), a pilot study is a test run of aspects of the main study. The questionnaires was tested in the community late May 2003 on selected 30 men in Sese area situated at 10 km

from Jwaneng and 10 pregnant women at Sese clinic after training of field workers. Men were selected starting from a random point and every fifth man who passed near the Kgotla area in Sese on the road or entering the kgotla premises was invited to participate.

This pilot study was conducted using the subjects similar to those of the actual study to pretest the data collection tool. This collection of data took one working day for the sample to be met. For pregnant women, they were selected from a random starting point; only those who had PMTCT counselling were invited to participate in the pilot study. The readjustment of the questionnaire and corrections were done based on the pre-testing.

3.7 Reliability and validity

The researcher presented the interview schedule for men to the Town clerk and for pregnant women to the department of nursing for the purpose of detecting ambiguity of wording, inappropriate and inadequate responses and any other flaws in the instruments. Reliability is estimated by having two or more trained observers watching some event and independently recording the variables according to predetermined plan of coding system [10]. For the inter-rater reliability, the nine research assistants were trained in the use and interpretation of the interview schedule. The researcher spent five days and two days respectively at ANC clinics and malls training the research assistants in the

interpretation of the questions and co-interviewed the participants. A 100% agreement on the responses was obtained.

3.8 Data analysis approach

A database was designed in EPI Info 6.04d because it is easily customized for data entry; it has many analysis techniques and allows a large database management descriptive. Epi Info 6.04d allows rectification of errors by returning to the original questionnaire. This procedure was followed until no error was found between the two data sets. Further responses across questions were checked for consistency. For example, a woman whose partner did not escort her for HIV test can not be found having tested for HIV as a couple.

3.8.1 Descriptive analysis

The descriptive statistic included the computation of means and standard deviation of different ages (pregnant women's age and men's age). This was to provide an indication if the ages were normally distributed. Frequency counts and percentages were computed to describe respondents' knowledge and other variables under PMTCT experience and perception such as: asked partner to come, want to be accompanied for PMTCT, women whose partner came for PMTCT, partner came, Partner tested as well for HIV, women who disclosed her HIV status, ever accompanied partner for ANC, should men participate, importance of HIV for pregnant women.

In order to compare two different groups by education level, marital status, we assumed a null hypothesis stating there is no difference between the two groups. To accept or reject the null hypothesis, independent t tests were employed to determine whether there was a difference between variables (know PMTCT and choice of infant feeding). To assess whether the level of education and marital status had an effect on various variables, the contingency chi-square for cross tabulation (2x2) were used. A significance level of 0.05 and a confidence interval at 95% were used to determine whether a test is statistically significant.

The qualitative data were organize thematically, and then checked that all questions were answered and responses filled in the appropriate spaces. The data collection sheets from respondents were coded. The qualitative data from focus-groups discussions were audio taped, transcribed and then entered into a word processing file for thematic analysis.

3.9 Report Process

There was a weekly researcher's meeting during which successes and problems encountered were discussed. Each step of the project was reported to the supervisors at Witwatersrand University in South Africa. At the end of the research, results will submitted to the school of Public Health at Wits University in South Africa, Research and Development Office in Gaborone, Office of the Mayor of Jwaneng, Botswana National Library service in Gaborone, Ministry of Health / FHD, Jwaneng Health facilities and to my supervisors in Johannesburg.

3.10 Ethical considerations

The research protocol was presented to the Faculty of Health Sciences Postgraduate Committee at the University of Witwatersrand. A letter of approval to conduct the study was received from the committee (Appendix B). Since the study involved human participants, ethical clearance was obtained from the committee of Research on Human Subjects (Appendix c). The purpose of this committee is to ensure that individual participant as subject in research studies is protected and ethical standards are adhered to throughout the study. Permission to conduct this research was also obtained from the office of the Vice-president of the republic of Botswana (Appendix D). Verbal permission was sought and received from the Town Clerk for interview of men to take place in his jurisdiction. Another verbal permission was obtained from the HIV coordinator in the mines who allowed the selected participants for focus group discussions to participate during working hours.

Participants were introduced to the study. Those who voluntarily agreed, consent forms were given to them prior to answering of the questionnaire. For example, pregnant women of less than 18 years of age had to have the consent signed by a guardian. Confidentiality and anonymity of the respondents were assured by not asking their names or plot numbers in the questionnaire (Appendix E). In addition, they would remain anonymous and only researcher and the assistants would have access to the completed questionnaires.

During focus group discussions, efforts were made to ensure participant's confidentiality by not mentioning their own details or people's names.

Ethical issues will be invariably raised in studies of this nature. For our part, this dimension of the methodology was handled with caution. Participants were assured that the decision not to participate or withdraw from the study will be respected and that they will not be disadvantaged in any way.

3.11 Limitations

- There are scares literature on men involvement in PMTCT. However, most studies researched had been done on men in reproductive health, PMTCT being a recent subject in clinical practice.

-These are data collected on self-reported experience, perception of men and women on programme to prevent mother-to-child transmission of HIV in Jwaneng. Hence, there is a problem of validity given that respondents might have been giving answers that could make them look concerned about the programme. This could have introduced a recall bias. To counteract that the researcher ensured confidentiality and anonymity during administration of the questionnaires.

- Men were selected in shopping centres. This could have excluded men who were not shopping or excluded men who are poor or men who were working in the morning. This could have introduced a selection bias.

- In case of multiple refusals to participate in the study, there could have been bias to a particular category of the socio-demographics (age-groups, education level, marital status) of the potential respondents. To reduce the bias, the team

interviewed on different days so that opportunity could be given to people of different socio-economic background to be at the shopping malls.

- The selection of pregnant women could have been biased by the fact that the field workers did interview only those who come for ANC at the health facilities leaving out those who do not come for ANC.
- For the results to be generalisable, the population that comprise the sample must be fully representative of the population at large. However, the population size in this study was relatively small and the sampling process took into consideration all these important aspects, it should be possible to generalize results to all pregnant women and all men residents of Jwaneng, but not perhaps to the reproductive age population of Botswana.
- Measurements of knowledge in section B of the tools could be treated with caution because few questions asked on knowledge of PMTCT programme would not be sufficient to establish that respondents truly know this programme.

3.12 Conclusion

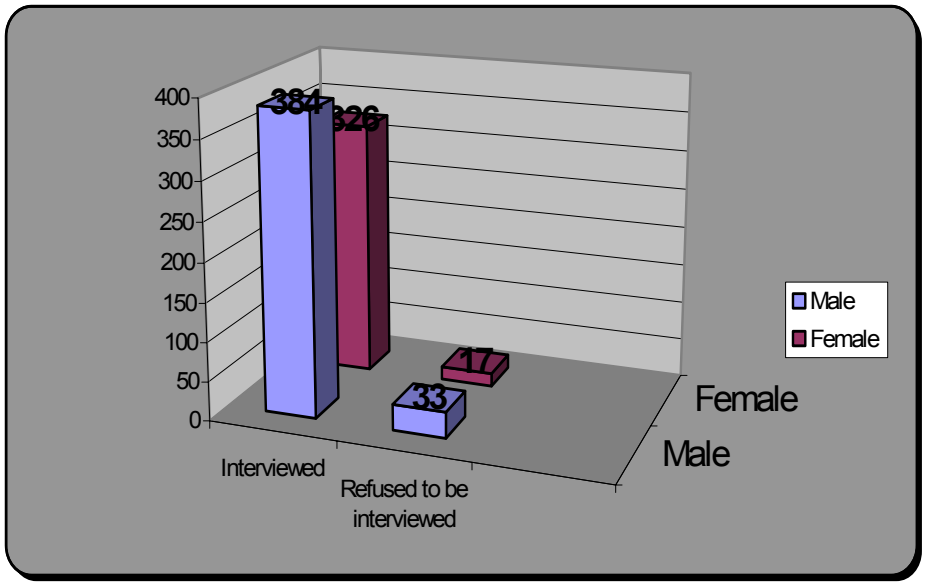
In this chapter, the research design, target population and sampling, data collection, pilot study and data analysis was described. Measures to ensure validity and reliability have been discussed. Ethical considerations and limitations were addressed. In the next chapter, results of the study are presented.

CHAPTER FOUR: RESULTS

4.1 Introduction

In this part of the report, the findings of the research are presented. The chapter is divided into two broad sections. The first section gives the analysis and interpretation of the data collected through individual interviews with pregnant women and men of Jwaneng. 326 pregnant women and 384 men were interviewed as seen in graph 1. It took four consecutive saturdays and three sundays for collection of quantitative data from men and 6 months from pregnant women. 17 women and 31 men refused to be interviewed.

Figure 1: Distribution of respondents by sex by acceptance to interview



The second section deals with analysis of the focus groups organized with the pregnant women, men and community leaders. Twelve focus groups discussions were held, facilitated and the (same) following questions were asked during all

focus group discussions: Do men have a role to play in the PMTCT? What is their role? What can be the causes and consequences of low level of involvement in such a programme? What can influence men participation in PMTCT programme? What can be done to strengthen men's participation?

4.2 Participation and form completeness rate

Seven hundred and fifty eight questionnaires were distributed and 710 (94%) participated in the study. In addition, all forms were completed correctly at 100%.

4.3 Quantitative data from pregnant women and men

4.3.1 Findings from pregnant women

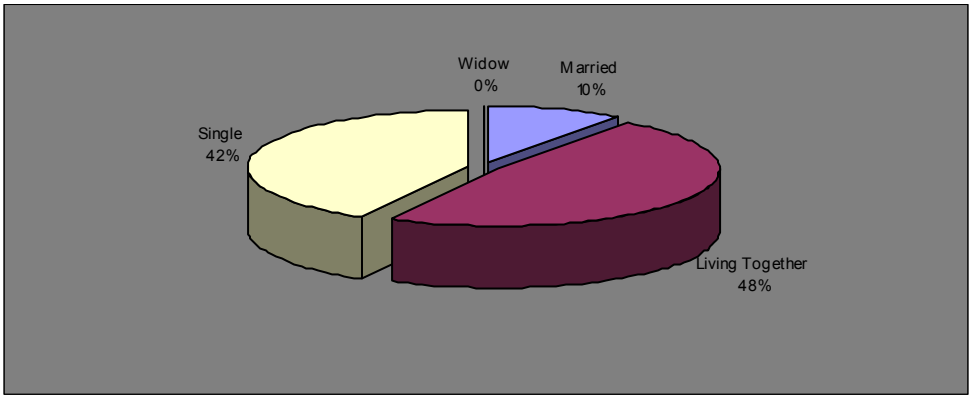
4.3.1.1 Socio-demographic characteristics of respondents

The population distribution was characterized by a mean of 25 years, the range was between 17-40 years, a variance of 33 years, and a standard deviation was 5.78. The t statistic test (t statistic) = 51.61, DF = 137 and the p-value (P)<0.01. 62% of women were aged between 18-30 years, 13% had completed tertiary education and 10% were married. See table 2 and Figure1.

Table 2: Pregnant women by age group and by education achieved

Age-groups	n (%)	Education Achieved	n (%)
<18	66 (20%)	Primary	66 (20%)
18-30	201 (62%)	Secondary	179 (55%)
31-35	31 (9%)	Tertiary	43 (13%)
36-40	28 (9%)	None	38 (12%)
Total	326		326

Figure 2: Distribution of pregnant women by marital status



4.3.1.2 Knowledge of PMTCT

In this section, five questions were asked to assess the respondents knowledge of PMTCT. The results of questions answered correctly show that of all pregnant women who responded, 313(96%) were confident that they knew the programme to prevent mother-to-child transmission of HIV. In addition, 17/326 (5%) had another exposure to PMTCT counselling during the previous pregnancy before the current one.

Further analysis was done to find out whether there is a statistical difference in source of information of PMTCT and level of education. As indicated in table 3, health workers 73% (238/326) have been a major source of information for all education level with the highest frequency among those who completed secondary school (X^2 = 18.59, DF=9, P=0.0288). The differences between the groups of education achieved were statistically significant in the way that women of different education level receive information.

Table 3. Source of information of PMTCT and level of education.					
Source of PMTCT information	Level of education achieved				Total n=326
	None n (%)	Primary n (%)	Secondary n (%)	Tertiary n (%)	
Peer educators	5 (11)	3 (7)	38 (83)	0	46
Media	0	2 (7)	25 (89)	1 (4)	28
Partners	0	6 (43)	8 (57)	0	14
Health workers	33 (14)	55 (23)	108 (45)	42 (18)	238

4.3.1.3 Women's experience of support by men in PMTCT programme

In this section, 18 questions were asked to assess the support respondents got from their partners.

4.3.1.3.1. Want to be accompanied by the partner

A cross tabulation was done to establish whether there is a statistical difference between the level of education of pregnant women and them wanting to be accompanied by the partner to ANC. 255 (78%) of pregnant women stated that they would like to be accompanied by their partner to ANC (X^2 = 6.29, DF = 3, P= 0.09). The difference is not statistically significant between those who want to be accompanied by partners by education level. In addition, in the category of pregnant women who had tertiary education, more than three quarter [38/43 (88%)] want to be accompanied while in other category the difference is not significant. See table 4 (next page).

The results show also that 265 (81.2 %) were encouraged by the nurses to come with their partners. A 27 years old woman stated: "Nurse, find a way to mak*e him come and hear for himself. Men do not agree with what we say…*"

Table 4. Level of education and women who want to be accompanied

Level of education	Would like to be accompanied		Total=326
	YES	NO	
None	20	18	38
Primary	54	12	66
Secondary	143	36	179
Tertiary	38	5	43
Total	255 (78%)	71 (22%)	
X^2			**= 6.29**
P			**= 0.098**

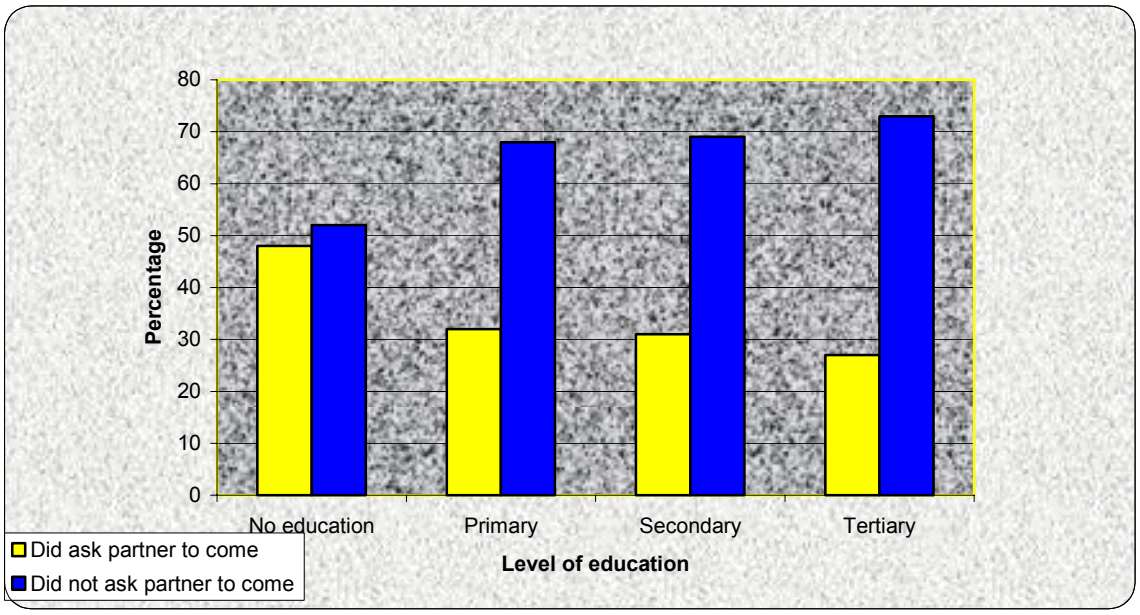
4.3.1.3.2. Asked their partners to come

The results had shown that despite the staff encouragement, only 29% (77 pregnant women) actually asked their partners to escort them to the health facilities for ANC (including PMTCT) services. The distribution of level of education of pregnant women who had asked partners to come compared to those who did not ask are as follow: no education [16/33 (48%], primary education [17/53 (32%)], secondary education [45/146 (31%)] and tertiary education [9/33 (27%)].

A further analysis was done to determine whether there is association between the level of education and asking the partner to escort at ANC. The results in figure 3 demonstrate that women were more likely to ask their partners to come with them if they were less educated (X^2=10.11, df = 3, P<0.01). See figure 3. The reasons given to explain why women do not ask partner to come are that they are far, they are not married, they fear their men's unpredictable reactions such as: suspicion of being infected, assault, be chased from the house. One

woman said:" *my man is impossible, he does not listen. I don't want to be chase away, for my children will suffer*".

Figure 3: Level of education of pregnant women who asked their partner to come



4.3.1.3.3 Marital status of women whose partner agreed to come

Of all pregnant women who asked the partners to come for PMTCT services, 74% (57/77) of their partners agreed to do so (X^2=1.98, df=2, P=0.37). Then the researcher selected these pregnant women and analyzed them according to their marital status. The main finding was that the marital status of pregnant women does not influence their decision to ask their partner to come with them as shown in table 5 (next page).

Table 5. Marital status of women who asked partner to come and the partner did agreed to come.

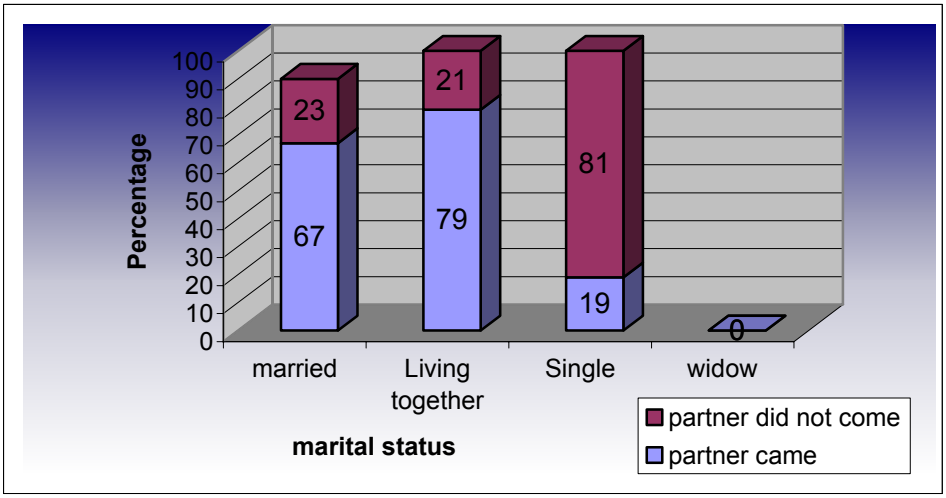
Marital Status	Partner did agree to come for PMTCT.		Total
	YES - n(%)	NO - n (%)	
Married	7 (88)	1 (12)	8
Living Together	31 (86)	5 (14)	36
Single	19 (58)	14 (42)	33
Total	57 (74)	20 (26)	77
Chi squarre			**1.98**
P value			**0.3719**

4.3.1.3.4 Partners came for PMTCT services

All respondents whose partner came represent 7.6% [~8% (25/326)] of the sample population.

Further analysis was done to establish whether there is statistical difference between marital status and partners coming with her for PMTCT. Out of 57 partners who came after having been asked by their women to do so, 25 (44%) came (X^2 =2.15, df = 2, P=0.34). These findings had shown that the marital status of women does not influence the decision of men to come. Meaning that as far as convincing men to come is concerned, there is no association between and convincing the partner to come.

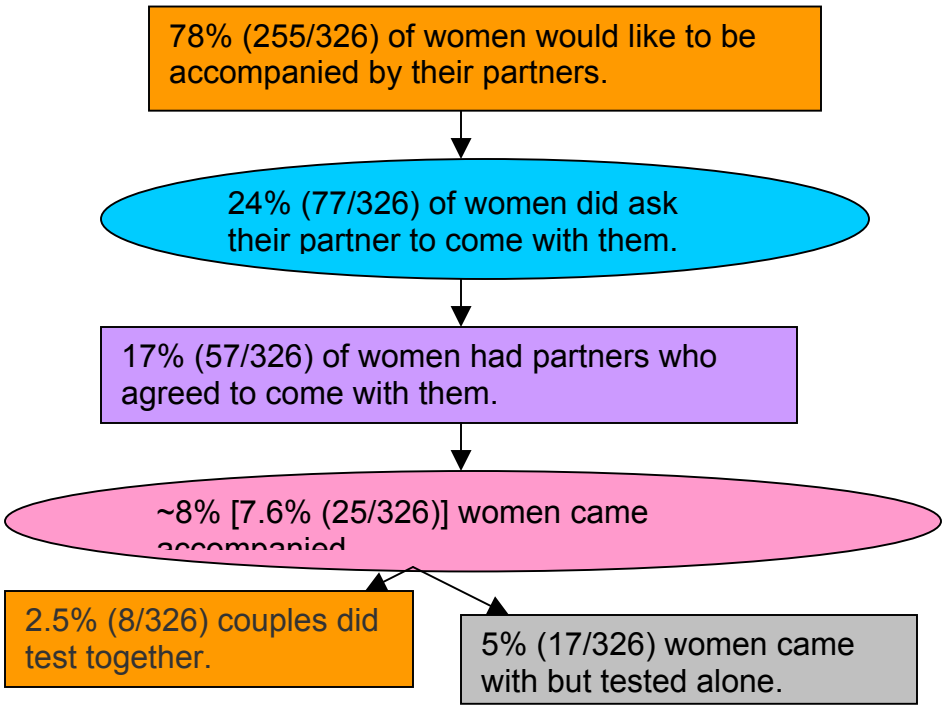
Figure 4: Respondents whose partner came



4.3.1.3.5 Respondents whose partners came and tested for HIV

Of all the 25 pregnant women who came with their partners, 17 (68%) women tested alone and 8 (22%) couples tested together [1](OR: 109.78, 95% CI: 5.98-21.51, P=0.0000).

Flow chart 1: Women's experience on men's participation in PMTCT.



[1] Couple: Female and male sexual partner presumed responsible for the current pregnancy.

As for women who tested alone, they all told their men the results of HIV [100% (17/17)]. They responded individually that their partners were busy at work and do not have time.

4.3.1.4 Pregnant women's perception of PMTCT programme

In this section, five questions were asked to assess how pregnant women do perceive PMTCT in Jwaneng. Women gave varieties of how they do consider the programme to prevent mother-to-child transmission of HIV.

4.3.1.4.1. Convinced about PMTCT counselling provided and tested for HIV

66.7 % (217/326) of women who underwent PMTCT counseling agreed that counselling that was provided was enough so that they agreed to be tested for HIV.

Out of 109 respondents who did not agree to be tested for HIV, 79% (86/109) responded that they were not even convinced that they had received enough counselling that day. A 22 year old woman said: "*he allowed me to test for HIV because he tests each year at the mines…otherwise there has been no counselling but hearing of what she wanted us do*". This represented 26% of the sample population. 18% (20/109) of pregnant women felt that they had to ask for permission from their male partners and almost 3% (3/109) of the respondents felt that they feared HIV. According to a 28 years old pregnant woman: "*I have tested without him knowing it. We lost a child last year and he does not see it a problem*".

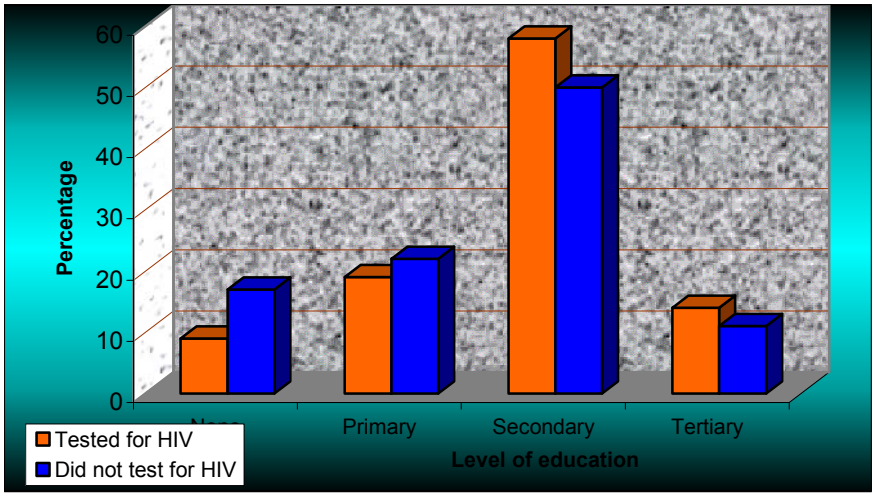
All women who refused to be tested conceived PMTCT services in health facilities as advices leading somehow to HIV testing and not as educational services.

4.3.1.4.2 Overall HIV Testing

Among the categories of pregnant women who tested for HIV, those who had gone for tertiary education were 31/217 (14%), secondary level 125/217 (58%), primary level 42/217 (19%) and no education level achieved 19/217 (9%).

Further analysis was done to determine whether there is an association between agreeing to test for HIV and level of education of pregnant women. Figure 5 shows that women's education level does not influences the decision to test for HIV (X^2 = 2.64, df = 3, P = 0. 4).

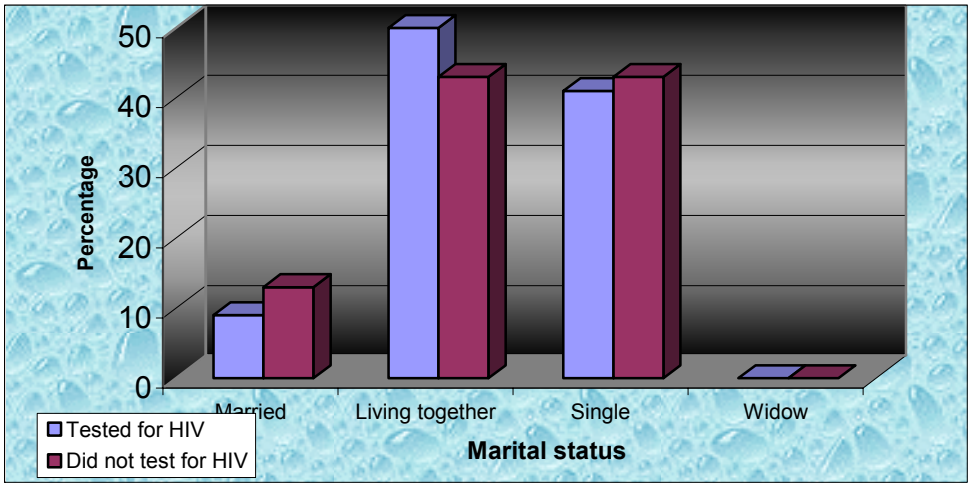
Figure 5: Level of education of women who agreed to test for HIV.



When looking at the respondents who agreed to be tested for HIV by their marital status, as shown in figure 6, 109/217 (~50%) pregnant women were living together with boyfriends, 90/217 (~41%) were single women and pregnant married women were 19/217 (9%). After cross tabulation, the analysis showed

that the marital status does not influence the women's decision to test for HIV (X^2 = 0.88, df = 2, P = 0.64).

Figure 6. Marital status of pregnant women who agreed to test for HIV

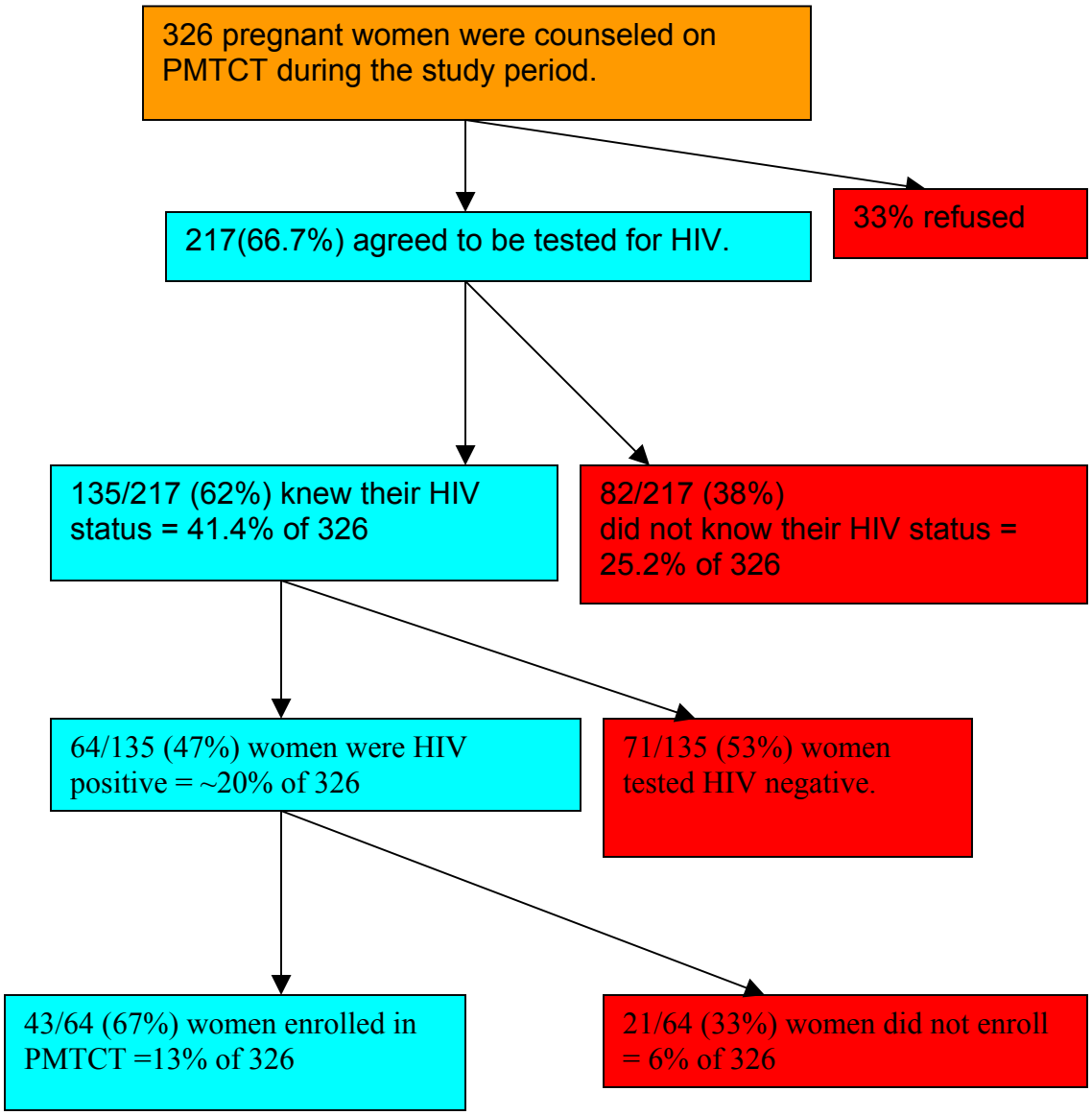


Of 217 who agreed to test for HIV, 62% (135/217) knew their HIV status at the time we were interviewing them. Meaning that others did not turn up for results or did not just want to know them. A 27 year old respondent said: "*I tested because the nurse emphasized… Now I am in fear*". Findings showed that 64 pregnant women were HIV positive (~20% of 326).

Results showed also that 32% (43/135) of pregnant women who knew their status enrolled in the PMTCT programme.

Out of the remaining 21 pregnant women who did not enroll in PMTCT programme, 71% (15/21) women did not because their men reside out of Jwaneng Town so that they could not decide alone and 29% (6/21) women said they were psychologically disturbed.

Flow chart 2: Enrollment of pregnant women in PMTCT.



4.3.1.4.3 Disclosure of HIV results

Among the 217 pregnant women who tested, 57% (124) did disclose their HIV status to the partners and 33% (45) told a person other than their usual partners (mainly parents). Some reasons were given by women as to why they did not disclose their HIV to their partners.

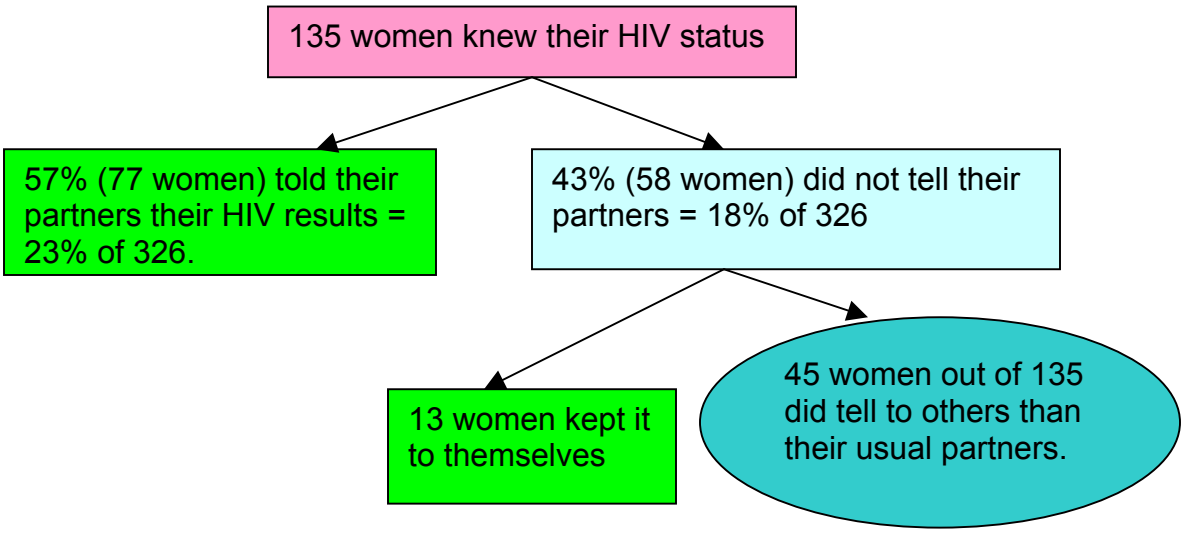
" why should I tell him if he does not care about me?".

" it is not easy to disclose it to him directly".

Eleven women also mentioned that they fear unpredictable reactions from men. Also, "*People are talkative and gossipers, especially when one is HIV positive, so I better keep it for myself*'.

The following is a reason that they did tell partners. A woman said*: "It is a sign of respect and openness for peace sake in the relationship".* Another woman said: *"even if my partner does not want to talk about HIV, he remains the head of the house, hence I have to tell him".*

Flow chart 3. Reasons for disclosing HIV status to others.



4.3.1.4.4 Support needed by pregnant women

All women expressed the need for financial support, tender love, be escorted to antenatal clinic for PMTCT services and provide psychosocial support.

4.3.1.4.5 Room for improvement of men's involvement in PMTCT inJwaneng

Three quarter of respondents feel that there is nothing they can do to improve involvement of men in programme to prevent mother-to-child transmission of HIV in Jwaneng. However, all agreed that the government and the employer can force men to get involved. As said a 26-year-old woman that: "*government should help men to own this PMTCT programme, us women we can manage*".

4.3.2Findings from men respondents

4.3.2.1 Socio-demographic characteristics of men

This part of the study deals with men residents of Jwaneng. For anonymity purpose, the researcher could not track partners to pregnant women in order to interview them, as some were not residing in Jwaneng. Hence, the marital status was of no use in the study of men. However, we got data on whether they ever had a pregnant partner. Therefore, under the demographic information; only age groups and level of education were collected as relevant data.

The population age distribution of men was characterized by a mean of 32.1 years; the range was between 20-50 years, the mode of 25 years, variance 59.74 and a standard deviation of 7.72. In addition, 46% (177) of men were of age group 18-30, 34% (130) of respondents had gone for tertiary education.

Table 6. Socio-demographic characteristics of men

Level of education	Frequency (%)	Age groups (years)	Frequency (%)
None	58 (15.1)	18-30 years	177 (46)
Primary	79 (20.6)	31-40	151 (39)
Secondary	117 (30.5)	41-50	56 (15)
Tertiary	130 (33.9)		
Total No. of men interviewed=384			

4.3.2.2 Men's knowledge of PMTCT

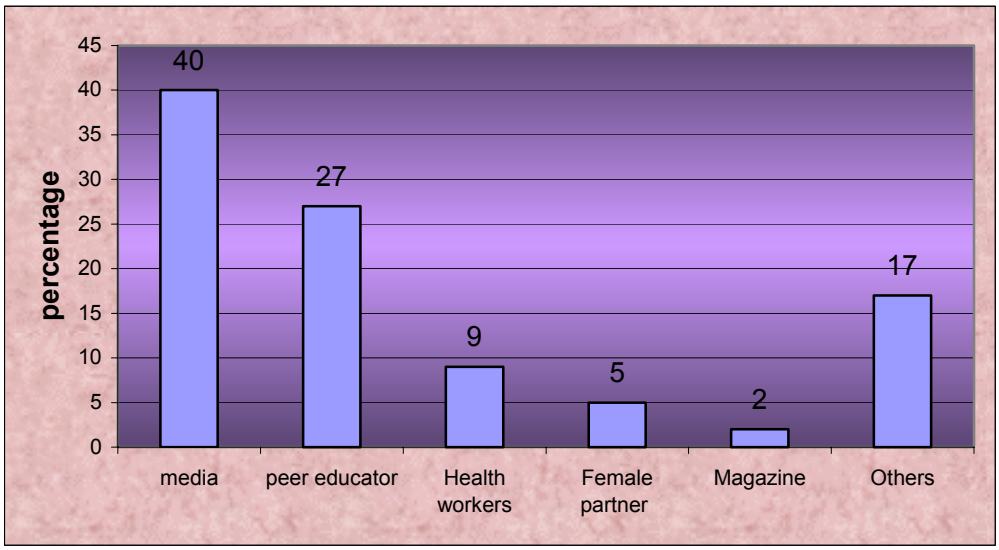
Eleven questions were asked. Data yielded the following findings: that 82.1% (315/384) men had already heard about the PMTCT programme. Among the

respondents who have heard, 62% (195/315) know where PMTCT services are rendered.

4.3.2.2.1 Men's source of PMTCT information

Of all the participants who knew about the programme to-prevent mother-to-child transmission of HIV, 40% (127/315) got the information from media, 27% (85/315) from peer educators, 9% (29/315) from health workers, 5% (17/315) from female partners and 2% (5/315) from magazines.

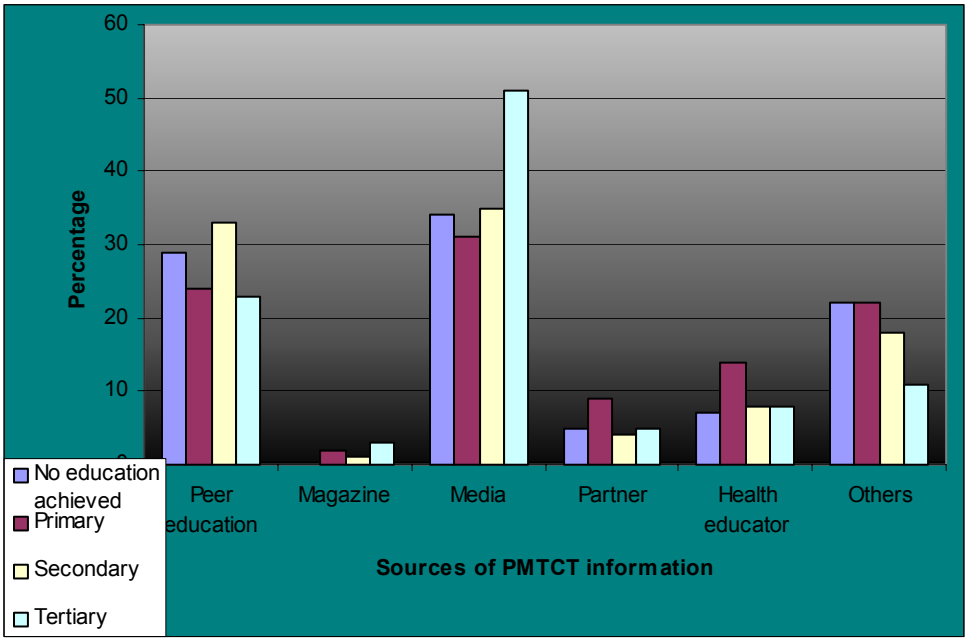
Fig. 7. Men's source of PMTCT information



Further analysis was done to determine whether there was a difference between the levels of education in regard to the sources from where these participants got the PMTCT information. As shown in figure 8, despite the level of education, media was the major source of information. 34% (14/41) among those with no education level, 31%(18/58) among those who achieved primary education, 35% (34/96) among those who achieved secondary and 51% (61/120) among those who achieved tertiary education, had media as source of PMTCT (X^2 = 17.48, df

= 15, P = 0.29). Therefore there is no difference between the levels of education of men as far as source of information on PMTCT is concerned in Jwaneng.

Figure 8: Sources of PMTCT information according to education level



In all, media is the strongest communication tool (40%) for men in Jwaneng followed by peer education (27%). The impact of health workers on men's information of PMTCT related issues is minimal.

4.3.2.2.2 PMTCT knowledge

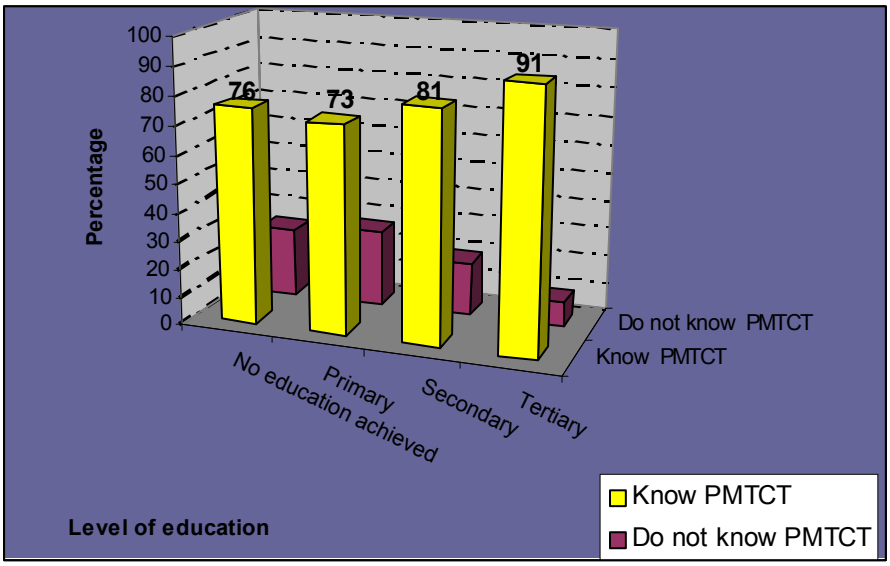
As the majority of respondents had already heard about PMTCT services in Jwaneng, the researcher asked a series of questions on mode of transmission of HIV to unborn babies, benefits of PMTCT programme and infant feeding. Any respondent who gave at least 50 percent of correct answers was considered as having PMTCT knowledge.

4.3.2.2.2.1 Men's knowledge of the mode of transmission of HIV

Table 7. Respondents' knowledge on the mode of transmission of HIV			
HIV is	Yes n (%)	NO n (%)	Total
Transmitted during unprotected sexual intercourse	356 (93)	28 (7)	384
Transmitted to unborn child during pregnancy	380 (99)	4 (1)	384
Transmitted during protected sex during confinement	213 (55)	171 (44.5)	384
Transmission reduced when the mother is on AZT.	344 (90)	40 (10)	384

Analysis was done to determine whether there was an association between the level of education and men's knowledge of PMTCT programme. Indeed, Figure 9 shows that there was an association (X^2 = 15.09, df = 3, P = 0.001).

Figure 9. Level of education of respondents who knew PMTCT



4.3.2.2.2.2 Men's knowledge of infant feeding born of HIV positive mothers

Respondents were asked to choose a method of infant feeding that his/their partner could use if she tests HIV positive, 11% (44/384) chose strict

breastfeeding, 34% (130/384) chose mix feeding, 38% (145/384) chose formula feeding and 17% (65%) did not know which method to advise their partners. However, because of the ambiguity of choices of infant feeding, there is association between knowing PMTCT and choices of infant feeding in Jwaneng. An analysis was done from respondents who answered that they knew PMTCT, and only 39% (122/315) chose artificial milk (formula) feeding as the only method for infant feeding (X2 = 2.05, df = 3, P = 0.56).

Table 8. Choices of infant feeding and knowledge of PMTCT

Know PMTCT	Choices of infant feeding				Total
	Formula feeding n (%)	Mix feeding n (%)	Strict breastfeeding n (%)	Don't know n (%)	
YES	122 (39)	97 (31)	35 (11)	61 (19)	315
NO	23 (33)	33 (48)	9 (13)	4 (6)	69
Total	145	130	44	65	384
Chi squarre					**2.05**
P value					**0.5628**

4.3.2.3 Men's perception and experience

In these two sections, twenty questions were asked. In addition, past history of respondent having partner is assessed, the history of having accompanied them for ANC, men's desire to participate in PMTCT and HIV test, gender issues, asking permission to test for HIV are presented. The flow charts are made to clarify the findings for easy follow up of ideas.

During the study, two categories of men were identified: those living with female partners and those who live alone. 56% of men (216/384) had a pregnant partner in the past / or present and 44% (168/384) had never had a pregnant partner but

have sexual partners. According to the researcher, men who have had pregnant partners could have had an exposure to ANC related services such as PMTCT. Hence, their views could differ from the other category.

Table 9. Respondents who have ever had a pregnant partner	
Had a pregnant partner	Frequency (%)
Yes	216 (56)
No	168 (44)
Total	384

4.3.2.3.1 Men's experience of antenatal activities

4.3.2.3.1.1 participation in ANC for PMTCT

Out of 216 who had ever had a pregnant partner, 68% (147) had never been with their partner to health facilities for any antenatal clinic.

Many respondents commented on their work schedule, which made it difficult for them to be available at the same time as their partners to go to the clinics.

A few respondents stated that they were concerned by the fact that their partners went to ANC with their mothers and they did not therefore see the need of escorting them.

Table 10. Men who ever accompanied partner for ANC	
Was accompanying partner to ANC	Frequency (%)
Yes	69 (32)
No	147 (68)
Total	216

Having the above findings in mind, a question was asked in order to know whether it was important for men to participate in PMTCT activities. The results in

table 11 below show that the majority of men [75% (288/384)] felt that men should participate in the PMTCT programme and 25 % (96) did not agree with the participation. The following are some of people's views on men's participation in PMTCT programme.

A 32 years old man expressed his feeling and said that: "*asking men to participate is a sign of trust, which the government is giving them and should therefore help men to set and make functional men's health clubs where they can learn more about PMTCT and take appropriate strategies to embark in this fight*".

A 39 years old man made the following statement*:" why only now that the government should ask men to join hands in health issues*? *For e.g. why can't the government give paternity leave when a legitimate wife gives birth, why can't employers allow us to go for ANC with our women during working hours"*?

A 24 years man said: "*it is good for men to participate because couple counselling prevents unwanted differences related to results, it can get people's social behavior changed and after it, nobody would be pointing fingers to the other*".

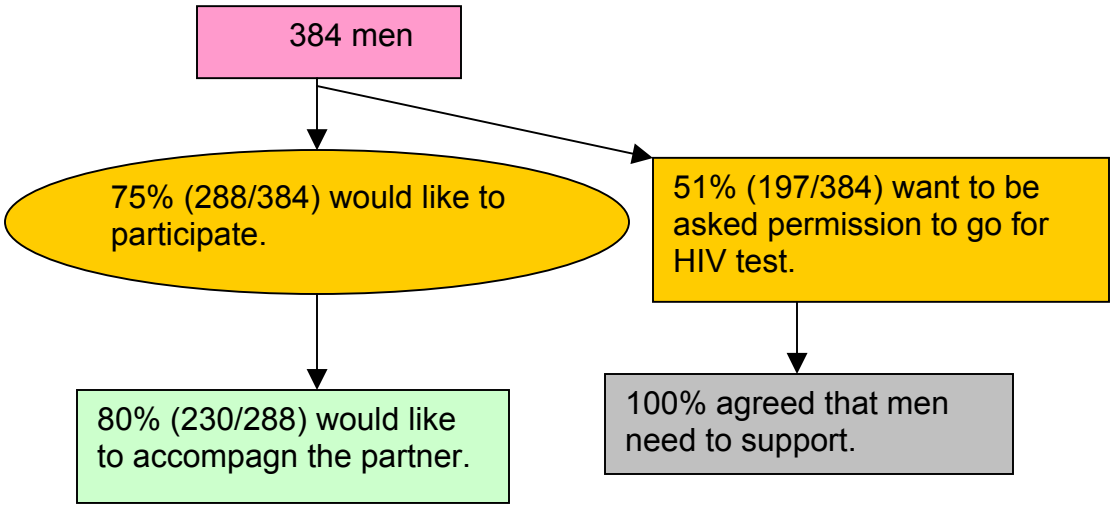
Table 11. Should men participate in PMTCT	
Should men participate in PMTCT	Frequency
Yes	288 (75%)
No	96 (25%)
Total	384

Further analysis was done to determine whether there was an association between level of education and agreeing to escort the partner for PMTCT. Table 12 shows that men are more likely to escort their partners to a health facility if

they were educated. 42% (29/69) have secondary education (X^2 = 10.13, df = 3, P = 0.017).

Table 12. Was accompanying partner for ANC services by highest level of education					
Accompanying partner to ANC	Highest level of education				Total
	None	Primary	Secondary	Tertiary	
Yes	1 (5%)	16 (33%)	29 (42%)	23 (29%)	69 (32%)
No	19 (95%)	33 (67%)	40 (58%)	55 (71%)	147(68%)
Total	20	49	69	78	216
Chi squarre					**10.13**
P value					**0.0174**

Flow chart 4. Men's participation in PMTCT



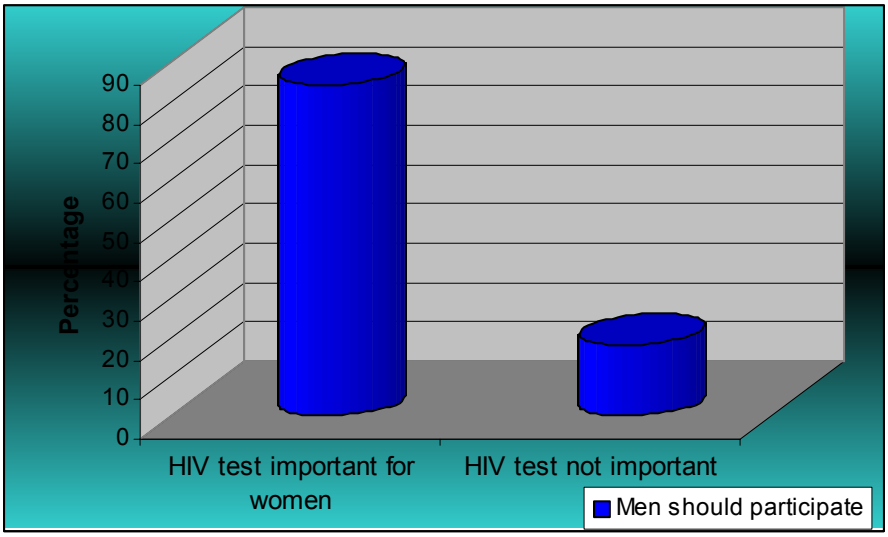
A 25 years old respondent said: *"It is not important to say: support women, support women. Men should be allowed to be part and parcel of PMTCT services when the partner is pregnant".*

A 35 years old man said: " *married or not, men always support financially and give love to women even though they never appreciate. Women always think that someone else cares more than his partner does. Anyway, I will provide the best to my partner*".

4.3.2.3.1.2 Men's views on HIV test

In this study, results in figure 10 have shown that 87% (333 men) agreed that HIV test for pregnant women was important. Respondents were asked a question to know whether there was an association between importance of men to participate in PMTCT and how important was the HIV test for pregnant women. Analysis showed that 84% (279/333) of them that saw the importance of HIV test had agreed also that men should participate (OR=23.54, 95% CI: 2.57-8.43, P<0.01). There was a significant association between agreeing for the importance of HIV and the importance of men to participate in PMTCT activities.

Figure 10: Association importance of HIV test for pregnant women and men to participate

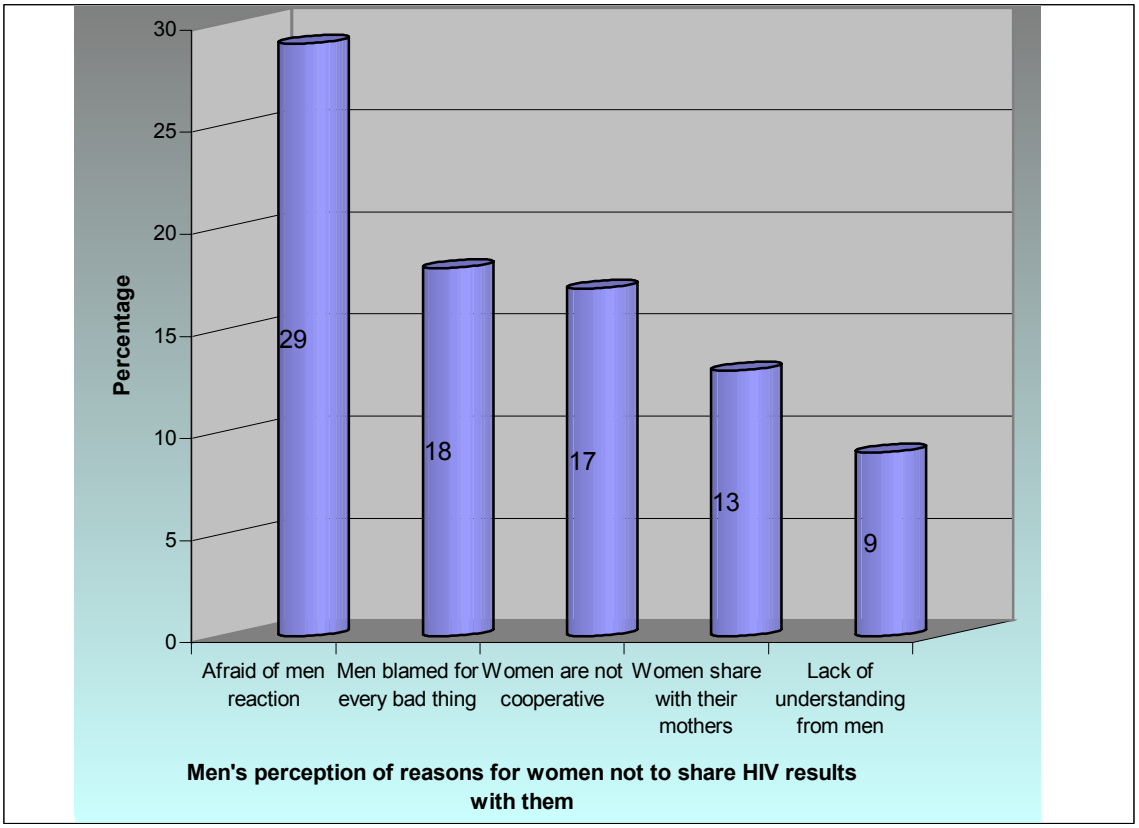


Results of this study have shown also that out of 384 respondents, 49% (187 men) felt that it was not necessary for women to ask their permission to test for HIV (OR: 1.41, 95% CI: 0.86 – 1.66, P = 0.25). Therefore, there was no statistical

significant difference between agreeing that HIV test is important and wanting to be asked permission to test. One respondent said that*:" pregnant women are old enough and ready to take big decisions including HIV test without asking for permission from her partner*".

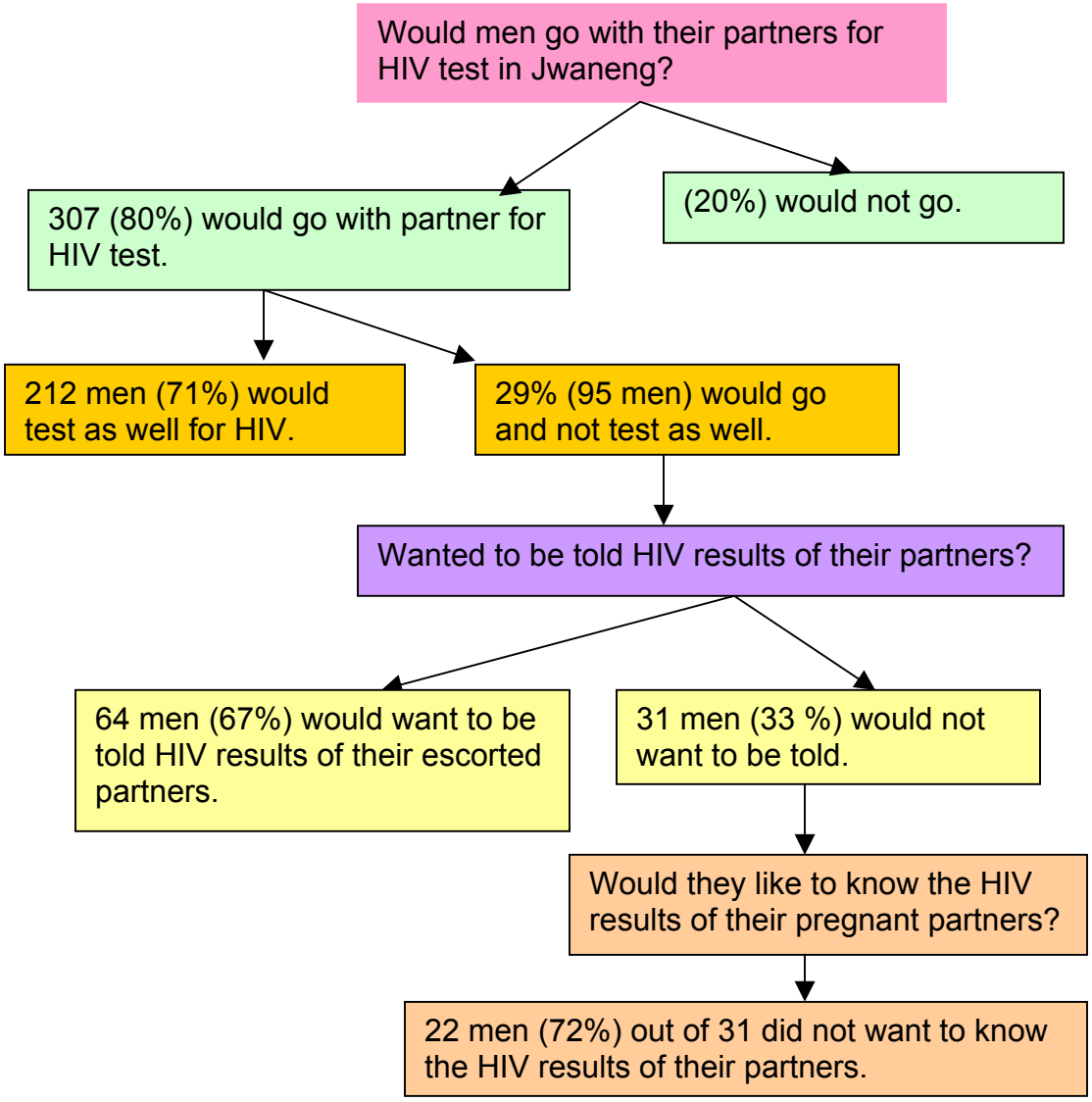
A 32 years old man who wanted to be asked permission said that:" *men are the head of homes and relationships, they need to give a go ahead for HIV or not*." Because, many are those men who felt that they should be asked permission, some are afraid to test for HIV while other condemn the Government for not having involved them from the beginning.

Despite this high perception of the importance of HIV test, sharing of results remained a burden between partners. Respondents were asked to choose one answer that could be the cause of women's non-disclosure of their health related issues. Results were that 29% (112/384) felt that women were afraid of men's reaction, 18% (71/384) felt that men were blamed for every bad thing that happens in health, 17% (65/384) felt that women were not cooperative, 13% (51/384) felt that women share with their mothers, 9% (36/384) lack of understanding from men. See figure 11.



Indeed, women's reasons for not sharing their HIV results have been shown through men's intended reactions toward the positive HIV test of partners. 54% (208/384) of men would send their HIV positive women to health facilities, 16% (60/384) would chase them from their houses, 9% (34/384) would look for spiritual assistance, 8% (29/384) felt that their women should abort, and5% (19/384) would consult traditional healers. Other 9% (34/384) did not give know what they would do.

Details on men's PMTCT perception and experience are reflected in the following flow chart 5.



4.3.2.3.1.3 Types of assistance to be given when a partner tests HIV positive

44% (168/384) felt that that financial, moral support combined with encouraging the partner to adhere to PMTCT drugs would be appropriate. The majority felt that assistance was always there. One respondent stated that: "*should he buy a house to the each time she is pregnant for her to say that she is assisted?"*

Table13:Types of assistance to be given to an HIV pregnant woman n (%)		
Ensure her adherence to PMTCT drugs, financial and moral		168 (44)
Assitance is always there and I	send her to health facility	72 (19)
Assitance is always there and	she is old enough to take care of herself	62 (16)
Assitance is always there but	Other types	82 (21)
Total		100%

4.3.2.3.2 Improving men's participation in programme to prevent mother-to-child transmission of HIV in Jwaneng

Let us look at the benefits of men's participation in PMTCT. According to the results of the analysis, a proportion of 71% (272/384) agreed that there would be a negative impact on the PMTCT programme if men do not participate in PMTCT. The HIV transmission will continue.

A man said that: "*if men do remain ignorant and not interested in this programme, they can stop women from utilizing the services and increase the HIV infection rate*". A respondent suggested that:" *for PMTCT to succeed, men should lead it at family and community level*". Another respondent said that:" *The government has been empowering women in the past years in all health programmes, living out men, so that even during an epidemic like of HIV, programmes are still made to benefit women only. This is why the Government should continue fighting HIV without men's participation".*

Three questions were asked to respondents on how to improve men's participations, what would they do and what others could do. The majority felt

that policy makers should back up men in different areas of their health. A 34 year old man said: ”*couple counselling should be the norm in order to reduce accusations that men do not participate*”. Meanwhile, the minority felt that men and women should change their attitude towards utilization of PMTCT services instead of pin pointing each other and requested for banning of confinement.

4.3.3 Focus group discussions

In total, 11 focus group discussions took place during this study.

Out of 384 men participants, 71% (272 participants) agreed to participate in the focus groups discussion. 29.2% of 384 refused to participate. 60 men participants were randomly selected to participate in focus groups discussion. 8 men did not turn up.

Five focus groups discussions for men of 10-12 participants each were organized with the 52 participants. Qualitative data from men were collected during focus groups at these places: the mines, Thutano VCT center, Old Community Hall, Water Utilities.

Two focus group discussions with the 18 selected community leaders were organised at Jwaneng Civic Centre. Each group had 9 participants.

Out of 326 interviewed participants, 78.5% (265 pregnant women) refused to participate in the focus group discussions. The main reason was they were tired and had no time to come back for that focus group. Forty-eight women were selected for the four focus group discussions of pregnant women. Three focus-groups discussions were organized with an average of 9 pregnant women in each group discussions at Ditsweletse clinic and one focus group discussions at Tshimologo clinic. Five women did not come to the focus group discussions.

4.3.2.1 Do men have a role to play in the PMTCT programme.

The results from all the focus groups discussions revealed that majority of participants felt that men have a big role to play in the programme to prevent mother-to-child transmission of HIV.

The more they play their role, the lesser will be the stigma associated with HIV. One participant complained about the late appeal from the Government asking men to get involved.

4.3.2.2 What is the role of men in PMTCT programme.

As perceived by respondents in this study, the role of men was: agreeing to come for counseling, accompanying women for HIV results, agreeing to be tested as well for HIV, psychosocial and materials support. But, most of men's groups added that: men should play a leading role in the fight against HIV by giving health talks in their homes, at work places and they needed to change their own attitude towards pregnant women. This change of attitude includes the provision of material, social, psychological and Physical involvement in the PMTCT programme.

4.3.2.3 Specific causes of poor men participation in PMTCT

In the focus groups of pregnant women, the majority felt that the following are important issues regarding men's participation:

- After work, men are always in bar and do not have enough time to discuss health issues under normal circumstances. Men have many girlfriends.

- Men underestimate the benefit of PMTCT and look only at the component of HIV test. One woman stated that:" *if you test and come to tell him that I am HIV positive, he can harasse you and can tell that he doesn't want you to infect him*". Many pregnant women mentioned that:"*they have told their partners to test and that they had refused; I do not know what to do*".

In the focus groups of men, the majority felt that the following are important issues regarding men's participation:

- Living far from their partners, separated by circumstances such as work or being not married. Women have many boyfriends.
- Lack of commitment. One respondent said that:" *most of men in Jwaneng are not legally married so that they can not get committed for a pregnancy he never planned nor accepted to be co-author".*
- Government did not involving men in health programmes*. One man asked the following question:" why did our government try to show a kind of trust in men? Why these last years health programme never considered the importance of men's impact".*

  Men are limited not only by their work schedules but by governmental policies. One participant said that:" *a pregnant woman who works can go officially to antenatal clinic, but the partner is not allowed by the policies to go with her"*.

  Mentioning about policies, a man said that:" *despite this willingness to participate, illegal relationships can still be a limitation to full involvement of men.*

Important issues from the focus groups of community leaders were:

- Lack of role model amongst leaders in this country. One participant said*:" it looks like the problem of HIV does not affect leaders. It is only people of a lower class who are asked to go public or be part of different groups of people living with HIV".*
- Languages used in the fight against the HIV infection give the impression that those who are infected do carry the enemy to the nation and ipso facto are enemies to everybody. For example:"our enemy is HIV","war against HIV", "accepting people with HIV", "disease of promiscuous people".

4.3.2.3 Consequences of lack or poor participation of men in PMTCT

All focus groups discussions concluded that men do not or poorly play their role in PMTCT programme, children who are the future of Jwaneng would be infected. Hence, chance will be minimal to have a generation free from HIV by 2016 as visionned by the central government of Botswana.

4.3.2.4 What can be done to improve men participation in PMTCT.

Suggestions from pregnant women

- Regular meetings between men and women to discuss the importance of dual decision-making in PMTCT and other reproductive health issues.

- Partners should be encouraged to come together for ANC classes. This should not be on papers only, but seen in practice. Policy-makers should look at how to encourage men by putting in place paternity leave.
- Policy-makers should put in place a law, which can strengthen marriages against living together for long period. Many are the women who said that the government should help them in making the HIV test a must at all level (schools, pre-employment, marriage) and not only during pregnancy.

Suggestions from male participants included:

- There is a need for intensification of PMTCT campaign in the community so that the programme can be sold to men.
- They should keep good traditional customs and reject what could harm the smooth running of the PMTCT programme. One participant said*:" women are sent in confinement after delivery and the father of the child is not suppose to be together with the family, this tells in one way that child's responsibility is not his".*
    - Leaders should lead visibly in this PMTCT programme.

Men and community leaders mentioned that:

- if leaders themselves could go to test and openly make it known to others, it would go a long way and help to whole community to get involved.
- The Government should do its best to improve the support of men in public health programmes.

- Creation and running of men's club should be facilitated and monitored. A few participants mentioned that the solution to men' s participation lies in their willingness to see betterment of the life of each member of the Jwaneng community.
- Therefore, men need to be educated from childhood on how to take responsibility of health education in a home setting, the importance of legal marriage and good morals.
- Young girls should be taught to have the courage to ask men to test with them for HIV at the beginning of their relationships when they hardly know each other.

Community leaders

- Concluded that HIV/AIDS does not kill these days in Botswana but the main killer is stigma and fear of the test.

4.3.2.5Conclusion

This chapter described the analysis of the research data and the findings of the study. The last chapter summarizes the study and describes the main findings of the study. Recommendations for improvement of men's role in programme to prevent mother-to-child transmission of HIV in Jwaneng are presented.

CHAPTER FIVE: DISCUSSION

This chapter of the report puts together the findings from various data sources and discusses them emphasizing on the trends and patterns that have emerged from these data. For easy reference, this chapter is structured around the same sub-headings as used in chapter four.

Socio-demographic characteristics

The population distribution of pregnant women was characterized by a mean of 25 years (t statistic = 51.61, DF = 137, P <0.01) and by a mean of men of 32 years. 62% of women were aged between 18-30 years, 13% had completed tertiary education and 10% were married. In addition, 46% (177) of men were of age group 18-30, 34% (130) of respondents had gone for tertiary education.

Knowledge of PMTCT

The findings of this study indicate that men's and women's knowledge of PMTCT is high. That more than 80% of them are aware about the mode of transmission of HIV to an unborn baby during pregnancy **(table 7)**. Although, the level of education of men has had influence on their awareness of PMTCT, this awareness is widespread among men in Jwaneng **(fig. 9)**. This shows that the majority of respondents had been exposed to messages on programme to prevent mother-to-child transmission of HIV as a result of on-going public health education nationwide.

The results on knowledge in the Jwaneng study is congruent with the Bangladesh findings of a study done on integration of reproductive health

services for men in health and family welfare centres where 87% of men had heard about the availability of treatment for STIs at the facilities [63]. Similar evidence of high level of awareness was in the results of surveys about HIV/AIDS conducted in sub-Saharan Africa and Latin America, South East Asia and the Caribbean where at least 90% of men had heard about AIDS [40]. From the same the South East Asia surveys, more than 90% of women had heard about integration of reproductive health services for men in health and family welfare centres from various sources, but 95% heard mainly from health workers. Similarly, pregnant women in this study have been exposed to the first hand information on MTCT programme, meaning from health workers (73%) and 14% from peer educators. Meanwhile, men have had the media (40%) as their main source of information **(table 3, fig. 7 & 8)**.

Probably, information on PMTCT could not have been heard and known by women of reproductive age in Jwaneng if they did not become pregnant. Women knowledge is relates to easy access to reproductive health services and higher utilization of health facilities by women compared men's utilization of health facilities. This is congruent with UNAIDS report 2000 report that concluded that: "Women have had easy access to reproductive health services than men"[53]. Which tells us that in the Jwaneng, health education has to be intensified so that the community can be encouraged to read, listen to the radio or watch health related news on television for them to know what are new developments in public health programmes.

As for men, peer educators and health workers combined had accounted for one-third as source of PMTCT information, which means that messages that are used by media should be detailed with all accuracy in order to enrich men on such a programme. For, media is still a major tool for dissemination of PMTCT information for men.

However, in India during the programming of male involvement in reproductive health, it was found that men were subject to conflicting messages about sexual matters [51]. Even in this study, with such high level of awareness of PMTCT, when questions regarding infant feeding were asked, not all men gave right answers **(table 8)**. This could be attributed either to the fact that what they got what they knew on PMTCT mainly from media such that they could not have a clear understanding on the facts of infant feeding in Botswana. Or, because conflicting messages are found even in Botswana guidelines.

In these guidelines, choices of infant feeding for children born of HIV positive mothers are: strict breastfeeding and/or bottle-feeding with artificial milk [26&60]. This is still ambiguous. Men and pregnant women do not have a clear and fixed decision to make. This could be the reason why in this study, although having influenced the general knowledge of men, the level of education had no influence on men's choice of infant feeding.

PMTCT experience

From the evidence of high knowledge of PMTCT among respondents in this study, findings have shown that despite the level of education and marital status,

the majority of pregnant women had identified the need to be accompanied by their sexual partners for PMTCT services in Jwaneng and indeed men (75%) had also identified the need to participate **(table 4 & 11)**. These findings conquer with the Horizons project of 1998 under population council on the importance of involving men in counselling and care that men would participate in programme if they had opportunity to do so [37].

With such high willingness from both men and pregnant women, reasons for involving men is that they want to have HIV free new babies.

However, that willingness from men was accompanied by a highlight during collection of data through questionnaire and focus group discussions that:" why only now that the government should ask men to join hands in health issues? **(Page 87 & 97).** An encouraging finding was as stated: "asking men to participate is a sign of trust, which the government is giving them… **(page 87)**. According to the results of studies under Pati Sampark program in India in 1992, there were a number of very practical reasons why women wanted their partners to be involved in their health education. For example, it was thought that women should not eat too much during pregnancy in order to have a smaller baby and thus an easier delivery. When Centre for Health Education, Training and Nutrition Awareness (CHETNA) workers talked to women about the need to eat more and better food, these women would frequently reply:" you give this advice to my family members. If I start eating what you suggest, my husband and my mother in-law will beat me" [37]. The CHETNA experience was not very different from some of the statement in this study: "Find a way to make him come…" **(page 72),**

“my man is impossible, he does not listen. I don’t want to be chase away, for my children will suffer” **(page 71).** In addition, results have shown that pregnant women (71%) had difficulty to ask their partners to accompagn them and the lesser the education level, the higher they asked their men to come. This is a sign of lack of interspousal communication [56]. This is a sign also of reluctance of married men of Jwaneng to get involved in reproductive issues of their families. In our opinion, marriage has become a fact of compliance than a life commitment.

This finding is congruent with the study on involvement of men in perinatal health that had shown that the absence of inter-spousal communication and discussions could inhibit men from using reproductive health services; they might remain sticked to their beliefs system [38].

In this study, there is also evidence that despite the level of education, pregnant women in Jwaneng want their men to participate. Which means that the major stambling block at this level of men’s and pregnant women’s willingness to see men involved in PMTCT in Jwaneng is the absence of interspousal communication. In addition, PMTCT services are rendered only during normal working hours.

This Jwaneng study has identified that some women do not ask their men to come for PMTCT at local health facilities. Because these pregnant women think that, their partners are tested for HIV at work (mines). This finding has revealed that some Jwaneng men told their partners that they are tested at work on yearly basis. This has been used as an excuse for them not to go to the health facilities

for PMTCT when available. Unfortunately, this is not what happens. Because, it is only the Debswana mines which organizes unlinked and anonymous HIV surveys every year. It becomes unfortunate for men to tell women their HIV results that are not even communicated individually by the researchers.
This makes it difficult for partners to pregnant women to come at antenatal clinic when needed.

As far as men's willingness to participate in this programme is concerned, third quarter of men would like to participate but only 8% of partners to these pregnant women came for ANC. This was far less than the 80% national target of counselling rate that could have come with their partners [26]. This could be attributed to the above-mentioned barrier **(flow chart 2)**. The focus groups discussions had also found that men do not or poorly played their role in PMTCT in Jwaneng. Considering absence of interspousal communication, men's work schedule already mentioned, 18% of pregnant women resorted to asking for permission to undergo HIV test at the antenatal clinic. Benzmalinovic et al found the similar in Guatemala where women lacked autonomy to make decisions about HIV testing [3]. While Jwaneng pregnant women lack autonomy to test for HIV, men do it without consultation. As said by a 22-year-old woman that: "*he allowed me to test for HIV because he tests each year at the mines…* **(page 75)**.
This finding is a clear expression power imbalance in relationships.
In addition, the traditional power imbalance in household has been found having an impact on Jwaneng pregnant women as far as freedom of decision is concerned.

Moreover, half of men felt that pregnant women should ask permission to test for HIV. As said by a 32-year-old man: *"men are the head of homes and relationships…***(page 90)***.* Men also felt that women should not use the absence of men at ANC as an excuse for refusal to test for HIV and enroll in the programme especially when permission to test for HIV had been granted.

During the focus group discussions, lack of legal commitment or relationships contributes to poor men involvement. For example, it is almost impossible for a married man to escort his girl friend for ANC services even if he is the one who made her pregnant. Or, as found that multiple sexual partnership is common in Jwaneng, a woman who is made pregnant by somebody else than her usual sexual partner, she will not feel comfortable to ask a man to escort her especially if they stay in different houses or towns/villages.

From the above findings, the bottom line is that most societies of Africa, men are generally viewed as providers of economic support, hence women behave as victims during power struggle in a home setting even if she earns more than the man of the house [5 & 33].

One of the intriguing findings is that 67% of pregnant women agreed to be tested and 84% of men had agreed that they should be part of the testing procedures **(fig. 10 & flow chart 5)**. With such a high willingness from both parties, 41% of women knew their status when this was conducted. This result was far less than the national target in which the HIV testing rate is expected to be 70% amongst pregnant women [26]. Hence, national targets were not men. Because of poor men involvement.

Agree to test is an issue, to come back for the results is another. For instance, some pregnant women did not get their results because of fear of unpredictable reactions from men. And this correlates with the study done by Sowell R et al in 2001, they found that 61.8% of women who were lost to follow-up (p=0.068) after HIV test, feared violence with their current partner. In addition, the findings of this study support Mbizvo's in 1996 findings in which, some of the women who took an HIV test and did not return for the results stated that the reason was the disapproval of their male partners [25].

It was also found that 18% of women who were interviewed agreed that they could not disclose their results to their partners **(flow chart 3)**. The encouraging finding is to evidence that more than half of the sample of men would send their pregnant women to health facilities should these women test HIV positive. However, only 16% would chase them from their homes. Considering the 16% as one form of abuse, this finding shows why women have a problem of disclosure of their status should it happen that they test without the knowledge of the male partner.

It is interesting to find in this study that 18% of pregnant women did not disclose their HIV serostatus to their partners and at the same time, 16% of men were found to be ready to chase their HIV positive partners from their houses. This is congruent with Sowel's findings during his study: experiences of violence in HIV-seropositive women in south-eastern United States of America that the major reason for non-disclosure (52%) among all women, regardless of HIV serostatus, was fear of partner's reaction; principally fear of abuse and abandonment [42].

Another interesting finding about men's reactions to HIV was that men were also condemning their partners of not being cooperative or that women share health issues only with their mothers. As said by a 35 years old man: "…*Women always think that someone else cares more than his partner does*…**(page 88)**.

One of the much-neglected barriers found during the focus group discussions is the type of language used in the fight against the HIV infection. Theses languages give the impression that those who are infected do carry the enemy to the nation and ipso facto are enemies to everybody. For example:"our enemy is HIV", "war against HIV", "accepting people with HIV", "disease of promiscuous people".

View of support of pregnant women

The focus groups discussions in this study have defined the role of men in PMTCT as agreeing to come for counseling, accompanying women for HIV results, agreeing to be tested as well for HIV, psychosocial and materials support. However, most of men's groups added that: men should play a leading role in the fight against HIV.

On the other hand, the quantitative data from women expressed the need for financial support, tender love, be escorted to antenatal clinic for PMTCT services and provide psychosocial support. This finding is congruent with the general the CHETNA experience where women wanted men and indeed, they participated as couples, both were satisfied with the outcome [37].

However, 44% of men revealed that the above-mentioned types of support should be given to their women **(flow chart 4)**. On the other hand, the majority of men felt that assistance is always there in different areas of their relationships. As stated also by a 35 years old man that: " *married or not, men always support financially and give love to women even though they never appreciate…(***page 88)**. Another respondent among men said: *"It is not important to say: support women, support women. Men should be allowed to be part and parcel of PMTCT services…***(page 88)**.

The way the support of pregnant women in PMTCT is defined in this study requires enough time and high level of commitment from men, especially when the two partners are legal marital obligations. Because, the majority of men in Jwaneng feel that they do support and had identified some barriers, then barriers should be dealt with. Otherwise, as found by Mbizvo in his study: reproductive health and AIDS prevention in Sub-Saharan Africa, he found that limitations inhibit men from taking appropriate reproductive health decisions even when the risks are apparent [25].

View on improve of men's involvement

This study had found that despite high level of willingness and knowledge of PMTCT among Jwaneng men, their participation is very low. Presumably, limitations could have made men act as barriers in a way or another. Alternatively, men could hide also behind their barriers and deny services to their

women. However, where programmes had reached men, male attitudes had changed and service utilisation had increased [38].

Majority of women felt that the Government should help men to own this PMTCT programme. This shows how women in Jwaneng are too dependent on the government and have few initiatives as far as finding solutions to societal problems are concerned. Meanwhile men's opinion of improving their participation was that: the government should help alone but also both women and men should change their attitudes towards PMTCT.

These findings increase the need for improved interspousal relations in the light of the influencial role that men can play in PMTCT programme in Jwaneng. As found by Danforth that failure to incorporate men has had a serious impact on their health, health of their women, and the success of the programmes themselves [11]. Hence, men have shown promising steps by requesting for more interspousal communication and banning of some traditional approaches to reproductive health in Botswana, such as: confinement. For this practice isolates men from their children and women. With that, men continue to feel that all activities related to maternity are women responsibility.

In addition, as a 34-year-old man said: "*couple counselling should be the norm…*"**(page 94)**. That statement correlates to the UNAIDS report in 2000 in which it was found that should full male involvement culminate in a focus on men and women as couples and partners, women receiving VCT would have adequate time to discuss their own needs, and be partner in decision-making, initiatives…[49]. Hence, men in Jwaneng should be considered as fathers,

husbands, workers and community members partners in PMTCT programme and not merely as sexual beings.

Conclusion

It is clear that there is low participation of men in PMTCT in Jwaneng. It is clear that men's participation is limited due to barriers and it is clear that women do not play their part in asking or encouraging their men or just take a decision for the benefit of all. Finally, it is shown that policy makers did not put in place strategies that could enhance a harmonious implementation of social and health policies to avoid discrepancies.

CHAPTER SIX: CONCLUSION

The purpose of the study was to determine the role of men in programme to prevent mother-to-child transmission of HIV in Jwaneng, to assess and determine men's and pregnant women's knowledge, their experience and their perception of this progamme.

This study will serve as baseline for future strategies that could be geared towards better participation of men in the fight against HIV/AIDS in Jwaneng and in particular the prevention of the unborn child.

The major findings of this study were: that men in Jwaneng had some knowledge about the programme to prevent mother-to-child transmission of HIV (PMTCT) mainly from media and that knowledge wasn't all accurate. Perhaps the fact that they got it from media means that they did not understand their involvement and could not understand that PMTCT services were not only about having an HIV test but about also supporting women in the way women had identified. For, the role of men as perceived in the study was: agreeing to come for counseling, accompanying women for HIV results, agreeing to be tested as well for HIV, provide psychosocial and materials support.

The study identified that men's high knowledge and willingness to participate in PMTCT were not enough, for the PMTCT national targets were not being met. These national targets were not met clearly because men did not come. Reasons found for men's non-involvement were that partly they were at work, partly because they were afraid to test for HIV, and partly because the government had

in the past excluded them. However, both men and pregnant women had identified a desire for men to be involved in PMTCT.

Although living in urban area, the traditional power imbalance in household had shown an impact on Jwaneng pregnant women as far as freedom of decision to test for HIV is concerned. This study has shown that some women do not ask men to come for PMTCT, because men accuse them of having many sexual partners, or were in fear of being chased from the home, for they could be considered as source of HIV infection by their partners. Alternatively, because being not empowered in a home setting, pregnant women are not just used to take isolated decisions, as men's words are final. Possibly because of poor inter-spousal communication or other barriers.

As men spend most of their time at work, some Jwaneng men told their women that they were tested at work (mines) anyway. Although this information was not correct, men felt that women should not use their absence at ANC as an excuse for refusal to test for HIV and enroll in the programme especially when permission to test for HIV had been granted.

The researcher has learned that men's role in programme to prevent mother-to-child transmission of HIV in Jwaneng needs to cut across the disciplines and sectors. Having found that men have a role to play is not sufficient to make lasting and sustained improvements.

This study has shown that both men and women face barriers, and that both women's and men's barriers can be overcome. These were categorized according to the gender as follow:

a) Men face the following barriers: - they are limited by their work schedules, - government policies do not allow men to go with pregnant women to ANC during working hours, - multiple sexual partners - ANC services are provided only during normal working hours excluding holidays, weekends and after hours, - women do not share health issues with men – living far from a partner.

b) Pregnant women face the following barriers: - lack of commitment of men to the household day to day life, - multiple sexual partners and denial by men to be partner in the authorship of the pregnancy could negatively influence women not to ask their men to come for ANC, - unpredictable reactions from men in case of PMTCT commitments without mutual agreement, - their men do not stay in Jwaneng, - psychologically disturbance.

One of the much-neglected barriers is the type of languages used in the fight against the HIV infection. Theses languages give the impression that those who are infected do carry the enemy to the nation and ipso facto are enemies to everybody. For example:“our enemy is HIV”, “war against HIV”, “accepting people with HIV”, “disease of promiscuous people”.

Addressing the barriers will contribute towards knowledge, good PMTCT experience and will change people’s perception of programme to prevent mother-to-child transmission of HIV in Jwaneng.

Building on the above, men and women asked themselves to change their attitude towards PMTCT and employers and the government of Botswana should help by finding solutions to the above-mentioned barriers. these findings could be used as cornerstone for the success of PMTCT programme in Jwaneng.

CHAPTER SEVEN: RECOMMENDATIONS

The role of men in PMTCT as defined, strategies must be geared towards feasibility and monitoring of the impact of their involvement. Risks of mother-to-child transmission of HIV in Jwaneng can be reduced unless barriers to services utilization are addressed through combined approaches: medical, social, employer-labour regulations and policies.

Medical approach:

- Provide mixed gender PMTCT counselling and mainly couple counselling at ANC.
- Routine HIV testing for both men and women whenever a partner is pregnant.
- Men-friendly environment should be a norm at ANC with non-judgemental attitude from midwives. This will make antenatal clinic more attractive for men users.

Social approach:

- Need for House-House community based mobilization of men and women on PMTCT meant to improve inter-spousal and inter-relational communication. Suggested topics to be covered: - traditional beliefs and child welfare. - my place in family health:"who should talk on my behalf". - let us talk PMTCT.
- Women should be encouraged to know their rights since this increases the level of consciousness and reduces the risks unnecessary denial to enroll in PMTCT.

- Plan of action for intervention coupled with timely funding of men's enhancing programme such as men against AIDS, HIV clubs…to promote discussions between of different background and age.

Policy approach:

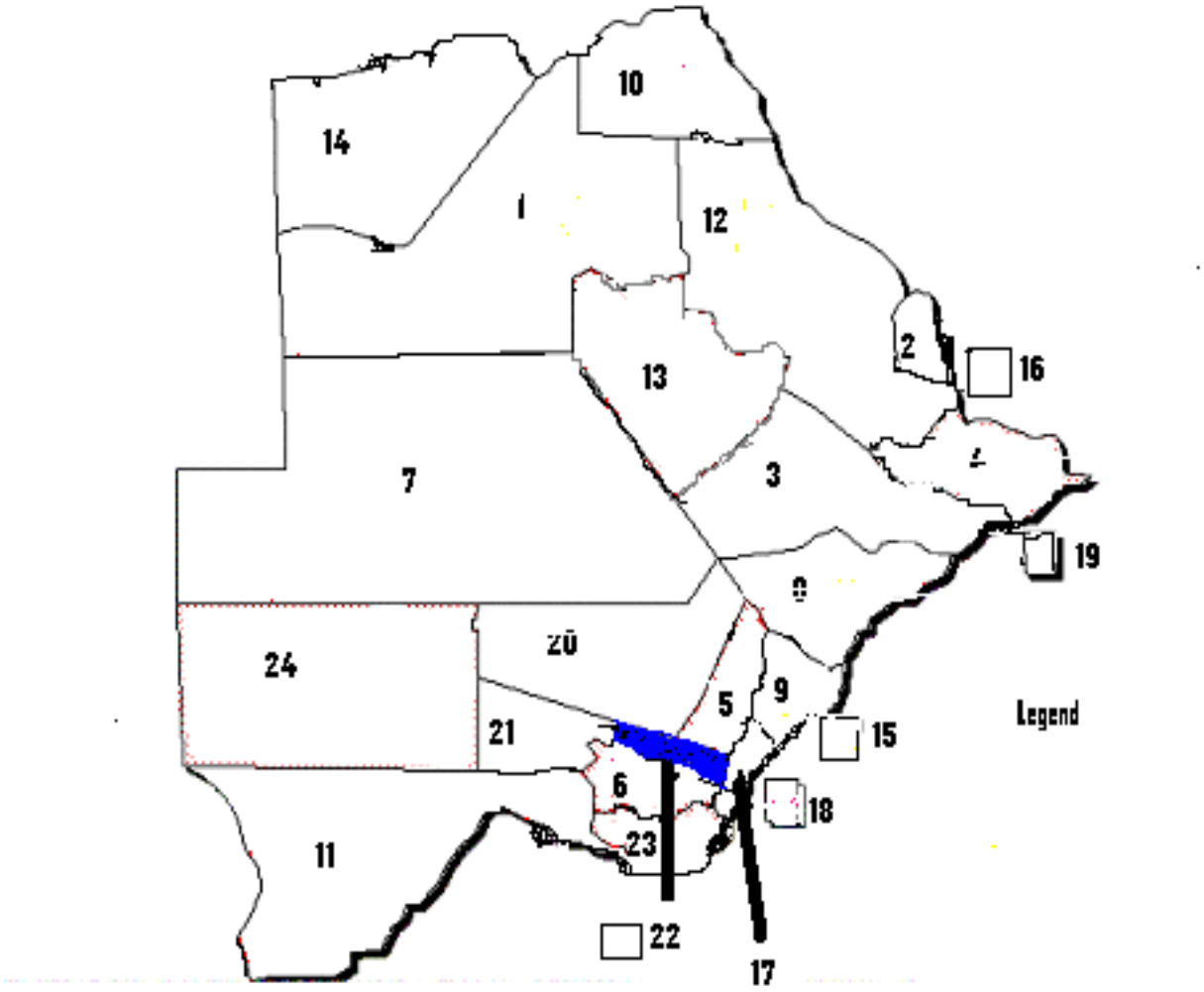
- An effort should be made to improve men utilization of health services particularly PMTCT. Issue to be addressed: Employers and Government should re-visit and see how possible men can be allowed to go for ANC services during normal working hours with their partners when needed.
- Plan of action for intervention should be formulated to deal with various barriers faced by both men and pregnant women.

Research:

Researches on men involvement in HIV should consider men as participants and not as variable of the research on women's services utilization. There is a need to do an impact assessment of post-test serostatus disclosure to partners.

APPENDIX A – Map of Botswana showing study site.

In blue color is Jwaneng Town (District Health 22).



Appendix B

DATA COLLECTION SHEETS

"Role of men in programme to prevent mother-to-child transmission of HIV in Jwaneng, Botswana".

THE FOLLOWING QUESTIONNAIRE IS FOR PREGNANT WOMEN ONLY.

1. Interviewer's name: ……

2. Date of interview: ……

3. Respondent's Code: ……

(This part should be filled by the respondent)

A. SOCIO-DEMOGRAPHIC DATA

4. Age (in years): ……..

5. Marital status (please tick one)

Married	☐	Living together	☐	Single	☐
Widow	☐	Divorced	☐	Separated	☐

6. Highest level of education achieved

Completed primary	☐
Completed secondary	☐
Completed tertiary	☐
None	☐

B. BEHAVIOUR

7. As you are pregnant, do you know what the programme of prevention of mother to child transmission of HIV is?

Yes ☐ NO ☐

8. If yes to (7), how did come to know it?

Media ☐ male Partner ☐ Magazine ☐

Health Workers ☐ Peer Educators ☐

Other ways- Please specify……..

9. Since April 2000, the government of Botswana started implementing the programme of mother-to-child transmission of HIV. A part from this pregnancy, Have you ever been pregnant after April 2000?

Yes ☐ NO ☐

10. If you have been pregnant after April 2000 (apart from this pregnancy), did you enrol in the PMTCT programme?

Yes ☐ NO ☐

11. If you have not chosen to join the PMTCT programme, what could have been the reason?

I was afraid of the results ☐

My partner did not allow me to test ☐

I didn't just want ☐

I didn't have a reliable person to encourage me ☐

I was not convinced of its success ☐

People will label me in my community ☐

Other reasons (please specify)……

C. PERCEPTION AND EXPERIENCE OF PMTCT PROGRAMME

12. What PMTCT services did you get at the antenatal care clinic?

a) Have received counselling? Yes ☐ NO ☐

b) If no to counselling – why?

……

c) Have you agreed to be tested? Yes ☐ NO ☐

d) If no to testing – why?

……

e) Have you agreed to enrol in the PMTCT programme?

Yes ☐ NO ☐

f) If no to (e), why?

……

g) Did you get your HIV result? Yes ☐ NO ☐

h) If do not know result, what is the reason?

……

13. If yes, have you told your partner your results?

Yes ☐ NO ☐

14. Have you told anyone you know about PMTCT counselling

Yes ☐ NO ☐

15. If not to (14), why not

……

16. Did the nurses encourage you to bring your partner for counselling and testing?

Yes ☐ NO ☐

D. EXPERIENCE WITH MEN SUPPORT DURING PREGNANCY

Do you want your partner to come with you for PMTCT related services?

Yes ☐ NO ☐

18. If no to (17), what could be the reason?

……

19. Did you ask your partner to come with you for PMTCT counselling sessions?

Yes ☐ NO ☐

20. Did your partner agree to come with you for counselling?

Yes ☐ NO ☐

21. If no to (20), what was the reason?

……

22. Did your partner come with you for your test?

Yes ☐ NO ☐

23. If no to (22), why didn't he come with you for your test?

……

24. If yes to (22), did your partner have an HIV test?

Yes ☐ NO ☐

25. If not to (24), what could be the reason……

……

26. If yes to (24), what was his reaction?

……

27. Did you tell your partner about the outcome of PMTCT counselling?

Yes ☐ NO ☐

28. If you did tell him, how did he respond to your message?

……

29. If you did not tell him about the outcome of the PMTCT related services, what could have been the reason?

……

30. Do you think he knows when HIV can be transmitted to a baby (unborn or born)?

Yes ☐ NO ☐

31. What do think could be done in order to improve the participation of your partner in the prevention of transmission of HIV to the baby?

……

32. Do you need support from your partner?

Yes ☐ NO ☐

33. If yes to (32), can you please state the kind of support you need?

……

34. If you do not need any support, what could be the reason?

……

E. IMPROVING MEN PARTICIPATION IN PMTCT

35. What can you do to improve men participation in PMTCT in Jwaneng?

……
…..

36. Who do you think could assist in improving men participation in PMTCT in Jwaneng?

……
…….

37. If the answer to (33) is a person / a group of persons or an institution, what would you ask them to do so that men participation in PMTCT could be improved?

……
……

Can you volunteer for a group discussion?

Yes ☐ NO ☐

Thank you.

"Role of men in programme to prevent mother-to-child transmission of HIV in Jwaneng, Botswana".

THE FOLLOWING QUESTIONNAIRE IS FOR MEN ONLY

1. Interviewer's code……..…

2. Date of interview……..

3. Respondent's Code……..

***(This part should be filled by the respondent*)**

A. SOCIO-DEMOGRAPHIC DATA

4. Age (in years): ……..

5. Highiest l**evel of education achieved**

Completed primary ☐

Completed secondary ☐

Completed tertiary ☐

None ☐

B. KNOWLEDGE OF PMTCT PROGRAMME

6. Do you have a sexual pregnant partner?

Yes ☐ NO ☐

7. If yes to (6) were you accompanying her to health facilities for ANC services?

Yes ☐ NO ☐

8. If you were not accompanying your pregnant partner to the health facilities, what could have been the reason?

……..

9. Do you have a child with her?

Yes ☐ NO ☐

10. Do you know what PMTCT is all about?

Yes ☐ NO ☐

IF yes to (10), answer questions 11 and 12 . if you do not know the programme of mother-to-child transmission of hiv, please do not answer the questions 11 and 12.

11. Where are PMTCT (Prevention of Mother-to-Child Transmission of HIV) services given to pregnant women in Jwaneng? Tick in one of the following boxes.

Health Facilities ☐

Tebelopele VCT ☐

Thutano House ☐

Private Clinic ☐

Private Pharmacies ☐

Traditional Healers ☐

Other – please specify……..

12. **How did you come to know this programme of mother- to -child transmission of HIV?** (Tick one of the boxes below).

Media ☐ male Partner ☐ Magazine ☐

Health Workers ☐ Peer Educators ☐

Other ways- Please specify……..

13. Please answer the following questions.

a) HIV is transmitted during unprotected sexual intercourse.
Yes ☐ NO ☐

b) An unborn child can be infected by HIV during pregnancy.
Yes ☐ NO ☐

C) Protected sexual intercourse during confinement leads to transmission of HIV.
Yes ☐ NO ☐

d) The transmission of HIV to a child can be reduced by taking drugs for HIV**.**
Yes ☐ NO ☐

14. If you know about the PMTCT (prevention of mother to child transmission of HIV) services- what are the benefits of such a programme? (Please tick)

Having a chance of child born without HIV ☐

Can get formula milk freely ☐

Your partners' will not breastfeed ☐

Your newborn Child will be closely followed for prevention of infection ☐

15. If your female partner is HIV positive and pregnant, which infant feeding method will you follow?

Strict breastfeeding ☐

Mix feeding ☐

Don't know ☐

☐

Formula feeding

Other, specify……

16. Should she be HIV negative after counselling, can you use condom while Pregnant or breastfeeding?

Yes ☐ NO ☐

C. VIEWS AND PARTICIPATION IN PMTCT

17. DO you think it is important for women to be tested for HIV during Pregnancy?

Yes ☐ NO ☐

18. If yes to (17), what could be the reasons?

……

19. If no to (17), what are your reasons?

……

20. Could there be an impact of men not participating in the PMTCT programme?

Yes ☐ NO ☐

21.If yes to (20), what could be the impact when men do not participate in PMTCT?

……
..

22. Do you have a female partner?

Yes ☐ NO ☐

23. Do you think that men should participate in PMTCT programme?

Yes ☐ NO ☐

24. If yes, what could be their role in PMTCT?

……

25. If you not have now a partner, would you support your pregnant partner who joins PMTCT programme without mutual agreement?

Yes ☐ NO ☐

a) If you agree to support, what will be the types of support?

……
……..

b) **If you do not agree to support her, what could be the reason?**

……

26. If your partner is pregnant and wishes to go for HIV test; would you accompagn with her?

Yes ☐ NO ☐

27. If yes to (26), would you be tested as well?

Yes ☐ NO ☐

28. If NO to (27), why not?

……

29. Should she let you know what her result is?

Yes ☐ NO ☐

30. If NO to (29), would you like to know what the result of her HIV test is?

Yes ☐ NO ☐

31. If you would like to know the HIV results (cfr. question 30), what could be the reason?

.....

32. If NO to (30), what could be the reason? (Choose one below)

Fear to know the results ☐

Worried about self blame ☐

Because there is no benefit ☐

HIV has no cure ☐

No reason ☐

Other – please specify……

33. Do you think that she should ask your permission before she has the test?

Yes ☐ NO ☐

34. Should your female partner be HIV positive, how will you help her live healthily?

By monitoring and observe her swallow ART medication ☐

By sending her to take them at the clinic ☐

She is old enough to know when to swallow them ☐

If other, please specify: …….

35. If you have a partner, what could be the reason of her not sharing the outcome of the HIV test? (Tick one of the following boxes). Because

She is uncooperative ☐

Shares only with her mother ☐

She blames me to do not understand ☐

She is afraid of my reactions ☐

She thinks I will blame ☐

If other – please specify……

36. If your female partner has been tested HIV positive and she is pregnant. What will you do?

I can chase her from my house ☐

I will ask her to abort ☐

I will ask her to go to health facility ☐

We will consult the traditional healer ☐

We will seek for spiritual assistance ☐

Other - please specify……..

D. IMPROVING MEN PARTICIPATION IN PMTCT

37. What can you do to improve men participation in PMTCT in Jwaneng?

……

38. Who can assist in men participation in PMTCT in Jwaneng?

……

39. If the answer to (38) is a person / a group of persons or an institution, what would you ask them to do so that men participation in PMTCT could be improved?

……
……

N.B. Can you volunteer for a group discussion?

Yes ☐ NO ☐

Thank you.

APPENDIX C

Appendix D

Appendix E

Appendix F

INFORMATION SHEET AND CONSENT FORMS FOR ALL PARTICIPANTS

My name is Dr Kayembe Kazadi. I work as district medical officer under Jwaneng Town Council health department. I am a postgraduate student at the University of the Witwatersrand in South Africa where I am doing a masters degree in Public Health.

As you know HIV / AIDS is a huge problem in our community and some time ago year ago, the Government of Botswana started a programme to prevent the transmission of HIV from mothers to their unborn babies. All pregnant women are offered the opportunity to participate in this programme when they go for antenatal care. The programme has not been as successful as we would have hoped. Many women who are pregnant and who are offered the opportunity to participate in the programme do not wish to do so and we are trying to find out why women prefer not to be tested for HIV and take the drugs that would prevent the transmission of the virus to their child.

Research in other countries has shown that the active involvement of men in these programmes is extremely important and that women are more likely to participate in these programmes if their male partners are supportive and understanding.

We are trying to find out how much men know about the prevention of mother to child transmission programmes in Jwaneng and what they think their role in this programme might be. We would like to understand more about whether women would be more likely to participate in the PMTCT programme if their male partners were supportive and knowledgeable. We would also like to find out how

we might encourage men to support their partners. We will be interviewing men in the community and pregnant women about how much they know about PMTCT programmes and what they think about them

The data will be used to recommend that health services and the PMTCT programme is orientated to encourage and facilitate the involvement of men in the PMTCT programme. The results will also be used to advocate for a media campaign targeting men and ensuring that they know about the programme and what their role might be.

I would like to ask you some questions about how much you know about PMTCT programmes and what you think about them.

I will not be asking you for your name and everything that you say will remain completely confidential. Nothing that you say will be linked to you in anyway.

The questionnaire will take about 20 minutes to complete.

You are not under any obligation to answer any of some of these questions. If at any point you would like to stop, or if prefer to not answer some of the questions I will ask, please do not hesitate to say so. We will just pass to the next question.

Please stop me at any time.

May I have your permission to continue.

Would you please sign this form indicating that you give your consent to participate in this study.

Thank you

Signature of the participant:……. Date…/…/……

Researcher:……..

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