

**THE CONTRIBUTION OF MALE INVOLVEMENT IN THE UPTAKE OF  
PREVENTION OF MOTHER TO CHILD TRANSMISSION (PMTCT) SERVICES**

**A CASE STUDY OF MENGO HOSPITAL**

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**A Post Graduate Research dissertation submitted to the Institute of Health Policy and  
Management in partial fulfillment of the requirements for the award of a degree of Master  
of Public Health of the International Health Sciences University.**

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## Declaration

This is to declare that the dissertation of Joan Nangiya (2008-MPH-PT-015) on title “The contribution of male involvement in the uptake of PMTCT services, a case study of Mengo Hospital” has never been submitted in any institution of higher learning.

.....

Joan Nangiya

**(Researcher)**

Date.....

## **Approval**

This is to certify that the dissertation of Joan Nangiya (2008-MPH-PT-015) titled

“The contribution of male involvement in the uptake of Prevention of Mother to Child Transmission (PMTCT) services: A case study of Mengo Hospital” has been done under my supervision and is now ready to be submitted for examination, for the award of a degree of Master of Public Health.

.....

**Prof Ndungutse David**

**(Supervisor)**

Date.....

## **Dedication**

This piece of work is dedicated to my dear parents Mr George William Nnaku and Ms Mercelina Lanyua. May the good Lord bless you and keep you safe

## **Acknowledgement**

I would like to thank the Dean and all the lecturers at the Institute of Health Policy Management, International Health Sciences University, from whom I have learned much throughout my training in the field of Public Health. I also got the opportunity to learn more from my colleagues with whom we had lectures, discussions and shared experiences. May God bless and reward you abundantly.

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## List of Abbreviations/Acronyms

<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>ANC</b>	Ante-natal Care
<b>APHIA plus</b>	AIDS Population Health Integrated Assistance
<b>ART</b>	Antiretroviral Therapy
<b>CHCT</b>	Couple HIV Counselling and Testing
<b>EMTCT</b>	Elimination of Mother to Child Transmission of HIV
<b>FSG</b>	Family Support Group
<b>HCT</b>	HIV Counseling and Testing
<b>HIV</b>	Human Immunodeficiency Virus
<b>ICPD</b>	International Conference on Population and Development
<b>IEC</b>	Information Education Communication
<b>IRB</b>	Institutional Review Board
<b>MCH</b>	Maternal and Child Health
<b>MI</b>	Male Involvement
<b>MoH</b>	Ministry of Health
<b>MOL</b>	Male Opinion Leaders
<b>MPH</b>	Masters in Public Health
<b>MTCT</b>	Mother to Child Transmission of HIV
<b>PLHAs</b>	People Living with HIV/AIDS
<b>PMTCT</b>	Prevention of Mother to child Transmission of HIV
<b>RCT</b>	Routine Counseling and Testing
<b>SAS</b>	Statistical analysis software
<b>SPSS</b>	Statistical analysis package used in social sciences
<b>SRH</b>	Sexual and Reproductive Health
<b>STIs</b>	Sexually Transmitted Infections
<b>TBAs</b>	Traditional Birth Attendants
<b>TSS</b>	Technical Support Services
<b>TV</b>	Television
<b>UAC</b>	Uganda AIDS Commission
<b>UN</b>	United Nations
<b>UNAIDS</b>	The Joint United Nations Programme on HIV/AIDS
<b>US</b>	United States
<b>VCT</b>	Voluntary Counseling and Testing
<b>WHO</b>	World Health Organization

## **Abstract:**

Globally, Mother to Child Transmission is one of the biggest channels through which HIV is transmitted to children below five years. Prevention of Mother to Child Transmission (PMTCT) programmes have been proven to be effective in reducing the risk of HIV infection from mothers to their children. Ministry of Health (MoH) Uganda has advocated for male involvement as a way of in order to scale up the uptake of PMTCT services. The male spouses play a big in the uptake of PMTCT services (Burke et al. 2004). Unfortunately men's active involvement in this intervention is very minimal. (Nkouh, GN et al., 2011)The study therefore sought to establish the contribution of male involvement in the uptake of PMTCT services.

The main objective of the study was to establish the factors contributing to the low level of male involvement in the uptake of PMTCT services at Mengo Hospital with a view to suggesting remedial measures.

**Methodology** A Cross-sectional study conducted among 206 HIV positive women aged 18-49 years and attending the PMTCT clinic at Mengo Hospital. The Sample size was calculated using the Israel (1992) formula. A simple random sampling technique was used to select the study participants and a purposive sampling technique for the key informants. Data was collected with the aid of interviewer administered questionnaires and key informant interviews, entered, cleaned and analyzed using the STATA and SPSS package.

**Results:** Current roles played by the male spouses in the uptake of PMTCT services were in form of giving financial support 89%.

**Conclusion:** Male involvement in PMTCT services at Mengo Hospital was good, but mainly through giving financial support to their partners.

**Recommendations:** There is need to conduct further studies to ascertain the role of male involvement in the uptake of PMTCT services in different health settings both private and public so that results from such studies can be more generalised.

More strategies like father to father peer mentors attached to every health facility and communities are needed in order to scale up male involvement in the uptake of PMTCT services and also to address stigma in the communities.

### **Operational definitions**

**Couple-** Two people in an on-going hetero-sexual relationship

**Drop-out-** loss to follow up or quitting the PMTCT programme before being officially discharged by the health workers.

**Male Involvement-** The socio-economic and physical support given to pregnant women by the male partners in PMTCT services.

**Non-adherence-** not full-filling the requirements of the PMTCT guidelines.

**Partner-** Sexual counter part responsible for the pregnancy.

**Partner testing-** Testing of a partner for HIV when the counter partcounterpart has already tested.

**Skilled delivery-** mothers delivering in health facilities that have PMTCT programmes

**Up-take of PMTCT services-** Being enrolled into the PMTCT programme and followed up till the baby is 18 months.

**Very sick** – not able to sit and wait in the line.

## **Chapter One: Introduction**

### **1.1 Introduction**

This chapter describes the background of PMTCT giving the global, continental and local view. It also includes the statement of the problem; general objective; specific objectives; research questions; Significance of the study and the conceptual framework.

### **1.2 Background**

Globally, Mother to Child Transmission is one of the biggest channels through which HIV is transmitted to children below five years. Programmes for the prevention of mother-to-child transmission of HIV (PMTCT) respond to three of the most challenging problem areas of international health: combating HIV/AIDS, reducing child mortality and improving maternal health. These health topics, also voiced in the United Nation's Millennium Development Goals (United Nations 2007), have been calling attention worldwide in the past years.

In Africa, PMTCT programmes have now broadly been established in HIV-affected countries, like South Africa, Botswana, Tanzania, Malawi, and Uganda. This has been done because HIV prevalence in pregnant women is exorbitantly high in some regions in Africa.

In Uganda, mother to child transmission alone contributed to 18% of new HIV infections in the year 2008 (UAC 2009). It is estimated that by the end of 2007, 130,000 children below 14 years and 810,000 adults were living with HIV/AIDS. More than half of the adults are women (UNAIDS). In addition, discordant monogamous couples also contributed 35 % of the new infections. According to the Uganda AIDS Commission, there have been massive efforts to prevent the spread of HIV but social, economic, cultural and behavioral factors continue to drive people into high risk sex. Gender issues increase the vulnerability of women to HIV infection;

promotes polygamy and extramarital sexual relationships and hinders access to antiretroviral therapy (UAC 2006 and Paul et al 2006).

The widespread approach, consisting of comprehensive counseling and subsequent HIV-testing followed by the offer of single-dosed nevirapine for sero-positive mothers and their newborns, as well as referring HIV-positive mothers and their families to antiretroviral therapy (ART) programmes, has been reported to be convincing in terms of feasibility and effectiveness (Rely et al. 2003; Stringer et al. 2003). However, it has been shown that fear of the partner's reaction in case of positive sero-status disclosure is a major obstacle for women to participate in voluntary counseling and testing and further programme enrolment (Antelman et al. 2001; Medley et al. 2004). Joint counseling and HIV-testing for couples is a major factor for success in the area of PMTCT and so, the study sought to establish the contribution of male involvement in the uptake of PMTCT services.

Since 2009, the Ministry of Health (MoH) Uganda in conjunction with Engender Health started advocacy for male involvement as a way of scaling up the uptake of PMTCT services in Uganda. Male partner involvement has developed to be a major target point for the successful implementation of PMTCT as well as of other SRH programmes. The male role is considered to be a major contributor to community acceptance of PMTCT services (Burke et al. 2004). The study therefore sought to establish the contribution of male involvement in the uptake of PMTCT services.

### **1.3 Statement of the Problem**

Prevention of Mother to Child Transmission (PMTCT) programmes have been proven to be effective in reducing the risk of HIV infection from mothers to their children. Men's participation in PMTCT programmes is likely to increase women's uptake of PMTCT services. Unfortunately men's involvement in this intervention is very minimal. (Nkouh, GN et al., 2011)

Although many countries in the world including Uganda have responded to the Cairo International Conference on Population and Development (ICPD) Programme of Action (1994) that urged that special efforts should be made to emphasize men's shared responsibility and promote their active involvement in matters of reproductive health which includes HIV prevention (Drennan M) , very few men have heeded the call. This has negatively affected PMTCT service uptake by women. (Theuring S, et al., 2009 & Bajunirwe.F and Muzoora.M (2005)

Despite the fact that Mengo Hospital has been implementing PMTCT programme for some time now, men have not been actively involved yet they provide both emotional and material support for their spouses. (Theuring S, et al., 2009and Musumba, T, 2008). This affects PMTCT service uptake by the targeted women leading to Mother to Child Transmission of HIV.

Thus, the purpose of this study was to establish the contribution of male involvement in the uptake of PMTCT services at Mengo Hospital so that measures are put in place to scale male involvement and the uptake of PMTCT services at Mengo Hospital.

## **1.4 General objective**

To establish the factors contributing to the low level of male involvement in the uptake of PMTCT services at Mengo Hospital with a view to suggesting remedial measures.

### **1.4.1 Specific objectives**

1. To establish the roles played by male partners in the uptake of PMTCT services at Mengo Hospital.
2. To investigate reasons as to why mothers do not take up PMTCT services at Mengo Hospital.
3. To identify the health facility/system factors that influence the uptake of PMTCT services by mothers at Mengo hospital.
4. To assess the contribution of community factors in the uptake of PMTCT services by mothers at Mengo Hospital.

## **1.5 Research questions**

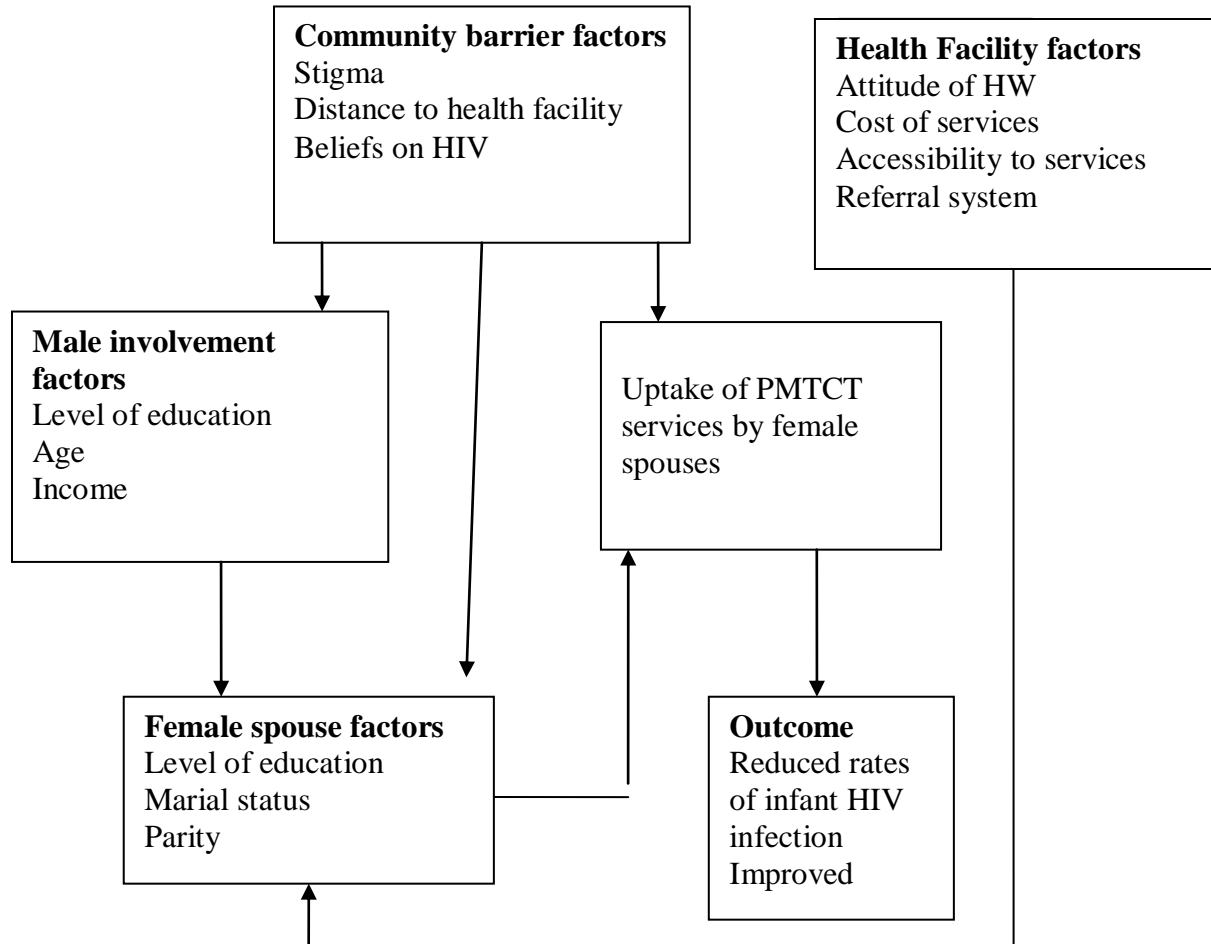
1. What roles do the male partners played in the uptake of PMTCT services at Mengo Hospital?
2. What are the reasons as to why mothers do not take up PMTCT services at Mengo Hospital?
3. What are the health facility/system factors that influence the uptake of PMTCT services by mothers at Mengo hospital?
4. What is the contribution of community factors in the uptake of PMTCT services by mothers at Mengo Hospital?

## **1.6 Significance of the study**

There are gaps in the uptake of PMTCT services by HIV infected individuals both males and females due to the parallel nature of PMTCT and HIV prevention, care and treatment services. If these gaps continue to exist, the maternal and infant mortality rates and prevalence rates of HIV in the general population will continue to increase. Bridging the gaps in the uptake of PMTCT services will lower the HIV incidence rates, prevalence rates and improve survival rates of children born to HIV positive mothers. It is important that more emphasis is put in involving men in the access of PMTCT services by their spouses. Therefore there is need to establish the contribution of male involvement in the uptake of PMTCT services. This research provides relevant information to Mengo hospital which may help in increasing uptake of PMTCT services.



## 1.7 Conceptual framework



## **An Explanatory commentary on the conceptual framework**

Men play a big role in the uptake of PMTCT services by their spouse because traditionally they are looked at as the heads of their families and they are the decision makers in all matters regarding the health of the family members. In this case it is the men that provide money for transport and hospital bills. In most cases men only focus on financial support, sometimes too busy looking for money and forgetting the moral support. This eventually deters the women's adherence to the PMTCT guidelines (uptake) hence poor uptake.

On the other hand women are the direct consumers of the PMTCT services however; their uptake of the services is dependent on level of education, type of relationship and parity. The highly educated are empowered enough to make decisions regarding their health unlike their counterparts. Those in polygamous relationships usually have issues of non disclosure and so this affects their uptake of PMTCT services. However the uptake of PMTCT services by the women is also influenced by community barrier factors such as stigma and belief on HIV and health facility factors.

In addition to that, community also plays a big role the uptake of PMTCT services by the HIV positive women. Community barrier factors like stigma, distance to health facility and beliefs on HIV greatly affect the uptake of PMTCT services by the HIV positive mothers. The HIV positive women may fear to be seen by friends, neighbours and relatives. The very long distance that the women have to travel in order to reach the health facilities hinders the uptake of PMTCT services. The community factors directly influence the male and female factors leading to low uptake of PMTCT services.

Furthermore, the health facility factors like availability of PMTCT services, attitude of health workers, cost of services and the systems affect the uptake of PMTCT services by the HIV positive women.

Finally, the impact of male factors, female factors, community barrier factors, and health facility factors, determines the uptake of PMTCT services and this eventually lead to reduced rates of infant HIV infections, improved survival rates of babies born to HIV positive mothers and reduced infant mortality rate.

## **Chapter Two: Literature Review**

### **2.1 Introduction**

This chapter describes studies done regarding male involvement factors, female factors, community barrier factors, health facility factors in the uptake of PMTCT services by pregnant mothers. All the topics in this chapter are discussed from a global picture, the situation in the developing countries, and what is happening in Uganda.

### **2.2 Male involvement factors**

While promising program models are emerging worldwide, less explicit attention has been paid to the level of policy challenges and opportunities that could promote an enabling environment for addressing men's roles in improving their own and their partners' health (Margaret.G., 2006) This is supported by Kinanee J.B and Hart.E.J (2009) who stated that traditionally, maternal health issues have predominantly been seen and treated as a purely feminine matter because women get pregnant and give birth. Although men's participation in maternal and child health (MCH) care services is low, they play a vital role in the safety of their female partners' pregnancy and childbirth.

At the household level, a study in the US focused on male involvement in improving academic achievement among school going children and revealed that children whose fathers were involved in their academic performance performed better than those whose fathers were not involved and suggested that future studies on the effectiveness of home visits as a strategy for improving academic achievement could impact school policy. However, the study sought to

establish the contribution of male involvement in the uptake and utilization of PMTCT services by pregnant women.

A study conducted in the US by Raymond (2006) about male involvement in abortions revealed that African Americans in the study least supported their partners during abortions in contrast to other ethnic groups. However this study intended to focus on the contribution of male involvement in the uptake of PMTCT services.

In Africa, results of a review of selected programmes indicated that male opinion leaders (MOL) were very active in delivering health interventions regarding family planning as shown by an average of 90 percent submission of their monthly activity reports (Lalla. T., 1996.). This indicates that there is a high level of male involvement both at societal and programmatic levels in public health matters. However this study sought to establish the contribution of male involvement in the uptake of PMTCT services.

In Uganda, Byamugisha R. et al (2010) noted that men who had had 8 or more years of education were 2 times more likely to get involved in the PMTCT programs than those with less education. Those who knew their HIV sero-status were 4 times more likely to get involved in the PMTCT programme, those who had heard about the PMTCT programme were 2 times more likely to get involved than those who feared to disclose their HIV status to their spouses. The same study revealed that 97% of the men gave financial support to their spouses to attend antenatal care services. They also noted a dramatic and sustained increase in HIV testing among pregnant mothers and their spouses in Mbale following a policy change from VCT to RCT. They therefore

recommended further research and innovative interventions in order to improve male involvement.

Whereas the above studies focused on the level of male involvement in children's education, abortion, family planning, determinants of male involvement and dramatic and sustained increase of HIV testing rates among men, this study intended to look at the contribution of male involvement in the uptake of PMTCT services.

### **2.3 Female spouse factors influencing PMTCT uptake**

According to the Sonke Gender Justice Network, at the 2010 International AIDS Society conference in Vienna, Austria, it was reported that women's experiences upon disclosing their sero-status to their male spouses were frequently complex, and that some studies reported violence levels of up to 14 percent, while others stated that about half of HIV-positive women said their partners responded positively to the disclosure of their sero- status. It was further noted that there was limited research into the area of gender-based violence following HIV-testing. However, on the other hand, Beatrice Misoga, PMTCT programme officer with the AIDS Population Health Integrated Assistance (APHIA Plus) asserted that gender-based violence is more common in discordant relationships where the man is HIV-negative. She further stated that Male involvement has helped realize success with PMTCT programmes where it has been applied because prevention of mother to child transmission is a family issue, but also noted the possibility of gender-based violence targeting women more so in a situation where the male spouse is not willing to be involved. Othman Kakaire et al (2011), regarding Parity, maternal age, education level, and occupation of spouse and presence of pregnancy complications were associated with having a birth plan.

In Uganda, the strongest predictor of willingness to accept an HIV test and join the PMTCT programme was the women's perception that their husbands would approve of their testing for HIV and women who thought their husbands would approve were almost six times more likely to report a willingness to be tested compared to those who thought their husbands could not approve (Bajunirwe and Muzoora 2005). This justifies the importance of establishing the contribution of male involvement and in the uptake of PMTCT services. It was further noted that enrollment of HIV positive pregnant mothers into PMTCT since the year 2000 has increased but the drop-out (loss to follow-up) rates were also high in a way that a big proportion of mothers do not adhere to the PMTCT guidelines. This is supported by UAC (2009) and MoH (2008) reports which asserted that the uptake of PMTCT was slowed down by factors like socio-cultural gender norms that included multiple sexual partners, poor referral networks, stigma, discrimination in the communities and lack of community awareness. In Uganda still, a study on investigating factors associated with uptake of HIV voluntary counselling and testing among pregnant women living in northern Uganda by Fabian et al (2007) revealed that VCT uptake was still low in Northern Uganda. They further stated that although some socio-demographic factors were found to have been associated with the uptake, the contribution of male involvement was not known.

#### **2.4 Community barrier factors**

Globally, sexual and reproductive health (SRH) services that include PMTCT have focused mostly on Women, yet many observers have emphasized that the knowledge, attitudes, behaviors and health of men often play a critical role in determining the reproductive health choices of women (UNHCO 2010). One of the greatest challenges facing PMTCT services is reaching sexual partners of HIV-positive women and persuading them to receive HIV counseling and

testing and getting them involved in the uptake of PMTCT services. There is strong evidence that excluding men in Reproductive health increases the women's vulnerability of HIV hence compromising the effectiveness of HIV prevention strategies and creating barriers to effective HIV treatment. This is supported by Muwa .B et al (2004) who asserted that too often in the past, men were presented as an obstacle and not as part of the solution and that involvement of male spouses and families is crucial for compliance to HIV interventions including PMTCT, as men exercise financial and social power over their families. This is why we sought to establish the contribution of male involvement in the uptake of PMTCT services.

Ntabona, (2002) asserted that the majority of interventions and services to promote sexual and reproductive health, including care during pregnancy and child birth exclusively focused on women yet both women and men living in the same society are influenced by the same beliefs about the roles and responsibilities that are appropriate for each gender. He further suggested that men can significantly influence their partner's reproductive health choices and use of health resources. Men also have the potential to provide valuable support to HIV infected women as they attempt to prevent HIV transmission to their children during pregnancy and after delivery yet involving men is particularly challenging because their culturally defined roles hinder their participation.

In Tanzania, an evaluation of male involvement on the PMTCT programme revealed that lack of communication between pregnant women and their partners was a major limiting factor to the uptake and utilisation of PMTCT services. It was further noted that knowledge, attitude and communication behaviours also had a greater chance of influencing follow up to the uptake of PMTCT services. Among other factors identified were lack of awareness in the community and stigmatization which needed to be addressed (Akarro.R.R.J. et al, 2011). Against the background



of the Tanzania study, we tried to evaluate the contribution of male involvement in the uptake of PMTCT services.

In Uganda men play a major role in reproductive health decisions thus addressing male involvement can contribute to improved uptake PMTCT services. This is supported by Muwa .B et al (2004) who reported that there was more support from men who joined the Family Support Group (FSG) to their pregnant spouses. They further reported increased communication and cooperation between spouses, better birth planning, and improved adherence to PMTCT guidelines. Based on these findings, it is very important to establish the contribution of male involvement in the uptake of PMTCT services.

According to Homsy et al (2007), the high prevalence of HIV sero-discordance among couples in Uganda and Africa, pregnant women need to be empowered to appreciate the importance of PMTCT for themselves and their families; learn their HIV sero-status as early as possible during pregnancy; and involve their male partners actively in PMTCT. This justifies the above statement that women in Uganda greatly depend on their spouses/partners in order to access HCT and the PMTCT services. Therefore this study intended to establish the contribution of male involvement in the uptake of PMTCT services.

## **2.5 Health facility factors**

WHO (2012), suggested that Couple HIV Testing and Counseling (CHTC) could increase uptake of PMTCT and ART services and adherence to drug regimens. WHO further asserts that studies have examined PMTCT up take after CHTC, but no indicators for couple specific interventions have been developed expressly to improve PMTCT uptake. This study tried to establish the

contribution of male involvement in PMTCT services among HIV positive mothers attending Mengo Hospital.

WHO (2010) noted that in high income countries, the number of infant infections has dropped down since the option of long term antiretroviral therapy became available in the mid-1990s. The availability and utilization of long term ART has been shown to suppress viral load and increase in CD4 cells, hence minimizing the risk of MTCT in the developed countries. The role played by the male partners in these countries is not known and so, this study intended to establish the contribution of male involvement in the uptake of PMTCT services.

In Africa, the PMTCT programmes are hindered by limited uptake of the services by women and their male partners (Homsy et al, 2006). The uptake of PMTCT is still a major challenge and some of the factors contributing to the poor uptake of PMTCT services include inadequate PMTCT services, and lack of accessibility because some pregnant women have to travel very long distances in order to access PMTCT services. According to WHO (2010), despite the scaling up of PMTCT services, many countries still do not have enough PMTCT services and the existing services are not reaching many of the local women in need. In Addition to that, Ministry of Health Malawi (2005) noted that inadequate PMTCT services provided in health facilities has also proved to be a major challenge to PMTCT uptake. As an example in Nkhotakota district in Malawi, PMTCT was offered in two health facilities which were not enough to serve the rural population. People still had to travel long distances to reach the nearest health facilities where these services were provided.

Similarly, in a study done by Krah (2004) on barriers to PMTCT uptake conducted in South Africa found, it was found out that community members exhibited knowledge gaps regarding PMTCT and among these were the perceived disadvantages of HCT. A number of varied and complex factors were identified as barriers to the uptake and acceptance of HCT. The study recommended a vigorous and innovative information, education and communication (IEC) drive with accurate, consistent and culturally appropriate messages in order to reduce community barriers to the uptake of HCT in addition to Couple HIV Counseling and Testing CHCT. These were said to positively impact on the uptake of HCT and increase cost effectiveness during the scaling up of PMTCT services (Krah 2004). However, the studies above do not give information about the contribution of male involvement in the uptake of PMTCT services. Therefore this study sought to establish the contribution of male involvement in the uptake of PMTCT services. It has been shown that fear of the partner's reaction in case of positive sero-status disclosure is a major obstacle for women to participate in voluntary counseling and testing and further programme enrolment (Antelman et al. 2001; Medley et al. 2004). Joint counseling and HIV-testing for couples seems to be a key to success here but there is need to establish the contribution of male involvement.

According to Karl Peltzer et al (2011), despite the availability of dual therapy treatment protocol and infant feeding guidelines designed for PMTCT of HIV, only 70% of the over one million babies born to HIV positive mothers receive the therapy comparable to other resource limited countries facing challenges with the integration of PMTCT services into routine antenatal care. Efforts in South Africa to scale up PMTCT and reduce transmission rates to less than 5% have fallen far short of the UN's goal of 50% reductions in Paediatric HIV and by 80% coverage of pregnant mothers. What would be the impact of male involvement in the uptake of PMTCT

services is not known and so, this study intended to find out the contribution of male involvement in the uptake of PMTCT services in our local environment.

In Nigeria, some of the challenges to initiation and implementation of PMTCT programmes included: high rates of home delivery as 66% of the women delivered at home; dilapidated health centre infrastructure; limited or no access to HIV testing and care sites; shortage of staff; Limited laboratory capacity at the Hospital level; nursing staff exclusion from point of service testing; weak internal and external referral systems; limited linkages to community based resources and HIV related stigma and discrimination (Chanda et al, 2008). . According to Creek.T et al (2007), in Botswana factors associated with having an HIV test included being interviewed, having a high PMTCT knowledge score, knowing someone receiving PMTCT and having a partner who tested for HIV. On the other hand, service providers also reported discomfort with their knowledge and skills. This study examined the contribution of male involvement in the uptake of PMTCT services.

In Uganda, a study conducted by Bajunirwe and Muzoora (2005), in Mbarara Regional Referral Hospital revealed that willingness to accept the PMTCT program is high in both rural and urban health units although a small proportion of births were occurring in health facilities particularly in rural areas. This was noted to be a barrier to ensuring neonatal antiretroviral dosing. They suggested that same day results for HIV was likely to result in increased uptake of VCT and male partner involvement, particularly in the rural areas, should be considered if complete success of the PMTCT programme was to be achieved. They also discovered that in some circumstances where women had consented to an HIV test without the husband's approval, the women suffered domestic violence. They, as a result, recommended that a study be done to establish the contribution of male involvement in the uptake of PMTCT services

In Uganda, Karamagi et al (2006) in their study about Antenatal HIV testing in rural eastern Uganda found out that the other barriers to PMTCT implementation were lack of PMTCT services particularly in rural clinics, poor antenatal counselling, and HIV testing services. They recommended that the focus of the PMTCT programme should shift to the district and sub-district levels, strengthen community mobilization, improve the quality of antenatal voluntary counselling and HIV testing services, use professional and peer counsellors to augment HIV counselling, and ensure follow-up care and support for HIV positive women and their infants. This shows that facility factors other than male involvement alone play a big role in the up-take of PMTCT.

The up-take of PMTCT services in the middle and low income countries is still low and as a way of strengthening these services in the public health system, the study intended to establish the contribution of male involvement in the uptake of PMTCT services and come up with recommendations that would improve uptake of these services.

## **Chapter Three: Methodology**

### **3.1 Introduction**

This section describes the study area, study design, study population, study variables, sampling technique, sample size, data collection, data analysis and the ethical considerations as stated below.

### **3.2 Study design**

A cross-sectional study design was used in this study. The design was most appropriate because observations were made at one point in time and the study was to be conducted within a short time given the MPH program structure. The study design chosen was the one suitable for describing a phenomenon in a heterogeneous population (different groups of people who differ in the variable of interest, but share other characteristics such as socioeconomic status, educational background and ethnicity). Using this study design, both qualitative and quantitative data was collected from the study participants (service providers, pregnant and postnatal mothers) using in-depth interviews and interviewer questionnaires.

### **3.3 Sources of data**

The primary sources of data were pregnant and postnatal mothers attending the PMTCT clinic at Mengo Hospital, the partners of those mothers and the health workers who participated in key informant interviews. The secondary sources were the medical records and other health facility reports.

### **3.4 Study population**

The study population comprised of pregnant and postnatal mothers attending the PMTCT clinics at Mengo Hospital plus their spouses aged 18-49 years, and the health workers in order to get their perception about the contribution and level of Male involvement in the uptake of PMTCT services.

The study unit consisted of pregnant and postnatal mothers aged 18-49 years and attending the PMTCT and HIV clinics at Mengo Hospital, and the health workers who participated in key informant interviews.

#### **3.4.1 Inclusion criteria**

To be included in the study one had to meet all the conditions listed below.

- Accessing PMTCT services at Mengo hospital
- Women aged between 18- 49
- Men aged 18 years and above

#### **3.4.2 Exclusion criteria**

Those that fell in the category below were excluded from the study

- Insane clients
- Very sick clients

### **3.5 Sample size calculation**

The sample size for the study was calculated using the Israel (1992) formular as follows:

$$\text{The sample size } n = \frac{N}{(1 + N_e^2)}$$

Where N is population size = 720 average attendances at the PMTCT clinic (Mengo Hospital Monthly Report).

$e$  is sampling error (Precision) =  $\pm 5\%$

Confidence Interval= 95%

Significance level = 5%

$n$  is sample size

Thus sample size

$$n = \frac{N}{(1 + N e^2)}$$

$$n = \frac{720}{(1 + 720 (0.05)^2)}$$

$$720/ 2.8$$

$$257.14$$

$$n = 257$$

### **3.6 Sampling procedures**

The clients were screened for eligibility to be included in the study and a simple random sampling procedure was employed to select the study participants. This enabled each individual equal chance and probability of being chosen to participate in this study. A list of all, pregnant and postnatal mothers eligible for the study was generated on each clinic day and then given registration numbers. Using the lottery method each name with its registration number was trimmed, folded and put into a basket which was shaken and participants picked to the required



numbers. The selected study participants were then requested for consent. The process was repeated if one was selected and she declined to participate in the study. The above sampling procedure was done on each clinic day until the required sample size was attained.

For the spouses, a purposive sampling procedure was used to select those to participate in the interview. The same purposive sampling procedure was applied to the health workers who participated in the In-depth interviews since they were a small population and knowledgeable in the variable under study.

### **3.7 Study variables**

The independent variables are male involvement factors, female factors, health facility/system factors, and community factors that directly influence the dependent variable namely up-take of PMTCT services.

### **3.8 Data collection techniques**

A letter from the IRB of Mengo Hospital granting the researcher permission to conduct the study was presented to the in-charge of the PMTCT clinic. The in-charge helped the researcher to identify the research assistants who underwent training regarding the study. With the help of research assistants, the study participants were requested for consent after presenting a thorough explanation about the study. Interviewer administered questionnaires were then used to collect both quantitative and qualitative data from pregnant and postnatal mothers attending the PMTCT clinic based on the sampling procedure. In-depth interviews using key informant interview guides were also used to collect data from the health workers (refer to appendix I).

### **3.9 Data collection tools**

The data collection tools were pre-tested at the Mildmay Uganda PMTCT clinic to see whether there were any problems with the questions and also whether all information required to answer the study objectives was being collected before being used in the study. The tools were translated into Luganda (the local language) to cater for those who did not understand the English language. These were then used to collect both quantitative and qualitative data from pregnant and postnatal mothers attending the PMTCT clinic at Mengo Hospital. Key informant interview guides were also used to collect data from the key informants (health workers).

### **3.10 Plan for data analysis**

Data collected from the field was edited before leaving the field to ensure that all questions had been answered, skip instructions followed and all responses coded. Those questionnaires that had inconsistent data were returned to the interviewers to respond to the queries there in.

Data was entered into data entry screens designed from MS Access with inbuilt data controls that ensured the entry of right codes and skip instructions followed. Data was cleaned using data cleaning program designed using SAS applications. Data inconsistency reports were crosschecked against the Questionnaire hard copies and data editing done on the computer database.

Quantitative data analysis was done using the STATA for Univariate, Bivariate and Multivariate analysis. Univariate analysis for the respective objectives was done, presented and interpreted in the form of frequencies, proportions, means and summarised inform of texts, graphs and frequency tables.

Bivariate analysis took the form of cross-tabulation to test association between independent and dependent variables. Bivariate analysis was interpreted using the Odds ratios, P-Values and Confidence Intervals so as to establish strength of association.

Multivariate analysis was done to assess the independent effect of the variables while controlling for the possible confounders. Binary logistic regression was done to explain relationships between the dependent and the independent variables.

The “logit” model was used thus:

$$- \ln[p/(1-p)] = a + BX$$

**Where:**

“ln” is the natural logarithm,  $\log_{\text{exp}}$ , where  $e=2.71828$

“p” is the probability that Y for cases equals 1,  $p(Y=1)$

“1-p” is the probability that Y for cases equals 0,

$1 - p(Y=1)$

“ $p/(1-p)$ ” is the odds

$\ln[p/1-p]$  is the log odds, or “logit”

### **3.11 Quality control measures**

#### **3.11.1 Validity of the study instruments**

A validity test was carried out after administering the research instrument to find out whether the questions were capable of capturing the intended response. A coefficient of validity was carried out in order to establish the validity of the research instrument. The frequency for each question in the different section was computed from the SPSS in which non responses to the questions was computed as the percentage of total responses.

### 3.11.2 Reliability of the instrument

Test \_Retest procedures were used to test the stability of the instrument. The reliability result was computed using the split half reliability index, coefficient alpha (Cronbach, 1951). The split half estimate entails dividing up the test into parts (e.g, odd/even or first of the items/second half of the items), administering the two forms to the same group of individuals and correlating the responses. Therefore the reliability was done by first administering the instrument to 15 respondents and after a few days the same test was administered to the same respondents. A high coefficient implied high reliability whereas a low coefficient was an indication of low reliability.

#### **To calculate coefficient:**

$$\alpha = N/(N - 1)[1 - \text{sum Var}(Y_i)/\text{Var}(X)]$$

Where N = # items

Sum Var (Y<sub>i</sub>) = sum of item variances

Var (X) = composite variance (Allen & Yen, 1979)

To ensure reliability, the data collection tool was piloted at the PMTCT clinic at Mildmay Uganda and the results from the data collected used to re-modify the tools where necessary. This also enabled the researcher and the research team to become conversant with the tools which enabled them to extract reliable and complete data.

To ensure that the study was rigorous and procedures leading to reliability are ensured, the data collection tools were edited for completeness and accuracy after piloting. The data set was cleaned to ensure consistency and accuracy.

There was double data entry so as to minimize inconsistencies. Data entered was then compared using a consistence program and Inconsistency reports generated and cross checked against the hard copies to edit the entered data.

To further ensure data reliability, atest-retest reliability was carried out. This helped in comparing results from an initial test with repeated measures later on, the assumption being that if the instrument was reliable, there was close agreement over repeated tests when the variables being measured remained unchanged.

To ensure data validity, the effects of the intervening, extraneous or confounding variables was controlled for so as not to interfere with the observed effects of the variables under study.

### **3.12 Ethical considerations**

Permission to carry out this study was first sought from the IHSU research and ethics committee, then from Mengo Hospital Research Review committee and finally from the individual respondents following informed consent.

#### **3.12.1 Confidentiality**

For purposes of upholding ethical provisions governing research involving human subjects, the researcher treated with utmost confidentiality the names of and any other information obtained from the clients' records during and after the study and the report is anonymous.

#### **3.12.2 Informed Consent**

Participants voluntarily signed consent forms after getting a thorough explanation of the study objectives and the participants' roles before taking part in the study.

### **3.12.3 Privacy of research respondents**

During the study the researcher ensured adequate privacy and comfort for study participants by carrying out the exercise from an isolated place and the study participants were made comfortable by providing them a seat while being interviewed.

### **3.12.4 Non-discriminatory**

The researcher and research assistants recruited the study participants according to the selection criteria above and did not discriminate the study participants on their tribes, religions, the socio-economic background and political affiliations.

### **3.12.5 Non-bias**

The researcher being a female controlled bias by recruiting male research assistants.

## **3.13 Limitations of the study**

This study was based on respondents' perceptions on the contribution of male involvement in the uptake of PMTCT services and so, generalisation of the findings was difficult.

This study was conducted in a private faith-based hospital and yet health facilities are not homogeneous. Therefore generalisation of the study findings will be limited.

Some of the respondents were reluctant to answer questions asked by unknown interviewers about things they considered private.

Some study participants could have given pleasant answers that were not truthful.

Some were not able to answer some of the questions because they could not remember (recall bias) or never gave a thought to what they do and why they do it.

Some answered the questions in order to look smart or well informed.

### **3.14 Plan for dissemination**

The findings will be compiled in a report which will be disseminated to all the stakeholders thus International Health Sciences University, Mengo Hospital plus all other health facilities offering PMTCT services.

## **Chapter Four: Results**

### **4.0 Introduction**

A total of 206 instead of 257 respondents were interviewed during the period of data collection due to limited time. The results of the study are presented according to study objectives. Results from univariate, bivariate and multivariate analysis are presented in text and table form.

### **4.1 Socio demographic characteristics**

The age range of the respondents was 17-49 years. The mean age was 27.6 years. Ninety nine percent (99%) of the respondents had completed primary education, 1.9% had never been to school. Most of the respondents were of the Christian faith (Anglicans\protestants 23.3%, Catholic 33.5%, Pentecostal 18.9%), and 21.4% were Muslims. Majority of the respondents were married at the time of data collection (83.5%). Sixty three percent (68.5%) of the respondents were employed as seen in Table 1 below.



**Table 1: Socio demographic characteristics of respondents, n = 206**

<b>Variable</b>	<b>Frequency</b>	<b>Percent (%)</b>
<b>Education</b>		
None	4	1.9
Primary	30	14.6
Secondary+	172	84.5
<b>Total</b>	<b>206</b>	<b>100%</b>
<b>Religion</b>		
Catholic	69	33.5
Anglican	48	23.3
Pentecostal	39	18.9
Moslem	44	21.4
Other <sup>1</sup>	6	2.9
<b>Total</b>	<b>206</b>	<b>100%</b>
<b>Occupation</b>		
Not employed <sup>2</sup>	65	31.5
Employed	141	68.5
<b>Total</b>	<b>206</b>	<b>100%</b>
<b>Marital status</b>		
Single	29	14.1
Married	172	83.5
Ever married <sup>3</sup>	5	2.4
<b>Total</b>	<b>206</b>	<b>100%</b>

Source: primary Data

Secondary+ includes secondary and tertiary

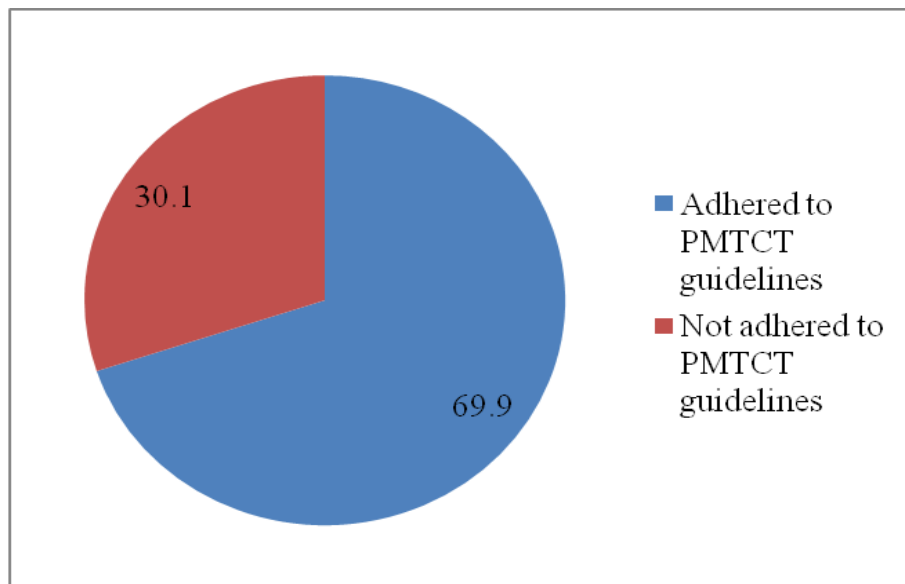
1 Others include: Orthodox, and Adventists.

2 Includes: housewife and students.

3. Includes: Divorced

## 4.2 Uptake of PMTCT services by mothers at Mengo Hospital

**Figure 1: Uptake of PMTCT services**



Source: primary data

Uptake in the context of this study means adherence to the PMTCT guidelines where by the pregnant mother enrolled into PMTCT programme is followed-up till the baby is 18 months.

Uptake of PMTCT services among the respondents was 69.9% (144/206) as shown in figure 2 above.

## 4.3 Roles Played by male partners in the uptake of PMTCT services

### 4.3.1 Current roles Played by male partners in the uptake of PMTCT services

The current roles played by the male spouses in the uptake of PMTCT services were in form of giving financial support 86.9% (179/206), (6/206) and providing information about PMTCT to their spouses, 3.4% (7/206) as summarized in table 2 below.

**Table 2: Current roles Played by male partners in the uptake of PMTCT services, n=206**

	Frequency(n=206)	Percent (%)
<b>Current roles/contribution played by the male spouses towards their spouses' attendance of PMTCT services?</b>		
Give financial support	179	86.9
Accompanying their spouses	6	2.9
Provide information about PMTCT to their spouses	7	3.4
Drop their spouses at the hospital	5	2.4
Give consent	3	1.5
Not sure	6	2.9

Majority of the men do not attend Maternal and Child health clinics with their female spouses.

This is illustrated by the key informant interview statement:

Men do not go to these clinics because it is not their responsibility. They only go there when their wives are not feeling well. (Female discussant, Mengo hospital)

#### 4.3.2 Suggested male involvement in the uptake of PMTCT services by their spouses

**Table 3: Roles that men should play as suggested by their spouses in PMTCT uptake**

	Frequency(n=206)	Percent (%)
<b>Suggested male involvement in the uptake of PMTCT services by their spouses</b>		
Giving financial support	90	43.7
Accompanying the spouse	36	17.5
Picking the spouse from the hospital	27	13.1
Maintain contact with the hospital	6	2.9
Approval for the spouse to seek PMTCT services	4	1.9
Encouraging PMTCT family support groups	3	1.5
All of the above	31	15.0
I do not know	9	4.4

**Source: Primary data**

The suggested male involvement in the uptake of PMTCT services by their spouses included giving financial support to their spouses seeking PMTCT services (43.7%), accompanying the

spouses (17.5%) and picking the spouses from the hospital (13.1%) among others as shown in table 3 above.

Other men prefer to trying to do things that earn money which will enable their family to meet their needs. This is supported by the key interview as illustrated by the statement:

*“ Due to complexities of life it is better to go and look for money for the family, instead of attending clinics which were intended for women only. (Female discussant, Mengo hospital)”*

#### **4.4 Reasons given for seeking PMTCT services**

Majority of the HIV positive women (66.5%) sought PMTCT services because they were referred by the health workers, to produce a baby free from HIV 25.7% (21/206), and being forced by their spouses (7.8%). Some of the strongest reasons HIV positive women sought for PMTCT services are shown in the table below:

**Table 3: Reasons given for seeking PMTCT services n=206**

<b>Response</b>	<b>Frequency(n=169)</b>	<b>Percent (%)</b>
I was referred by the health worker	137	66.5
I want to get a baby free from HIV	21	25.7
My spouse forced me	11	7.8

**Source: Primary data**

Majority of women feel good when they are accompanied by their spouses to the maternal and child health clinic. This is supported by the key informant interview as illustrated by the statement:

*“ Just marching with my husband to the clinic will make me happy; we will be able to talk about our concerns throughout the way to the clinic. It will persuade us to make*

*use or put into use the advice from the counselor. (Female discussant, Mengo Hosp)”*

#### **4.4.1 How the spouses knew their wives were enrolled onto the PMTCT program**

Of the HIV positive women who responded that their spouses were aware of their enrollment in the PMTCT program, 56.7% (93/164) informed their spouses about it while 28.7% (47/164) reported that their spouses got to know of it when they were invited by the health workers. Other HIV positive women reported that their spouses got to know of it when they discovered their PMTCT documents 9.8% (16/164), and the rest reported that their spouses took the initiative to find out 4.9% (8/164). The various ways how the spouses of the HIV positive women got to know that they were enrolled in the PMTCT program are summarized in Table below.

**Table 4: How the spouses knew their wives were enrolled into the PMTCT program, n=164**

<b>Response</b>	<b>Frequency(n=164)</b>	<b>Percent (%)</b>
I told him about it	93	56.7
He was invited by the health worker	47	28.7
He discovered my documents for PMTCT	16	9.8
He took the initiative to find out	8	4.9

**Source: Primary data**

#### **4.5 Health facility/system factors in the uptake of PMTCT services.**

Forty one percent (41.3%) of women uptake PMTCT services because they are accessible while 38.3% do so because they are accompanied by their spouses which confers special attention. Promotion of women uptake of PMTCT services is done through giving special attention to men who accompany their spouses to the MCH clinic 38.3% (79/206), requiring males to be with

their spouses at every station 33.5% (69/206), wait from outside 14.1% (29/206) and their wives are given priority 6.8% (14/206). Other health facility\system factors in the uptake of PMTCT services are summarized in the table below.

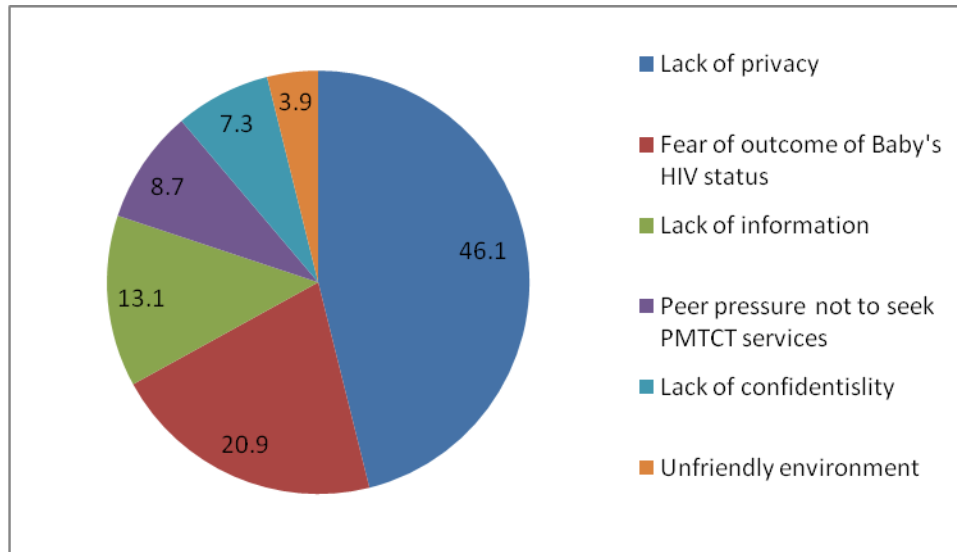
**Table 5: Health facility\system factors in the uptake of PMTCT services, n=206**

	<b>Frequency(n=206)</b>	<b>Percent (%)</b>
<b>What else drives the uptake of PMTCT services</b>		
Access to services	85	41.3
Availability of IEC materials	74	35.9
Confidentiality	19	9.2
Others	8	3.9
No idea	20	9.7
<b>Ways through which promotion of women uptake of PMTCT services are done</b>		
Given special attention (when they come with their spouse)	79	38.3
Required to be with their spouses at every station	69	33.5
Wait from outside	29	14.1
Their wives are given priority	14	6.8
No one minds about them	9	4.4
Others	6	2.9

**Source: Primary data**

#### 4.5.1 Barriers to the uptake of PMTCT services

**Figure: 2 Barriers to the uptake of PMTCT services**



**Source: Primary data**

The major barriers to the uptake of PMTCT services are due to lack of privacy 46.1% (95/206), fear of outcome of baby's HIV results 20.9% (43/206), lack of information 13.1% (27/206) peer pressure not to seek PMTCT services 8.7% (18/206), lack of confidentiality 7.3% (15/206), and un friendly environment for women to open up 3.9% (8/206) as shown in figure 2 above.

Male spouses having to wait for their female spouses outside the clinic room as they seek PMTCT services was a hindrance to the uptake of the PMTCT services as pointed out by the key informant interview illustrated by the statement:

*“ I heard that in case you have accompanied your wife to the services, you will be told to wait outside the clinic room, so why should I go and end up waiting outside? (Female discussant, Mengo Hospital)”*

#### 4.5.2 Sources of information that helped women to decide to uptake PMTCT services

**Table 6 Sources of information that helped women to decide to uptake PMTCT services**

	Frequency	Percent (%)
<b>How did you receive information about PMTCT</b>		
Health talks	126	61.2
Visual audio	57	27.7
One on one discussion	13	6.3
Drama	10	4.9

**Source: Primary data**

The various sources of women information that helped them to decide to uptake PMTCT services included health talks (61.2%), visual audio (27.7%), one on one discussion (6.3%) and drama (4.9%) as shown in the table above

#### 4.5.3 Access to PMTCT services

Majority of the HIV positive women responded that in order to access PMTCT services they did not need to pay for the services 36.4% (75/206). as shown in the table below.

**Table 7: Access to PMTCT services**

	Frequency	Percent (%)
<b>In order to access PMTCT services, HIV positive women need to:</b>		
Does not need to pay for the services	75	36.4
Pay for some services	67	32.5
Pay some money for all services	45	21.8
Not sure	19	9.2

**Source: Primary data**



#### 4.5.3.1 Distance travelled In order to access the PMTCT services and the reasons why women travel those distances

**Table 8: Distance travelled In order to access the PMTCT services and the reasons why women travel those distances**

Reasons why women travel those distances	Distance travelled In order to access the PMTCT services				Total
	Very long distance	Fairly long distance	Fairly short distance	Very short distance	
Don't want to be seen	27	22	24	8	<b>81</b>
No PMTCT services in area	16	21	17	1	<b>55</b>
It is the nearest facility	4	8	18	15	<b>45</b>
Fairy cheap service	0	3	2	3	<b>8</b>
<b>Total</b>	<b>47</b>	<b>54</b>	<b>61</b>	<b>27</b>	<b>189</b>

Of all the respondents (206) who were interviewed, only 189 responded to this question. The percentage of those who travelled long distance was 24.9%, (47/189) and the percentage of those who travelled long distance and not wanting to be seen was 14.3%, (27/189). The percentage of women who travelled long distance because they had no PMTCT services in their area, and did not want to be seen was 22.8% (43/189). Overall the percentage of women who did not want to be seen was 42.9% (81/189). See table 8 above.

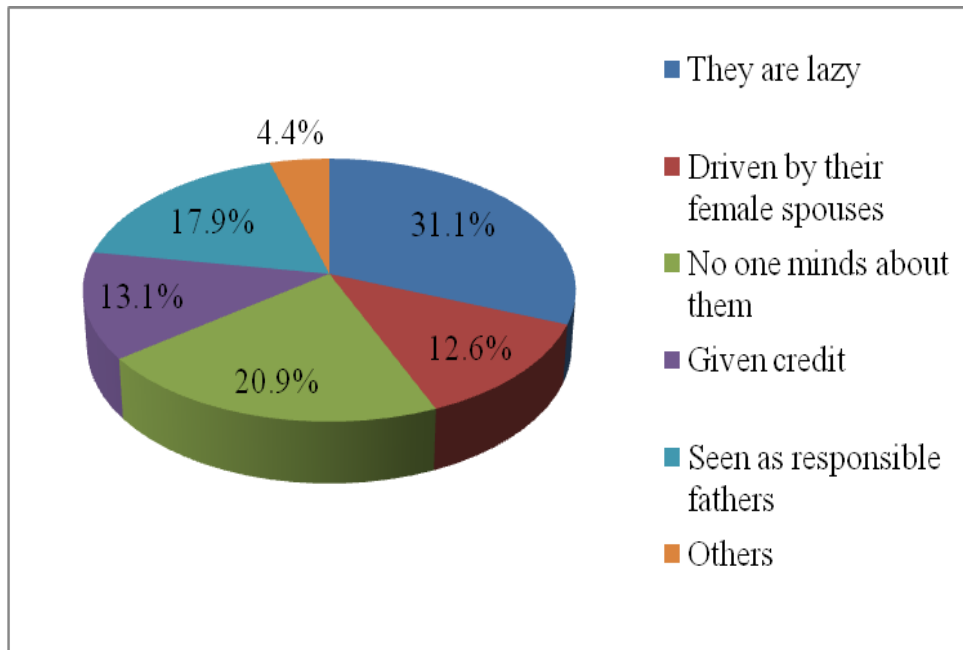
#### 4.6 Community barrier Factors.

##### 4.6.1 Community perception about males who accompany their spouses to health facilities

Community perception about men who accompany their spouses to health facilities are as follow; men are lazy (31.1%), no one minds about them (20.9%), seen as responsible fathers

(17.9%), given credit (13.1%) and driven by their female spouses (12.6%) among others as shown in figure three below

**Figure 3: Community perception about males who accompany their spouses to health facilities**



**Source: Primary data**

#### **4.7 Bivariate analysis and its interpretation.**

Additional factors other than male involvement factors, female\spouse factors, health facility\ system factors and community barrier factors described above are explained below. Bivariate analysis was done to assess relationship of these factors with uptake of PMTCT services. The results of this analysis are presented below. Tables 9 below, shows the association of these various factors with uptake of PMTCT services. The outcome variable was uptake of PMTCT services. The Odds ratios and their P values are shown to measure strength of association.

Statistically significant association was observed between these factors and the uptake of PMTCT services with: type of relationship, parity, male spouse level of education, self stigma among female and distance to health facility as shown in table 9 below

**Table 9: Association between Independent variables and Uptake of PMTCT services**

<b>Variables</b>	<b>Adhered to PMTCT guidelines n=144(92%)</b>	<b>Not adhered to PMTCT guidelines n=62 (8%)</b>	<b>OR (95%CI)</b>	<b>p-value</b>
Female level of education				
Primary	24 (16.6)	10 (16.1)	1.04	0.924
Above primary	120 (83.4)	52 (83.9)	(0.44 – 2.52)	
Type of relationship				
Monogamy	82 (56.9)	36 (58.1)	0.96	0.021*
Polygamy	62 (43.1)	26 (41.9)	(0.50 – 1.82)	
Parity				
1-3 births	95 (65)	41 (66.1)	0.99	0.001*
>3 births	49 (34)	21 (33.9)	(0.50 – 1.95)	
Male spouse age				
18 – 30 years	110 (76.4)	47 (76)	1.03	0.928
>30 years	34 (23.6)	15 (24)	(0.48 – 2.18)	
Male spouse level of education				
Primary	12 (8.3)	6 (9.7)	0.85	0.003*
Above Primary	132 (91.7)	56 (90.3)	(0.28 – 2.69)	
Male spouse's Level of income				
< 1 Million	106 (73.6)	46 (74.2)	0.97	0.931
1 Million and above	38 (26.4)	16 (25.8)	(0.46 – 2.01)	
Self Stigma among female				
Stigmatized	131 (91)	56 (90.3)	1.08	0.000*
Not stigmatized	13 (9)	6 (9.7)	(0.35 – 3.25)	
Distance to Health facility				
Long distance	77 (53.5)	33 (53.2)	1.01	0.013*
Short distance	67 (46.5)	29 (46.8)	(0.53 – 1.91)	
Attitude of health workers				
Good	139 (96.5)	60 (97.8)	0.93	0.646
Bad	5 (3.5)	2 (2.2)	(0.12 – 5.60)	
Availability of PMTCT services				
Yes	83 (57.6)	36 (58.1)	0.98	0.955
No	61 (42.4)	26 (41.9)	(0.51 – 1.88)	
Cost of PMTCT services				
Pay	31 (21.5)	14 (22.6)	0.94	0.867
Not pay	113 (88.5)	48 (77.4)	(0.44 - 2.05)	

\* Statistically significant

#### **4.8 Multivariate Analysis and Interpretation**

Logistic regression was performed using the eleven predictor variables identified at bivariate level . The dichotomous grouping variable for this study was uptake of PMTCT services (Adhered/ Not Adhered). The independent variables chosen as potentially important in influencing uptake of PMTCT services: (i) female level of education, (ii) type of relationship, (iii), parity, (iv) male spouse age, (v) male spouse level of education, (vi) male spouse's level of income, (vii) self stigma among female, (viii) distance to health facility, (ix) attitude of health workers, (x) availability of PMTCT services and (xi) cost of PMTCT services.

A direct logistic regression analysis was performed on uptake of PMTCT services (Adhered/ Not adhered) as the outcome and the eleven predictors as described above. Logistic regression has no assumptions about the distributions of the predictor variables and thus the predictors do not have to be normally distributed, linearly related or of equal variance within each group (Tabachnick & Fidell, 1996).

A test of the full model with all the predictors against a constant-only model was statistically reliable,  $\chi^2(11, N = 206) = 149.3, p < .000$ , indicating that the predictors, as a set, reliably distinguished between male involvement and uptake of PMTCT services by HIV positive women. Table 10 shows results of comparison of odds ratios of the predictor variables before and after adjustment.

From the logistic regression, predictor variables found to have statistically significant association with uptake of PMTCT services include:

- (i) Type of relationship

- (ii) Parity
- (iii) Distance to health facility
- (iv) Attitude of health care workers towards the clients seeking the service

**Table 10: Logistic Regression results**

Variables	Unadjusted OR (95%CI)	Adjusted OR (95%CI)	p- value
Female level of education (1 = Primary)	1.04 (0.44 – 2.52)	0.94 (0.13 – 4.98)	0.647
Type of relationship (1 = Monogamy)	0.96 (0.50 – 1.82)	0.37 (0.15 – 0.92)	0.033*
Parity (1 = 1-3 births)	0.99 (0.50 – 1.95)	0.87 (0.29 – 2.72)	0.004*
Male spouse age (1 = 18-30 years)	1.03 (0.48 – 2.18)	1.86 (0.17 – 1.42)	0.061
Male spouse level of education (1 = Primary)	0.85 (0.28 – 2.69)	0.49 (0.36- 1.68)	0.358
Male spouse level of income (1 = <1 Million)	0.97 (0.46 – 2.01)	0.51 (0.38 – 1.72)	0.624
Self stigma among female (1 = Stigmatized)	1.08 (0.35 – 3.25)	1.36 (1.98 – 3.27)	0.071
Distance to health facility (1 = Long distance)	1.01 (0.53 – 1.91)*	0.26 (0.23 – 1.48)	0.011*
Attitude of health workers (1 = Good)	0.93 (0.12 – 5.60)	1.31 (0.57 – 2.08)	0.013*
Availability of PMTCT services (1 = Yes)	0.98 (0.51 – 1.88)	1.02 (0.43 – 2.19)	0.924
Cost of PMTCT services (1 = Pay)	0.94 (0.44 – 2.05)	1.57 (0.43 – 2.19)	0.331

\* Statistically Significant.

## **Chapter Five: Discussion**

### **5.0 Introduction.**

The following factors were found to be significantly associated with uptake of PMTCT services: type of relationship, parity, distance to health facility and attitude of health care workers towards clients seeking PMTCT services

### **5.1 Uptake of PMTCT services**

Uptake in the context of this study means adherence to the PMTCT guidelines where by the pregnant mother enrolled into PMTCT programme is followed-up till the baby is 18 months.

The study established that Uptake of PMTCT services among the respondents was good (69.9%). This was attributed to the well streamlined system for management of PMTCT mothers at Mengo hospital whereby the health care workers refer all HIV positive mothers to the PMTCT clinic. These findings are supported by remarks made by Sam Lubega and Kana Bwengye, a couple in the Daily Monitor Newspaper in which they stated that their first born, unlike the second one turned out to be HIV positive due to unclear guidelines about PMTCT in 2004.

However the above findings are in contrast with findings established by a study conducted in Zambia by Vusumuzi.S. in 2013 which showed that majority of women were not accessing PMTCT services and recommended for increased awareness among pregnant women on the benefit of accessing these services during their ANC visits.

## **5. 2The role played by male partners in the uptake of PMTCT services**

Giving financial support to the women accessing PMTCT services by their spouses is seen as the major form of male involvement in the uptake of PMTCT services and there was low rating of male involvement in PMTCT services by the HIV positive women accessing the Maternal and Child health clinic at Mengo Hospital. This is supported by Mbezi.P (2013) in her study conducted among men dabbed Factors affecting the levels of male involvement in PMTCT in Mbeya city, where the findings revealed that a smaller number of the married 59 (33.9%) and cohabiting 79 (37.6%) respondents were optimally involved in PMTCT services. Similarly, Morfaw.F et al (2013) found out that there were barriers to male involvement in PMTCT programmes and these were mainly at the level of the society, the health system and the individual. They went ahead to clarify that the most pertinent issue was the societal perception of antenatal care and PMTCT as a woman's activity, and it was unacceptable for men to be involved. Health system factors such as long waiting times at the antenatal care clinic and the male unfriendliness towards PMTCT services were also identified. The lack of communication within the couple, the reluctance of men to learn their HIV status, the misconception by men that their spouse's HIV status was a proxy indicator of theirs, and the unwillingness of women to get their partners involved due to fear of domestic violence, stigmatization or divorce, were among the individual factors that contributed to non adherence to PMTCT guidelines.

This is supported by a study conducted in Mbale district, Uganda by Byamugisha et al (2010) where they also established that providing financial support to their spouses to attend ANC was a major form of male involvement in the uptake of PMTCT services, while Morfaw et al (2013) noted that financial dependence of women was key to facilitating spousal involvement. According to the Elizabeth Glaser Pediatric AIDS Foundation (2010), Males act as financial

providers and decision makers on ANC, delivery services, and infant feeding practices. In Zambia, Vusumuzi.S. (2013) found out that some women needed approval from their husbands in order to get an HIV test at antenatal clinic yet without the support of their spouse, it becomes challenging to go through the PMTCT process, whether the test is done or not. Also low levels of partner testing Limited male involvement in PMTCT because men thought the women's results were enough to tell their sero status (Mbezi 2013).

These findings support Byamugisha et al, 2010 recommendation that further work through research and innovative interventions to improve male partner involvement in the uptake of PMTCT services be conducted.

However, on the other hand, male involvement has helped realize success with PMTCT programmes where it has been applied because prevention of mother to child transmission is a family issue as revealed by Beatrice Misoga, PMTCT programme officer with the AIDS Population Health Integrated Assistance (APHIA Plus) based in Malawi.

### **5.3The reasons for the uptake of PMTCT services**

The study established that majority of the HIV positive women sought PMTCT services because they were referred by the health workers, they wanted to produce a baby free from HIV, or they were being forced by their spouses.



#### **5.4 The health system factors that influence the uptake of PMTCT services**

The study established that access to PMTCT services was good. The study also found out that promotion of women uptake of PMTCT services was done through giving special attention to men who accompanied their spouses to the PMTCT clinic, requiring males to be with their spouses at every station, wait from outside and their wives were given priority. This is contrary to what Byamugisha et al (2010) found out in their study conducted in Mbale that Men had also been reluctant to attend ANC because they found the midwives impolite and quoted one of the spouses who said that *"Nurses and midwives should become friendlier to the mothers in antenatal clinics than they are at the moment."*

A similar finding was found from the study of Muia et al. (2000), where, when investigating constraints for men to participate in sexual and reproductive health services, it was wrapped up that institutional barriers appeared more overwhelming than cultural barriers.

Muia et al. 2000, DiPaoli et al. 2002 and Peacock, 2003 also established that service provider attitudes surfaced as a significant barrier to male involvement in PMTCT services. The attitudes of health providers were vital if strategies to boost male participation in PMTCT services were to be effective.

The study found out that accessibility to PMTCT services is one of the major determinants in the uptake PMTCT service at Mengo Hospital because PMTCT can only be administered if delivery takes place at a health facility with a skilled attendant. This is not the case with the population in rural areas and hard to reach areas like islands where mothers have to travel several kilometers coupled with transport hardships in order to reach the health facilities where they can access PMTCT and skilled delivery services (Senkandwa.J 2013). In Zambia, due to inaccessibility

factors many women deliver at home, making 100% PMTCT access a dream and according to the 2007 DHS, 53% of all pregnant women in Zambia did not deliver with a skilled birth attendant (Vusumuzi.S. 2013). Such mothers end up not seeking PMTCT services because they are delivered by Traditional Birth Attendants (TBAs).

The above findings are also supported by Mbezi & Paulina Beatrice (2013) who recommended that all stakeholders should continue disseminating health promotion materials, advocacy campaigns on male involvement in PMTCT programs to reach household level, targeting males. All these measures will ultimately lead to changes in attitude of men towards their involvement in PMTCT.

The above findings are justified by the finding of Kaitirimba in his study that Male participation in PMTCT in Uganda stands at just five percent. In addition, Dr Wilfred Ochan Baylor College of medicine while presenting at paediatric HIV conference at Hotel African also asserted that "Traditionally, sexual and reproductive health services that include PMTCT have focused mostly on women, yet many observers have emphasized that the knowledge, attitudes, behaviors and health of men often play a critical role in determining the reproductive health of women." On the other hand, Bazikamwe.S et al, 2011 in their study named "prenatal follow up in the first trimester" conducted in Bujumbura established that even though mothers get prenatal complications, they hardly visit the health facility during the first trimester. They therefore recommended that medical staff put emphasis on education of mothers about the importance of the first prenatal consultation which should happen during the first trimester. This can also serve as a timely point for PMTCT interventions among HIV positive mothers.

In view, to the same Misoga highlights the importance of giving constant information and messages targeting men on the need to be part of PMTCT programmes.

## 5.5 The contribution of Community factors in the uptake of PMTCT services

The study established that fear of stigma was high among the HIV positive women seeking PMTCT services. Pregnant women feared stigmatization at home, where some have actually suffered divorce, expulsion from their homes and other challenges from personal experience.

These findings are supported by a report of Human Rights Watch 2009 conducted in Kenya where by the government was cautioned to ensure that human rights were protected during large scale home based counseling and testing. Human Rights Watch noted that those HIV-positive mothers sometimes suffered hostility, ill-treatment, rejection, and discrimination from their husbands, in-laws, or their own families.

Another study conducted in Nyanza Province's Siaya District Hospital revealed that some women were too fearful of the consequences of revealing the outcome of their HIV test to their husbands, and therefore chose not to continue with the PMTCT programmes altogether. Julie Miseda, a nurse at Nyanza Province's Siaya District Hospital said *that "A woman comes to the facility but the moment you mention her man, she disappears and might resurface to give birth - some go to traditional birth attendants," "Some will tell you they are not married but the day they give birth, a man appears and claims he is the father"*.

Christopher Mukabi, a local peer educator at Nyanza Province's Siaya District Hospital highlighted the importance of male support groups in improving the utilisation of PMTCT services. This helps in dealing with some challenges such as stigma by getting men involved.

## **5.6 Factors influencing uptake of PMTCT services**

### **5.6.1 Type of relationship**

The study established a relationship between type of relationship (monogamy) and increased uptake of PMTCT services.

### **5.6.2 Parity**

The study established a relationship between lower parity and increased uptake of PMTCT services. These findings are supported by a study conducted by Othman Kakaire et al. 2011 that established an association between parity and uptake of PMTCT services. Couples who had lower parity adhered to the PMTCT services compared with their counterparts. Also these findings are supported by remarks made by Sam Lubega and Kana Bwengye; a couple in the Daily Monitor of 18<sup>th</sup> August, 2014 where they praised the role of male support in the uptake of PMTCT services that enabled them get an HIV free second born unlike the first born.

### **5.6.3 Distance to health facility**

The study established a relationship between distance (long distance) to health facility and increased uptake of PMTCT services. Those travelling long distances adhered to the PMTCT guidelines compared to their counterparts. These findings are not in agreement with Homsy *et al.* 2006 findings which highlighted travelling long distances in order to access PMTCT services was a major challenge to the uptake of PMTCT services.

Also another study conducted in Nkhotakota District in Malawi revealed that travelling long distances hampered the uptake of PMTCT services. People had to walk long distance to reach the nearest health facilities where PMTCT services were provided.

#### **5.6.4 Attitude of health workers towards the clients seeking PMTCT services**

The study established a relationship between positive attitude of health worker towards clients seeking PMTCT services and increased uptake of PMTCT services. These findings are in disagreement with those of a study conducted in Mbale by Byamugisha et al (2010) that found out Men being reluctant to attend ANC because they found the midwives impolite and quoted one of the spouses who said that "Nurses and midwives should become friendlier to the mothers in antenatal clinics than they are at the moment."

Also these findings are in contrast with those of Muia et al. 2000, DiPaoli et al. 2002 and Peacock, 2003 that pointed out service provider attitudes surfaced as a significant barrier to male involvement in PMTCT services. The attitudes of health providers were vital when strategies to boost male participation in PMTCT services are planned.

#### **5.7 Study limitations**

Recall bias on the part of respondents could have occurred but is likely to have been minimal since most of the events the HIV positive women were asked to recall were one time occurrence in their lives.

The study findings cannot be generalized given the fact that the study site is private and faith-based.

## **5.8 Implication of the study findings**

Generally, the study findings imply that the positive attitude of health workers greatly influenced the uptake PMTCT services other factors remaining constant.

This study has helped to dismiss the myth that all health workers especially midwives had a very negative attitude towards the management of HIV positive mothers.

This study has established valuable findings that even with long distances HIV positive mothers can adhere to PMTCT guidelines as long there is male partner support.

## **Chapter 6: Conclusion and Recommendations.**

### **6.1 Conclusion**

Male involvement in PMTCT services at Mengo Hospital was good, and at the individual level, this was mainly through giving financial support to their partners which influenced uptake of PMTCT services. Other factors found to be influencing PMTCT included health workers, IEC materials, access to PMTCT services and health education.

Male partners do not only provide financial support to facilitate uptake of PMTCT services, but also providing information about PMTCT, they accompany their spouses to the health facilities among others.

Reasons given for seeking PMTCT services were referral by the health care workers, and the urge to have a baby free from HIV.

Health facility/system factors such as distance to health facility and availability of the PMTCT services hindered access to PMTCT services.

Promotion of male involvement into PMTCT services was done through giving special attention to mothers who came with their male spouses, requiring males to be with their spouses at every station in the PMTCT clinic, giving priority to those who came with their male spouses.

Lack of privacy, fear of outcome of the HIV positive results of the baby, lack of information, peer pressure not to seek services, lack of confidentiality, unfriendly environment for women to open up and walking long distance to travel to health facilities hindered uptake of PMTCT services

Type of relationships, parity, distance to health facility and attitude of health workers towards female spouses seeking PMTCT services were associated with Uptake of PMTCT services.

## **6.2 Recommendation**

There is need for the Ministry of Health to improve the health facility\system by availing PMTCT services in the communities in order to scale up active male involvement in the uptake of PMTCT services.

There is need for the Ministry of health to increase sensitisation of the public about the PMTCT programme with messages that target specific regions of the country through health talks on the mass media so as to encourage direct male involvement.

There is need to conduct further studies to ascertain the role of male involvement in the uptake of PMTCT services in different health settings both private and public so that results from such studies can be more generalised.

More strategies like father to father peer mentors attached to every health facility and communities are needed in order to scale up male involvement in the uptake of PMTCT services and also to address stigma in the communities.



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Zambia daily mail: Male participation missing link in PMTCT

## **Appendix I**

### **KEY INFORMANTS INTERVIEW GUIDE FOR HEALTH WORKERS PROVIDING PMTCT SERVICES AT MENGO HOSPITAL.**

This Key informants guide is indented to collect data in order to establish the perceived contribution of male involvement in the uptake of PMTCT services at Mengo Hospital. The data will then be used to write a report for submission in the partial fulfillment of a master degree in Public health at the International Health Sciences University. Participation is voluntary and all information obtained will be treated with at most confidentiality. Names of respondents will not be required.

#### **Type of Male involvement as perceived by health workers**

I. The following are forms of male involvement in the uptake of PMTCT services

1. Accompanying the spouse
2. Approval for the spouse
3. Maintain contact with the hospital
4. Picking the spouse from hospital
5. Encourage support groups
6. Giving financial support
7. Others specify
8. I am not sure

II. How do you rate the level of male involvement in the uptake of PMTCT services by mothers at Mengo Hospital?

Very High   High   Moderate   Low   Very low

!.....!.....!.....!.....!.....!

5            4            3            2            1

III. If the answer above is moderate, low or very low, suggest ways of increasing male involvement

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.....  
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.....

**Health facility factors**

IV. How do you rate the PMTCT services at Mengo Hospital?

Very good    Good    Moderate    Bad    Very bad  
!.....!.....!.....!.....!  
5            4            3            2            1

V. Give reasons for your answer

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**Female factors**

VI. What are the factors enhance the uptake of PMTCT services

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**Community factors**

VII. What do clients say about PMTCT services at Mengo Hospital?

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## Appendix II

### Interview Questionnaire to the PMTCT mothers

#### Instructions:

1. Follow all the skips in the questionnaire
2. Circle the responses given by the respondent
3. Write the responses in the handwriting that is readable

No	Question	Valid Response
<b>A</b>	<b>Demographics</b>	
1	What is your age? ( <b>Write the age</b> )	_____
2	Religion	1. Anglican/Protestant 2. Catholic 3. Moslem 4. Pentecostal 5. Others (specify) _____
3	Marital Status	1. Married 2. Single 3. Divorced 4. Separated 5. Widowed 6. Others (specify) _____
4	Type of relationship at time conception	1. Monogamy 2. Polygamy
5	Parity (write number of births)	
6	Education (completed)	1. Never 2. Primary 3. Secondary 4. Tertiary 5. Others (specify) _____
7	Occupation (State the occupation)	1. _____ 2. _____
<b>B</b>	<b>Male involvement factors</b>	
8	The following are the forms of male involvement in the uptake of PMTCT services?	1. Accompanying the spouse 2. Approval for the spouse 3. Maintain contact with the hospital 4. Picking the spouse from hospital 5. Encourage support groups

		6. Giving financial support 7. All of the above 8. I do not know
9	In what ways is your spouse involved in PMTCT services? (women only)	1. Gives financial support 2. Accompanies me for ANC 3. Drops me at the hospital 4. He provides information 5. Others Specify 6. None of the above
10	Is your spouse aware that you were enrolled onto the PMTCT programme? (women only)	1. Yes 2. No
11	How did he get to know about PMTCT? ( <b>List all the responses</b> )	1. I told him about it 2. He was invited by the health worker 3. He discovered my documents for PMTCT 4. He took the initiative to find out
12	Rate the level of male involvement in the uptake of PMTCT services by mothers at Mengo hospital	Very High High Moderate Low Very low  !.....!.....!.....!.....!  5 4 3 2 1
13	How often do you have to seek for permission from your spouse in order to seek medical service	1. Very often 2. Often 3. Not at all
14	What is your opinion about spouses having to consent before women seek PMTCT services?	1. Spouses must consent 2. Spouses may not consent 3. No idea
15	Give reasons for the above response	1. It is good to involve them 2. They are the decision makers 3. I do not want to involve my spouse 4. I am not sure
<b>C Female spouse factors</b>		
16	Before being enrolled into care, were you aware that PMTCT services are available in Uganda?	1. Aware 2. Not aware 3. Don't know
17	What are your reasons for accessing PMTCT services?	1. I was referred by the health worker 2. I want to get a baby free from HIV 3. My spouse forced me
18	What can happen to an HIV positive mother who does not seek ANC services?	1. Will not know their HIV status 2. Will get birth complications 3. Increases the risk of getting an HIV positive baby



		<ul style="list-style-type: none"> <li>4. Others (Specify)</li> <li>5. I don't know</li> </ul>
19	How does your spouse support you in the uptake of PMTCT services? (list all responses)	<ul style="list-style-type: none"> <li>1. Give financial support</li> <li>2. Accompany their spouses</li> <li>3. Provide information about PMTCT to their spouses</li> <li>4. Drop their spouses at the Hospital</li> <li>5. Give consent</li> <li>6. Not sure</li> </ul>
20	Women can access ANC services even if their spouses do not support them?	<ul style="list-style-type: none"> <li>1. Agree</li> <li>2. Disagree</li> <li>3. Not sure</li> </ul>
21	How often do the health workers involve the spouses PMTCT services?	<ul style="list-style-type: none"> <li>1. Always</li> <li>2. Often</li> <li>3. Sometimes</li> <li>4. Rarely</li> <li>5. Never</li> </ul>
22	How would your spouse respond if you told him about PMTCT? ( <b>Tick all the responses</b> )	<ul style="list-style-type: none"> <li>1. Come to Hospital for further information</li> <li>2. Not bothered</li> <li>3. Abandon me</li> <li>4. Beat me</li> <li>5. I don't know</li> </ul>
<b>D Health facility factors</b>		
23	Are there health facilities within your location that provide PMTCT services?	<ul style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>3. Not sure</li> </ul>
24	If <b>Yes</b> , what categories of people access those services?	<ul style="list-style-type: none"> <li>1. Only the rich</li> <li>2. Only the poor</li> <li>3. Only the educated</li> <li>4. All classes of people</li> </ul>
25	What are your views on the availability of PMTCT services in your area	<ul style="list-style-type: none"> <li>1. available</li> <li>2. not available</li> <li>3. not sure</li> </ul>
26	In order to access the services, PMTCT clients/mothers need to	<ul style="list-style-type: none"> <li>1. Pay some money for all services</li> <li>2. Does not need to pay for the services</li> <li>3. Pay for some services</li> <li>4. Not sure</li> </ul>
27	In order to be able to access the PMTCT services	<ul style="list-style-type: none"> <li>1. I had to travel a very long distance</li> <li>2. Traveled fairly long distance</li> <li>3. Traveled a fairly short distance</li> <li>4. Traveled a very short distance</li> </ul>
28	What are your reasons for the above answer	<ul style="list-style-type: none"> <li>1. I do not want to be seen by people near my home</li> <li>2. There are no PMTCT services within our area.</li> <li>3. It is the nearest to my home</li> <li>4. Others specify</li> </ul>
29	The attitude of the Health workers towards work is	<ul style="list-style-type: none"> <li>1. Positive</li> <li>2. Negative</li> </ul>

30	What are your reasons for the above answer	1. Always willing to serve clients 2. Always at their work stations 3. Very rude 4. Rarely at their work stations
<b>Community Factors</b>		
31	What do you think are the barriers to the uptake of PMTCT services? (circle all responses)	1. Privacy 2. Confidentiality 3. Fear of outcome 4. Peer pressure 5. Lack of information 1. Inviting environment for women to open up
32	What else drives the uptake of PMTCT services	2. Availability of IEC materials 3. Access to services 4. Confidentiality 5. Others specify 6. No idea
33	(a) Health workers discuss information on patients who visit clinic in public (b) Health workers leave the medical records there for anyone to see	Strongly Agree Agree Neutral Disagree Strongly Disagree 5 4 3 2 1 5 4 3 2 1
34	<b>If responses are 4&amp;5 to the above, Do you think it hinders some women from accessing PMTCT services?</b>	Very Likely Likely Neutral Unlikely Very Unlikely !.....!.....!.....!.....! 5 4 3 2 1
35	In your community, what is said about men who accompany their spouses to Hospital (tick all responses)	1. They are lazy. 2. Driven by their spouses. 3. No one minds about them 4. Given credit 5. Seen as responsible fathers 6. Others specify
36	How do the health workers treat you and those that are seeking PMTCT services?	1. Treat them very well 2. Treat them well 3. Somehow treat them well 4. Do not treat them well
37	There is an inviting environment for women to open up at the PMTCT clinic.	1. Agree 2. Disagree 3. Undecided 4. don't know
38	Health workers have good customer care	Strongly Agree Neutral Disagree Strongly Disagree 5 4 3 2 1
39	Health workers are knowledgeable and	Strongly Agree Agree Neutral Disagree Strongly

	skilled.	Disagree 5                      4    3            2                      1
<b>F</b>	<b>Promotion of male involvement</b>	
40	At the health facility you last visited, the IEC materials about male involvement in PMTCT were well displayed.	1. Yes 2. No 3. not sure
41	What types of IEC materials were displayed? ( <b>tick all responses</b> )	1. Posters 2. Brochures_ 3. Flip charts 4. Books
42	Where were the IEC materials displayed? ( <b>List all responses</b> )	1 Reception are_ 2 doctor's room 3. Antenatal clinic waiting area 4 .At the gate
43	In what language were the displayed IEC materials? (List all responses)	1.English 2 Luganda 3. Runyankole rukiga 4 Swahili 5. Others specify
44	Information about male involvement is available to all people who seek PMTCT services.	1. Agree 2. Disagree 3. Undecided 5. don't know
45	How often do the health workers give information about male involvement in PMTCT services?	1. Always 2. Often 3. Sometimes 4. Rarely 5. Never
46	How are the health education messages about PMTCT delivered by the health workers? ( <b>List all responses</b> )	1 Visual audio 2 Health talks_ 3 One on one discussion 4.Drama
47	What topics are included in the health education talks?	1. Nutrition 2. Infant feeding 3. Preparation for child birth 4. HIV in pregnancy 5. Male involvement 6. Others specify
48	What have your health providers ever said to you about involving your spouse?	1. Asked me to disclose 2. Invited him to the hospital 3. The importance of him being involved 4. Others specify 5. None of the above

## **Appendix III**

### **CONSENT FORM FOR PATIENTS/CLIENTS (English version)**

**Introduction:** Good morning/afternoon. I am student from the International Health Sciences University, I am called..... (Name)

I am conducting a study entitled **“The Contribution of Male involvement in the Uptake of Prevention of Mother to Child Transmission (PMTCT) services”**.

**Objective of the study:** The general objective of the study is to establish the contribution of male involvement in the uptake of PMTCT services at Mengo Hospital with an overall aim of designing strategies to increase male involvement in PMTCT services thus increasing adherence to the PMTCT guidelines and reducing the risk of MTCT.

**Procedure of study:** You have been identified to participate in the study and I wish to ask a few questions regarding the contribution of male involvement in the uptake of PMTCT services at Mengo Hospital. Your responses/answers will help us to establish how best we can scale up male involvement in the uptake of PMTCT services at Mengo Hospital and consequently reduce the risk of MTCT.

**Confidentiality:** Your answers will be taken generally as a contribution from one member of the health unit community. The answers will be confidential and used for purposes of this study only. It is not necessary that you give your name and no body will be allowed access to the audiotape used as they will be immediately collected and kept by the principal investigator only.

**Benefits and Risks:** The results of this study will be beneficial to the Mengo Hospital Team, and the entire country at large as they will go a long way in contributing to scaling up male involvement in PMTCT services. There are no anticipated risks as a result of your participation in this study.

**Voluntary consent:** You are free to choose whether you should take part in this study or not. You will not be persecuted in any way for declining to take part in the study neither will it affect your access to any services at Mengo Hospital. We shall only proceed beyond this point if you

accept to take part in the study. You are also free to stop at any stage of the study if you feel uncomfortable. If you have any questions about the study now or at any time during the study, you may contact the principal investigator: Ms Joan Nangiya, on Telephone **0772 375456**.

**Consent statement**

I have been informed about the study on the contribution of male involvement in the uptake of PMTCT services at Mengo Hospital. The purpose and nature of the study, the benefits and risks have been explained to me. I have been informed that the information given will be kept confidential and that participation in the study is voluntary and that no consequences will result if I refuse to participate or withdraw from the study.

.....	.....	.....
Name of patient/client	Signature/thumb print	Date

.....	.....	.....
Name of Research assistant	Signature/thumb print	Date

## **Appendix III**

### **CONSENT FORM FOR PATIENTS/CLIENTS (Luganda version)**

#### **OLUPAPULA LW'ABALWADDE OLW'OKUKKIRIZA**

**Ennyanjula:** Wasuze/osiibye otya nno. Ndi muyizi okuva muu ssetendekero lya International Health Sciences University, mpititibwa.....Erinnya. Nkola okunoonyereza okutumiddwa ‘ Emiganyulo egivudde mu ky’abaami okwenyigira mu kukozeza enkola ez’okuziyiza ba maama okusiiga abaana babwe akawuka ka siriimu.

**Ekigendererwa ky’okunonyereza:** Ekigendererwa eky’okunonyereza okutwalira awamu kwe kuzuula emiganyulo egivudde ku ky’abaami okwenyigira mu kukozeza enkola ez’okuziyiza maama okusiiga omwana we akawuka ka siriimu mu ddwaaliro lye Mengo, ng’ekiruubirirwa ekikulu kye ky’ogunjawo empenda ez’okwongera abaami okwenyigira mu nkola ez’okuziyiza maama okusiiga omwana we akawuka, olwo nno kiryokeye kyongere okunyweeza enkozeza y’amateeka agafuga enkola zino n’okukendeeza ku bulabe obwa maama okusiiga omwana we akawuka.

**Emitendera egy’okunonyereza:** Olondedwa okwetaba mu kunonyereza kuno era nsaba okukubuuzaayo ebibuuzo bitono, ebikwata ku ky’abaami okwenyigira mu nkola ez’okuziyiza ba maama okusiiga abaana babwe akawuka ku ddwaaliro lye Mengo, mu kyo kikendeeze obulabe obw’omwana okufuna akawuka ng’akajja ku nnyina.

**Okukuuma ebyama:** By’onooba bijja kutwalibwa wamu ng’ebiddiddwaamu ebiddiddwa kw’omu ku bantu abali mu ddwaaliro lino. Ebinaddibwamu bijja kuba bya kyama era bijja kukozezebwa olw’ebigendererwa by’okunoonyereza kuno kwokka. Tekikwetaagisa kwogera mannya go era tewali muntu yenna ajja kukkirizibwa kutuukirira butambi bwo obukozezeddwa anti bujja kukunganyirizibwawo era bukuumibwa akulira okunoonyereza kuno yekka.

**Emiganyulo n’obulabe:** Ebinaava mu kunonyereza kuno bijja kuba bya mugaso eri eddwaaliro lye Mengo n’eggwanga lyonna okutwalira awamu olw’okuba bijja kuyamba kinene nnyo mu kwongera abasajja okwenyigira mu nkola ez’okuziyiza ba maama okusiiga abaana babwe akawuka ka siriimu. Tewali bulabe bwonna busuubirwa olw’okwetabaakwo mu kunonyereza.

**Okukkiriza okwa kyeyagalire:** Oli wa ddembe okusalawo okwetaba mu kunoonyereza kuno oba obuteetabaamu. Tujja kutulugunyizibwa mu ngeri yonna olw’okugaana okwetaba mu kunoonyereza era tekijja kukosa nfunayo ey’empeereza ez’enjawulo mu ddwaaliro lye Mengo. Tujja kweyongerayo okuva ku katundu kano singa onooba okkirizza okwetaba mu kunoonyereza. Era oli wa ddembe okulekeraawo okwetaba mu kunoonyereza ku mutenderera gwonna, singa owulira obutali butebenkevu mu nda yo. Bw’oba olina ebibuuzo byonna mu kiseera kino oba ekirala kyonna ng’okunoonyereza kugenda mu maaso, oyinza okutuukirira akulira okunoonyereza Mky. Joan Nangiya ku ssimu 0772 375 456.

**Okukkiriza**

Mbuuliddwa ebikwata ku kunoonyereza kuno okuli okukwata ku miganyulo egiva ku baami okwenyigira mu nkola ez’okuziyiza ba maama okusiiga abaana babwe akawuka ka siriimu mu ddwaaliro lye Mengo. ebiruubirirwa n’ekikula ky’okunoonyereza, emiganyulo n’obulabe bunnyinnyonnyoddwa. Ntegezeddwa nti bye nnaayogera bijja kuterekebwa nga bya kyama era n’okwetaba mu kunoonyereza kwa kyeyagalire era nti tewali kijja kuntuukako singa ngaana okwetaba mu kunoonyereza oba singa nkuvaamu.

.....	.....	.....
Erinnya ly’omulwadde	Omukono/ekinkumu	Ennaku z’omwezi
.....	.....	.....
Erinnya l’omuyambi mu kunoonyereza	Omukono/ekinkumu	Ennaku z’omwezi