DETERMINANTS OF MALE PARTNERS' LEVEL OF PARTICIPATION IN MATERNAL AND CHILD WELLBEING PROGRAMMES. A CASE OF KIAMBU COUNTY, KENYA

JANE KAGENDO FRANCIS

A THESIS SUBMITTED IN FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY IN GEOGRAPHY IN THE SCHOOL OF HUMANITIES AND SOCIAL SCIENCES OF KENYATTA UNIVERSITY

DECLARATION

This thesis is my original work and has not been presented for a degree in any other University

Signature_____ Date_____

JANE KAGENDO FRANCIS

DECLARATION BY SUPERVISORS

This thesis has been submitted with our approval as University supervisors

Signature_____Date_____

PROF. LEONARD M. KISOVI

Department of Geography

Kenyatta University

Signature_____Date_____

DR. SAMUEL C. J. OTOR

Department of Environmental Sciences

Kenyatta University

DEDICATION

I dedicate this thesis to my parents Francis Njeru and the late Mary Njeru for the foundation they laid in my academic life without which I could not achieve this.

ACKNOWLEDGEMENTS

My long academic journey has been made possible due to the support accorded me by various persons and institution that I have the pleasure to acknowledge. First and foremost, my gratitude goes to the Almighty God for His grace and mercy that have enabled me to come this far. He provided with life, sound health and the necessary environment and resources to complete this extensive and demanding task.

I wish to express my sincere gratitude to Kenyatta University for giving me an opportunity to undertake my doctoral studies. To my supervisors Professor Leonard Kisovi and Dr. Samuel Otor for their immeasurable guidance, support, encouragement and time that enabled me to undertake research and write this thesis, I say thank you. My sincere appreciation also goes to my friends and relatives for the assistance they extended to me in one way or the other during the study. Last but not least, I wish to thank my family for their patience and words of encouragement during this study. May the Almighty God bless you all.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

OPERATIONAL DEFINITION OF TERMS

Maternal and Child wellbeing programmes:

These are interventions geared towards promoting the health of pregnant women, mothers to < 5s as well as the health of children below the age of five. They include Ante Natal Clinics (ANC), Voluntary Counseling and Testing (VCT) for HIV, delivery at the health facilities, post natal clinics and provision of appropriate feeding for the infant and the mother.

Male partner:

This refers toa spouse to female nursing a child who is aged five years and below. The female was consuming maternal and child wellbeing services at the health facilities in Kiambu County during the time of study.

Male partner participation in maternal and child wellbeing programmes:

For the purpose of this study the focus of male partner participation in the programmes was assessed on basis of physical participation which means accompanying the female partner to the health facility for various services. This was done in order to compare with earlier study on physical participation.

Level of male partner participation:

Referred to the degree of involvement in the programmes and was categorized into low and high level of participation. The maternal and child wellbeing programmes are categorized into five, namely ANC, VCT, delivery, postnatal clinics and in provision of appropriate feeding for the mother and the infant. Low level of participation meant that the male partner had not accompanied the female partner to the health facility for any programme or had accompanied her for one or two programmes (0-2).A high

level of participation meant that he had accompanied the female partner to health facilities to attend between three and five programmes.

Nature of Participation:

Refer to involvement of the male partner in the programmes which can be grouped into:

(i) Physical participation, which meant accompanying his female partner to the health facilities for MCW services namely; Antenatal Clinics, VCT, delivery and post natal clinics

(ii) Emotional participation:

Referred to male partner discussing reproductive well-being services with the female partner and encouraging her to attend and consume the services.

(iii)Financial participation:

Referred to the male partner's provision of financial support to the female partner to enable her pay for transport, medication and other services at the health facilities.

LIST OF ACRONYMS AND ABBREVIATIONS

AIDS-Acquired Immuno-Defiency Syndrome

AMREF-African Medical and Research Foundation

ANC-Ante-Natal Care

ARVs-Anti Retro-Viral Drugs

HF-Health Facility

HIV-Human Immune-defiency Virus

HP- High participation

IRIN-Integrated Regional Information Networks

JUA KALI-informal income activities

KAIS-Kenya AIDS Indicator Survey

KDDP-Kiambu District Development Plan

KDHS-Kenya Demographic Health Survey

KDSP-Kiambu District Plan

KNBS-Kenya National Bureau of Statistics

LMPP- Low Male Partner Participation

MCW-Maternal and Child Wellbeing programmes

MPP-Male- Partner Participation

MTCT-Mother- to- Child Transmission

NASCOP-National AIDS and STI Control Programme

NACC-National AIDS Control Council

NCAPD-National Coordinating Agency for Population and Development

P/N CARE-Post Natal Care

PMTCT- Prevention of Mother- to- Child Transmission

RH-Reproductive Health

ROK-Republic of Kenya

SDGs-Sustainable Development Goals

SIF –Safe Infant Formula

STDs-Sexually Transmitted Diseases

STIs-Sexually Transmitted Infections

UK-United Kingdom

UNAIDS-The United Nations Programme on HIV and AIDS

UNFPA-United Nation's International Children's Emergency Fund

UNICEF-United Nations Children's Fund

USAID-U.S Agency for International Development

VCT-Voluntary Counseling and Testing

WHO-World Health Organisation

ABSTRACT

Extensive research shows that responsibility for uptake of maternal and child wellbeing (MCW) services are a responsibility for both female and male partners but in most of the cases it is looked at as a female's. International development platforms and commitments have emphasised the need for male participation in the programmes considering the benefits associated with it and without which the programmes are doomed to fail. High maternal and infant mortality and morbidity rates have been associated with low male participation in programmes. In Kiambu County where the study was carried out, Kiambu strategic plan 2008-2012 had identified low (3%) male partner participation in the MCW programmes a challenge to successful implementation of the programmes. The main objective of this study was to determine factors that could be implied for their low level of participation. A cross-sectional descriptive study was carried out in Kiambu County to establish existing relationships between the male partner's level of participation and the possible predictor variables. The study used random sampling to identify five sub-Counties to represent the County. Free sampling was used to identify mothers who reported to level four and level five hospitals for postnatal clinics. They introduced their male partners through snowballing technique. Male partners' consent for inclusion in the study was sought. Data was collected from one hundred and two male partners. Data cleaning, coding and analysis was done with aid of SPSS version 20.The results for effects of male partner's demographic characteristics on his level of participation revealed a significant negative relationship. Increase in male partner's age, length of stay in relationship and ordinal position of the child led to reduced probability of registering high level of participation. Increase in education level did not have a significant influence on their probability of registering a high participation. The results for effects of male partner's economic status and livelihood activities on his level of participation revealed a significant negative relationship. Increase in income levels was associated with decreased odds of high level of participation, while wage employment led to low odds of high level of participation. The results on effects of male partner's knowledge and awareness in the programmes on his level of participation were significant and positive. Male- partners' who had knowledge of the programmes and of their role in the programmes were more likely to register a high level of participation compared to those who did not have the knowledge. The results for effects of socio-cultural factors were significant and negative. Male partners who believed in cultural norms that were against the programmes were less likely to register a high level of participation. The results for effects of programme related factors on male partner level of participation revealed that male partners who had a negative perception of the programmes were less likely to register a high level of participation. The government should increase literacy levels in the general population as well as create awareness on role of male partner in the programmes. The Kiambu County government should also support male partner friendly and culture sensitive programmes. This may increase male-participation leading to reduction in maternal and child mortality and morbidity.

CHAPTER ONE: INTRODUCTION

1.1 Overview

This chapter presents the background to the study, statement of the problem, objectives of the study, hypothesis of the study, justification and significance of the study, scope, and limitations of the study.

1.2 Background of the Study

Social goals expounded on at 1994 international conference on population and development held in Cairo, Egypt and the 1995 United Nations Fourth world Conference on women, held in Beijing, China, laid a practical foundation for improvement in women's reproductive wellbeing in all key areas (UNICEF, 2011). International development platforms and commitments like the Cairo convection of 1994 on involving male partner expressed the need for their participation in maternal and child wellbeing programmes (WHO, 2012). Many international reports on reproductive health point to the beneficial effect of male partner participation in maternal and child wellbeing programmes in the optimization of the services. For example global HIV AND AIDS reduction programme has identified six specific interventions requiring prioritization and these include among others reduction in mother to child transmission of HIV (WHO, 2012).Since these conferences, there has been a formal recognition that more equitable relations between male and female partner are important in achieving international, national or even regional goals on maternal and child wellbeing (UNICEF, 2012).

Many factors may be implied for male partner's level of participation in maternal and child wellbeing programmes some of which are barriers existing at societal level referred to as socio-cultural factors (WHO/UNFPA and PREMUNDO, 2013). Others may include economic status of the family and the male partner's livelihood activities as well as his demographic characteristics. Male partner's lack of appropriate knowledge and awareness regarding maternal and child health programmes and of his role, his demographic characteristics as well as effects of his perception towards the current MCW programmes affect their participation in the programmes (WHO/UNFPA and PREMUNDO, 2013).

Male involvement in MCW programmes on the other hand is associated with reduced post-partum depression and improved utilization of maternal health services. Male involvement during pregnancy and post partum has shown greater benefits in maternal and infant outcomes than during delivery (WHO, 2013). In most of the cases, the burden of pregnancy, excessive childbirth, responsibility for contraception, infertility investigation, and undiagnosed sexually transmitted diseases including HIV and sometimes death rests squarely on the female partner. This becomes a drawback to enrollment into the programmes and even leads to drop out of the less vigorous traumatized female partner (WHO, 2012). A study carried out by international centre for reproductive health in Belgium realised that male involvement led to increased uptake of the services by the females and the sub sequent improvement on maternal and infant health (Olena, 2015).

The emergence of HIV and AIDS pandemic created a global need to involve male partner in maternal and child wellbeing programmes with the realization of their vital role without which the programmes are doomed to fail (WHO/UNAIDS/UNICEF,

2010).Out of the estimated 1000 children infected with HIV daily, 90% live in Sub-Saharan Africa and Mother to child transmission accounts for 95% of the infections in the children. Male involvement in the programmes has been associated with 40% are reduction in the vertical transmission and infant mortality (Lemens, 2010).According to Mullay *et al*., (2013), male participation means that he chooses to go to the HF with his female partner in coping with HIV infection and support her financially to cater for transport and purchase services. Studies have however found that male participation has remained low especially in sub-Saharan Africa. The effects are negative on the health of the mother and the infant. This is because male partner are the chief decision makers, determining women access to maternal health services and influencing their health outcomes. As a result of their low-participation, developing countries today account for 99% of global maternal deaths (Judith Yargawa and Jo Leonardi-Bee, 2015). For instance, Kabagenyi *et al*., (2014) indicated that without male participation in the reproductive health programmes, the woman bears the physical, emotional and financial responsibility alone and that psychologically, the woman feels traumatised. A study carried out in Ethiopia by Haile *et al.* (2014) found that 20.08% of the pregnant women were accompanied by their male partner to the health facility. The study however realized that only 82% of these male partners got counseled and tested for HIV. Other studies further reveal that male involvement in MCW programmes improved maternal outcomes in developing countries (Judith and Leonardi-Be, 2015).Ramirez-Ferero *etal*., (2012) found that male participation promoted female partner uptake and utilization of PMTCT services. Non-consumption of the MCW services exposes the mother and foetus or the infant to poor health and sometimes death. For example, in sub-Saharan Africa, one in every 39

women dies as a result of childbirth or pregnancy compared to one in every 4,600 in UK (AMREF, 2015). Preventing maternal and infant death depend significantly on the delivery assisted by a skilled birth attendants mostly at the health facilities.

A retrospective cohort study carried out in Mwanza District, Malawi (Kalembo *et al*., 2013) examined the association between male partner involvement and uptake of PMTCT interventions by HIV pregnant women.

A study carried out by the University of North Carolina at Chapel Hill and South Africa's University of Kwa Zulu Natal (Kenneth *et al.,* 2016), found that male involvement in maternal and child wellbeing programmes was linked to greater uptake of HIV testing, antiretroviral treatment, condom use, and support for infant feeding choices.

Adelekan *et al*. (2014) in their study carried out in sub-Saharan Africa, realised that men had to be active agents in maternal and child wellbeing programmes for any positive gains to be realized. According to them the mechanisms on how to involve men in Africa remains vague and unspecified. A study carried out at two primary healthcare clinics in Moshi urban, Tanzania aimed to describe the prevalence and predictors for male partner participation in HIV voluntary counseling and testing (Akkaro *et al.,* 2011). They also aimed at establishing effects of partner participation on uptake of HIV perinatal interventions (WHO/ICASA, 2010). The study realized that HIV-sero-positive women whose male partner attended MCW programmes with them were three times more likely to use Nevirapine prophylaxis, four times more likely to avoid breastfeeding and six times more likely to adhere to the appropriate infant feeding method selected than those whose partners did not attend. Women were

more likely to be accompanied by their male partner for VCT if they had known their own HIV status, were living with their partner, had a high monthly income or if they had expressed an intention to disclose their HIV status to their partners. The study realized that although MCW programmes are presumably a good entry point for male involvement in prevention of sexual and MTCT HIV transmission, the traditional clinic-based approach reached few male partners (WHO/ICASA, 2010). Given the positive influence male participation have on the acceptance of the interventions, different approaches for promoting male participation in VCT were urgently required (AMREF,2010). For example, male partner attendance levels in northern Tanzania, Kenya, Uganda and Ivory Coast were at 12.5%, 15%, 65.4% and 25%, respectively (WHO/ICASA, 2010).

A study carried out in Tanzania by Akarro *et al.,* (2011), revealed that majority of the men were willing to support their female partner through pregnancy and childbirth although their physical participation was low. A study carried out in Tanzania realised that low rate of male partner involvement implied that, if the women tested HIV positive, it would be difficult for them to get full support and encouragement from their male partner (Boniphace, 2010). In a study carried out in Uganda by Byamugisha *et al*. (2011), it was realized that some men although they acknowledged the importance of their participation in maternal and child wellbeing programmes, they opted not to accompany their partners because their fellow men looked at them as weaklings. Kabagenyi *et al.* (2014) in their study in Uganda realized that in countries that experience high fertility rates and unmet needs, men have often been regarded as unsupportive of their partners' use of family planning methods.

Brusamento *et al*., 2012 in their study realised that male involvement in reproductive health programmes increased prevention of mother to child transmission of HIV.

Men have a clear role in decision making regarding their families' maternal and child wellbeing however their participation has remained low due several factors that include excessive concentration on women's reproductive health and lack of research on men's health needs and how to involve them (AMREF,2010). The understanding of the concept '*participation'* in maternal and child wellbeing programmes varies with the context within which it is used and its definition differs from source to source (AMREF Kenya, 2012). Male partner's level of participation is dependent on several predictor variables such as the social-cultural context in which they occur. There are no clear cut guidelines on how far the male partner's participation can go. Physical participation refer to accompanying the female partner to the health facility to consume maternal and child wellbeing services during ANC, couple VCT, delivery, postnatal clinics and in provision of appropriate feeding for the infant and the mother (AMREF Kenya, 2012). Financial participation refers to supporting her financially to cater for transport costs and to purchase services at the health facilities. Male partner's emotional participation includes show of concern in what the female partner and the infant are going through at the health facilities and his willingness to provide psychological support to her. This would involve sharing information and experiences on maternal and child wellbeing issues with his female partner and encouraging her to consume the services (AMREF Kenya, 2012).

Another study by Aluisio *et al.,* 2011 in Kenya realised that increased in male participation was associated with increased antenatal attendance and HIV testing which was associated with decreased infant HIV infection and increased HIV-free

survival. Mohlala *et al*., 2011 carried out an interventional trial among pregnant women in Kenya and found that there was increase in uptake of VCT and promotion of safe sex during pregnancy if men were invited to the clinics.

Attendance at ante-natal clinics early in the pregnancy is important in determining HIV status of the mother and the onset of measures to prevent MTCT of HIV where applicable (NACC, 2014). Delay or failure to consume the services exposes the infant to infection. Lack of male partner participation in couple voluntary counseling and testing may be associated with unsafe sex, partner HIV infection or subsequent MTCT of HIV (NACC, 2014).Lack of support for the female partner may lead to unplanned pregnancies because the female partner lacks financial support as well as emotional support in decision making and consumption of the services (AMREF, 2015). This has more often than not led to poor maternal and child wellbeing outcomes such as delivery out of health facilities or delayed obstetric services that may lead to visco-virginal fistula or other related complications (AMREF, 2015).

1.3 Statement of the Problem

Maternal mortality rates remain high in Kenya at 362/100,000 live births (KDHS, 2014). Out of the pregnant women in Kenya only 47% receive the recommended full health professional care during pregnancy and delivery while the remaining 56% are delivered at home without professional help. Neonatal mortality rate stands at 22/1,000 live births, infant mortality rate at 39/1,000 live births and < 5 mortality of 52/1,000 live births while about 26 /1,000 of the < 5 s are affected by malnutrition (KDHS, 2014). Kenya is ranked 39th globally in <5 deaths (KDHS, 2014).This low consumption of MCW services and the resultant mortality and morbidity has been

attributed to low emotional, financial and physical support accorded to the female partner by their male partner (WHO,2016).Despite the growing evidence on the benefits of engaging male partner in maternal and child wellbeing programmes, their participation has remained low globally (AMREF Health Africa,2015).This remains a significant challenge in the implementation of MCW programmes especially in sub-Saharan Africa (AMREF,2013). Kiambu County is not an exception. Kiambu District Strategic Plan (2008-2012) identified low male-participation (3%) has a major challenge in implementation of MCW programmes in the County. This level of male participation was low compared to the national level that was 15% (WHO/ICASA, 2010).Despite this awareness, hardly any documentation has been done on the factors which could be implied for the low participation in the County. This study is therefore aimed at assessing factors which determine the low level of male partner participation in maternal and child wellbeing programmes in Kiambu County.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of this study was to assess determinants that inform male partner level of participation in maternal and child wellbeing programmes in selected health facilities in Kiambu County.

1.3.2 Specific Objectives

The specific objectives of the study were:

1. To establish the influence of male partner's demographic characteristics on his level of participation in maternal and child wellbeing programmes in the County.
2. To determine the influence of male partner's economic status and livelihood activities on his level of participation in maternal and child wellbeing programmes in the County.
3. To examine the influence of male partner's knowledge and awareness in maternal and child wellbeing programmes on his level of participation in maternal and child wellbeing programmes in the County.
4. To determine how social-cultural factors influence the level of male partner level of participation in maternal and child wellbeing programmes in the County.
5. To examine the implications of current maternal and child wellbeing programmes on the level of male partner's level of participation in maternal and child wellbeing programmes in the County.

1.4 Questions Guiding the Study

1. Do the male partner's demographic characteristics have an influence on his level of participation in maternal and child wellbeing programmes in Kiambu County?
2. How do the male partner's economic status and livelihood activities influence his level of participation in maternal and child wellbeing programmes in the County?

3. What is the influence of male partner's knowledge and awareness in maternal and child wellbeing programmes on his level of participation in maternal and child wellbeing programmes in the County?
4. How do social-cultural factors influence male partner's level of participation in maternal and child wellbeing programmes in the County?
5. What is the influence of the current maternal and child wellbeing programmes on male partner's level of participation in the programmes in the County?

1.5 Study Hypotheses

The Null hypotheses guiding the study as indicated hereunder.

Ho_1 There is no significant relationship between male partner's demographic characteristics and his level of participation in maternal and child wellbeing programmes.

H_{O2} Male partner's economic status and livelihood activities are not significant determinants of his level of participation in the programmes.

H_{O3} There is no significant relationship between male partner's knowledge and awareness in the programmes and his level of participation.

H_{O4} Social-cultural factors do not significantly influence male partner's level of participation in the programmes.

H_{O5}The existing maternal and child wellbeing programmes do not have a significant influence on male partner's level of participation.

1.6 Justification and Significance of the Study

Emergency of HIV pandemic attracted global attention since it affected social, political as well as economic aspects of the of the global community. In the field of demographic studies this phenomena introduced a new worry in relation to the wellbeing of children born to mothers who are HIV sero-positive. Emergence of mother to child transmission of HIV called for adaptive mechanisms such as the need for greater involvement of the male partner in support of the programmes. In most global cultures, especially in Sub-Saharan Africa, reproductive health was a females' domain where men were required to give women space to carry out reproduction related matters with little interference.

Women would attend ANC; be escorted for delivery by their fellow womenfolk or deliver the babies at home assisted by traditional mid-wives. It was a duty of the relatives (women) to monitor the life and wellbeing of the infant and the mother after birth. This was deeply rooted in the African communities' culture that the current call for male partner's involvement in ANC, VCT, during delivery and post delivery activities seem to undermine the cultural norms. Secondly, male partners' presence at the health facilities during the programmes has an economic implication in that he will not attend to his daily chores and will more so pay transportation for the two people to the health facility. The current health system on the other hand, has not adjusted its reproductive health service delivery to meet the specific needs of the male partner who in most of the cases are also looked at as intruders. There is need to carry out a study that is context specific with a view of determining which factors have contributed to the low level of male turn out at the health facilities in support of the health of their female partner and the infants.

The Sustainable Development Goals on child survival and improved life expectancy for mothers cannot be achieved without taking into account successful implementation of maternal and child wellbeing programmes. Involving male partner in the programmes is key to achieving these goals. The current study presumed that male partner's active role in maternal and child wellbeing programmes would boost uptake and adherence to the services. There are however numerous barriers to male partner participation and there is need to determine and employ context specific strategies to limit these barriers. It is of paramount importance to assess the possible barriers that are area, time, community and contexts specific with an aim of breaking them.

Kenya's Vision 2030, through the social pillar, aims at improving livelihood of all Kenyans through efficient and high quality health-care system which shift national health bill from curative to preventive. This is possible if more mothers and infants consume MCW services and few children get infected with HIV for example. More women would spend most of their time in productive economic activities than at the HFs attending to their ill health or that of their infants. Children would spend most of their time in school acquiring knowledge and avoid absenteeism caused by poor health which in-turn would lead to better school retention and performance. This would create a strong workforce to drive Kenya to achieving the Vision 2030.

1.7 Scope and Limitations of the Study

This study was on the determinants of male partner's level of participation in MCW programmes in Kiambu County. The study attempted to establish whether male partner's demographic characteristics, economic factors, knowledge and awareness,

socio-cultural factors and programme related factors were significant determinants of male partner level of participation in the programmes. The study was restricted to health facilities that offered MCW services in Kiambu County which were level five and level four health facilities within the five sub-Counties. It was confined to collecting data from male partner whose female partner were mothers to children aged five years and below and were consuming MCW services in the health facilities at the time of the study.

The data from male partner was collected through direct interviews which reduced bias and misinterpretation which would have occurred if data were collected from secondary sources. This gave the study a true reflection of male partner's perceptions of the current MCW programmes and their implementation. The study has strength in that it collected data from male partner whose female partner were consuming maternal and child wellbeing services during the time of study. This enabled them to recall their participation level and their perception of the programmes was still fresh in their minds. One of the weaknesses of this study was that recruitment of respondents was done through their female partners who were consuming MCW services. This may have led to selection bias since male partner whose female partner were not consuming the services were not recruited into the study. This denied the study a chance to understand what role the male partner to such women played in their failure to consume the services. The study encountered a challenge in that some of the female partners were not willing to introduce their male partner to the study while some male partner declined participation in the study. This was a limitation in getting the target study sample. The researcher mitigated this drawback by seeking assistance of Healthcare providers in explaining to the female partner the importance

of participating in the study as well as promising their confidentiality. The other challenge was that questions on reproduction are very sensitive to the community due to the effect of African culture where male partner felt that their privacy was being interfered with. This was mitigated by explaining the importance of the study in improving Healthcare delivery in the County.

Lastly, the study's index for low and high level of participation (0-2 times for low and 3 to 5 times for high) has not been used by other studies and therefore its validity and reliability have not been well established. This means that there is no established standard instrument to assess the level of male partner participation in maternal and child wellbeing programmes. In this study, a suitable instrument was developed and used to categorize the participation of male partners into low and high levels.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents critical review of literature and was done according to the study objectives. The literature was reviewed with a view to identifying the gaps in knowledge (Table 1.2.1). The empirical literature was synthesised to gain knowledge from previous studies focusing on factors influencing male partner's participation in maternal and child wellbeing programmes and also to place this study in the context of existing scientific knowledge in this area of study. The theoretical and conceptual frameworks of the study are described in the last sections of the chapter.

2.2 Empirical Review

2.2.1 Effects of male partner's demographic characteristics on his level of participation in maternal and child wellbeing programmes

A study carried out in Bangladesh found that male partner's level of education is an important correlate of his involvement in reproductive health programmes with increase in levels of education leading to increase in levels of participation in the programmes (Shahjahan *et al.,* 2013). Another study by Shiyagaya (2016) in Namimbia studied factors influencing male involvement in prevention of mother to child transmission of HIV and realised that male partners' age and education level were significant determinants of his level of involvement. In this view the current study aimed at determining if demographic characteristics of the male partner such as age, level of education, ordinal position of the infant and the male-partner's length of stay in the current relationship had significant influence on their level of participation

in the programmes in Kiambu County. Another study by Ani *et al*., (2015) in Nigeria on effects of demographic factors on male involvement in reproductive health programmes found that male partner's level of involvement was influenced by his level of education. Those who have completed secondary level of education reported a higher level of participation compared to those who had lower education levels.

Secka in his study in Gambia (2010) found that increase in a male partner's level of education lead to increase in his level of escorting the female partner and other relatives to health facilities for delivery because he understood risks associated with childbirth. His study found that higher levels of education had enabled male partners to overcome some cultural barriers that discouraged their participation such as gossip from other men and even women.

2.2.2 Effects of male partner's economic status and livelihood activities on his level of participation in maternal and child wellbeing programmes

In several studies carried out in Africa, male partners reported economic factors and livelihood activities as barriers to their participation in maternal and child wellbeing programmes (AMREF, 2013). This refers to time conflict between their economic and livelihood activities and attending the programmes. These factors include inadequate funds to cater for transport of two people to the health facility. In Malawi Golden carried out a study in 2011 and found that economic factors such as provision of transport costs to health facilities were limiting factors to male involvement although male partners knew it was important to do so. Byamugisha *et al*., (2012) carried out a study in Uganda and found that most male partners are the sole bread winners for

their families and it was necessary to attend to their businesses while the women attended the clinics alone. Male partners were expected to meet expenses incurred in acquiring the healthcare services as well as the transport costs while accompanying the female partner for health services. Another barrier to their participation was child care where male partner had to remain home to take care of the older children while the mother sought healthcare for the infant (Godlove *et al*., 2010).A study carried out in Zanzibar (Shuwena, 2016) indicated that male attendance to the HFs for antenatal clinic was low due to job commitments for male partner who are family breadwinners.

2.2.3 Effects of male partner's knowledge and awareness on MCW programmes on his level of participation in maternal and child wellbeing programmes

It is clear from earlier studies that improvement of maternal and antenatal care services by creating more awareness to the general public and especially to the male partners on the importance of their participation is key. It is difficult to achieve success in the programmes without the male partner's understanding and consent. For example, a study carried out in Pakistan by Babar (2014) established that it is difficult for the male partner to accept alternative feeding of their child or even support it if he does not understand its importance. Creation of awareness to male partner on importance of supporting their female partner in consuming the services as well as their personal role in the programmes has led to a tremendous increase in the number of women and children who adhered to the programme up to 18 months after delivery (Barker *et al*., 2010). A study carried by Hashima *et al., (*2012) in Bangladesh also revealed the need for improvement in male partner knowledge and awareness in

maternal and child health interventions as a way of increasing male participation. In a study conducted in Australia by Frances *et al.,* (2015), male partner's as well as his female partner's level of education was pointed as a significant determinant of the male partner's level of involvement in maternal health programmers.

Judith and Leonardi-Be (2015) in their study in Sub-Saharan Africa realised that with male partner involvement in maternal health programmes, there was a high likelihood of improving reproductive health outcomes through attending VCT together, using condoms to prevent secondary infections during pregnancy and breast feeding, delivering at the HF and increase of follow-up visiting during postnatal compared to those without male partner support. The results emphasized the importance of male partner in promoting the uptake of MCW interventions by their female partners. Shiyagaya (2016) carried out a study in Namibia and found that lack of information was a significant determinant of male involvement in PMTCT programmes. Olugbenga-Bello *et al*., (2013), in their study in Nigeria realised that level of knowledge on maternal health by male partners was average and attributed to their low level of participation in the programmers. The study emphasized the need to enlighten men on their roles in promoting maternal and child health. Another study by Baggaley *et al*. (2012) found that perception of MCW clinics as not "male-friendly," is a narrow focus caused by lack of adequate information on the role of male partners in the programmes. The study also established that HIV and AIDS prevention programmes had overlooked married couples perceiving them to be at low risk. Baggaley *et al*. (2012) carried out a qualitative study of men and women's perceptions on barriers to male involvement in contraceptive uptake and reproductive health services in two rural districts in Uganda. The study realized several barriers to male

involvement in reproductive health which included perceived side effects of female contraceptive methods, fear and concerns relating to vasectomy, concerns that women's use of contraceptives will lead to extramarital sexual relations as well as limited awareness regarding specific role of men in maternal and child wellbeing programmes deterred their meaningful involvement. Men were generally found to have scanty knowledge in maternal and child wellbeing programmes especially VCT in terms of whom should be involved and why they should be involved. This was attributed to lack of community awareness in maternal and child wellbeing programmes (Baggaley *et al*. (2012).

The findings of a study by Alemu *et al*., (2016) in Ethiopia on male involvement in HIV counseling and testing and associated factors among male partners to pregnant women realised that low levels of awareness on the programmes among male partner was a drawback to their level of involvement. In another study in Bangladesh (Shahjahan *et al.,* 2013), indicated that access to media was identified as an important correlate of male level of involvement in MCW services. Their knowledge and awareness in maternal and child wellbeing programmes and of their role was found to have influence on their level of participation in the programmes. Men's misconception that their female partner's HIV status is a proxy of theirs is caused by lack of knowledge on couple discordance in HIV status and was a drawback to their participation in Couple VCT. Findings of a study by Marelign and Shikur (2015) in Ethiopia on male partners' involvement in PMTCT of HIV and associated factors revealed that male-partners who had knowledge on how MTCT of HIV occurred and how it could be prevented recorded a higher level of participation in the programmes compared to those who did not have the knowledge.

A study by Michael and Basset (2014) in Zimbabwe on reproductive health and AIDS prevention in sub-Saharan Africa realised that increase in levels of awareness among the males on importance of participation in maternal and child health led to increased levels of involvement. A study carried out in Uganda by Kaye *et al., (*2014) reported that in order to improve male involvement in the maternal and child health programmes, barriers such as low awareness on the role of male partner and the unwelcoming attitude of Healthcare providers had to be changed. A study by Alfred in (2016) on barriers to active male partner participation in maternal and child wellbeing services found that lack of information on the programmes was a limiting factor to male-participation. Another study carried out in Tanzania revealed that men felt left out in matters of MCW because they lacked accessibility to information and only received second hand information through their female partner. Men lacked understanding of the MCW programmes and even the roles they were expected to play in the programmes. Consequently they associated their participation to the traditional paternal attributes such as assuring family protection and financial support. They did not associate it with physical attendance to the clinics and mutual communication of related issues with their female partner (Akarro *et al*., 2011).A study by Osoti *et al.,* 2014 in Kenya revealed that lack of awareness of the role male partner in antenatal clinics was a drawback to the active participation in the programmers. A study carried out by Ongweny Eunice in Machakos County, Kenya (2014) found that majority of male partner perceived payment for the reproductive health services as the only way they could participate in the programmes. The study pointed out the need to create awareness to the general public and specifically to the male gender on their role in the programmes.

2.2.4 Effects of Socio-cultural factors on male partner's level of participation in maternal and child wellbeing programmes

A study carried out in Nicaragua by USAID (2014), revealed that Nicaragua's machismo culture discouraged men from participating in maternal and child Healthcare. Men in patriarchal societies of developing countries are often identified as decision-makers in all aspects of day to day life (Dharma, 2013).The need to involve male partner in maternal and child-wellbeing programmes is more critical in sub-Saharan Africa due to rapid spread of HIV and AIDS and the subsequent mother to child transmission of HIV during pregnancy and breastfeeding. Some of these infections are attributable to secondary infections and which are preventable if the parents consumed MCW services which are offered by skilled professionals at the HFs. Socio-cultural barriers include social norms and taboos that are deeply rooted and are negative to male participation such as the perception that Ante Natal Care, Child delivery clinics and post natal care are in a woman's domain and it was shameful for men to be found in such settings (Kelvin.*et al*., 2013& Debra *et al.*, 2014). Shiyagaya (2016) carried out a study in Namibia and established that cultural factors had a negative influence on male level of participation in PMTCT programmes. A study carried out in Zanzibar by Shuwena (2016) indicated that male attendance to the health facilities for antenatal clinics was low due to the community's perception that it is a responsibility for women who were expected to play passive role.

A study carried in Ghana by Roseline (2013) identified socio-cultural factors as barriers to male participation. Male-partners who believed reproductive health was a domain of female-partners and were expected to play a passive role recorded lower

levels of participation than their counter parts who believed it was a couples' responsibility. The findings of a study by Jullie *et al*., (2014) in East, West and Central Africa revealed that cultural factors were the main barriers to male involvement in maternal and child programmes since the community's gender norms disapproved of male involvement. The male role is perceived as provision of financial support which take place outside the health facilities. A study carried in the rural Mozambique (Carolyn *et al*., 2016) indicated that low male participation in maternal and child wellbeing programmes was attributed to gender inequality in decision making and responsibility for pregnancy as well as community beliefs that uptake of ANC services was a woman's responsibility.

Such men were seen as weak or controlled by their female partners, a factor that discouraged most of the male partner from accompanying their partners to the health facilities (Ditekemena *et al.,* 2012). It is unlike African culture for women to lead in family matters by telling their male partner to join them to the HFs. It is even worse for the male partner to consent to the woman's suggestions (Rebecca *et al*., 2014). Women are forbidden from taking such decisions even on matters such as ante natal care and HIV counseling and testing. This is a major challenge to women's efforts of involving their spouses in the maternal and child-wellbeing programmes (Hensen *at el*., 2012).Most female partners therefore fail to consistently make their ANC visits to the HFs not because they do not want to, but because of lack of interest or support from their male partner (Auvinen *et al*., 2013).This is because men are the decision makers in many African cultures and one major factor that prevents female partner from accepting HIV testing is the need to seek their partners' consent (Homsy.*et al*, 2011).A study carried out in rural Ghana (Dumbaugh *et al.,* 2014) showed that some

women opted out of maternal and child wellbeing programmes due to lack of support by their male partner while those who were supported consumed the MCW services up to 18 months after delivery. In 2008, the Government of Malawi introduced male partner involvement in MCW programmes. It was observed that before the introduction of the programme, many pregnant women were shunning HIV testing because they did not have the consent of their husbands. Those who had the courage to go for the test and tested HIV positive were afraid to disclose their sero-status to their male partner. They were afraid that their husbands would accuse them of infidelity, an issue which could lead to divorce. These factors resulted in low uptake of PMTCT services by HIV positive women. Male partner involvement in MCW was then introduced with an aim of combating these problems. This eventually led to increased uptake of the services and improved outcomes of the interventions (Kalembo *et al*., 2013).

Culturally, in Malawi, women are not expected to communicate HIV status and initiate condom use with their spouses because this is associated with women having extra marital affairs (Kalembo *et al*., 2013).A study carried out by Debra *et al*., (2014) in Uganda found that male involvement in maternal Healthcare was confined to the traditional gender roles where they are family providers. This restricted male-participation into provision of financial assistance while consumption of the services was done by the female partner alone. Studies carried out on 24 peer-reviewed journals from sub-Saharan Africa, Asia and Europe (1998 to 2012) on male partner involvement in maternal and child wellbeing programmes pointed to the beneficial effect of male partner involvement (Morfaw *et al*., 2013 a). The studies summarized the barriers and facilitators of male involvement. Lack of communication between the

couple, the reluctance of male partner to learn his HIV status, the misconception by male partner that their spouse's HIV status was a proxy of theirs, and the unwillingness of female partner to get their partners involved due to fear of domestic violence, stigmatization or divorce were among the individual factors (Morfaw *et al*., 2013 a).Prior knowledge of HIV and prior male HIV testing facilitated their involvement. Financial independence of the female partner was key to facilitating spousal VCT consumption (http://creativecommons.org/licenses/by/2.0).Ditekemena *et al*. (2012) in their study in several countries in Sub-Saharan Africa found that male participation in MCW programmes was determined by among other factors. Socio-cultural factors such as beliefs, attitudes and communication between men and women. It is clear however that health awareness campaigns are needed. Some studies in the African culture point towards unfavourable social aspects where sexual matters are not discussed openly with the female partner or even with healthcare providers more so when the female partner is pregnant (Obermeyer. *et al*, 2013).

Weak relationships caused by lack of affection between partners were cited as a major factor discouraging communication between partners. A further cause could be the general demonization of men involvement in women's reproductive affairs including ANC (Auvinen *et al*., 2013). The society has set up patterns of communication whereby the male partner is the family head and the source of information for the family. Therefore MCW information brought in by the female partner is not welcome else the man feels over ruled (Dzumbila-Namasasu, 2010). Nkuoh (2012) found that in the African culture men and women do not fully express themselves to each other and noted this is a barrier to their dual participation in reproductive health programmes since it blocks dialogue. Poor communication between men and their

female partner was associated with low male partner participation because it hindered sharing and disclosure on HIV status. It is a drawback to deliberations on the best techniques to tackle the effects of the infections. Poor spousal communication was also found to reduce chances of support for each other and the infant in case they are infected with HIV (Getu, 2011). Lack of communication within the couple and reluctance of male partner to learn their HIV status are caused by misconception that their spouse's HIV status is a proxy of theirs or fear of obtaining an HIV positive result.

Akarro *et al*. (2011), in their study in Tanzania realized that women feared violence from their male partner if they ever found that they were HIV positive. Good couple communication led to greater male partner participation in the programmes emotionally, physically as well as financially (Kabagenyi *et al*., 2014). The societal norms that men are not supposed to open up too much to their female partner else they look weak, limits the communication between the spouses even in matters of reproductive health. Kabagenyi *et al.,* (2014) in their study in Uganda realized that in countries that experience high fertility rates and unmet needs, men have often been regarded as unsupportive of their partners' use of family planning methods.

Sexual unfaithfulness between spouses discouraged male-partners from attending VCT with their partners else they receive the HIV positive results in their presence (Ruiter and Kok, 2010). Some men perceive themselves to be faithful and expect their partners to be, and therefore cannot be HIV positive (IRIN, 2010). Perception of MCW programmes as issues of women were identified as barriers to male partner participation. These led to a negative perception that men who attend ANC services with their female partner were dominated or were overprotective of their partners.

They were ridiculed as being jealous and lacking self-confidence a factor that discouraged male participation (Byamugisha *et al*, 2011).

Shiyagaya (2016) carried out a study in Namibia on factors influencing male involvement in prevention of mother to child transmission of HIV programmes and realised cultural beliefs and practices prevented men from accompanying women to health facility since the community would perceive them as weak men. Findings of a study by Mari *et al*., (2014) in Ghana on perceptions and attitudes towards and barriers to male partner involvement in newborn care in rural Ghana found social values had significant influence on male partners participation in programmes geared to promoting maternal and newborn Healthcare services. A study carried out in South Africa by Koo *et al.,* (2013) found that most men when interviewed on the barriers to their participation in MCW programmes did not attribute their low participation to their intrinsic refusal to participate but rather external factors which could be grouped as infrastructural, socio-cultural as well as institutional based factors.

Other barriers could be women refusal to inform or involve their male partner in the programmes due to fear of divorce, accusations of infidelity especially when the HIV results are positive (IRIN, 2013).The initiatives realized that male partner do influence women's access to health services through their control of finances, women's mobility, means of transport, and healthcare decisions (Auvinen *etal*., 2013).It was also in the realization that implementation of MCW programmes was dependant on the male partner who is the family head and the decision maker and that it would create a condusive environment for sharing related information (Homsy.*et al*., 2011).Male partner play a major role not only in women's risk of acquiring HIV but also in uptake of maternal and child wellbeing services. Earlier studies have

reported that involvement of male partner in antenatal VCT was associated with increased uptake of the services (Arundhati, 2011). Couple VCT was shown to have greater benefits than accompanying the female partner for individual VCT. Unfortunately, few men accompany their partners to antenatal clinics and even fewer participate in couple counseling and testing (Homsy.*et al*., 2011).Baggaley *et al*., (2012) carried out a qualitative study of men and women's perceptions on barriers to male involvement in contraceptive uptake and reproductive health services in two rural districts in Uganda. The study realized several barriers to male involvement in reproductive health which included perceptions that reproductive health was a woman's domain, preference for large family sizes which are uninhibited by prolonged birth spacing; and concerns that women's use of contraceptives will lead to extra-marital sexual relations.

Monica, (2010) carried out a study in Kenya, and found that some men still believed that women were the only source of HIV infections and therefore did little to participate in HIV prevention programmes. The study attributed their behaviour to mother to child transmission of HIV during pregnancy and breastfeeding. Kabagenyi *et al.*,(2014), in their study carried out in Uganda, realized that prevailing gender relations and other patterned social inequalities have overemphasized the role of female gender in maternal and child wellbeing programmes ignoring the role of the male. They found that culture has made women have little say in maternal and child wellbeing programmes both at the family and the community levels. Their study recommended economic empowerment of women and men's acknowledgement of their joint responsibility in maternal and child wellbeing programmes. The researchers, however, did not address other factors other than culture that hindered

male sexual partner participation in the programmes. Akarro *et al*. (2011), in their study in Tanzania realized that women feared violence from their male partner if they ever found that they were HIV positive. Good couple communication led to greater male partner participation in the programmes emotionally, physically as well as financially (Kabagenyi *et al*., 2014). The societal norms that men are not supposed to open up too much to their female partner else they look weak, limits the communication between the spouses even in matters of reproductive health. Another study by Alfred 2016 in Tanzania realised the belief that maternal and child wellbeing programmes were meant for women and children alone prevented men from attending the clinics. A study by WHO (2016) reported that maternal and child health issues in Kenya are still looked at as a woman's domain and this need be changed by involving men as stakeholders rather than facilitators of the programmes.

2.2.5 Effects of programme related factors on male partner's level of participation in maternal and child wellbeing programmes

One of the most significant barriers to male-involvement in maternal and child wellbeing programmes are the historic institutionalization of reproductive health as a woman's domain leading to men's perception that it is a woman's work (WHO, SSA, 2012).This traditional organization has not changed to accommodate men in terms of infrastructure, service delivery hours, accommodation of male special needs etc, all which have kept the man at bay. In the recent past, emerging health issues such as MTCT of HIV has created need to accommodate the male partner not as a facilitator but as a constituent part of the reproductive health policy and practice (WHO, SSA, 2012).

Furthermore there has been growing understanding in the international community on the role of male gender in maternal and child-wellbeing programmes as having fundamental influence in decision-making, power and health choices for the family (WHO,2012).This understanding has been instrumental in making stakeholders aware of the need to develop suitable strategies to reach male partner. There has emerged a need in the face of the growing world-wide spread of STDs including pre- and post-natal HIV infection to involve the male partner (WHO, 2012). Attempts to engage men in maternal and child wellbeing programmes is in line with several global convections which laid a foundation for the 2010 global strategy for women's and children's health. The global strategy in turn emphasised on importance of creating awareness and advocacy programmes for participation of men and boys to increase programme effectiveness (WHO, UNFPA &PROMUNDO, 2013).

Findings of a study by UNICEF (2016) in Uganda on improving male-involvement to support elimination of MTCT of HIV revealed that provision of male service packages by changing clinic hours, increasing peer support, using male champions and collaborating males as stakeholders improved their level of involvement into the programmers' study carried out in four Countries in the Pacific (Cook Island, Fiji, Papua New Guinea, Solomon Island and Vanuata) by Jessica *et al*., (2016) revealed that programme related factors such physical layout and space at the health facilities, Healthcare provider workloads and attitudes discouraged male attendance at the health facilities. Although many pilot programmes and initiatives for inclusion of male partner have been formulated, in many countries they have not been established, and fewer still have been fully intergraded the countries' healthcare system. Programme managers and policy makers in these countries have almost automatically

assumed that male partner are not interested in or not supportive of maternal and child wellbeing programmes even though recent research revealed that many are (Madiba and Letsoalo, 2013).On the other hand, related programmes have for many years focused on women because it is women who get pregnant and health providers felt that women needed their privacy in matters of reproduction (Kelvin *et al*., 2013). Most contraceptives, for example, are designed for women and could conveniently be offered to women during the MCW visits. This has created a perception that maternal and child wellbeing programmes are for females a perception that is difficult to change even with present need for male participation (Mbonye *et al*., 2010).Despite the above challenges, the importance of involving male partner in MCW programmes gained recognition after the 1994 Cairo and 1995 Beijing consensus. This consensus agreed that men have a crucial role in improving the health of women and children. The need to involve men in MCW programmes was further necessitated by the fact that men's health status and their behaviour affect women's reproductive health especially during pregnancy and breast feeding.

Programmatic factors can facilitators or barriers to male partner participation in MCW programmes. Most of these programmes and the settings within which they are offered mostly suit women's and children's needs leading to marginalization of men. Distrust in confidentiality of the healthcare providers on the client's HIV status especially where healthcare providers are known to them (Sprague *et al.*, 2011). Harkiran and Seema (2013), in their study in India found that men felt marginalized in dispensation of maternal and child wellbeing services with great emphasis in policy making and implementation being placed on the female gender. The study emphasized the need to improve Healthcare delivery to accommodate male partner.

Shiyagaya (2016) in a study carried out in Namibia realised that time spent at the health facilities and infrastructural organization of the health system kept male partners out of the health facilities.

Men also felt that the MCW clinics were designed for women and were male unfriendly (Peter and Marya, 2010). For example there was no sitting provision for men. Some men disagreed with some MCW programmes such as the ones that encouraged condom use in marriage which they felt led to unfaithfulness of their female partner and conflicted with men's interests. Some men felt that VCT during the woman's pregnancy was too late and partners should be encouraged to know their status prior to conception in order to decide if to avoid the pregnancy all together. They therefore thought it unnecessary at pregnancy level (Nkuoh, 2010). Most studies carried out in sub-Saharan Africa showed conflicting interests between the male partner and the MCW programmes. For example most men did not support replacement of breast feeding with alternative feeding for their babies and therefore rejected it (Ditekemena *et al.,* 2011).Findings of a study by Morfaw *et al*., (2013 b) in sub-Saharan Africa revealed that health system factors such as long waiting hours and male unfriendly environments at the health facilities were the major barriers to male involvement in the programmes.

The findings of a study by Wessel (2015) in South Africa realised that service hours limited men from attending the clinics because majority of them are engaged in their daily livelihood activities. The male partner's level of participation could be influenced by intervening factors such as fear of HIV positive results and the stigma associated with it (Ditekemena *et al.,* 2012). Kululanga *et al* (2011) in their study on promoting male-participation in maternal Healthcare realised that low levels of

participation by men was due to their stubborn nature, that they are stoic and believe in their self efficacy. They found that most men do not think it is important to go for VCT or get involved in maternal and child wellbeing programmes because they deem themselves to be in good health, a factor related to male masculinity. Obermeyer, et al., (2013) in their studies sub-Saharan Africa realized that the notion of masculinity in men required them to be and to act in control, to have knowledge, be strong, resilient, disease free, highly sexual and economically productive. Such traits are in conflict with the expectation of male participation in maternal and child wellbeing programmes which is perceived feminine. This conflict between local understanding of manhood and the expectations in the medical field may explain why men do not participate in the programmes (Skovdal *et al.,* 2011). Roseline, (2013) carried out a study in Ghana and identified societal and programmes based barriers to male participation. The study recommended male friendly environments such as infrastructure, organization of the services and positive staff attitudes to overcome cultural barriers.

A study carried out in Abuja, Nigeria (Momoh, 2014), showed that women who attend ANC with their male partner are taken through VCT together. This has encouraged more males to participate making it easy to disclose their status to their partner. Those who are HIV positive then register immediately for PMTCT programmes. This in turn led to treatment adherence of both partners. With a male partner involvement in reproductive health especially in MCW programmes, a couple has a chance to make informed and collective decisions. The couple share responsibility for preventing HIV transmission to the unborn child, discusses safe sex practices, as well as making informed decisions to access care and treatment

(Roseline, 2013). In addition, men also play a crucial role in supporting HIV positive female partner, by assisting them get to clinics or hospitals where chances of safe delivery are higher, and to choose a safe infant feeding method (Roseline, 2013). Olukayode (2013) conducted studies in Sub-Saharan Africa and realized the importance of male partner involvement in designing and delivery of the maternal and child wellbeing services. He realized that it increased community acceptance, commitment and increase uptake of the programmes services by the members. Male partner can support their female partner to shoulder this burden not only by encouraging them to consume the services (emotional support) but by also facilitating them financially (Byamugisha *et al.,* 2012). The male partner can also accompany the female partner to the HF physically. On the other hand men have their special reproductive health issues that are not addressed through the current MCW programmes. This has led to the perception that men are used as tools to achieve the child's health and that of the mother while theirs is ignored. Efforts to prevent Mother-to-Child Transmission of HIV (PMTCT) in Sub-Saharan Africa for example, were initially focused overwhelmingly on women, to the unintended exclusion of their male partner.

Ditekemena *et al*., (2012) in their study in several countries in sub-Saharan Africa found that male participation in MCW programmes was determined by among other factors such as health services related factors such as opening hours of services, behaviour of health providers and the lack of space to accommodate male partner; Factors shown to facilitate male involvement were either health system factors or those directly tied to the individuals. Inviting men to the hospital for voluntary counseling and HIV testing and offering of the services to men at sites other than

antenatal care clinics were key health system facilitators. Studies carried out on 24 peer-reviewed journals from Sub-Saharan Africa, Asia and Europe (1998 to 2012) on male partner involvement in maternal and child wellbeing programmes pointed to the beneficial effect of male partner involvement. The studies summarized the barriers and facilitators of male involvement. Healthcare system factors included long waiting hours at the antenatal care clinics and the male unfriendliness of MCW programmes. A study conducted in Tshwane, South Africa (Kelvin. *et al*., 2013) on determinants of male partner participation in MCW programmes revealed that while most fathers believed that HIV testing is an important part of preparing for fatherhood, there are formidable structural and psychosocial barriers to their participation.

A study carried out in Zanzibar (Shuwena, 2016) indicated that male attendance to the HFs for antenatal clinics was low due to the community's negative attitude of health workers towards male partner that made them feel unwelcome and intruders. A study by Baggaley *et al*. (2012) in Uganda realized several barriers to male involvement in reproductive health which included limited choices of available male contraceptives, lack of time and unfriendly nature of the services to men's reproductive needs. Kaye *et al., (*2014) carried out a study in Uganda male involvement during pregnancy and childbirth and realised that male partner's low participation in the programmes was attributed to unwelcoming Healthcare system that was intimidating and unsupportive to the males. In a study in Tanzania on barriers to active male participation in the maternal health programmes, Alfred (2016) realised that lack of specific programmes for men at the health facilities kept men a bay.

There is need for government and health workers to create awareness and condusive environment in health facilities for male partner's participation (UNAIDS 2013).

Family-oriented approaches to maternal and child wellbeing programmes coupled with measurable improvements in the way male partner are invited to and engaged in the programmes may improve their level of participation (Hashima, 2012).A study carried out in Kenya (Osoti *et al*., 2014) realised that most of the barriers to male-participation had a social dimension however programme related factors have also contributed to a reasonable degree. In Kenya National Statistics, less than half of all births have been attended by skilled professionals, a situation that has not changed for the last ten years (NASCOP, 2013 &AMREF, 2012). This has partially been attributed to low or lack of support accorded to the women by their male partner (AMREF, Kenya 2015).

Kwambai *et al.,* (2013) carried a study in western Kenya and realised that despite evidence that male partner participation in antenatal and reproductive health was associated with better Healthcare seeking behaviour, many reproductive health programmes did not facilitate their involvement. A study in Kenya by Mangeni *et al*., (2013), realised that male partner's participation in reproductive health programmes promoted female partner uptake of the services and their retention in the programmes.

A study carried out by Alfred *et al.,* (2016) in the University of Nairobi-Kenya in collaboration with Kenyatta National Hospital, Kijabe Hospital and University of Washington established that in resource-limited settings with high Human Immunodeficiency Virus burden, male partner involvement in PMTCT was associated with improved uptake of effective interventions. They realised that improvement in male partner involvement was not possible in the standard antenatal clinic settings. The study pointed to the importance of involving male partner at the initial stages for prevention of MTCT of HIV other than in taking care of the infected mother and the

infant. Kivunaga *et al.*, (2013) in their study in Kenya on male involvement in women's reproductive health realised that male involvement is key in improving uptake of sexual and reproductive services for women and that most men were willing to participate in and attend reproductive health services together with their partners. In so doing, they influence the type of family planning method to be used, health facility to be attended for delivery as well as to attend ANC with their partner. The study found that males' main support for their female partner in the programmes was financial. The current study differs from their studies in that they studied levels of male involvement in sexual and reproductive health while the current study paid special attention to determinants of male partner participation in MCW programmes. The earlier studies did not establish factors leading to low male participation which was the main objective of the current study.

Gathuto, (2014) conducted a study in Kenya (Kenyatta National Hospital) to investigated factors influencing male partner involvement in the care of their pregnant partners. The study established that the current Healthcare infrastructure such as inadequate sitting space and sitting arrangements and long waiting hours on the queues discouraged that male partner from accompanying their partners. Nyandieka *et al.,* (2016) carried out a study in Malindi (Kenya) on male involvement in maternal health planning and utilization of skilled birth services. The study found that male partner were decision makers on whether the female partner seeks skilled Healthcare during pregnancy and delivery. Failure to involve them was a drawback to optimal utilization of the services by their female partners. Kenya Demographic Health Survey indicated that in Kenya only 13% of partnered Kenyans went for VCT with

their male partner during pregnancy (KDHS) (2010). The study however did not establish factors that led to the low male partner participation.

A report from a study carried in Kenya in 2008 indicated that in the year preceding the study, only 32% of women and 37% of men with multiple sexual partners used condoms to prevent secondary infections during pregnancy (KDHS, 2010). The study, however, did not establish factors leading to the low male partner participation in preventing mother to child transmission of HIV during pregnancy. Findings from a study by NASCOP noted that in Kenya couple discordance in HIV status led to new HIV infections during pregnancy and breastfeeding. This in turn led to mother-to-child transmission of HIV during pregnancy or breastfeeding (NASCOP, 2014). The report however did not establish factors that lead to low male partner participation in preventing mother to child transmission of HIV. The current study aimed at identifying factors that lead to low male partner participation in these programmes. Aluisio, (2011) carried a study in Kenya and realized that there was increased uptake of maternal and child wellbeing services among women and children in families where the male partner took an active role. His study was similar to the current study in that it was carried out in the Country and on male partner participation in MCW programmes. The two studies agree that male partner participation in reproductive health programmes is low. The study however differs from the current study in that it did not determine barriers to male partner participation.

Mangeni *et al.,* (2013) carried out a study in Kenya on male involvement in maternal healthcare as a determinant of utilization of skilled birth attendants. The study realized that female partner whose male partner had a positive perception of maternal and child wellbeing programmes had consumed the services and were at least once or

twice likely to utilize a skilled birth attendant than those who were not supported. A study carried out in Kenya (Njeru *et al*., 2011) realised that male partner participation in maternal and child wellbeing programmes led to increased uptake of the services by women and infants. The study recommended governments and other stakeholders to explore multi-strategic, culturally tailored public healthcare models that would increase male partner involvement in the programmes. The study revealed that when working in a patriarchal society like Kenya, it is important to take the route of least resistance, and that is to make antenatal and post-natal clinics male friendly. NASCOP (2011) carried out a study in Kenya and identified mass media as the best channel to increase knowledge and awareness on maternal and child wellbeing matters. The study realized the need to change the perception that maternal and child wellbeing programmes are designed for women and men should take a passive role. The study did not establish factors leading to low male partner participation in MCW programmes except knowledge and awareness. Kivunaga *et al.,* (2013) carried out a comparative study of Nyahururu and Thika sub-Counties in Kenya on male involvement in reproductive health. Their study is similar to the current study in that it was carried out in Kenya. The study however differ from the current one in that it explored men's involvement and experiences of their partner's health in the context of integrating SRH and HIV in public health facilities while the current study sought to determine barriers to male partner participation in maternal and child wellbeing programmes.

Table 1: 2.1: Studies carried out in Kenya and research gaps

Reference	Literature	Research gaps
Kivunanga *et al* 2013	-A comparative qualitative study	-the current study is quantitative -did not establish factors for the LMPP in MCW programmes
Ongweny (2014)	-study on effects of male attitude on their involvement in ANC programme	-did not establish other factors influencing male participation in the programme
AMREF-Kenya (2012)	- male partner involvement in promoting deliveries by skilled attendants in Busia	-Concentrated participation during delivery only.
Nyandieki *et al* 2016	Male involvement in maternal health on utilization of skilled birth attendants in Malindi	-Study carried out in different cultural background -Did not study factors determining level of male-participation
Monica *et al* 2010	-A qualitative study on factors influencing male involvement in sexual and reproductive health in Busia	-a study carried out in Western Kenya with different cultural background
IRIN *et a*l 2010	-Effects of *men only* clinics in western Kenya	-did not establish factors for the LMPP in MCW programmes
NASCOP strategic plan 2009-2014	-Couple discordance in HIV	-did not establish factors for the LMPP in MCW programmes

Source: Author 2015

2.3 Theoretical Framework

The theoretical underpinning of this study was enriched by a number of theories that basically informed the various study variables. These are health promotion theories by Rowan *et al.,* (2008) that guide programme planning and implementation in health promotion to enhance behaviour change. These behaviour change theories provide

structures that may be used to design programmes and explain why and how the programmes are expected to be context effective. It is important to note that no one theory can address all variables that contribute to a person's behaviour. A combination of several of these theories creates a programme tailored for a specific issue and for a particular target population. Most of these health promotion theories address eight components of behaviour change. Some of these theories include those indicated in the sub-sections below.

2.3.1 Social Cognitive Theory/Social Learning Theory

Social cognitive theory is based on the idea that a person's behaviour is determined by what they hear and observe in the society within which they interact and which shapes their way of thinking and therefore their behaviour. These social and physical environments may create barriers to or facilitate certain behaviour (Rowan *et al.*, 2008).This theory guided the study on the independent variable 'Socio-cultural factors' which the current study hypothesised as determinant of male partner's level of participation in maternal and child wellbeing programmes in Kiambu County. The study sought to establish the influence of socio-cultural factors of the male partners' level of participation in MCW programmes in Kiambu County.

2.3.2 Protection Motivation Theory

It is a general theory of persuasive communication that is applied in primary prevention by taking measures to combat the risk of developing a health problem or undesired health outcome by creating knowledge and awareness to the people to enable them make informed decisions (Rowan *et al.*, 2008). This theory significantly

guided this study in establishing influence of male partner's knowledge and awareness in MCW programmes and in the role of the male partners in the programmes on their level of participation in the programmes. The theory explains that knowledge and awareness enables people make informed decisions based on the correct information.

2.3.3 Social Ecological Theory

The theory argues that health promotion programmes should focus on individual's behaviour as well as on environmental underpinnings of health. It emphasizes behavioural change, environmental enhancement and social ecological models. It is a behavioural change approach to disease prevention and health promotion laying special emphasis on a persons' health related behaviours that promote or demote health (Rowan *et al.,* 2008). This theory guided the study in establishing the influence of cultural factors on the dependent variable 'level of male partner's participation in MCW programmes' which makes the difference between participation in the programmes or not. It emphasize on the role environment play in enhancing health promoting or health deleterious factors. This may include social environment or the programme related factors. This theory informed the independent variables –the effects of socio-cultural and programme related factors on male partner's level of participation. In this study special attention was paid to the social environments in which people live and which determine their behavioural patterns as they conform to the social norms. Some of these could be health promoting or health deleting. This enriched objective four on effect of socio-cultural factors (Rowan *et al.*, 2008).

2.3.4 Health Belief Model

That people will act to avoid a health threat if they believe it is serious and that the benefits of their action outweigh perceived barriers. This informed the objective on effect of knowledge and awareness in maternal and child wellbeing programmes and the role of male partner in the programmes. The study presumed that male partner's knowledge and awareness in the programmes enhances their level of participation (Rowan *et al.*, 2008).

2.3.5 Diffusion of Innovation Theory

The theory explains that innovations or new concepts are adopted by communities or individuals in stages; for example awareness stage, implementation and maintenance. This occurs through formal and informal channels such as opinion leaders or change agents. Some people naturally adopt innovations much earlier than others. Attributes of an innovation determines peoples' willingness to adopt it, however this can be manipulated (Rowan *et al.*, 2008). This informed the independent variable on male partner's level of knowledge and awareness in maternal and child wellbeing programmes and their role and how this impacted on their participation. The study adopted because the researcher believed male partner's level of knowledge and awareness in maternal and child wellbeing programmes is varied and this influences their level of participation. The study presumed that increase in male partner's knowledge and awareness enhances his participation (Rowan *et al.*, 2008).

2.3.6 Precaution Adoption Model

This model explains that in the process of adopting health promoting behaviour or abandoning the health deleterious ones, people start with unawareness of an issue through decision making to action or inaction (Rowan *et al.,* 2008).This takes a certain process involving the stages of: unaware of issue, unengaged by issue, deciding about acting, decided not to act, decided to act, acting and maintenance. This enriched the independent variable 'effects of knowledge and awareness in maternal and child wellbeing programmes' The study presumed that male partner knowledge and awareness in maternal and child wellbeing programmes influenced his level of participation (Rowan *et al.,* 2008).

Summary

The above health promotion theories depict the following main characteristics;

- A strong positive intention to perform the behaviour which in this study is to participate in maternal and child wellbeing programmes (the dependent variable).
- The effects of environmental constraints to the behaviuor such as effects of programmatic factors as well as the social environment in which they live (Programme related and socio-cultural factors)
- Perceived social pressure to perform the behavoiur (participate) or not to perform (effects of socio-cultural factors).
- Perception that performance of the behaviour (participation) is more consistent with his own self-mage, his personal norms or his standards (effects of male partner's demographic characteristics).

2.4 Conceptual Framework

Yosef (2015) defines a conceptual framework as a network or a "plane" of linked concepts. They form a framework that is structured from a set of broad ideas and theories that help a researcher to properly identify the problem they are looking at and frame their questions and find suitable literature. Farlex (2012) defined a conceptual framework as a set of interrelated theories that form the basis for research study.

Wylie (2012) defined a conceptual framework as a researcher's own position on the problem and gives direction to the study. It may be an adoption of a model used in a previous study with modifications to suit the inquiry. It enables the researcher to show the direction of study and show the relationships of the different constructs that the study is intended for investigation.

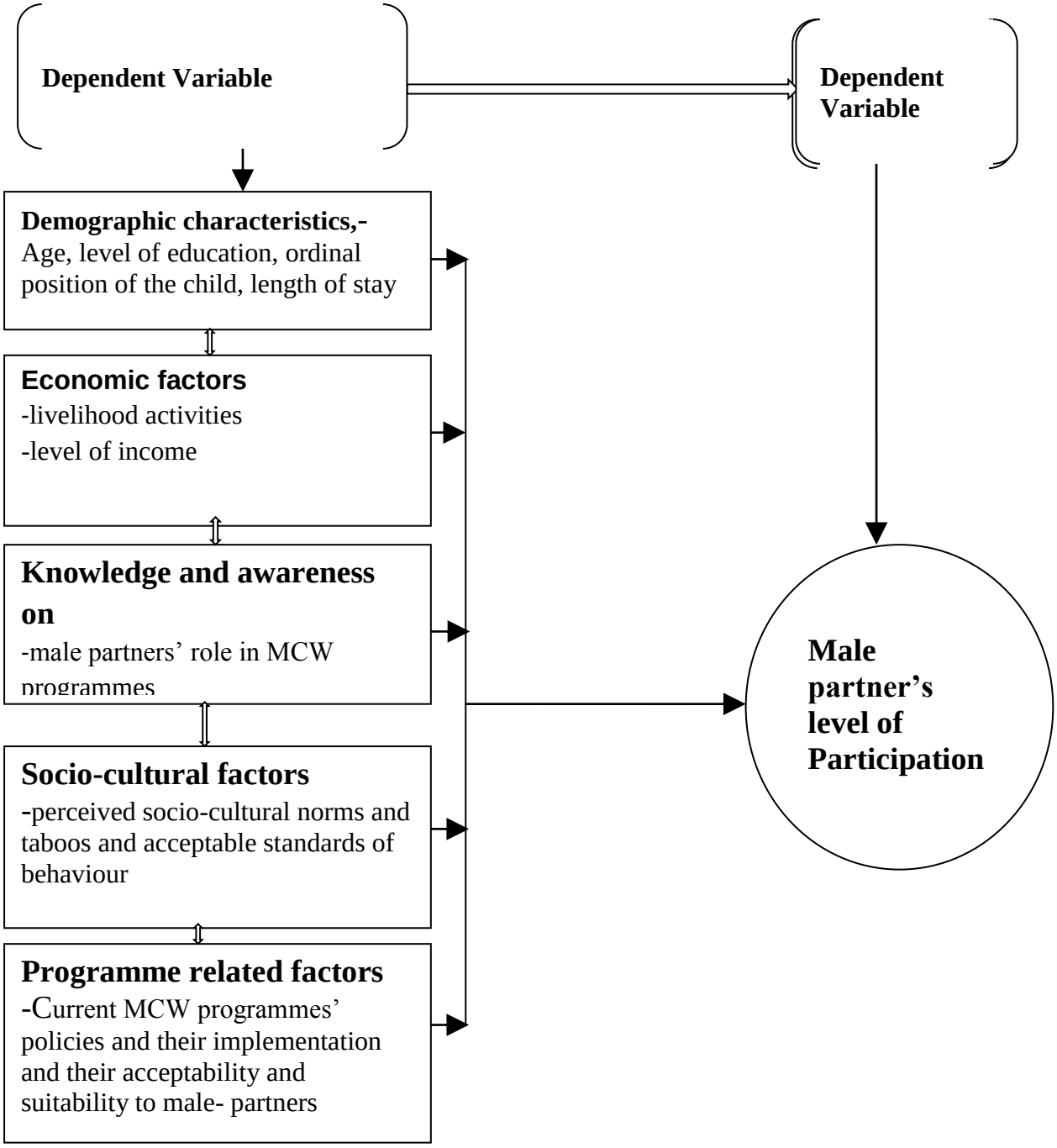

Figure 1: A conceptual model showing relationship between dependent and independent variables. Source: Adopted and modified from Champion and Skinner (2008).

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The first section of this chapter gives the background information about the area where the study was conducted in terms of the location, study population and health facilities through which the sample was drawn. The other section provides a discussion on the methodology that was used to carry out this study. This comprises of the study design, target population, sampling frame, sample and sample size, sampling techniques, instruments used in data collection, data analysis and presentation of the findings.

3.2. Study Area

The study was carried out in Kiambu County (Figure 3.1). The total area of the County is 2,543 Km² and it is located in Central Kenya between latitudes $0^0$75' and $1^0$20' south of equator and longitudes $36^0$54'; and $36^0$85' east. The County is located between altitudes of 2400 metres above sea level at the Aberdare ranges and 1430 meters above sea level at Juja in the South East (KDDP, 2008). It comprises twelve sub-Counties, namely; Gatundu South, Gatundu North, Thika, Githunguri, Ruiru, Lari, Kiambaa, Juja, Kabete, Limuru, Kikuyu, and Kiambu (KDDP, 2008). It has two main Municipal Councils of Thika and Kiambu. Agriculture dominates the economy of the County and provides livelihood to 75% of the County's population. The major economic activities include tea and coffee growing, horticulture, dairy farming and poultry farming. Thika is the major industrial town with Limuru, Ruiru and Githunguri coming up. The major industrial activities include Bata shoe making in Limuru, Brookside milk processing, Leather tanning in Thika, Bidco industries in

Thika, mining of Carbacid in Lari, fresh milk processing in Githunguri and several tea and coffee factories. The community practices are micro-economic activities and subsistence farming (KDDP, 2008).

3.2.1 Sampling Area Unit

The study adopted a multi-stage sampling technique to determine the area units from which the study was carried out. This technique is applied when the total area of interest is big in this case Kiambu County (Kothari, 2004).Kiambu County is divided into smaller areas (sub Counties).The ultimate goal was to draw sample from these sub-Counties. The initial stage involved selection of the study site which was Kiambu County. It was the area of interest having reported low (3%) level of male partner participation in maternal and child wellbeing programmes and which had been identified as a challenge in implementation of the programmes (Kiambu Strategic Plan,2008). Since Kiambu County is vast with twelve sub-Counties, the second stage involved random sampling to pick five sub Counties which represented 40% of the County. The following sub-Counties were picked to represent kiambu County. They include, Gatundu North, Thika East, Kiambu, Limuru, and Ruiru. The latest map of Kiambu County (Figure 3.1) was obtained from the KNBS (2010). The sub-Counties acted as the second stage strata from which level four and level five health facilities offering maternal and child wellbeing services were picked Table 2.3.1)..

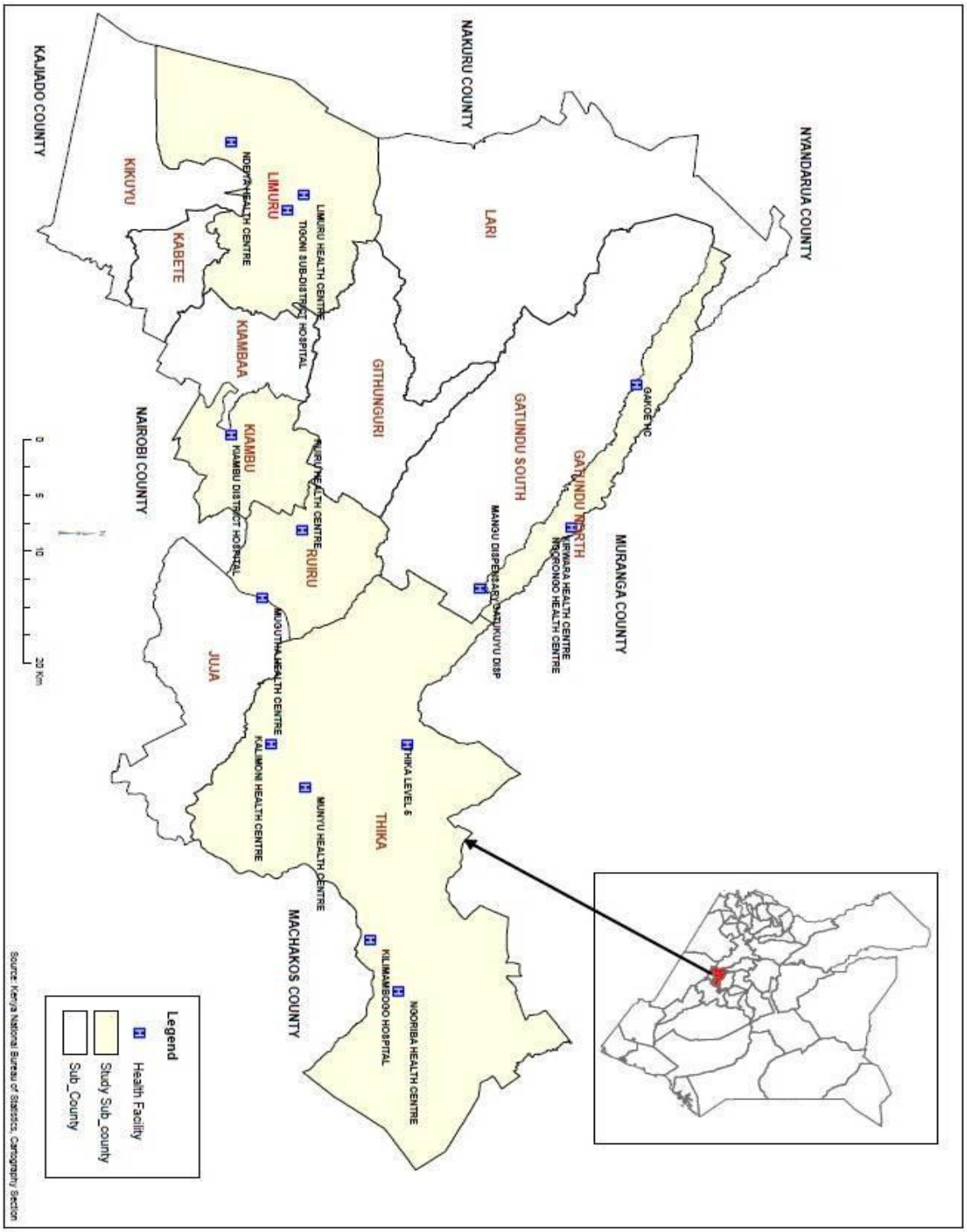

Figure 2: 3.1 Map of study Area. Source: Kenya National Bureau of Statistics, Cartographic Section.

Table 2: 3.1 Sampling procedure for study area

Sampling method	Sampling procedure
Purposive sampling	Kiambu County was selected as the study area. Kiambu Strategic Plan 2008-2012 had identified low (3%) male partner participation in MCW as a major challenge in implementation the services in the County.
Random sampling	The study sought to pick five sub-Counties to represent 40% of the County. Health facilities from which the samples were picked were selected from each sub-County to include only level four and level five HFs that offer MCW services.

Source: Author, 2015

3.3 Level four and five health facilities in the representative sub-Counties

The County has a healthcare service network comprising; level one HFs (mostly the Community Health Volunteers at the village level), level two (the dispensaries), level three (the Health Centres), level four (which are either mission, private or government hospitals) and level five (the referral hospital).The different levels of the HFs offer MCW services at different levels. The MCW services include antenatal clinics, VCT, administration of ARVs, delivery and theatre services. Currently these services are offered at the level five and four hospitals with the lower levels lacking in delivery and theatre services. In Kiambu County these health facilities include Thika General Hospital which is a Level Five and referral Hospital. The County is also served by several Level Four health facilities which include public hospitals and Mission hospitals. The leading government level four health facilities include Kiambu Hospital, Kijabe Hospital, PCEA Kikuyu Hospital, Ruiru Hospital and Immaculate Heart of Mary Hospital (Figure 3.1).

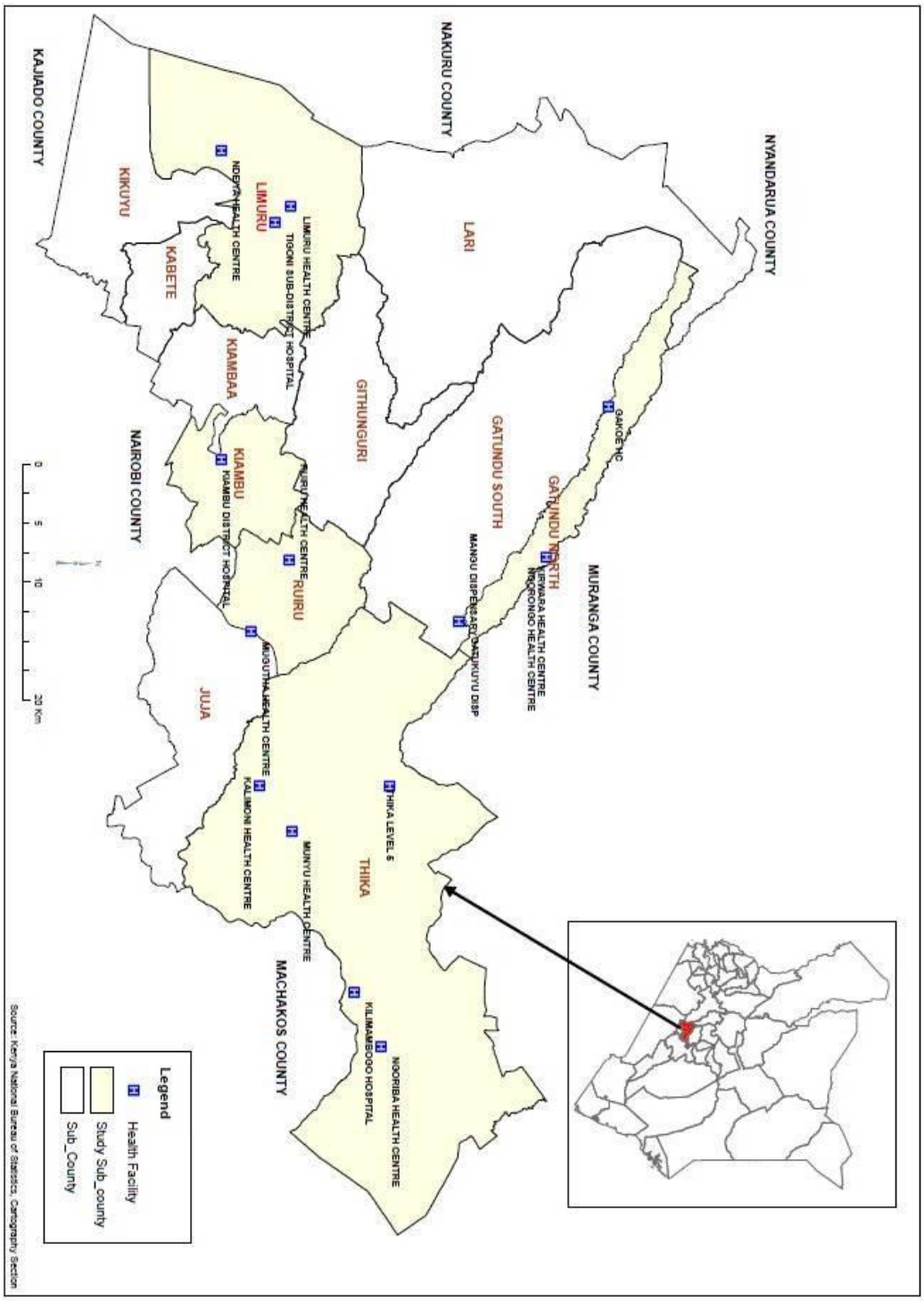

Figure 3: 3.2 Map of study site showing Health Facilities in the representative sub-Counties. Source: Kenya National Bureau of statistics cartographic section

3.4 Study population

Population is a large collection of individuals or objects that is the main focus of a scientific study. It is for the benefit of the population that research is done (Seidman, 2006).A population also refers to an entire group of individuals, events or objects having a common observable characteristic. Hence it is an aggregate of all that conforms to a given specification (Mugenda and Mugenda, 2003).It is also known as a well defined collection of individuals or objects known to have similar characteristics (Sekaran, 2006).Kiambu County has a total population of 1,623,282 and 469,244 households (KNBS, 2010), with a population density of 638 persons per square kilometer. Its population is predominantly Kikuyu with low percent of non-Kikuyu Kenyans and non-Kenyans. The population is mainly rural but rapidly becoming urban with the growth of Nairobi County. It hosts a significant number of workers who commute daily to the national capital to work.

3.4.2 Health Status

In Kiambu County, HIV prevalence was estimated at 47, 100, and 10% of who were children.The County had an adult prevalence of 4.4% of who 44% are in stable marriages. The County reported new annual infections of 3,200 in 2011. The County was ranked11 among the 47 Counties (NACC, 2014) with a prevalence rate of 3.8%, the highest being Home bay with 25.7% and the least Wajir with a rate of 0.2%.

3.4.3 Gender Inequality in the Study Area

Gender concern entails power relations between sexes in relation to the role they play in the society. In most African societies the family resources are controlled by male

gender and the female gender are discriminated against as regards inheritance of material wealth from parents and property ownership. This has led to poverty among the female gender that has to rely on their male-partners for support (Nanjala, 2012). In Kiambu County men dominate access to resources and decision making. This disadvantages female partner in consumption

3.4.4 Target Population

The population total in the five sub counties representing Kiambu in the study was 707453.The female population in the sub counties was 59% of the total population (417,397). Women within the reproductive age group in the sub-Counties (15-49 years) was 25% (104,349).The proportion of women of child bearing age likely to be nursing babies aged five years and below at a particular point in time is 2% of women of child bearing age (Kenya population and household data 2009) which was found to be 2,086.Only 15% (WHO/ICASA,2010) of these mothers are likely to be accompanied by their male partners for MCW services (312).This was the study target population.

3.4.5 Inclusion Criteria

The target population in this study was male partner who are husbands to mothers of children aged five years and below and who were consuming maternal and child wellbeing services in health facilities in Kiambu County during the time of the study. The researcher only interviewed male partner who consented.

3.4.6 Exclusion Criteria

The study excluded male partner who are husbands to mothers of children aged five years and below and who were consuming maternal and child wellbeing services in health facilities in Kiambu County during the time of the study but who did not consent to the study.

3.4.7 Ethical Considerations

The study sought consent from mothers attending clinics to introduce their male-partners to the study. The consent of the interviewees was also sought before interviews were conducted. Each respondent was interviewed separately in privacy to ensure their confidentiality. They were not required to reveal their identity as part of the interview to assure them of confidentiality. The respondents were further assured that the information they provided would be used only for the purpose of the study.

3.5 Sample Size Determination

A sample is a subset of population to be studied and it is a true representative of the entire population to be studied (Patton, 2002). Similarly sampling is the selection of a subset of individuals from within a population to yield some knowledge about the whole population, especially for the purpose of making predictions based on statistical inference (Scott and Wild, 1986). Its main advantages are cost, speed, accuracy and quality of the data (Ader *et al.*, 2008). A good sample should be a true representative of the population, result in small sampling error, be viable, economical and systematic, whose results can be applied to a universe with a reasonable level of confidence (Kothari, 2004).

The sample size for this study was calculated using the Fishers statistical formula for calculation of sample size from a finite population (Fisher, 1998).

$$n=Z^2pq/d^2$$

Where n is the desired sample size of the target population,

Z=the standard normal deviate set at 1.96 which correspond to the 95% confidence level

p= is the proportion of female partner likely to be accompanied by their male partner to the health facilities for post-natal services was calculated at 15% (WHO/ICASA, 2010).

q= was set at 0.85 (1-1.5)

d= is the degree of accuracy or of freedom / sampling error set at 0.05.

Therefore;

$n= (1.96)^2\ pq/d^2$

$n= (3.841)\ (.15)(.85)/.0025$

$n=195$

Thus at 95 per cent confidence level, the sample size *n* was equivalent to 195.

In qualitative research, especially where purposive sampling has been used, the goal is to select cases that are information rich with regard to the purpose of the study (Creech, 2011). It is for this reason that a total of 195 male partners out of the target population of 312 were picked to represent others who had similar characteristics.

3.6 Sampling Procedure for Respondents

Free sampling technique was used to identify mothers as they came for post natal services at the level four and five HFs at the selected five sub-Counties. The mothers were requested to introduce their male-partners to the study through use of the snowballing technique. The consenting mothers introduced their male-partner whose consent was also sought through a phone call. This was done in until the desired sample sizes per sub-County were attained. A total of one hundred and ninety five male partners who consented to the study were picked and included (Table 3. 3.2).

Table 3: 3.2 Sampling Procedures for Study Respondents

Sampling method	**Sampling procedure**
Free sampling	Free sampling technique was used to pick mothers to children aged five years and below from the MCW sections of the health facilities. They were introduced to the study and requested to introduce their male partner.
Purposive sampling	After the consent of their female partner was sought, male partner's own consent was sought to include them into the study. This was meant to enable the study pick only male partner whose female partner were consuming MCW services at the HFs in Kiambu County at the time of the study.
Proportionate quota Sampling	Was used in picking the required number of respondents from each sub-County in relation to number of women consuming MCW services at the levels four and five HFs

Source: Author, 2015

3.7 Sample Distribution

Proportional quota procedure was used to apportion the total one hundred and ninety five male partner participants into the five sub-Counties and the level four and five health facilities .This was done to take care of variance in population sizes of mothers nursing the under fives in each sub-County and the various HFs. Health facilities for inclusion in the study were selected purposively to include only those offering maternal and child wellbeing services. The number of participants per health facility was apportioned through proportional quota sampling (Table 4.3.3).

Table 4: 3.3 Sample distribution within the sub Counties

Sub-County	Target population	Sample Size
Gatundu	46	28
Thika	77	46
Kiambu	51	30
Limuru	61	36
Ruiru	93	55
Total	328	195

Source: KNDS, 2009

3.8 Research Design

Research design' is how data collection and analysis are structured in order to meet the research objectives through empirical evidence (Chandran, 2004).According to Cooper and Schindler (2011) research design is the plan and structure of investigation so conceived as to obtain answers to research questions. According to Kothari (2014),

a research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose (Kothari, 2014).The current study adopted an analytical cross-sectional design. Data on level of male partner participation in MCW programmes and on presumed predictor variables was collected to help determine whether there existed a significant relationship between the two. Data were collected from purposively selected male partner in the selected sub-Counties within the same time. The analytical design established causal inferences about hypothesised relationships between male partner level of participation (dependent variable) and the presumed explanatory variables. It answered questions on why and how about the problem of study. It helped to identify factors that had significant relationships with male partner's low level of participation in MCW programmes in Kiambu County and which could be implied for the same. This was done through gathering of quantifiable information that was used to make statistical inferences about the targeted population through analysis. The analytical design identified and quantified associations between the dependent variable and the explanatory variables. This helped in testing of the study hypotheses and in determining if the relationships between variables were likely to have occurred by chance. This research design provided a systematic description of the factors which was factual and as accurate as possible. The collected data were useful in suggesting possible reasons for particular relationships between the variables. Analytical research is used to obtain information concerning the current status of the phenomena without changing the environment (Sekaran, 2006).This study involved description of male partner behaviour in participating in MCW programmes as well as in creating a relationship between the behaviour and factors likely to influence it. The design was

important in examining effects of various independent variables (economic factors, demographic factors, and Socio-cultural factors, effects of knowledge and awareness and programmatic factors) on the dependent variable (male partner's level of participation).

3.9 Data Collection Using Questionnaire

A six-part structured questionnaire (see *Appendix 1*) was designed to elicit information about male partner's level of participation in maternal and child wellbeing programmes in Kiambu County. The first section of the instrument was used to collect data on the male partner's level of participation in maternal and child wellbeing programmes (dependent variable).The second set of questions was used to collect data on the male partner's demographic characteristics; the third on male partner's economic status and his livelihood activities ; the fourth on his knowledge and awareness in maternal and child wellbeing programmes; the fifth on socio-cultural factors and the sixth set on programme related factors.

3.9.1 Reliability Test for the questionnaire

Reliability refers to the extent to which a measuring instrument contains variable errors that appear inconsistently from observation to observation during any one measurement attempt or that vary each time a given unit is measured by the same instrument (Sekaran, 2006).The pilot study tested the interview guide's reliability in Juja sub-County of Kiambu County but the sub-County was not included in the study area in the main study. A total of 30 study interviews were conducted to collect data from male partners. Reliability tests were conducted using SPSS version 20.

Reliability results for the interview guide attracted a cronbach alpha statistics of 0.779 as revealed in Table 5. 3.4.A cronbach alpha above 0.7 but less than 0.9 is good and indicates that a data collection instrument is reliable (Sekaran, 2006).

Table 5: 3.4 Reliability test for interview guide

Nature of participation	Cronbach alpha if item deleted	Comment
Financial- ANC	0.767	Reliable
Financial-delivery	0.772	Reliable
Financial- VCT	0.758	Reliable
Financial – postnatal	0.773	Reliable
Emotional-participation	0.748	Reliable
Physical –ANC	0.743	Reliable
Physical-VCT	0.757	Reliable
Physical- delivery	0.749	Reliable
Physical-post natal clinics	0.751	Reliable

Source: Author, 2015

3.9.2 Respondents' Response Rate

Figure 4.1 shows that a sample of 195 male partners was initially recruited into the study after their consent was sought through their female partner. A total of 23 of the initial respondents declined participation in data collection on grounds that the information needed for the study was feminine and women could answer them without involving men. A further 30 respondents were excluded from the study due to incomplete data. Some of them explained that they were busy and could not get more time for interviews while others declined to pick their mobile phones. The researcher therefore lost contact with them. Therefore, a total of 142 of the anticipated 195

despondences were included in the data analysis representing a return rate of 72%. According to Mugenda and Mugenda (2003), a response rate of 50% or more is adequate for data analysis. They also asserted that return rates of 50% are acceptable to analyse and publish, 60% is good and 70% is very good. Based on the above reference, data were analysed (Table 6.3.5).

Table 6 : 3. 5 The respondents' response rate per sub-county

Sub-county	Sample size (Level 4)	Response Rate	Total
Gatundu North	N=29	72%	21
Thika	N=49	75%	37
Kiambu	N=44	73%	32
Limuru	N=39	70%	27
Ruiru	N=34	73%	25
Grand total	195	73%	142

Source: Author 2015

3.10 Tests for Linear Regression Assumptions

3.10.1 Heteroscedasticity Test for the Error Term Distribution within the Data

Heteroscedasticity is a situation where the variability of a variable is unequal across the range of values of a second variable that predicts it.In this study Heteroscedasticity was tested by performing the Breusch-pagan / Koenker test (Table 7.3.6). Breusch-Pagan / Koenker test the null hypothesis that the error variances are all equal versus the alternative that the error variances are a multiplicative function of

one or more variables. The test revealed Homoscedasticity for the data since the value of significance was greater than 0.05.

Table 7 : 3.6 Heteroscedasticity test for the error term distribution within the data

Test	Chi-square Value	Sig
Breusch-Pagan	4.807	0.44
	5.029	0.412

Source: Author, 2015

3.10.2 Test for Multicollinearity for the Predictor Variables

Multicollinearity is a situation where two or more predictor variables in a multiple logistic regression model are highly correlated. It affects calculations regarding individual predictor variables in relation to the effect it has on the outcome variable. In this study the variance inflation factor (VIF) and the Tolerance were used to test multicollinearity among the independent variables. Tolerance measures the impact of collinearity among the variables in a regression model and is calculated from 0-1 with a tolerance value close to 1 showing little multicollinearity, while a value close to 0 indicates presence of multicollinearity. A VIF statistic above 5 is an indicator of multicollinearity and should be removed from regression models. For this study, the test indicated non collinearity of the predictor variables because the VIF value was between 1.208 and 1.043 (Table 8.3.7) which shows absence of multicollinearity.

Table 8 : 3.7 Test for Multicollinearity for the predictor variables

Variables	Collinearity Statistics	
	Tolerance	VIF
Demographic characteristics	.880	1.136
Economic factors	.915	1.093
Knowledge and awareness	.828	1.208
social cultural factors	.849	1.178
program related factors	.959	1.043

Source: Author, 2015

3.10.3 Test of Normality for the Linear Regression Model

The normality test was used to determine if a data set is well-modeled by a normal distribution. It helped to measure the goodness of fit of a normal model to the data. The fit was good meaning the data was well modeled by a normal distribution. The data was tested against the null hypothesis of normal distribution. The tests reject the null hypothesis of normality when the p-value is less than or equal to 0.05, illustrating that the standardized residuals were significantly normally distributed. In this study the Shapiro-Wilk tests revealed significance levels ranging between 0.312 and 0.468 (Table 9.3.8) which were greater than 0.05 meaning the data was normally distribution and can be well modeled by linear regression model.

Table 9 : 3.8 Test of normality for the linear regression model

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Demographic characteristics	.044	142	.200*	.971	142	.312
Economic factors	.046	142	.200*	.988	142	.317
Knowledge and awareness	.045	142	.200*	.989	142	.320
social cultural factors	.047	142	.200*	.984	142	.315
program related factors	.047	142	.200*	.991	142	.468

*. This is a lower bound of the true significance. a. Lilliefors Significance Correction

3.10.4 Test for Homogeneity of Variances

Levene's test was used to determine whether the study samples had equal variances. If the Levene's test result is statistically significant (the result has a p <=.05), it means that the data do not show homogeneity of variance. If the Levene's test is not significant (p > .05) then you can assume that the data show homogeneity of variance. The test (Table 10.3.9) indicated high homogeneity of the variances. For this the significance values were all higher than 0.05 meaning the data had high homogeneity.

Table 10 : 3.9 Test for Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Demographic characteristics	0.130	1	140	.719
Economic factors	0.471	1	140	.493
Knowledge and awareness	0.487	1	140	.486
Social cultural factors	0.174	1	140	.677
Program related factors	0.847	1	140	.359

Source: Author, 2015

3.11 Data Types

In this study, both primary and secondary data were collected as described in the sections that follow. Primary data were largely obtained from primary sources through interviewing respondents from five selected sub-counties (Figure 3.1). Data were collected from 142 respondents using interview guides (see *Appendix I*). Secondary data were collected from reviewed literature from all available relevant sources from internet as well as text materials. The reviewed information was used in the results

analysis to compare, supplement, complement or enrich primary data collected through interview guides.

3.12 Data Collection Techniques

Primary data were collected from 142 male partners through structured interview guides. Secondary data were collected through documentary review. Data on Kiambu County population size and composition were obtained from the Kenya National Bureau of Statistics (KNBS), specifically the 2009 Kenya Population and Housing Census and analytical reports of 2010. This provided data on the population size, female/male ratios, age cohorts; population growth rate and fertility rate. Data on health characteristics of the population were obtained from recent publications from Kenya Demographic Health Surveys (KDHS, 2010 & 2014). Data on HIV and AIDS national prevalence rates were obtained from the available reports from the National Aids Control Council (NACC, 2014) and the National AIDS and STI Control Programme (NASCOP, 2013)

3.13 Methods used to Analyse the Data

Data analysis is a practice in which raw data are ordered and organized so that useful information can be extracted from them (Cohein *et al*., 2003). Before analysis, data cleaning was done. This mostly involved the '*know and don't know*, '*agree and don't agree*' responses. The analysis was done using Statistical Package for Social Sciences software (SPSS version 20). The descriptive statistics used included the frequencies and percentages of all variables (Kothari, 2004). Further analysis was done which included running cross-tabulations of key variables and compiling important tables.

The conceptual framework shown in Figure 2.1 illustrates the direction of interaction between independent and the dependent variable. The conceptual framework proposes that the independent variables influence the dependent variable. In order to establish if there exists a relationship between level of male partner participation (dependent variable) and the predictor variables descriptive statistics were used to determine frequencies and percentages of the data distribution. The data was further subjected to bi-variate cross-tabulation to determine relationships that existed between various predictor variables and the outcome variable. In order to lay a firm base for policy recommendations, there was need to adopt other methods for further analysis.

3.13. 1 Chi square (χ^2) Test of Independence

The study used the *Chi-square* to test the statistical significance of the relationship between the variables. The test of independence was used to establish whether the various presumed predictor variables significantly influenced the dependent variable. For the purpose of this study Chi square (χ^2) test was applied to ascertain if or not, a significance relationship existed between male partner's demographic characteristics, their economic status and livelihood activities, their level of knowledge and awareness in MCW programmes, socio-cultural factors, current MCW programme policies and their implementation versus their level of participation in the programmes in Kiambu County.

The idea behind statistical significance test was to pursue a reasonable inference that conclusions drawn from the sample of observations would hold true of the population from which this sample was drawn. It was used on comparisons between the observed cell frequencies of cross-tabulation with frequencies that would be expected if null

hypothesis of no relationship/ of statistical independence were in fact true. The rejection of H_0 by means of *Chi-square*, however, only establishes existence of a statistical association: it does not measure the strength of such association.

If two variables *X* and *Y* are statistically independent, the formula for the expected frequency in rows i and column *j* is:

$f_{ij} = \frac{(f_i)\,(f_j)}{N} = \frac{\text{(row total) (column total)}}{\text{N=Grand total}}$ = Expected value of each cell

Where f_{ij}=the expected frequency of cell in the i^{th} row and the j^{th}column;

fij=the total in the i^{th} row and the j^{th}column;

f^i=the total in the i^{th} row marginal;

f^j=the total in the j^{th} column marginal;

N=the grand totals or sample size for the entire table.

If $f_{ij}$is the expected frequency under the null hypothesis and $f_{ij}$is the observed frequency for the cell, the value of the statistic for the table if found by the formula

$\chi^2 = \Sigma\Sigma\ f_i\text{-}f_{ij}Y$

$\chi^2 = \Sigma\Sigma\,(f_{ij}\text{-}f_{ij})^2$

Equation (4 gives the value where the row and the column intersect.

The larger the value, the greater the relative discrepancy between observed and expected frequencies. Degree of freedom is the number of values free to vary or potential for cell entries to vary freely given a fixed set of marginal totals for χ^2

$df=(R-1)\ (C-1)$

The statistic is the product of the number of the rows, less 1 multiplied by the number of columns, less 1 or amount of choice in sampling distribution or space. In equation (4), χ^2 values are always non negative, they vary in value from zero to plus infinity; χ^2values which have the greatest likelihood of being observed is in likelihood of its degree of freedom.

3.13.2 Logistic Regression Analysis

Logistic regression analytical technique was used in this study to help understand the inter relationships among selected variables. It helped to identify the linear combination between independent variables used collectively to predict the dependent variable. It helped the study to explain how typical value of the dependent variable, changes when any one of the independent variables vary while the others are held constant. The relationship is expressed in the form of an equation connecting the response/ the dependent variable y, and the independent variables x_1 x_2 x_3……x_n.

Binary logistic regression model was applied on the analysed data to test for significance of the relationships between independent and dependent variables, where the latter was based on equation below

$$\gamma=\alpha+\beta_1x_1+\beta_2x_2+\beta_3x_3+\beta_4x_4+\beta_5x_5+\varepsilon$$

Where:

γ islevel of male partner participation in maternal and child wellbeing programmes in Kiambu County

α is a constant (intercept)

β is the slope (gradient) showing rate at which dependent variable changes for each unit chance of the explanatory/predictor variable. X_1 denote the demographic characteristics, $X_2$are economics factors, X_3 denotes knowledge and awareness, X_4 are the socio-cultural factors whilst X_5 are programme related factors and ε is the error term.

3.13.3 Pearson's Product Moment Correlation Coefficient (R)

The correlation coefficient was used to determine the type of relationship between various predictor variables and the dependent variable. The correlation coefficient explains how different entities vary together. The coefficient is a quantity that gives the quality of a least square fitting to the original data. In this study the Pearson's correlation coefficient was determined to indicate the type of relationship between male partner's level of participation in MCW programmes in Kiambu County and the possible predictor variables.

Table 11: 3 .10 Summary of study objectives, data collection and methods of analysis

Objectives	Data information collected	Methods of data analysis
If male partner's demographic characteristics were a significant determinants of male partner participation	-age -level of education -length of stay in the current relationship -ordinal position of the child/pregnancy	-Descriptive statistics -Bi- variate cross-tabulations -Chi-square test -Pearson's correlation r - Nagelkerke R^2 -Logistic regression
If male partner's economic status and livelihood activities had a significant influence on his level of participation in MCW	-Income levels -livelihood activities	- Descriptive statistics -Bi- variate cross-tabulations -Chi-square test -Pearson's correlation r - Nagelkerke R^2 -Logistic regression
If male partner's knowledge and awareness in the programmes was a significant determinant of their level of participation	-aware of the MCW programmes and the role of male partner	- Descriptive statistics -Bi- variate cross-tabulations -Chi-square test -Pearson's correlation r - Nagelkerke R^2 -Logistic regression
If socio-cultural factors had a significant influence on male partner's level of participation	-Influence of cultural norms on male behaviour of participation in MCW programmes	- Descriptive statistics -Bi- variate cross-tabulations -Chi-square test -Pearson's correlation r - Nagelkerke R^2 -Logistic regression
If programme related factors were a significant determinant of male partner's level of participation	-effects of male partner's perception towards the current MCW programmes	- Descriptive statistics -Bi- variate cross-tabulations -Chi-square test -Pearson's correlation r -Nagelkerke R^2 -Logistic regression

Source: Author 2015

3.14 Determining Male Partner's Level of Participation in MCW Programmes

In this study, male partner's level of participation in maternal and child wellbeing programmes was rated into high or low level for analyses. Participation referred to the male partner's support of their female partner in seeking maternal and child wellbeing

services offered through the programmes. The support could be emotional, physical or financial. These services are but not limited to ANC, VCT, and uptake of ARVs where applicable, delivery at the health facility, post natal clinics and choice of infant's appropriate feeding. This was assessed by measuring the following.

3.14.1 Physical Participation

This refers to the type of participation where the male partner accompanies the female partner to the health facility to seek maternal and child wellbeing services. The participation was ganged into high and low. The following variables were used to measure the level of physical participation;

i) Attending ANC with the female partner

ii) Attending VCT together

iii) Escorting the female partner for delivery at the HF

iv) Escorting her and the infant for post natal clinics

v) Choosing appropriate feeding for the mother and the infant

To facilitate analysis of the collected data, a score of 0 to 2 was rated as a low level of physical participation in the programmes while a score of 3 and above was rated as a high level of participation.

3.14.2 Emotional Participation

The study sought to find out if the male partner supported his female partner emotionally by showing interest and discussing maternal and child wellbeing interventions with her. It also included the male partner's interest to find out what his

roles in the programmes are as well as encouraging the partner to consume the services. The participation was ganged into high and low participation. The following variables were used to measure the level of emotional participation;

i) Discussing with the female partner and participating in making decisions

ii) Discussing ANC with the partner, know when it should be attended and encourage her to attend

iii) Have knowledge of maternal and child wellbeing programmes and their importance

iv) Discuss with the female partner and choose to deliver at the health facility

3.14.3 Financial Participation

The study also sought to establish if male partner provided partial or total financial support to the female partner to enable her access and consume maternal and child wellbeing services. The following variables were used to measure the male partner's level of financial participation;

i) Provide money to pay for transport to the health facility for ANC as well as pay for the service

ii) Provide money to pay for transport to the health facility for VCT as well as pay for the service

iii) Provide for transport to the health facility for delivery and after delivery as well as pay for the service

iv) Provide for transport to the health facility for post natal services as well as pay for the service

To facilitate analysis of the collected data, score of 0 to 2 was rated as a low level of financial participation in the programmes while a score of 3 and above was rated as a high level of participation. The study assumed that low male partner participation in the programmes would exhibit low scores of physical, emotional and financial support for the female partner in attending and consuming maternal and child wellbeing services. The study also assumed that high level of male partner participation would exhibit high scores of female partner's in attending and consuming the services.

Therefore, to achieve these objectives the study used Chi-square to seek association between level of male partner participation in the programmes (dependent variable) and the possible predictor variables that included demographic characteristics of the male partner (x_1), his economic factors (x_2), knowledge and awareness (x_3), socio-cultural factors (x_4) and programme related factors (x_5).The study tried to establish whether the relationship was consistently negative as expected in the hypothesis. The significance of the coefficient was also verified by checking the calculated p value against the convectional p value of 0.05 .A p value of less than 0.05 indicated that the independent variable was a significant determinant of male partner's level of participation.

The qualitative responses were analysed along some pre-determined themes. For instance, answers to qualitative questions such as "*What are the causes of low male partner's participation in maternal and child wellbeing programmes?"* yield answers such as like, health facilities are designed for women and children, the health facilities

are located far from my home, one takes many hours at the health facility etc, which were grouped as programmatic factors. Answers such as one below were grouped as socio-cultural factors.

"it is the work of women to go to the health facility, I would be ridiculed by other men if I accompany her to clinic, and female partner should seek consent from male partner before going for VCT"

CHAPTER FOUR: RESEARCH FINDINGS

4.1 Introduction

This chapter presents the empirical findings and results of the application of the variables using techniques mentioned in chapter three. Specifically, data analysis was based on specific objectives where patterns were investigated, interpreted and implications drawn on them.

The findings of the study are presented under the following sub-headings: respondents' response rate, reliability of the data collection instrument, tests of error distribution, normality test for the dependent variable(practice/level of participation), nature of male partner participation, influence of predictor variables (male partner's demographic characteristics, economic status and activities, knowledge and awareness in maternal and child wellbeing programmes and his role in them, effects of social-cultural factors and the effects of the existing maternal and child wellbeing programmes) on the outcome variable.

4.2 Descriptive statistics for predictor variables

4.2.1 Descriptive Statistics for Demographic Characteristics of the Respondents

This part of the report presents results of descriptive statistics on demographic characteristics of the respondents. The demographic characteristics covered by the study included; age of the respondent, his level of education, length of stay with the current relationship and the ordinal position of the child or the pregnancy. The results present the respondents' responses per individual questions in frequencies and percentages.

4.2.1.1 Demographic Age

Demographic age is an important determinant of a persons' behaviour, level of mobility as well his perception of life issues especially due to life experiences. It was important to find out if respondents belonging to different age cohorts reported varied levels of participation in the programmes. Findings revealed on Table 12.4.1 show that the age cohort with the highest representation 66 (46.5%) was between 30 – 39 years of age, followed by 40-49 cohort with 47(33.1%) and the least was between was 20-29 years representing 29(20.4%) of the respondents. The median age was 32 years with inter-quartile range of 28-37.The findings show that all male partners who participated in the survey were aged between 20 and 49 years. The results are presented in Table 12.4.1.

Table 12: 4.1 Age distribution of the respondents

Age cohort	Frequency	Percent
20 - 29 YEARS	29	20.4
30 - 39 YEARS	66	46.5
40 - 49 YEARS	47	33.1
Total	142	100.0

Source: Author, 2015

4.2.1.2 Respondents' Education Characteristics.

Level of education of an individual is an important factor in his ability to acquire information from the mass media both print and electronic. It was important for this study therefore to determine if variance in levels of education among the respondents led to variation in their behaviour of participating in the MCW programmes. The

collected data were summarized as shown in Table 13.4.2.The findings reveal that only one respondent had not attended formal education representing 1.1% of the total respondents. Those who had attained primary school level of education and below were 28 (19.7%),secondary school education 69 (48.6%) while those who had completed college or university level of education were 44 representing 31% of the respondents.

Table 13: 4.2 Education characteristics of the respondents

Level of education		Frequency	Percent
	Never attended formal school	1	1.1
	Completed primary school	28	19.7
	Completed secondary school	69	48.6
	Completed college/university	44	31.0
	Total	142	100.0

Source: Author, 2015

The study sought to establish the respondents' length of stay in the current relationship. This data assisted the study find out if respondents with varied lengths of stay in their relationships would record varied levels of participation in the programmes. The findings displayed in Table 14.4.3 show that majority of male partner 69(48.6%) who participated in the study had been in the current relationship for more than ten while the least 32(22.5%) had been in the relationship for less than five years. The study found that respondents who had been in the relation for duration of between five and ten years were 41(28.9%).

Table 14: 4.3 Respondents' length of stay in the current relationship

Length of stay in relationship		Frequency	Percent
	LESS THAN FIVE YEARS	32	22.5
	BETWEEN 5 - 10 YEARS	41	28.9
	MORE THAN 10 YEARS	69	48.6
	Total	142	100.0

Source: Author, 2015

4.2.1.4 The Ordinal Position of the Infant

The study sought to establish ordinal positions of the infants or the pregnancies for which the female partner sought MCW services. The study realised that 38 of the respondents representing (26.8%) of the respondents had their female partner seeking MCW services for the first born or the first pregnancy, 76 (53.5%) for second, 23 (16.2%) while the remaining 5 (3.52%) sought services for four ordinal position. Effect of ordinal position of a child on male partner's level of participation was determined by checking it against his level of participation. This data was used by the researcher to establish the relationship between ordinal positions and male partner's levels of participation. The findings are presented on Table 15.4.4

Table 15: 4.4 Ordinal position of the child

Ordinal position	Frequencies	Percent
FIRST BORN	38	26.8
SECOND BORN	76	53.5
THIRD BORN	23	16.2
OTHERS	5	3.5
Total	142	100.0

Source: Author 2015

4.2.2 Descriptive Statistics for Economic Factors and Livelihood Activities

4.2.2.1 Male Partner's Economic Characteristics

A person's income level may influence his ability to access and purchase Healthcare services. This study required information on male partner's economic status by indicating their monthly income in thousands of Kenya shillings. This information helped the study to establish whether different respondents with varied levels of income would record similar levels of participation in the programmes. Data presented on Table 16.4.5 show that 46 of the respondents representing 32.4% earned a monthly income of Kenya shillings 10,000 and below, 47 (33.1%) earned between ten and twenty thousand, 27 (19%) earned between twenty and thirty thousand while the remaining 22(15.5%) earned thirty thousand and above.

Table 16 : 4.5 Respondents' levels of income

	Frequency	Percent
10,000 and below	46	32.4
10,000 - 20,000	47	33.1
20,000 - 30,000	27	19
30,000 and above	22	15.5
Total	142	100.0

Source: Author, 2015

4.2.2.2. Male Partner Livelihood Activities

An individual's occupation determines the amount of time he has at his disposal to participate in other out of office activities. Varied occupations of male partner would mean that some have more free time off duty to visit the HFs with their female partners than others. This would determine the freedom of mobility of the respondents during working hours and would limit physical participation of some respondents. The study respondents were asked to indicate the nature of livelihood activities they were involved in and explain how this affected their level of physical attendance to the HFs. The information would aid the researcher determine if the male partner engaged in wage employment and those in self-employment would have varied levels of participation (Table 17.4.6).

Table 17: 4.6 Nature of male partner's livelihood activity

Nature of livelihood activity	Frequency	Percent
Wage employment/office work	82	57.7
Self employment	60	42.3
Total	142	100.0

Source: Author, 2015

4.2.3 Descriptive Statistics on Male Partner's Knowledge and Awareness in MCW Programmes

4.2.3.1 Knowledge on meaning and Importance of the MCW Programmes

To achieve objective number three of this study, it was important to establish male-partner's knowledge on meaning and importance of MCW programmes. In order to gauge the male partner's level of knowledge the researcher asked the respondents questions on the meaning and importance of the MCW programmes. A question to this effect was then posed to the respondents and the following responses were obtained as portrayed in Table 18.4.7 indicate that 75(52.8%) of the respondents had the correct knowledge of the MCW programmes while 67(47.2%) did not portray the correct knowledge.

Table 18: 4.7 Respondents' knowledge on meaning and importance of the maternal and child-wellbeing programmes

Knowledge	Frequency	Percent
Have Knowledge	75	52.8
do not have Knowledge	67	47.2
Total	142	100.0

Source: Author, 2015

4.2.3.2 Male Partner's Knowledge that the Female Partner was Consuming MCW Services

The study sought to find out if the respondents were aware that their female partners were consuming services at the HFs. This would help the study determine whether

varied knowledge levels of the respondents would cause variability in their level of participation in the programmes. A question to that effect was asked and the following responses were received from the respondents. The findings of the study presented in Table 19.4.8 show that 61(43%) of the respondents were aware that their female partner were consuming MCW services while majority 81(57%) were not aware.

Table 19: 4.8 Respondents' awareness that their female partner and the infant were consuming MCW services at the health facilities

Knowledge	Frequency	Percent
Aware	61	43
Not aware	81	57
Total	142	100.0

Source: Author, 2015

4.2.3.3 Male Partner's Knowledge on When the Female Partner Should Attend ANC

It is advisable that pregnant women attend ante-natal clinics earliest in the pregnancy during the first trimester. This enables healthcare providers detect any abnormalities early in the pregnancy and initiate mitigation measures. The study assumed that if the male partner had the correct knowledge they would accompany, encourage or finance their female partner to attend antenatal clinics and consume MCW services early in the pregnancy. In order to gauge the respondents' level of knowledge on the same, a question was posed to the respondents and the following results were obtained as depicted in Table 20.4.9.Majority of the respondents 91(64.08%) had the correct knowledge on the best time to first attend ANC clinics while 51(35.92%) did not have the correct knowledge.

Table 20: 4.9 Respondents' knowledge on when the female partner should attend ANC

Knowledge	Frequency	Percent
Knows	91	64.08
Don't Know	51	35.92
Total	142	100.0

Source: Author, 2015

4.2.3.4 Male Partner's Knowledge on Role of Male Partner in MCW Programmes

The study presumed that male partner's awareness on their role in the MCW programmes could lead to increase in their level of participation in the programmes. The study findings indicated that majority of the respondents 81(57%) were aware of their role in the programmes while 61(43%) were not aware. The findings are presented in Table 21.4.10.

Table 21 : 4.10 Knowledge on role of male partner

Knowledge		frequency	Percent
	Know	84	59.2
	not Know	58	40.8
	Total	142	100.0

Source: Author, 2015

4.2.3.5 Knowledge that services were offered at the HFs and that the female partner was consuming the services

The study presumed that for male partner to be supportive of their female partner's uptake and adherence to the MCW programmes, they needed awareness that the

services were offered at the health facility where the female partner attends clinic. The respondents were requested to indicate whether they knew MCW services were offered at health facility where their partners attended clinics. Results presented on Table 22.4.11 show that majority of the respondents 91(64.08%) knew that their female partner was consuming MCW services at the HFs. On the other hand 51(35.91%) were not aware that their partners were consuming the services.

Table 22: 4.11 Respondents' knowledge that their female partner were consuming

Knowledge	Frequency	Percent
Knows	91	64.08
Don't Know	51	35.92
Total	142	100.0

Source: Author, 2015

4.2.3.6 Respondents' Knowledge on Importance Couple VCT

The study presumed that if male partner were aware of the importance of couple VCT they accompany their female partner to the HFs for consumption of the services. The respondents were requested to indicate whether they knew why it was importance for couples to seek VCT services together. This would therefore determine their physical participation in the programmes. Results presented on Table 23.4.12 show that majority of the respondents 84(59.2) had knowledge on the importance of couple testing while 58(40.8%) did not have the knowledge.

Table 23: 4.12 Respondents' knowledge on importance of couple VCT

Knowledge	Frequency	Percent
Know	84	59.2
Don't Know	58	40.8
Total	142	100.0

Source: Author, 2015

4.2.3.7 Respondents' Knowledge on Couple Discordance in HIV Status

Since the emergence of HIV and AIDS and the subsequent mother to child transmission of HIV during pregnancy and breast-feeding, couple VCT became an important part of MCW services. Couple discordance in HIV sero-status creates the need for couple testing. Lack of knowledge in couple discordance in HIV sero-status would lead to perception that a partners' HIV status are a proxy of the other's. The study sought to establish male partners' knowledge on the same and to determine if this influenced their behaviour in accompanying the female partner to the HF for VCT. Male partner were further requested to explain if they were aware that one partner could be HIV positive while the other is HIV negative. The question received the following responses as depicted in Table 24.4.13.The results show that most of the respondents 80(56.3%) had the correct knowledge on couple discordance in HIV sero-status. The findings also reveal that 62(43.7%) of the respondents did not have the correct knowledge.

24: 4.13 Respondents' knowledge on couple discordance in HIV status

Knowledge	Frequency	Percent
Know	80	56.3
Don't Know	62	43.7
Total	142	100.0

Source: Author, 2015

4.2.3.8 Respondents' Knowledge on Importance of Delivery at the HF

The study presumed that male partners' knowledge on the importance of delivery at the HF would increase their support for their female partners to consume the service. The study sought to find out the respondents' knowledge on the importance of delivery at the health facility in preventing MTCT of HIV. The following responses were received from the respondents as depicted on Table 25.4.14.The findings indicated that 72(50.7%) respondents had knowledge on importance of child delivery at the HFs as opposed to out of the facility delivery. The findings also show that 70(49.3%) of the respondents did not have adequate knowledge on importance of delivery at the HF.

Table 25: 4.14 Respondents' knowledge on importance of delivery at the HF

Knowledge	frequency	Percent
Know	72	50.7
Don't Know	70	49.3
Total	142	100.0

Source: Author 2015

4.2.3.9 Respondents' Knowledge on Importance of Appropriate Feeding for Infants and the Mother

The study presumed that male partner knowledge on appropriate feeding for infants and the mothers who led to increased support from the male partner in providing the feeding. Therefore there would be variation in the providing appropriate feeding between male partner with the knowledge and those without. A question to this effect was asked to the respondents. This would enable the researcher determine effects of the knowledge on respondents' behaviour of participation in providing or supporting the female partner provide appropriate feeding for the infant and the mother. The findings (Table 26.4.15) revealed a wide variation in respondents' level of knowledge on importance of appropriate feeding. Majority of the respondents 77(54.2%) did not have adequate knowledge on the need for appropriate feeding for infants and the mothers. The remaining 65(45.8%) of the respondents had knowledge on importance of appropriate feeding for infants and mothers.

Table 26: 4.15 Respondents' knowledge on importance of appropriate feeding for infants and the mother

Male partner's knowledge		Frequency	Percent
	Know	65	45.8
	Don't Know	77	54.2
	Total	142	100.0

Source: Author, 2015

4.2.4 Descriptive Statistics for Socio-Cultural Factors

The effects of socio-cultural factors were captured by looking at them as governors of human behaviour in a community. A community's culture defines norms that guide gender relations and human behaviour. It is for this reason that the study sought to determine if these factors had a significant influence on male partner participation in Kiambu County. Respondents were asked to rate different statements according to their influence on male partner's level of participation. Nine structured socio-cultural statements influencing male partner's participation in maternal and child wellbeing programmes were incorporated with a scale ranging from strongly agree to strongly disagree. For ease of analysis, Strongly Agree and Agree were combined as Agree while Disagree and Strongly Disagree were combined as Disagree. The respondents' percentages of agreement and disagreement with the various MCW programmes have been worked out.

4.2.4.1 If Female Partner can be Tested for HIV without Male Partner's Consent

The study sought to find out the respondents' perception about female partners going for VCT without seeking their male partner's consent. This would aid the researcher in determining whether their perception influenced their level of participation in the programmes. The study findings presented in Table 27.4.16 indicated that most of the respondents felt that female partners should seek their male partner's consent before consuming the MCW services. On the contrary 64(45.1%) of the respondents were of the opinion that female partners should consume the services even without seeking their male partner's consent.

Table 27: 4.16 Respondents' perception that female partner can be tested without male partner's consent

Perception	Frequency	Percent
Disagree	78	54.9
Agree	64	45.1
Total	142	100

Source .Author:2015

4.2.4.2 Male Partner Perception of Accompanying their Female Partner to the HF for MCW Services

Participants' perception about accompanying their female partner to the HF for maternal and child wellbeing services were looked at as a possible determinant of their physical participation. This would assist the researcher in determining whether male partners with varied perceptions would register similar levels of participation. The study findings presented in Table 28.4.17 indicate that majority 102(71.8%) of the respondents were of the opinion that male partner should not accompany their female partners to the HFs for MCW services. The study also realised that 40(28.2%) of the respondents agreed with the statement that male partner should accompany their female partners to the HFs for MCW services.

Table 28: 4.17 Male partner's perception that male partner should accompany their female partner to the HF for MCW services

Perception	Frequency	Percent
Agree	40	28.2
Disagree	102	71.8
Total	142	100.0

Source: Author, 2015

4.2.4.3 Male Partner Perception towards Male Partner Who Accompany their Female Partner to the HF for MCW Services

The study sought to know the respondents perception towards male partner who accompany their female partners to the health facilities for MCW services. The study's findings presented in Table 29.4.18 show that majority of the respondents 93(65.5%) agreed with the statement that male partner who accompanied their female partners to the HF for MCW services were weak or bewitched. Another 49(34.5%) of the respondents disagreed with the statement.

Table 29 : 4.18 Respondents' perception that male partner's who accompany their female partners to the HF for MCW services are bewitched

Perception	Frequency	Percent
Disagree	49	34.5
Agree	93	65.5
Total	142	100.0

Source: Author, 2015

4.2.4.4 Male–Partners' Perception on Discussing MCW Programmes with Female partner

In most African communities the period of pregnancy was sacred and the community members took great caution when relating to the mother to be. The unborn was regarded as a member of the community and even the ancestors were involved in protecting the pregnant mother and the foetus. Certain behaviours towards the pregnant mother were forbidden as they were believed to cause misfortunes to the unborn (WHO/UNFPA, 2014). The study sought to find out male partner's perception

on discussion of maternal and child-wellbeing issues with their female partner during pregnancy. This was meant to help the study determine if this influenced male partner's level of emotional participation in the programmes. The study findings depicted in Table 30.4.19 reveal that 84(59.2%) of the study respondents disagreed with the statement that it was at a taboo to discuss issues related to the unborn during the female partners pregnancy. The study also realised that 58(40.8%) of the respondents agreed that male partner who accompany their female partners to the HFs were weak or bewitched and that real men do not go to clinics with women.

Table 30: 4.19 Respondents' perception that it a taboo to discus pregnancy related issues while the female is pregnant

Perception	Frequency	Percent
Agree	58	40.8
Disagree	84	59.2
Total	142	100.0

Source: Author, 2015

4.2.4.5 Male –Partners' Perception on Couple Testing for HIV

The study sought to establish the respondents' perception towards couple counseling and testing for HIV as one of the MCW programmes. The study findings (Table 31.4.20) show that majority of the respondents 91(64.1%) agreed with the statement that couples should go for VCT together while the remaining 51(35.9%) of the respondents did not support the statement.

Table 31: 4.20 Respondents' perception that couples should attend VCT together

Perception	Frequency	Percent
Agree	91	64.1
Disagree	51	35.9
Total	142	100.0

Source: Author, 2015

4.2.4.6 Male Partner Perception on use of Condoms to Prevent Secondary HIV Infections during Pregnancy

Secondary HIV infections during pregnancy and breast feeding could lead to mother to child transmission of HIV during that period. There are varied causes of secondary HIV infections including couple discordance in HIV status. This can be however be prevented through measures such as condoms use. Male partner perception on use of condoms as a preventive measure could be influenced by their level of knowledge in couple HIV discordance and on effects of secondary infections during pregnancy and breast-feeding. Their perception could influence their behaviour in participating in these preventive measures. The study sought to establish if male partner's perception had a significant influence on their level of participation in the programmes. The study findings (Table 32.4.21) revealed that most of the respondents 94 (66.2%) disagreed with the statement that male partner should use preventive measures such as condoms to prevent secondary HIV infections during pregnancy. At the same time 48 (33.8%) of the respondents supported the statement.

Table 32: 4.21 Use preventive measures against HIV infections during pregnancy

Perception	Frequency	Percent
Agree	91	64.1
Disagree	51	35.9
Total	142	100.0

Source: Author, 2015

4.2.47 If MCW Programmes are Designed for Women and Children Only

As stated earlier in the study, reproductive health was traditionally perceived as a woman's domain and men were perceived to be intruding into women's affairs. This was reflected in the HFs infrastructure that tends to be accommodative to the physical needs of the females with little attention paid to the male domain. Such include sitting space and consultation rooms just to mention but a few. The study sought to establish whether the respondent's perception that MCW clinics were designed for women and children influenced their level of participation in the programmes. The study findings presented in Table 33.4.22 show that 75(52.8%) of the respondents agreed that MCW programmes were designed for women and children only while 67(47.2%) disagreed with the statement

Table 33: 4.22 Respondents' perception that MCW programmes are designed for women and children only

Perception	Frequency	Percent
Agree	75	52.8
Disagree	67	47.2

Source: Author, 2015

4.2.5 Descriptive Statistics for Programme Related Factors

The study presumed that positive perception of the programme policies and their implementation would lead to a high level of participation in the programmes and vice versa. The study sought to establish male partner's perception of the current maternal and child wellbeing programmes and their implementation. A positive perception of the programmes, their implementation and as well as healthcare infrastructure put in place to support them, would most likely lead to high level of participation. Lack of satisfaction would lead to non-support of the programmes and the sub-sequent low participation. The respondents were requested to rate the current maternal and child wellbeing programmes and their implementation. The study sought to establish whether male partners' perception of the programmes influenced their behaviour in participating in the programmes. The study also sought to find out the respondents' opinions on the best strategies towards improving the programmes' policies and implementation with an aim of boosting uptake of the services. Respondents were requested to rate different components of the MCW programmes to help determine how this influenced their behaviour in participating in maternal and child wellbeing programmes. Thirteen structured statements rating MCW programme policies and their implementation were incorporated with a scale ranging from strongly agree to strongly disagree. For ease of analysis, Strongly Agree and Agree were combined as Agree while Disagree and Strongly Disagree merged as Disagree. The respondents' percentages of agreement and disagreement with the various programmes' policies and their implementation were worked out.

4.2.5.1 Men should be provided with Men only Clinics and Attendance Times

The set up of reproductive health infrastructure overwhelmingly paid attention to the needs of the pregnant mothers and the infants. Recent call for male participation in the programmes has been necessitated by the emergence of HIV and AIDS and the subsequent mother to child transmission of HIV at various stages of pregnancy and breast-feeding. The Healthcare systems could therefore be blamed for their unpreparedness to incorporate the male partner into the service delivery in terms of infrastructure and Healthcare delivery. The traditional African culture defined male role as a family head whose position in the family was highly regarded. The women had their main role as child bearing and taking care of the young ones with little physical support from their male counterparts. These roles were defined the community's' culture which still play a major role in determining behaviour and relationships between genders in the society today. Healthcare requirement that male partner accompany their female partner to the health facilities during pre and post natal clinics is not in line with most of communities' cultures. For this study, respondents were asked if they thought men should be provided with men-only reproductive health centres as well as the time they consume the services. The researcher intended to find out if the male partners' opinion on whether men should be provided with *men only* clinics and times to consume the MCW services influenced their behaviour in participating in the MCW programmes. This would imply that they are not satisfied with sharing the Healthcare infrastructure with their female-counterparts and the infants which could influence their participation negatively. A question to that effect was posted to the respondents and the findings are displayed on Table 34.4.23. The findings show that majority of the respondents

108(76.1%) agreed with the statement that men should be provided with men only clinics while a minority 34(23.9%) did not think it necessary to provide separate clinics.

Table 34 : 4.23 Respondents' perception that men should be provided with men only clinics

Perception	Frequency	Percent
Agree	108	76.1
Disagree	34	23.9
Total	142	100.0

Source: Author, 2015

4.2.5.2 If Health-Care Providers were Welcoming to the Male Partner

Male- partners' perception on how the current MCW programmes are implemented is key in determining if they appreciate the programmes and eventually participate in them or promote their consumption. The health facilities' physical as well as social environments favoured meeting of the female gender's health needs. The society viewed reproductive health as a female domain since they became pregnant, gave birth and nursed infants. Men on the other hand are likely to be looked at as intruders and therefore little is done to bring them on board. Although recent convections and studies have shown the need for male participation, little has been done to change this attitude or modify the Healthcare system to accommodate the male partner. Healthcare providers have at times been unwelcoming to the male partners. The respondents were requested to indicate their perception on whether the current maternal and child wellbeing programmes was welcoming to male gender. The

researcher intended to determine whether male partners' perception of the programmes influenced their level of participation. The study gathered the following responses as depicted in Table 35.4.24.Majority of the respondents 89(62.7%) perceived the MCW programmes as not welcoming to the male gender and only a small percent 53 (37.3%) said that the programmes were welcoming.

Table 35: 4.24 Respondents' perception that Healthcare providers were not welcoming to the male partner

Perception	Frequency	Percent
Agree	89	62.7
Disagree	53	37.3
Total	142	100.0

Source: Author, 2015

4.2.5.3 If the Health Facilities Provided Confidentiality for VCT and ARVS Dispensation

Every person would desire that their HIV status remain confidential. This is because of the possible stigmatization and discrimination that is associated with it especially from the general public. This study presumed that, if the respondents considered the health facilities to be non-confidential in relation to VCT and ARV dispensation, it would negatively impact on their level of participation. The researcher sought the respondents' opinion on the confidentiality of health facilities in dealing with VCT and administration of ARVs in Kiambu County. This would enable the researcher determine whether their perception had significantly influenced their level of participation in the programmes. Their responses displayed on Table 36.4.25 show

that majority 88(62%) agreed with the statement that the service delivery was confidential while the remaining 54(38%) did not think that the programmes provided confidentiality.

Table 36: 4.25 Respondents' perception on health facilities' confidentiality during VCT and ARV dispensation

Perception	Frequency	Percent
Agree	88	62
Disagree	54	38
Total	142	100.0

Source: Author, 2015

4.2.5.4 If time spent at the health facilities influenced male partner's level of participating in maternal and child wellbeing programmes

The study sought to find out the respondents' opinion concerning time spent at the HFs in accessing the MCW services. The researcher intended to determine whether this influenced male partners' level of participation in the programmes. The respondents were requested to indicate their opinion and the results were recorded in Table 37.4.26.The findings reveal that majority of the respondents 116(81.7%) agree that MCW programmes are time consuming while a small percent 26(18.3%) disagreed with the statement.

Table 37 : 4.26 Respondents' perception that participation was time consuming

Perception	Frequency	Percent
Agree	116	81.7
Disagree	26	18.3
Total	142	100

Source: Author, 2015

4.2.5.5 If the Health Facilities offering Maternal and Child Wellbeing Services were Accessible

Distribution of health facilities affect accessibility of the services in terms of distance and costs incurred in travelling especially for both the male and the female partner. It was necessary for this study to establish from the respondents if they perceived the HFs to be located far hence affecting their level of physical participation. Respondents were asked to give their opinion and the following feedback was received. Findings in Table 38.4.27 show that most of the respondents 114(80.3%) agreed with the statement that HFs were located far from their places of residence and work places which made Healthcare consumption costly and time consuming. The remaining 28(19.7%) disagreed with the statement.

Table 38: 4.27 Respondents' perception that HFs are located far

Perception		Frequency	Percent
Agree			
Disagree		114	80.3
		28	19.7
Total			
		142	100.0

Source: Author, 2015

4.2.5.6 If MCW Programmes are Accommodative to the Male Partner's Reproductive Health Needs

The current study sought to establish the respondent's perception on how accommodative the MCW programmes were to the male partner reproductive health needs. This enabled the researcher to determine if their perception influenced their level of participation in the programmes. The findings presented in Table 39.4.28 revealed that majority of the respondents 93 (65.5%) disagreed with the statement that the current MCW programmes were accommodative to the reproductive health needs of the male gender. The results also show that 49 (34.5%) of the respondents felt that the programmes were accommodative to their reproductive health needs.

Table 39: 4.28 Respondents' perception that MCW programmes were accommodative to men's reproductive health needs

Perception	Frequency	Percent
Agree	49	34.5
Disagree	93	65.5
Total	142	100.0

Source: Author, 2015

4.2.5.7 Perception that VCT and ARVs dispensing sections of health facilities should be served by non-residents to ensure confidentiality

The study sought to know the respondents opinion on whether the VCT and ARV dispensing sections of the HFs should be served by non-residents to increase confidentiality. This would enable the researcher to determine if their perception influenced their level of participation in the programmes. The respondents were requested to state their opinion. The findings are presented in Table 40.4.29 which show that 82 (57.7%) of the respondents had the opinion that VCT and ARV dispensing sections required privacy and would rather be served by non-residents who never knew the consumers. On the other hand, other respondents 60 (42.3%) felt that the services could be offered by any professionals regardless of their origin.

Table 40 : 4.29: Perception that VCT and ARVs sections be served by non-residents

Perception	Frequency	Percent
Agree	82	57.7
Disagree	60	42.3
Total	142	100.0

Source: Author, 2015

4.2.5.8 That Men should be Trained on their Role in MCW Programmes

The researcher intended to establish the respondents' opinion on whether men should be trained on their role in MCW programmes. The study presumed that lack of knowledge on what their role was could be blamed for the low level of participation. The study findings presented in Table 41.4.30 show that majority of the respondents 111(78.2%) were of the opinion that men be trained on their role while 31(21.8%) thought it was not necessary to train them.

Table 41: 4.30 Respondents' perception that men be trained on their role

Perception	frequency	Percent
Agree	111	78.2
Disagree	31	21.8
Total	142	100.0

Source: Author, 2015

4.2.5.9 If Current Healthcare Policies have done little to involve Men in Maternal and Child Wellbeing Programmes

It was important to determine the respondents' perception on the efforts by Healthcare providers in involving males in maternal and child wellbeing programmes. This would assist the researcher determine if the participants' perception of the programmes had an impact on their level of participation. The respondents were asked to express their satisfaction with the programmes. These study results displayed on Table 42.4.31 show that most of the respondents 96(67.6%) felt that little had been done by Healthcare providers to involve male partner in the MCW programmers. A further 46 (32.4%) of the respondents felt that the current MCW policies and their implementation had involved male partner.

Table 42: 4.31 Perception that little has been done to involve men

Perception		Frequency	Percent
	Agree	46	32.4
	Disagree	96	67.6
	Total	142	100.0

Source: Author, 2015

4.2.5.10 If the Health Facilities Offering Maternal and Child Wellbeing Services are Located far from their Home/Work Place making them Inaccessible

The study sought to find out if respondents perceived HFs offering MCW services to be located far from their residence or place of work making it costly and time

consuming to access them. This would enable the researcher determine if this influenced their consumption of the services of supporting their female partner to do so. The respondents were asked to explain if they thought HFs offering maternal and child wellbeing services were located far from their home/work place of residence making it expensive and time consuming for the two. Descriptive results in Table 43.4.32 reveal that most of the respondents 81(57%) explained that HFs offering MCW are located far making them in accessible while 61(43%) did not think that the HFs were located far from their residence or workplace.

Table 43: 4.32 Respondents' perception if Health facilities were located far

Perception		Frequency	percent
Agree		81	57.0
Disagree		61	43.0
Total		142	100

Source: Author, 2015

4.3 Dependent Variable (Level of Participation)

In this section an attempt has been made to define male partner's participation in MCW programmes into various categories. A minority (3.52%) of the respondents reported having accompanied their female partners to the health facilities for three or more programmes' services (high level of participation). The most critical of these visits is during ANC and VCT during which the couple is taken through counseling and testing to know their HIV sero-status. This is a key requirement in preventing secondary infections resulting from couple discordance in HIV sero-status and which is a major cause of mother to child transmission of HIV. These visits provided the couple with opportunity to increase their awareness in relation to MCW programmes

especially on the role of male partner. Physical participation has been used in many studies as an indicator of male partner involvement in MCW programmes however the current study went a step further to consider male partner's level of emotional and financial support to their female partner. This enabled the study in determining the nature of male- partner participation in the programmes other than physical participation. Responses indicated that 4.93% of the respondents had discussed three or more of the MCW programmes with their female partner (high emotional participation).The respondents had discussed information from the health facilities which included but not limited to what she was taught at the HF, the health providers' report or date of next visit and also encouraged her to consume the services. The responses also revealed that a majority of the respondents (84.5%) had supported their female partner financially by providing money to enable her pay for transport to health facility as well as pay for services three or more times. The findings are presented in Table 44.4.33

Table 44 : 4.33 Male partners' nature and level of participation in MCW programmes in Kiambu County

Nature of participation	Low participation		High Participation		Total
	Count	Row N %		Row N %	Count
Emotional	135	95.07%		4.93%	142
Overall emotional participation	135	95.07%		4.93%	142
Physical –ANC	138	97.18%		2.81%	142
Physical- VCT	137	96.47%		3.52%	142
Physical- delivery	134	94.36		5.63%	142
physical- postnatal clinics	139	97.88%		2.11%	142
Overall physical participation	137	96.4%		3.52%	142
Financial – ANC	46	2.39%		67.60%	142
Financial- delivery	6	4.22%		95.77%	142
Financial- VCT	31	21.83%		78.16%	142
Financial-postnatal clinics	5	3.52%		96.50%	142
Overall financial participation	22	15.49%		84.5%	142
Overall participation in MCW programs in Kiambu County				30.98%	142

Source: Author, 2015

The Table 44.4.33 presents a summary of the overall participation by the male partner during various MCW programmes. The study found that respondents registered an overall 4.93% emotional participation, 3.52% physical participation and 84.5% financial participation. The study revealed an overall male-participation of 30.98%.

4.3.1 Accompanying Female Partner to the Health Facility for Various Services

Accompanying the female partner to the health facility for MCW services is a key factor in determining the level of uptake and adherence to the programmes by his female partner. Recommendations by the WHO are that an expectant mother attends ANC earliest in pregnancy and continues consumption of MCW services up to five years of age for the infant. As mentioned earlier in the study, female partners who attend the clinics with their male partners are more likely to follow the programmes up to 18 months and behold after delivery. It is against this background that the study presumed that a high level of male partner participation in accompanying his female partner to the HFs would increase consumption and adherence to the services. A question was posed requesting male partner to indicate the number of times they had accompanied their female partner for antenatal clinics, VCT, delivery and post natal clinics. The study results depicted in table 44.4.33 show percentages of the male partner who had registered a high level of participation during various maternal and child wellbeing services as well as those who registered a low level.

4.3.1.1 Accompanying Female Partner for Antenatal Clinics

In most cases as indicated earlier in the study responsibility for pregnancy and health of the infants is considered for women. They attend and consume MCW services

mainly supported by other females who share experience of pregnancy and child upbringing. Older women are mainly perceived as custodians of experience and are perceived as having a duty to accompany the pregnant women through the journey of pregnancy and to provide the needed advice. Earlier studies have however portrayed the important role played by male partner's willingness and ability to attend the clinics with their partners. The study found that male partner's physical participation resulted to timely consumption of the ANC services by the pregnant woman .It was on this background that the study found it necessary to find out the male partners' level of physical participation and the factors likely to influence it. The study presumed high level of male partner participation would improve consumption of ANC services. Results on Table 44.4.33 show that majority of the respondents; ninety four point four percent (94.4%) registered a low level of physical participation during ANC. This meant that they accompanied their female partner to the health facility only once or twice. Results in Table 45.4.34 show varied reasons given by respondents for the low physical participation during antenatal clinics.

Table 45: 4.34 Reasons for not accompanying female partner to HF for ANC

Reasons	Frequency	Percentage
Did not know I was supposed to attend	40	28.2
Could not leave my job to go to health facility	24	16.9
Procedures take a long time/spend the whole day	26	18.4
It is the woman responsibility	18	12.7
Men have little to do at the facility, HFs are for women and children	14	9.9
Harsh unfriendly reception by healthcare providers	6	4.3
Inadequate sitting space/health facilities are congested	2	1.5
lack of confidentiality for discussing men's needs	10	7.0
Not enough money for transport of two of us to the health facility	2	1.5
Cumulative	**142**	**100**

Source: Author, 2015

4.3.1.2 Accompanying Female Partner for Voluntary Counseling and Testing

Voluntary Counseling and Testing is one of the most key programmes in MCW. It is the entry point for PMTCT without which a couple will not know their HIV status. This would be followed by initiation in PMTCT programmes or opting out depending on the sero status. Emergence of HIV and subsequently mother to child transmission creates the need for couple testing especially so due to secondary infections which are attributed to couple discordance in HIV sero- status. The study results in table 4.35 show that ninety six point five percent (96.5%) of the respondents recorded a low level of participation in accompanying their female partner to the health facility for VCT. This is a challenge to MCW because couple discordance or new infections during pregnancy and breast-feeding contribute the bulk of HIV infection in infants.

The results in table 46.4.35 show reasons given by the respondents for not accompanying their partners to the health facility for VCT.

Table 46: 4.35 Reasons for not accompanying their female partner to the health facility for VCT

Reasons for failure to attend VCT centers	**Frequency**	**Percent**
She is the one who can infect the foetus and the infant, my status is not important	64	45%
Went for testing separately	28	19.7%
Her status are a proxy of mine	20	14%
We were tested before marriage	16	12.3%
She went for the testing and did not inform me	12	8.4%
Am alright and do not need the test	2	1.4%
Total	**142**	**100%**

Source: Author, 2015

4.3.1.3 Accompanying Female Partner to Health Facility for Delivery

Most African cultures Kiambu included perceive reproductive health and especially child delivery as a duty of women. Older women have a social responsibility to watch over pregnant mothers and even accompany them to the HFs for delivery. The male partners on the other hand have a responsibility to provide the necessary financial aid. This has barred most male partner from accompanying their female partners to the HFs for delivery. Reports from earlier studies such as Kiambu strategic plan 2008-2012 noted low levels of male partner participation in MCW programmes. It is on this background that the study wished to determine levels of male partner participation in Kiambu County. This would aid in study justification. This was achieved by recording the number of times the male partner had accompanied his male partner to the HF for

the services. This was then categorized as low or high participation. The study results in table44. 4.33 show that ninety four point four percent (94.4%) of the respondents recorded a low level of participation in accompanying their female partner to the health facilities for delivery. The results in table 47.4.36 show reasons given by the respondents for not accompanying their partners to the health facility for delivery.

Table 47 : 4.36 Male partner reasons for not accompanying their female partner to HF during delivery

Reasons for not accompanying female partner to HF for delivery	**Frequency**	**Percent**
It is the duty of women to escort others for delivery	122	85.9%
I had to work for money to meet the bill	15	10.6%
I was far away	4	2.8%
No response	1	0.07%
Total	142	100%

Source: Author, 2015

4.3.2. Male Partner's Practice of Discussing Reproductive Health Issues with their Female Partner as Well as encouraging them to consume the Services (Emotional Participation)

Psychological support is of paramount importance to women who are pregnant and those nursing infants. As noted earlier in the study women who are not supported by their male partners feel traumatized and overburdened by the responsibility. Most of

them fail to register in MCW programmes while others register but drop out of the programmes later. On the other hand, female partners who receive psychological from their male partners or family members register in the programmes and continue to consume the services up to 18 months and above after delivery. In order to gauge male partner level of emotional participation the respondents were requested to explain their level and frequency of discussion with their female partner and especially in encouraging her to consume the services. Majority of the respondents 95.07% registered a low level of emotional participation. The table 48.4.37 shows reasons given by the respondents for the low emotional participation.

Table 48 : 4.37 Reasons for low male partner's emotional participation in MCW programmes

Reasons	Frequency	Percent
It is a woman's domain and men needed to take a passive role	65	45.77
It is a taboo to discuss the unborn	20	14.08
All what men need to know is when the partner need financial support	45	31.69
The female partner is taught everything at the hospital and she is the one who need the information	12	8.45

Source: Author, 2015

4.3.3 Male Partner's Practice of Providing Financial Support to the Female

Partner in Meeting Related Expenses (Financial Participation)

In the Kiambu community men are the custodians of family resources. Access and consumption of MCW services require finances to enable them access and consume the Healthcare. Females, who lack male partners' financial support feels traumatized, are unable to register for the services or even drop out. The study realized that in

kiambu County male partners had registered a high (94.5%) financial participation in MCW services Table 44.4.33). Majority of the respondents (63.4%) had met the expenses single handed while 21.1% shared the costs with the female partner especially where both are in wage employment. According to this finding male partners took it as their responsibility to provide financial assistance needed to meet Healthcare. Responsibility for physical attendance to clinics was perceived as a women's while male partners provided financial aid. This is portrayed in Table 49.4.38

Table 49 : 4.38 Male-partner's level of participation in meeting healthcare expenses

Who meets/met transport costs to the health facility for MCW	**frequency**	**percent**
Both of us share responsibility in meeting healthcare Expenses	30	21.1%
I meet healthcare expenses alone	90	63.4%
No response	22	15.5%
Total	142	100%

Source: Author, 2015

4.4 Regression Analysis for Predictor Variables

4.4.1 Regression Analysis for Respondents' Demographic Characteristics versus their Level of Participation

4.4.1.1 Influence of Demographic Age on Male Partner's Level of Participation

The purpose of this section was to find out if male partner with varied demographic characteristics in age would register similar levels of participation in maternal and child wellbeing programmes. Chi-square test of independence was carried out to empirically determine the association between male partner's age and their level of participation in maternal and child wellbeing programmes in Kiambu County**.** Cross tabulation was carried out to reveal nature of relationship between the dependent variable (level of participation) and the independent variable (age of the respondent).Results presented on Table 50.4.39 show that among the respondents who registered a low level of participation in MCW programmes 4(4.5%) belonged to the age cohort 20-29, 44 (50%) between 30-39 and the remaining 40(45.5%) were within the 40-49 age bracket. The findings further revealed that 25 (46.3%) of the respondents who registered a high level of participation in the programmes belonged to the age bracket 20-29 years, 22(40.7%) within the 30-39 bracket, while the remaining 7 (13.0%) were within the 40-49 age cohort. A Chi-square analysis was conducted to empirically determine whether demographic age was a significant determinant of male partners' level of participation in the programmes. The Chi-square results indicate that demographic age had a significant influence on level of participation. The study realised a Chi-square value of 39.9 at df (2) and a p value of

0.000. The findings were further subjected to a spearman's correlation test that revealed a negative significant relationship between the variables indicated by a correlation value of -0.489 at a p value of .000.Increase in age of the respondents led to a decrease in level of participation in MCW programmes in Kiambu County.

Table 50: 4.39 A Cross tabulation on the relationship between respondents' age and their level of participation

Level of participation		Age of the respondents			Total
		20 - 29 YEARS	30 - 39 YEARS	40 - 49 YEARS	
Low participation	Count	4	44	40	88
	% within participation	4.5%	50.0%	45.5%	100.0%
	% within Age of the respondents	13.8%	66.7%	85.1%	62.0%
	% of Total	2.8%	31.0%	28.2%	62.0%
High Participation	Count	25	22	7	54
	% within participation	46.3%	40.7%	13.0%	100.0%
	% within Age of the respondents	86.2%	33.3%	14.9%	38.0%
	% of Total	17.6%	15.5%	4.9%	38.0%
	Count	29	66	47	142
	% within participation	20.4%	46.5%	33.1%	100.0%
	% within Age of the respondents	100.0%	100.0%	100.0%	100.0%
	% of Total	20.4%	46.5%	33.1%	100.0%

Source: Author, 2015

4.4.1.2 Effects of Level of Education on Level of Male Partner Participation

Results presented in Figure 4.4.1 show that majority of the respondents who recorded a low level of participation had attained secondary level of education followed by those who had completed College or University education while the least in this

category had attained primary level of education. Among those who recorded a high level of participation, majority had completed secondary school while the least in this category had attained college and university education. The study realised a Chi-square value of χ^2=8.616 at a df 5 and a P value of 0.015. The study found that education level of the respondents was a significant determinant of the behaviour in participating in MCW programmes in Kiambu County.

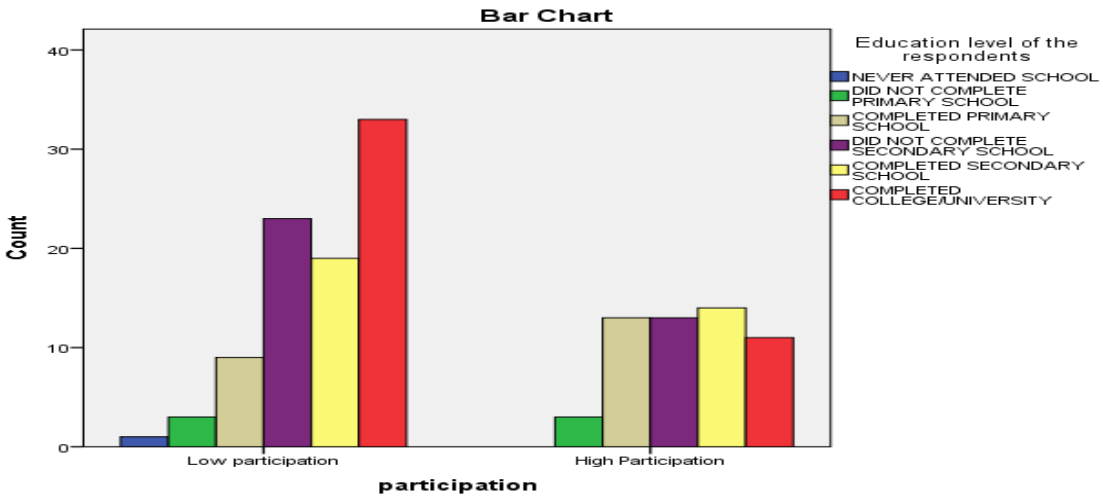

Figure 4: 4.1 Relationship between respondents' level of education and their level of participation in MCW programmes.

Source: Author, 2015

4.4.1.3 Effects of Length of Stay with the Female Partner on Male Partner

Participation

This study sought to establish the relationship between a male partner's level of participation in MCW programmes and their length of stay in the current relationship. This would enable the study know if varied lengths of stay led to variability in their behaviour of participating in the programmes. Results depicted on Table 51.4.40 show that 3(3.4%) of the respondents who registered a low level of participation in the

programmes had been in the relationship for less than five years, 28(31.8%) had been in the relationship for between five and ten years while the remaining 57 (64.8%) had stayed for more than ten years. At the same time 29(53.7%) the respondents who recorded a high level of participation had been in the relationship for less than five years, 13(24.1%) for between five and ten years while 12 (22.1%) had been in the relationship for more than ten years. The study found that male partner's level of participation in MCW programmes in Kiambu County increased with decrease in the length of stay in the relationship. Length of stay in a relationship was therefore found to have a significant negative relationship with male partner's level of participation. Chi-square value for the relationship was Chi-square=50.728 at df 2 at a P value (p=0.000) and a correlation value of R=0.404 at p value of 0.000.

Table 51: 4.40 A Cross tabulation between male partner's length of stay versus his level of participation in the program

Participation		length of stay in relationship			Total
		< 5 years	5 to 10 years	> 10 years	
Low participation	Count	3	28	57	88
	% within participation	3.4%	31.8%	64.8%	100.0 %
	% within length of stay	9.4%	68.3%	82.6%	62.0%
	% of Total	2.1%	19.7%	40.1%	62.0%
High Participation	Count	29	13	12	54
	% within participation	53.7%	24.1%	22.2%	100.0 %
	% within length of stay	90.6%	31.7%	17.4%	38.0%
	% of Total	20.4%	9.2%	8.5%	38.0%
Total	Count	32	41	69	142
	% within participation	22.5%	28.9%	48.6%	100.0 %
	% within length of stay	100.0%	100.0%	100.0%	100.0 %
	% of Total	22.5%	28.9%	48.6%	100.0 %

Source: Author, 2015

4.4.1.4 Effects of the Ordinal Position of the Infant on Male-Participation

This study sought to establish if there existed a significant relationship between the ordinal position of the infant and the participation level of the male partner in the MCW programmes. This was based on the assumption that male partner's level and nature of participation could vary with different ordinal positions.

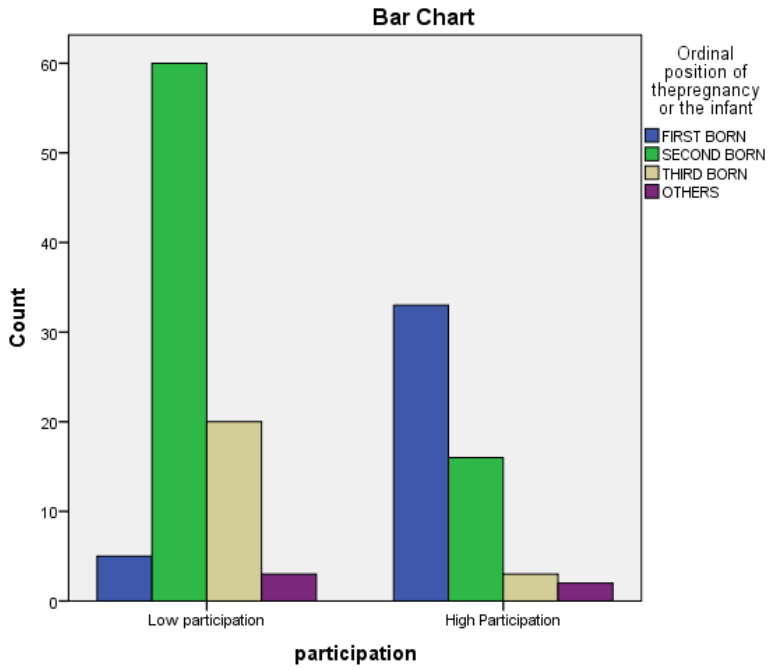

Figure 5: 4.2 Relationship between ordinal position of the child

Source: Author 2015

Results of the study depicted on Figure 5.4.2 reveal that majority of respondents who registered a low level of participation in the programmes were partners to female who had their second pregnancy or were nursing their second born. Male partner to females nursing third above third born registered the least high participation followed by those nursing first born.

Among male partner who registered a high level of participation in the programmes, those whose female partner had the first pregnancy or with a first born had the highest representation s, followed by second born, third born while the least were other categories with a representation . The study found that ordinal position of a child or a pregnancy was a significant determinant of his level of participation in the programmes in Kiambu County. Increase in the ordinal position of the infant or the

pregnancy led to increase in participation of the male partner. The Chi-square value for ordinal position and level of participation was; χ^2 = 35.138 at df 3 and a P value of 0.000.

4.4.1.5 Summary Model for Male Partner's Demographic Characteristics and Level of Participation in Maternal and Child Wellbeing Programmes

The first objective of the study was to investigate how male partner's demographic characteristics influence his level of participation in maternal and child wellbeing programmes in Kiambu County. The Nagelkerke R^2 obtained was 0.549 (Table 52.4.41), which means that the respondents' demographic characteristics explained 54.9% of the variation in their level of participation in maternal and child wellbeing programmes in the County.

Table 52:4. 41 Model Summary for demographic characteristics

Model Summary	
-2 Log likelihood	115.26
Cox & Snell R Square	0.549
Nagelkerke R Square	0.404

Source: Author, 2015

4.4.1.6 Logistic Regression for Demographic Characteristics and Level of Participation of the Respondents

A regression test was performed to ascertain the effects of male partners' demographic factors: age, education, length of stay in the relationship and ordinal position of the infant on his level of participation in maternal and child wellbeing

programmes in Kiambu County. The Exp (B) column (Odds ratio) for demographic age (Table 53.4.42 and Table 54.4.43) shows that male partner within the age cohort 30-39years were 2.158 times less likely to register a high level of participation than those within 20-29 age cohort which was the reference category. The findings also revealed that respondents within the age cohort 40-49 years were 1.570 times less likely to register a high level of participation than those in the reference category. Increase in age was associated with lower odds of registering a high participation. The Exp (B) column (Odds ratio) show that male partner's who attained secondary level of education were 1.582 times more likely to register high level of participation compared with those who attained primary school education (reference category).Male partner who attained University/College level of education were 1.952 times more likely to register a high level of participation compared to those in the reference category. The findings revealed that increase in male partner's level of education was associated with increase in high level of participation in the programmes in Kiambu County. The findings also revealed that male partner's who been in the relationship for more than ten years were 2.956 times less likely to register a high level of participation compared to those in the reference category (< five years).Increase in male partner's length of stay in the relationship was found to decrease the probability of registering a high level of participation in the programmes. The Exp (B) column (Odds ratio) for ordinal position show that male partner's whose child was ordinal position two were 3.908 times less likely to register high level of participation compared to those in the reference category (ordinal position one).Those with infants in ordinal position three were 4.914 times less likely to register high level of participation compared to the reference category.

Table 53: 4.42 logistic regression for demographic characteristics and level of participation

	B	S.E.	Wald	Df	Sig.	Exp(B)	1/EXP(B)
Age			9.513	2	0.009		
Age(1)-30-39 years	-0.769	0.144	28.519	1	0.000	0.463	2.158
Age(2)40-49 years	-0.451	0.261	2.986	1	0.084	0.637	1.570
Education			14.42	2	0.001		
Secondary	0.459	0.158	8.439	1	0.004	1.582	
University	0.669	0.241	7.706	1	0.006	1.952	
Length of stay			7.071	2	0.029		
<10years	-2.267	0.979	5.362	1	0.021	0.104	9.650
Length of stay>10 yrs	-1.084	0.519	4.362	1	0.037	0.338	2.956
Ordinal Position			9.448	3	0.024		
Ordinal Position 2nd	-1.363	0.635	4.607	1	0.032	0.256	3.908
Ordinal Position3rd	-1.592	0.492	10.470	1	0.001	0.204	4.914
Others	-1.874	0.591	10.055	1	0.002	0.154	6.514
Constant	-0.694	0.193	12.930	1	0.000	0.500	2.002

Source: Author, 2015

Table 54: 4.43 logistic regression for demographic characteristics and level of participation

	B	S.E.	Wald	Df	Sig.	Exp(B)	1/EXP(B)
Age			9.513	2	0.009		
Education			14.42	2	0.001		
Length of stay			7.071	2	0.029		
Ordinal Position			9.448	3	0.024		
Constant	-0.694	0.193	12.930	1	0.000	0.500	2.002

Source: Author, 2015

4.4.2 Logistic Regression Analysis for Economic Factors and Livelihood Activities versus Male Partner Level of Participation

4.4.2.1 Influence of Male Partner's Economic Status on His Level of Participation in Maternal and Child Well- Being Programmes in Kiambu County

Consumption of Healthcare services including MCW requires financial ability of an individual or the family. A person requires financial ability to cater for transport to and from the health facility especially for two partners as well as purchasing services such as delivery and related drugs. This could influence a person's physical as well as financial participation in the programmes. This study sought to establish whether male partner with varied levels of income had variation in participating in MCW programmes. The study findings revealed that majority of the respondents who recorded a low level of participation in the programmes belonged to the category earning ten thousand shillings and below while most 26 (31.7%) of those who registered a high level of participation earned between ten to twenty thousand

shillings a month. Those earning between twenty and thirty thousand shillings a month contributed 12 (20%) while those earning above thirty thousand shillings contributed 1(1.7%). The study also realised that respondents earning between ten and twenty thousand shillings a month registered the highest entry 26(31.7%) in high level of participation followed by those earning ten thousand and below 20 (24.4%). The study realised that increase in level of income of the respondents was associated with decrease in level of participation. The study realised that male partners' level of income was a significant determinant of his level of participation in the County. This was revealed through a Chi-square value of 39.137 at df 3 and a P value of 0.001. The study also realised that relationship between male participation and his level of income was significant and negative at a Pearson's correlation value of -0.463 at a p value of 0.000.

4.4.2.2 Effects of Nature of Livelihood Activities on Male Partner's Level of Participation in Maternal and Child Wellbeing Programmes

The findings of the study presented in Table 55.4.44 show that majority of respondents 32 (88.9%) who registered a high level of participation in the programmes were engaged in self employment while majority of those who recorded a low level of participation engaged in wage employment. Those engaged in self employment registered a higher level of physical participation than those in wage employment. The Chi-square analysis revealed a χ^2= 42.986 at df 1 and a P value of 0.000 and Pearson's correlation R =0.347 (P=0.000).The livelihood activity was found to have a significant and positive relationship with level of male partner participation in MCW programmes in Kiambu County.

Table 55 : 4.44 A cross tabulation between respondents' livelihood activities versus their level of participation

	Participation	Nature of Livelihood activity		Total
		wage employment	self employment	
Low participation	Count	32	23	55
	% within participation	58.2%	41.8%	100.0%
	% livelihood activity	39.0%	38.3%	38.7%
	% of Total	22.5%	16.2%	38.7%
High Participation	Count	37	50	87
	% within participation	42.5%	57.5	100.0%
	% livelihood activity	61.0%	61.7%	61.3%
	% of Total	35.2%	26.1%	61.3%
	Count	69	73	142
	% within participation	48.59%	51.41%	100.0%
	% livelihood activity	100.0%	100.0%	100.0%
	% of Total	57.7%	42.3%	100.0%

Source: Author, 2015

4.4.2.3 A Logistic Regression for Effects of Male Partner's Economic Status and Livelihood Activities

A logistic regression analysis (Table 56.4.45) was performed to ascertain the effects of income level and livelihood level on the likelihood of participation of male partner's in maternal and child wellbeing programmes. The Exp (B) column (Odds ratio) show that male partner with an income level between 10,000 and 20,000 shillings were 0.303 times more likely to register high level of participation in the programmes than the reference category (<10,000).Male partner with income above 30,000 were 0.265 more likely to register high level of participation than the reference category. The beta coefficients for income (1 and 2) is positive however with low significance, indicating that increasing income level is associated with increased odds

of achieving high participation. The Exp(B) column (the Odds Ratio) reveal that male partners in wage employment were 0.448 times less likely to register high participation than those in self-employment sector (reference category).The results revealed that male partner's nature of livelihood activity were determinants of his level of participation.

A logistic regression analysis was performed to ascertain the effects of income level and livelihood level on the likelihood of participation of male partner's in maternal and child well-being programmes. The Exp (B) column (Odds ratio) show that male-partners with an income level between 10,000 and 20,000 shillings were 0.303 times more likely to register high level of participation in the programmes than the reference category (<10,000).Male-partners with income above 30,000 were 0.265 more likely to register high level of participation than the reference category. The beta coefficients for income (1 and 2) is positive however with low significance, indicating that increasing income level is associated with increased odds of achieving high participation.

The Exp(B) column (the Odds Ratio) reveal that male partners in wage employment were 0.448 times less likely to register high participation than those in self-employment sector (reference category).The results revealed that male-partners' nature of livelihood activity were determinants of his level of participation.

Table 56 : 4.45 logistic regression for dependent variable and respondents' economic status and livelihood activities

		B	S.E.	Wald	df	Sig.	Exp(B)	
	Income			38.725	3	0.020		
	Income(1)-10,000-20,000	1.193	0.437	7.453	1	0.046	0.303	
	Income(2)-20,000-30,000	1.963	0.444	19.547	1	0.049	0.14	
	Income(3)-30,000 &<	1.329	0.63	4.450	1	0.035	0.265	
	Livelihood activity(1)	0.802	0.278	8.323	1	0.004	0.448	
	Constant	3.03	0.601	25.418	1	0.000	20.7	

Source: Author, 2015

4.4.2.4 Summary Model for Effects of Male Partner's Economic Status and Livelihood Activities

Nagelkerke R Square (Table 57.4.46) revealed that the model of goodness of fit is satisfactory and that male partners' economic status and livelihood activities explain 48.1% of the variation in male partner's level of participation.

Table 57: 4.46 Summary model for economic status and livelihood activities

Model Summary	
-2 Log likelihood	127.509
Cox & Snell R Square	0.354
Nagelkerke R Square	0.481

Source: Author, 2015

4.4.3 Logistic Regression Analysis for Effect of Respondents' Knowledge and awareness in MCW Programmes and their Level of Participation

4.4.3.1 Effect of Male Partner's Knowledge and Awareness of the Programmes

This section dealt with analysis and establishment of relationship between the male partner's level of participation in the programmes and knowledge in maternal and child wellbeing programmes. The study sought to investigate if male partner's knowledge in the programmes affects their level of participation. The specific aspects investigated under this section include knowledge and awareness in all MCW programmes especially in MTCT of HIV during pregnancy, delivery and breast feeding as well as knowledge on preventive measures.

Table 58: 4.47 Effects of Male Partner's Knowledge and Awareness of the Programmes

Participation		Knowledge level		Total
		Know	Don't Know	
Low participation	Count	31	47	78
	% within participation	39.7%	60.3%	100.0%
	%knowledge of MCW programmes	50.8%	58.0%	54.9%
	% of Total	21.8%	33.1%	54.9%
High Participation	Count	30	34	64
	% within participation	46.9%	53.1%	100.0%
	%knowledge of MCW programmes	49.2%	42.0%	45.1%
	% of Total	21.1%	23.9%	45.1%
	Count	61	81	142
	% within participation	43.0%	57.0%	100.0%
	%knowledge of MCW programmes	100.0%	100.0%	100.0%
	% of Total	43.0%	57.0%	100.0%

Source: Author, 2015

Results presented in Table 58.4.47 show that majority of the respondents 47(60.3%) who registered a low level of participation in the programmes did not have the correct knowledge on what maternal and child wellbeing programmes referred to. Those who had the correct knowledge among the low level of participation were 31 (39.7%).The study also realised that 30 (46.9%) of the respondents who registered a high level of participation knew what MCW programmes referred to while majority 34 (53.1%) in the same category did not have the correct knowledge. The concluded that knowledge in the meaning of maternal and child wellbeing programmes was not a significant determinant of male partner's level of participation in the programmes. The study realised a Chi-square value for the relationship as 0.730 at df 1 and a P value of 0.393.

4.4.3.2 Respondents' Knowledge on the Time of Pregnancy When the Expectant Partner Should Start Attending Ante-Natal Clinic

Findings presented in Table 59.4.48 show that majority of respondents who registered a low level of participation 42(53.8%) had the correct knowledge on when the female partner should attend the first Antenatal Clinic while the remaining 36(46.2%) did not have the correct knowledge. At the same time majority 49(76.6%) of those who registered a high level of participation in the programmes had the correct knowledge while the remaining respondents 15(23.4%) in the same category did not have the correct knowledge. The study realised a Chi-square value of 7.882 at df 1 and a P value of 0.005.

Table 59 : 4.48 Effect of knowledge on the time to attend ANC on male partner level of participation

Participation		knowledge on time to attend clinic		Total
		Know	Don't Know	
Low participation	Count	42	36	78
	% within participation	53.8%	46.2%	100.0%
	% within knowledge on time to attend clinic	46.2%	70.6%	54.9%
	% of Total	29.6%	25.4%	54.9%
High Participation	Count	49	15	64
	% within participation	76.6%	23.4%	100.0%
	% within knowledge on time to attend clinic	53.8%	29.4%	45.1%
	% of Total	34.5%	10.6%	45.1%
Total	Count	91	51	142
	% within participation	64.1%	35.9%	100.0%
	% within knowledge on time to attend clinic	100.0%	100.0%	100.0%
	% of Total	64.1%	35.9%	100.0%

Source: Author, 2015

4.4.3.3 Male partner's knowledge that the female partner was consuming MCW services at the health facility

The study yielded the following results as summarized in Table 60.4.49. The findings indicate that majority 34 (61.8%) of the respondents who were not aware that their partners were consuming MCW services at the HFs registered a low level of participation. At the same time 21(38.2%) of respondents in the same category registered a high level of participation. Male partner's knowledge and awareness that

the partner was consuming the services at the health facilities did not influence their level of participation. The study recorded Chi-square value of 0.007 at p value 0.935.

Table 60 : 4.49 A cross-tabulation on effects of male partner's awareness

Participation		Awareness of partner consuming MCW		Total
		Aware	Not Aware	
Low participation	Count	44	34	78
	% within participation	56.4%	43.6%	100.0%
	% within awareness of partner consuming MCW	50.6%	61.8%	54.9%
	% of Total	31.0%	23.9%	54.9%
High Participation	Count	43	21	64
	% within participation	67.2%	32.8%	100.0%
	% within awareness of partner consuming MCW	49.4%	38.2%	45.1%
	% of Total	30.3%	14.8%	45.1%
	Count	87	55	142
	% within participation	61.3%	38.7%	100.0%
	% within awareness of partner consuming MCW	100.0%	100.0%	100.0%
	61.3%	38.7%		100.0%

Source: Author, 2015

4.4.3.4 Male Partner's Knowledge on their Role in Maternal Child-Wellbeing Programmes

The study findings presented in Table 61.4.50 reveal that out of the total respondents who were aware of the male partner's role in the programmes, 40(49.4%) registered

a low level of participation whiles 41(50.6%) in the same category registered a low level of participation. The study also found that 47(77%) respondents who were not aware of their role in MCW programmes registered a low level of participation while the remaining 14(23%) in the same category registered a high level of participation. The study realised that male partner's awareness on their role in MCW programmes was a determinant of their level of participation. The study realised a Chi-square value was 11.224 at a df 1 and a P value of0.002.

Table 61: 4.50 Effects of male partner's knowledge on their role in MCW on their level of participation

Participation		Knowledge on role of male partner		Total
		Know	Don't Know	
Low participation	Count	42	36	78
	% within participation	53.8%	46.2%	100.0%
	% within knowledge on role of male partner	50.0%	62.1%	54.9%
	% of Total	29.6%	25.4%	54.9%
High Participation	Count	42	22	64
	% within participation	65.6%	34.4%	100.0%
	% within knowledge on role of male partner	50.0%	37.9%	45.1%
	% of Total	29.6%	15.5%	45.1%
Total	Count	84	58	142
	% within participation	59.2%	40.8%	100.0%
	% within knowledge on role of male partner	100.0%	100.0%	100.0%
	% of Total	59.2%	40.8%	100.0%

Source: Author, 2015

4.4.3.5 Effects of Male Partner's Knowledge on the Need to Attend VCT with Female Partner

Results presented in Figure 6.4.3 indicate that out of the total respondents who recorded a low level of participation in the programmes, majority did not have the correct knowledge on the importance of VCT for couples. The study also found that fewer respondents among those who registered a low level of participation had the correct knowledge on importance of couple testing for HIV. The study realised that knowledge on the importance of VCT for partners was a determinant of the male partner's level of participation in the programmes. The study realized a chi-square of 8.801 at df 1 and a P value of 0.003.

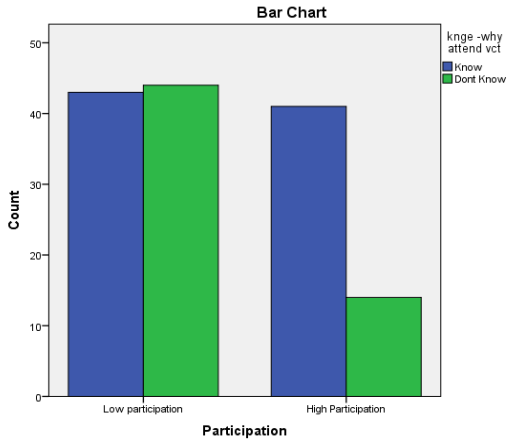

Figure 6: 4.3 Effects of knowledge on importance of couple VCT

Source: Author 2015

4.4.3.6 Male Partner's Knowledge on Couple Discordance in HIV Sero-Status

The study findings depicted in Figure 7. 4.4 indicate that majority of respondents who had the correct knowledge on couple discordance in HIV registered a high level of participation in the programmes. On the contrary a small number of the respondents who registered a high level of participation in the programmes did not have the correct knowledge. The findings reveal that respondents who had the knowledge registered a higher level of VCT consumption compared to those who did not have the knowledge. The study however realized that some respondents sought VCT services separately in the absence of their female partners. The predictor factors for their behaviour are based on perceived intervening factors, economic factors, effects of culture as well as effects of currents Healthcare system. Knowledge in couple discordance in HIV status significantly influenced HIV testing among the male partner. The study realized a chi-square of 41.243 at df 1 and a P value of 0.000.

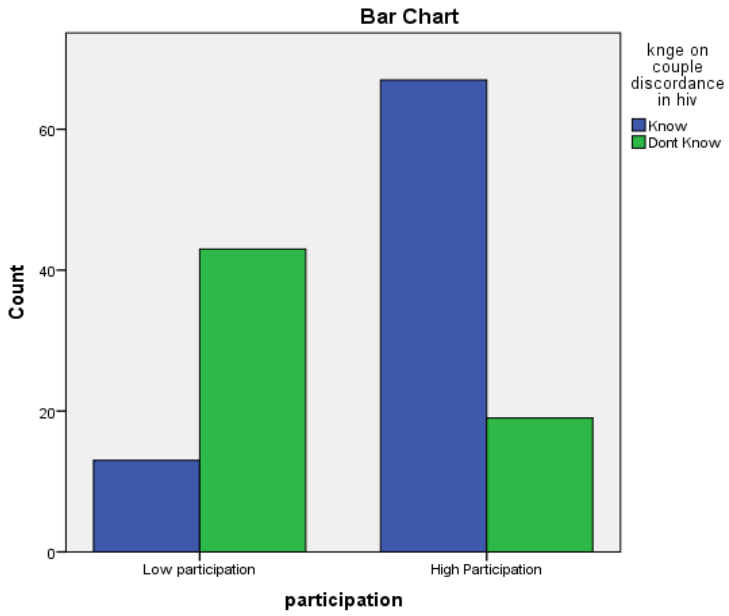

Figure 7:4.4 Effects of knowledge on couple discordance in HIV

Source: Author, 2015

4.4.3.7 Male Partner's Knowledge on How Delivery at the Health Facilities

Prevented MTCT of HIV

Results of the study in Figure 8.4.5 show that majority of the respondents who recorded a low level of participation in the MCW programmes did not have the correct knowledge on the importance of delivery at the health facility in preventing MTCT of HIV. The results further indicate that only a small number of respondents who did not have the correct knowledge registered a high level of participation in the programmes. The results also reveal that majority of the respondents who had the correct knowledge registered a high level of participation with a small percent of those in this category registering a low level of participation. The study found that male partner's knowledge on importance of delivery at the health facility significantly influenced male partner's level of participation in the programmes. The study registered a Chi-square value of 12.944 at df 1 and a P value of 0.000.

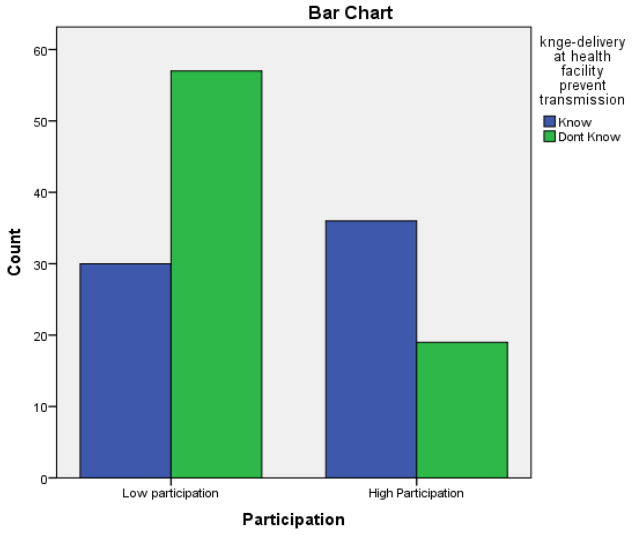

Figure 8: 4.5 Male partner's knowledge on importance of delivery at health facility in preventing MTCT of HIV

Source: Author, 2015

4.4.3.8 Male Partner's Knowledge on Importance of Appropriate Feeding in Preventing MCW

The study findings of the study (Table 62.4.51) revealed that majority of respondents who did not have the correct knowledge registered a low level of participation in the programmes. Mean while majority of respondents who had knowledge registered high of participation. The study realized a Chi-square of 0.057 at df 1 and a P value of 0.002. The study found that male partner's knowledge on appropriate feeding for infants and the mother was a significant determinant of their level of participation in the programmes in Kiambu County.

Table 62: 4. 51 A cross-tabulation on the relationship between male-partners' knowledge on appropriate-feeding and his level of participation

Level of participation		Knowledge on appropriate feeding		Total
		Know	Don't Know	
Low participation	Count	35	43	78
	% within participation	44.9%	55.1%	100.0%
	% within knowledge -role of appropriate feeding in prevention	53.8%	55.8%	54.9%
	% of Total	24.6%	30.3%	54.9%
High Participation	Count	30	34	64
	% within participation	46.9%	53.1%	100.0%
	% within knowledge -role of appropriate	46.2%	44.2%	45.1%
	% of Total	21.1%	23.9%	45.1%
Total	Count	65	77	142
	% within participation	45.8%	54.2%	100.0%
	% within knowledge prevention	100.0%	100.0%	100.0%
	% of Total	45.8%	54.2%	100.0%

Source: Author, 2015

4.4.3.9 Summary Model for Effects of Male Partner's Knowledge and Awareness in Maternal and Child Wellbeing Programmes on His Level of Participation

The third objective of the study was to establish the influence of male partner's knowledge and awareness in maternal and child wellbeing programmes on his level of participation. The Nagelkerke R^2 (Table 63.4.52)obtained was 0.221 which mean that male partner's knowledge and awareness in maternal and child wellbeing programmes

explained 22.1% of the variation in male partner's participation in maternal and child wellbeing programmes.

Table 63: 4.52 Summary model for knowledge and awareness

Model Summary	
-2 Log likelihood	169.84
Cox & Snell R Square	0.165
Nagelkerke R Square	0.221

Source: Author, 2015

The beta coefficients for time of pregnancy (1) are positive and significant (Table 64.4.53), indicating that increasing knowledge on time of pregnancy is associated with increasing odds of achieving high level of participation in the programmes. The Exp (B) column (the Odds Ratio) reveals that male partner who had knowledge on the time of pregnancy their female were expected to attend ANC, aware of their role in MCW programmes, knew importance of couple VCT and aware of couple discordance in HIV status among others were more likely to register high participation in MCW programmes than those who did not have the knowledge. Male partner who knew the importance of male participation in the programmes were 1.844 times more likely to register a high level of participation compared to those who did not know. At the same time male partner who knew the importance of couple VCT and of delivery at the HFs were 1.709 and 1.134 times more likely to register a high level of participation than those who did not know respectively. Male partner who had knowledge on couple discordance in HIV sero-status were 3.212 times more likely to register a high level of participation than those who did not know.

Table 64: 4.53 Logistic regression for dependent variable and male partner's

	B	S.E.	Wald	df	Sig.	Exp(B)
Meaning of MCW(1)	0.454	0.092	24.352	1	0.000	1.575
Time pregnancy (1)	1.073	0.445	5.814	1	0.016	2.924
Services availability(1)	0.792	0.344	5.301	1	0.021	2.208
MCW consumption(1)	0.328	0.145	5.117	1	0.024	1.388
MCW_HIV(1)	0.537	0.248	4.689	1	0.030	1.711
MCW importance(1)	0.612	0.212	8.334	1	0.004	1.844
Importance of male participation (1)	0.609	0.286	4.534	1	0.033	1.839
Importance of couple VCT(1)	0.536	0.176	9.275	1	0.002	1.709
Couple discordance in HIV status (1)	1.167	0.512	5.195	1	0.023	3.212
ARV MTCT(1)	0.272	0.402	0.458	1	0.499	1.313
Importance of delivery at HF(1)	0.126	0.441	0.082	1	0.775	1.134
Breast feeding(1)	0.19	0.441	0.186	1	0.667	1.209
Transmission BF(1)	0.875	0.225	15.123	1	0.000	2.399
Role of male(1)	0.545	0.178	9.375	1	0.002	1.725
Pregnancy prevention(1)	0.784	0.337	5.412	1	0.020	2.190
Transmission delivery(1)	0.857	0.323	7.040	1	0.008	2.356
Constant	1.696	0.601	7.963	1	0.005	5.452

Source: Author, 2015

4.4.4 Regression Analysis on Effects of Socio-Cultural Factors on Male Partner's Level of Participation in MCW Programmes

4.4.4.1. If Female Partner Should Seek Male Partner's Concept before Going for VCT

Descriptive results in Table 65.4.54 shows that 32(41%) of the respondents who disagreed with the statement that female partners should seek consent of their male partner before consuming MCW services registered a high level in participation while the remaining 46 (59%). The study also revealed that 38(59.4%) of the respondents who agreed with the statement registered low participation. Mean while 31 (59.6%) of

respondents who agreed recorded a high level of participation. The study realized a Chi-square of 11.96 at df 1 a P value of 0.002. Male partners' perception that female partner's should seek their male partner's consent be consuming MCW services had a significant influence on male partner level of participation in MCW programmes.

Table 65 : 4.54 Perception that female partner should seek male partner's concept for VCT

Participation		woman tested without man approval		Total
		disagree	agree	
Low	Count	46	38	84
	% within participation	54.8%	45.2%	100.0%
	% within woman tested without man approval	59.0%	59.4%	59.2%
	% of Total	32.4%	26.8%	59.2%
High	Count	32	26	58
	% within participation	55.2%	44.8%	100.0%
	% within woman tested without man approval	41.0%	40.6%	40.8%
	% of Total	22.5%	18.3%	40.8%
	Count	78	64	142
	% within participation	54.9%	45.1%	100.0%
	% within woman tested without man approval	100.0 %	100.0 %	100.0%
	% of Total	54.9%	45.1%	100.0%

Source: Author 2015

4.4.2. If Male Partner Should Accompany their Female Partner to the HF for

Maternal and Child Wellbeing Services

Results depicted in Table 66.4.55 reveal that 83(98.8%) of the respondents who disagreed with the statement that male partner should accompany their female partner to the HFs for MCW services registered a low level of participation in the programmes. The results also reveal that majority 39 (67.2%) of the respondents who were of the opinion that male partner should accompany their female partners recorded a high level of participation in the programmes. Only a small number 19 (32.8%) of the respondents who disagreed with the statement registered a high level of participation. Male partners' perception was found to significantly influence their level of participation in the programmes. The study recorded a Chi-square value of 73.976 at df 1 and a P value of 0.000 and a correlation of-0.722 at a p value of 0.000.

Table 66: 4.55Table on effects of male partner's perception towards accompanying female partner to Health Facilities

Participation		Men to accompany partners to HFs		Total
		Agree	Disagree	
Low participation	Count	1	83	84
	% within participation	1.2%	98.8%	100.0%
	% within accompany partners to HFs	2.5%	81.4%	59.2%
	% of Total	0.7%	58.5%	59.2%
High Participation	Count	39	19	58
	% within participation	67.2%	32.8%	100.0%
	% within accompany partners to HFs	97.5%	18.6%	40.8%
	% of Total	27.5%	13.4%	40.8%
	Count	40	102	142
	% within participation	28.2%	71.8%	100.0%
	% within accompany partners to HFs	100.0%	100.0%	100.0%
	% of Total	28.2%	71.8%	100.0%

Source: Author, 2015

4.4.4.3. It is a Taboo to Discuss Reproductive Issues with Female Partner During the Pregnancy

Every society has laid down dos and don'ts that the member are expected to comply with at various stages in their life and in relation to varied situations. In relation to this, male-female relationships during the period of pregnancy, child birth and breast feeding are well stipulated by the society. It was important for this study to establish if Kiambu community's cultural norms influenced male partner's level discussing MCW programmes with their female partner. The findings of the study presented in Figure 4.6 show that male partner's perception that it is a taboo to discuss MCW programmes with expectant woman influenced their level of emotional participation. The results reveal that majority of the respondents who agreed with the statement that it is a taboo to discuss maternal and child well- being issues with female partner during the pregnancy registered a low level of participation in the programmes. Only a few of the respondents who agreed with the statement registered a high level of participation in the programmes (Figure 9.4.6).

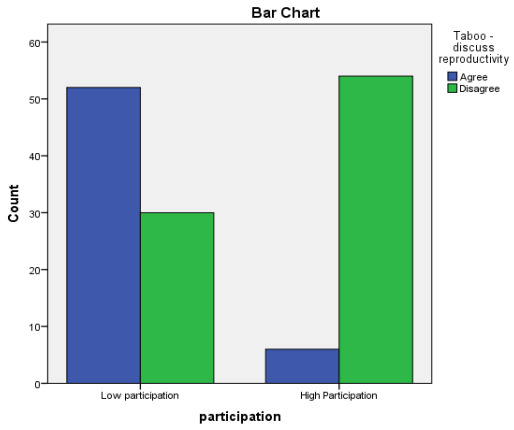

Figure 9: 4.6 If it is a taboo to discuss reproduction issues with female partner. Source: Author, 2015

Meanwhile majority of the respondents who disagreed with the statement registered a high level of participation while the remaining small number recorded a low level of participation. The study realised that male partner's perception towards discussing MCW programmes during pregnancy significantly influenced their level of participation in the programmes.

4.4.4.4. Male Partners' Perception on Couple VCT

Earlier studies have shown that a persons' perception on whether spouses need to attend HFs for HIV counseling and testing influence their decision to accompany their female partner for the same. This could be influenced by male partner level of awareness in couple discordance in HIV status or mother to child transmission of HIV which is partially blamed on secondary infections during pregnancy and breastfeeding. This study sought to establish whether the respondents' perception had influenced their accompanying the female partner for VCT. The findings of the study presented in Figure 10.4.7 show results based on the relationship between male partner's perceptions that couples should attend HFs for VCT together versus their level of participation in the MCW programmes. The results reveal that majority of the respondents who agreed with the statement that couples should be tested for HIV registered a higher level of participation in the programmes compared to those who did not. Meanwhile few respondents in the same category registered a low level of participation in the programmes compared to those who had a negative perception. The study also found that majority of the respondents who disagreed with the statement registered a low level of participation while a small number of the remaining respondents in the same category recorded a high level of participation.

The study realised that male partner's perception towards couple counseling and testing in HIV influenced their level of participation.

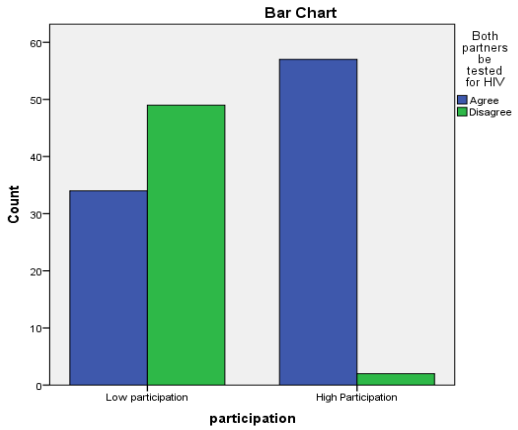

Figure 10: 4.7 Male partners' perception on couple VCT for HIV
Source: Author 2015

4.4.4.5 That Male Partner Can Use Preventive Measures Such as Condoms to Prevent HIV Infections during Pregnancy and Breast Feeding

The findings of the study depicted on Table 67.4.56 show that majority 63(67%) of the respondents who disagreed with the statement that partners should use preventive measures like condoms to prevent secondary infections during pregnancy registered a low level of participation. The findings also show that 31(33%) in the same category reported a high level of participation. Among those who agreed with the statement majority 27(56.2%) registered a high participation while the remaining 21(43.8%) in the same category registered a low level of participation. The results revealed a chi-square of 7.122 at df 1 and a P value of 0.008. Male partner's perception was found to significantly influence their level of participation in the programmes.

Table 67: 4.56 Use preventive measures prevent HIV infections during pregnancy and breast feeding

Participation		To use condoms with wife to prevent secondary infections		Total
		Agree	Disagree	
Low participation	Count	21	63	84
	% within participation	25.0%	75.0%	100.0%
	% within To use condoms with wife to prevent infections	43.8%	67.0%	59.2%
	% of Total	14.8%	44.4%	59.2%
High Participation	Count	27	31	58
	% within participation	46.6%	53.4%	100.0%
	% within To use condoms with wife to prevent infections	56.2%	33.0%	40.8%
	% of Total	19.0%	21.8%	40.8%
	Count	48	94	142
	% within participation	33.8%	66.2%	100.0%

Source: Author, 2015

4.4.4.6 Perception that the Clinics are designed for Women and Children Only

The study findings recorded in Table 68.4.57 indicate that majority 69(67.6%) of the respondents who agreed with the statement that MCW programmes were designed for women and children alone registered a low level of participation. The study findings also reveal that 33(32.4%) of respondents in the same category recorded a high level of participation. Mean while, majority 27(67.5%) of respondents who disagreed with the statement recorded a high level of participation while the remaining 13(32.5%) of respondents in the same category recorded a low level of participation. The study found that male partner perception of the programmes belonging to women and children significantly influenced their level of participation. Chi-square analysis

revealed that there is a significant relationship between male partners' perception that clinics are designed for women and children and their level of participation. A Chi-square value of 14.547 at df1 at a P value of 0.000 was realised.

Table 68: 4.57 Effect of perception that MCW programmes are designed for women and children only

Participation		MCW for women and children only		Total
		Agree	Disagree	
Low participation	Count	69	13	82
	Expected Count	58.9	23.1	82.0
	% within participation	84.1%	15.9%	100.0%
	%for women and children o	67.6%	32.5%	57.7%
	% of Total	48.6%	9.2%	57.7%
High Participation	Count	33	27	60
	Expected Count	43.1	16.9	60.0
	% within participation	55.0%	45.0%	100.0%
	% for women and children o	32.4%	67.5%	42.3%
	% of Total	23.2%	19.0%	42.3%
Total	Count	102	40	142
	Expected Count	102.0	40.0	142.0
	% within participation	71.8%	28.2%	100.0%
	% for women and children o	100.0%	100.0%	100.0%
	% of Total	71.8%	28.2%	100.0%

Source: Author, 2015

4.4.4.7 Summary Model Summary for Socio-Cultural Factors

The fourth objective of the study was to determine influence of social-cultural factors on male partner's level of participation. The Cox and Snell R square and Nagelkerke R square of 0.607and 0.819 (Table 69.4.58) reveal that the model of goodness of fit is satisfactory. The Nagelkerke R^2 obtained means that the social cultural factors

explained 81.9% of the variation in male partner's participation in the programmes while Cox and Snell R square show that they explain 60.7% of the participation.

Table 69: 4.58 Summary for goodness of fit model for socio-cultural factors

odds Summary	
-2 Log likelihood	59.325
Cox & Snell R Square	0.607
Nagelkerke R Square	0.819

Source: Author, 2015

4.4.4.8 Logistic Regression for Socio-Cultural Factors

The Exp (B) column (the Odds Ratio) (Table 70.4.59) shows that male partner who felt that discussing reproductive health issues with female partner was a taboo were 10.166 times less likely to register high participation in the programmes compared to those who never perceived it as a taboo. Male partner who believed that MCW programmes were for women and children were 6.050 times less likely to register high participation compared to those who believed male partner could participate. Further, the Exp (B) column (the Odds Ratio) shows that male partner who argued that MCW programme information should be communicated through men were 1.937 times less likely to register high level of participation compared to those who thought the information could be channeled through the female partner. The study findings revealed a negative significant relationship between the community's cultural beliefs and male partner's level of participation in the programmes.

Table 70: 4.59 logistic regression for socio-cultural factors

	B	S.E.	Wald	df	Sig.	Exp(B)	1/Exp(B)
Tested without approval(1)	0.159	0.078	4.155	1	0.042	1.172	
Accompany partner(1)	1.079	0.461	5.478	1	0.019	2.942	
Men are bewitched(1)	1.752	0.45	15.158	1	0.000	5.766	
Taboo to discuss(1)	-2.319	0.912	6.466	1	0.011	0.098	10.166
Couple testing(1)	1.312	0.53	6.128	1	0.013	3.714	
Use of condoms(1)	0.29	0.097	8.938	1	0.003	1.336	
MCW for women children (1)	-1.8	0.645	7.788	1	0.005	0.165	6.050
Unfaithfulness(1)	-1.501	0.974	2.375	1	0.123	0.223	4.486
Infected women be divorced(1)	-0.135	0.704	0.037	1	0.848	0.874	1.145
Information through men(1)	-0.661	0.803	0.678	1	0.41	0.516	1.937
Constant	-1.937	1.87	1.073	1	0.3	0.144	6.938

Source: Author, 2015

4.4.5 Analysis for Effects of Programme Related Factors

This independent variable (effects of the current MCW programmes) was measured by determining the respondents' perception on aspects of the current MCW programmes policies and their implementation and how this influenced their participation.

4.4.5.1 If men should be provided with men only clinics

The results from the cross tabulation (Table 71.4.60) show 76(93.8%) of the respondents who registered a low level of participation in the programmes had agreed with the statement that men should be provided with men only attendance times and

clinics. Mean while 5(6.2%) of those who registered a low level of participation had disagreed with the statement. Majority 52(85.2%) of respondents who registered a high level of participation in the programmes had disagreed with the statement that men should be provided with men only clinics. Only a minority 9(14.8%) of respondents who registered a high level of participation in the programmes had agreed with the statement. The respondents' perception on men only clinics significantly influenced their level of participation in the programmes in Kiambu County. This revealed by a Chi-square value of 90.54 within df 1 and a P value of 0.00.

Table 71: 4.60 Influence of male partner's perception on need for men only times and clinics on their level of participation

Participation		Provide men only clinics		Total
		Agree	Disagree	
Low participation	Count	76_a	5_b	81
	% within participation	93.8%	6.2%	100.0%
	% provide men only clinics	89.4%	8.8%	57.0%
	% of Total	53.5%	3.5%	57.0%
High Participation	Count	9_a	52_b	61
	% within participation	14.8%	85.2%	100.0%
	% provide men only clinics	10.6%	91.2%	43.0%
	% of Total	6.3%	36.6%	43.0%
	Count	85	57	142
	% within participation	59.9%	40.1%	100.0%
	% provide men only clinics	100.0%	100.0%	100.0%
	% of Total	59.9%	40.1%	100.0%

Source: Author, 2015

4.4.5.2 If Male Partner's Perception that MCW Programmes were not Welcoming to the Male Partner and Their Level of Participation

Results of a cross-tabulation between male partner's perceptions that MCW programmes were not welcoming to the male partner and their level participation. The study findings showed that of the respondents who registered a low level of participation in the programmes, majority had agreed with the statement that the programmes were not welcoming to the male partner. On the contrary, only a few of those who disagreed with the statement registered low participation. On the contrast, majority of those who recorded a high level of participation had disagreed with the statement with only a few having agreed.

4.4.5.3 Perception that Maternal and Child Wellbeing Programmes are Designed for Women and Children Only

The study sought to find out if male partners perceived maternal and child wellbeing programmes as belonging to women and children. This would assist the researcher determine if this influenced their level of participation in the programmes. The respondents were therefore asked if they perceived MCW clinics were designed for women and children only. Results presented in Figure 11.4.8 show that majority of those who recorded a low level of participation had the perception that MCW programmes were designed for women and children only. Meanwhile minority of those who registered a low level of participation did not perceive the programmes as designed for women and children. Majority of the respondents who registered a high a level of participation had disagreed with the statement while the remaining respondents supported the statement.

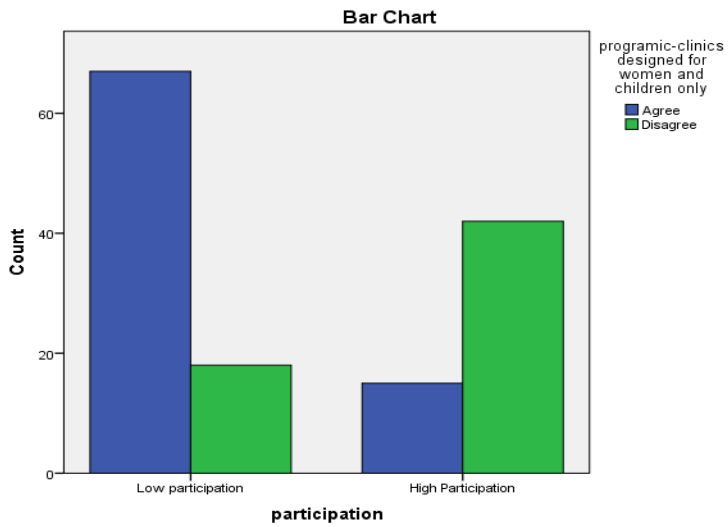

Figure 11: 4.8 If the clinics are designed for women and children only

Source; Author 2015

4.4.5.4 Perception that Current MCW Policies Have Done Little to Involve Men

Results from a cross-tabulation between the respondents' perception that current MCW policies have done little to involve men and their level of participation are presented on Table 72.4.61.They indicate that majority 63(91.3%) of the respondents who registered a low level of participation agreed with the statement that little has been done to involve male partner in MCW programmes. On the other hand majority 41 (56.2%) of those who registered a high level of participation in the programmes had agreed with the statement. The male partner perception that little had been to involve them in the programmes significantly influenced their level of participation in the programmes. A positive perception was associated with a high level of participation. The study realised a Chi-square value of 22.34 at df 1 and a P value of 0.000.

Table 72: 4.61 Effect of perception that little is done to involve men

Participation		little done to involve men		Total
		Agree	Disagree	
Low participation	Count	63	91.3%	102
	% within participation	30.4%	69.6%	100.0%
	% little done to involve men	67.4%	74.0%	71.8%
	% of Total	21.8%	50.0%	71.8%
High Participation	Count	15	25	40
	% within participation	37.5%	62.5%	100.0%
	% little done to involve men	32.6%	26.0%	28.2%
	% of Total	10.6%	17.6%	28.2%
	Count	41	96	142
	% within participation	56.2	43.8	100.0%
	little done to involve men	100.0 %	100.0%	100.0%
	% of Total	32.4%	67.6%	100.0%

Source: Author, 2015

4.4.5.5 Perception That MCW Services are not Accommodative to the Male Partner Needs

Results of the study show relationship between male partner's perceptions that MCW services are accommodative to the male partner needs versus their level of participation. The results show that majority of the respondents disagreed with the statement that the current MCW programmes were not accommodative to the male partners' health needs. The study realized a chi-square value of 40.901at df 1 and a P value of 0.000.

4.4.5.6 Perception that Health Facilities Provided Confidentiality for VCT and ARVS Dispensation

The results of cross-tabulation between male partner's level of participation and their perception that health facilities provided confidentiality for VCT and ARVs dispensation are presented in Table 73.4.62.The findings reveal that44 (60.3%) of the respondents who registered a high level of participation in the programmes had supported the statement that HFs provided confidentiality during VCT and ARV dispensation. The remaining 29(39.1%) of those who reported a high level of participation had disagreed with the statement. On the other hand majority 44(63.8%) of respondents who registered a low level of participation in the programmes agreed with the statement while the remaining 25(39.1%) disagreed. The study found that the respondents' perception of the health facilities providing confidentiality during VCT and ARVs dispensation did not significantly influence their behaviour of participating in the programmes. This was indicated by a chi-square value of 18.053, df 1 at a P value of 0.101.The study also realised that the relationship between their perception and participation was negative at a Pearson's correlation of 0.099 at a p value of 0.243.

Table 73 : 4. 62 Effect of perception on confidentiality during ARV dispensation on level of participation

Participation		No confidentiality for collecting ARVS		Total
		Agree	Disagree	
Low participation	Count	44_a	25_a	69
	% within participation	63.8%	36.2%	100.0%
	% within programmatic-no confidentiality for collecting ARVS	50.0%	46.3%	48.6%
	% of Total	31.0%	17.6%	48.6%
High Participation	Count	44_a	29_a	73
	% within participation	60.3%	39.7%	100.0%
	% within programmatic-no confidentiality for collecting ARVS	50.0%	53.7%	51.4%
	% of Total	31.0%	20.4%	51.4%
	Count	88	54	142
	% within participation	62.0%	38.0%	100.0%
	% within programmatic-no confidentiality for collecting ARVS	100.0%	100.0%	100.0%
	% of Total	62.0%	38.0%	100.0%

Source: Author, 2015

Table 74: 4. 63 VCT and ARV dispensation be carried out by non-residents

Participation		HIV testing be done by non residents		Total
		Agree	Disagree	
Low participation	Count	54	48	102
	% within participation	52.9%	47.1%	100.0%
	% within programme-HIV testing be done by non residents	65.9%	80.0%	71.8%
	% of Total	38.0%	33.8%	71.8%
High Participation	Count	28	12	40
	% within participation	70.0%	30.0%	100.0%
	% within programme-HIV testing be done by non residents	34.1%	20.0%	28.2%
	% of Total	19.7%	8.5%	28.2%
	Count	82	60	142
	% within participation	57.7%	42.3%	100.0%
	% within programme-HIV testing be done by non residents	100.0%	100.0%	100.0%
	of Total	57.7%	42.3%	100.0%

Source: Author, 2015

4.4.5.7 Perception that VCT and ARVS Dispensing Sections of Health Facilities should be Served by Non-Residents to ensure Confidentiality

The descriptive results in Table 74.4.63 reveals the relationship between male partner's level of participation in MCW programmes and their perception on whether VCT and ARVs dispensing sections of health facilities should be served by non-residents to ensure confidentiality. The findings reveal that 54(52.9%) of respondents who recorded a low level of participation had agreed with the statement while 48(47.1%) of the respondents in the same category had disagreed. Meanwhile most of

those who recorded a high level of participation 28(34.1%) had agreed with the statement while the remaining 12 (20%) had disagreed. The study however realised that male partner perception of whether non-residents serve the VCT and ARV dispensing sections of HFs did not significantly influence their level of participation in the programmes. This was revealed by the Chi-square of 3.427 at df 1 and a P value of 0.064 and a correlation of -0.155 at a p value of 0.65.

4.4.5.8 Male Partner Perception on Time Spent at the Health Facilities

Descriptive results in Table 75.4.64 show that majority 98 (98%) of the respondents who agreed who agreed with the statement that participating in maternal and child wellbeing programme at the HFs was time consuming registered a low level of participation. On the other hand a small percent (2%) of the respondents who agreed with the statement registered a high level of participation. The study also realised that majority of the respondents who disagreed with the statement recorded a high level of participation and only 14 (33.3%) in that category registered a low participation. The study found that male partner's perception was a determinant of their level of participation. The study realized a chi-square value of 55.159 at df 1 and a P value of 0.000 and a correlation of 0.623 at a p value of 0.000.

Table 75: 4. 64 Perception on time spend at Health Facility

	Participation	Time consuming		Total
		Agree	Disagree	
Low participation	Count	90	12	102
	% within participation	88.2%	11.8%	100.0%
	% time consuming	90.0%	28.6%	71.8%
	% of Total	63.4%	8.5%	71.8%
High Participation	Count	10	30	40
	% within participation	25.0%	75.0%	100.0%
	% time consuming	10.0%	71.4%	28.2%
	% of Total	7.0%	21.1%	28.2%
	Count	100	42	142
	% within participation	70.4%	29.6%	100.0%
	% time consuming	100.0%	100.0%	100.0%
	% of Total	70.4%	29.6%	100.0%

Source: Author, 2015

4.4.5.9 If the Health Facilities Offering Maternal and Child Wellbeing Services are Located far from their Home/Work Place Making them Inaccessible

Descriptive results in Figure 11.4.9 indicate that 91(79.1%) of the respondents who agreed with the statement that health facilities were located far making it costly and time consuming to travel registered a low level of participation. At the same 23(20.2%) in the same category recorded a high level of participation. On the other hand majority 21(75%) of those who disagreed with the statement registered low participation with only 7(25%) in that category recording high participation. A Chi-square value of 0.314 at df 1 and a P value of 0.575 showed that location of health did

not have a significant influence on male partner's level of participation in MCW programmes in Kiambu County.

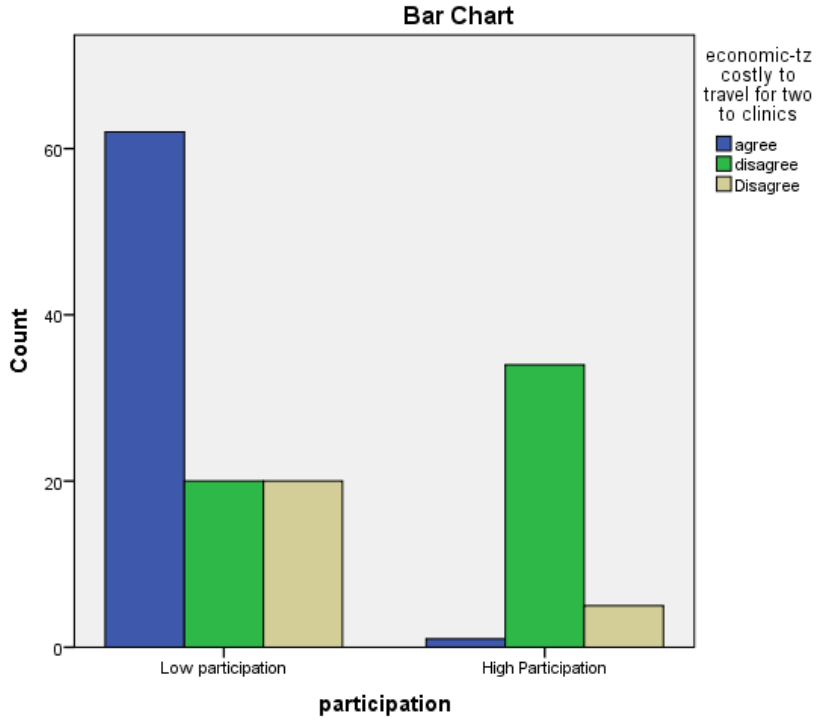

Figure 12:4.9. If the cost and time of travelling to HF influenced male partner's level of participation in the programmes. Source:Author, 2015

4.4.5.10 If Men Should be Trained on their Role in Maternal and Child Wellbeing Programmes

The respondents were asked if they thought male partner should be trained on their role in maternal and child wellbeing programmes. The descriptive results in Table 76.4.65 reveal that 87(78.4%) of the respondents who agreed with the statement that male partner should be trained on their role in maternal and child wellbeing programmes registered a level low of participation while 24(21.6%) registered a high participation. On the other hand 15 (48.4%) of respondents who disagreed with the

statement registered a low level of participation while 19(51.6%) recorded a high participation. A chi-square value for that response was 10.772 at df1 and a p value of 0.001.Perception that men should be trained in their role in MCW programmes significantly influenced their level of participation in the programmes in Kiambu County. The study registered a correlation value of 0.275 at a p value of 0.001.

Table 76: 4.65 If men should be trained on their role in MCW programmes

Participation		Men be trained on their role		Total
		Agree	Disagree	
Low participation	Count	87	15	102
	% within participation	85.3%	14.7%	100.0%
	% men be trained on their role	78.4%	48.4%	71.8%
	% of Total	61.3%	10.6%	71.8%
High Participation	Count	24	16	40
	% within participation	60.0%	40.0%	100.0%
	% men be trained on their role	21.6%	51.6%	28.2%
	% of Total	16.9%	11.3%	28.2%
Total	Count	111	31	142
	% within participation	78.2%	21.8%	100.0%
	% men be trained on their role	100.0%	100.0%	100.0%
	% of Total	78.2%	21.8%	100.0%

Source: Author, 2015

4.4.5.11 Influence of current maternal and child wellbeing programmes on level of male

partner's participation

The fifth objective was to explore the influence of current maternal and child wellbeing programmes on level of male partner's participation. The Nagelkerke R^2

obtained was 0.928 (Table 77.4.66). This means that current maternal and child wellbeing programmes explained 92.8% of the variation in male partner's participation in maternal and child wellbeing programmes.

Table 77: 4.66 Summary model for programme related factors

Model Summary	
-2 Log likelihood	21.535
Cox & Snell R Square	0.646
Nagelkerke R Square	0.928

Source: Author, 2015

4.4.5.12 Regression for Programme Related Factors

The probability (odds) of high level of participation (Table 78.4.67) was 488 times lower for male partner who felt that health facilities were designed for women and children compared to those who disagreed with the statement. The probability of high level of participation was 5.75 times lower for male partner who thought that Healthcare providers at the MCW sections of the HFs were not welcoming to male partner compared to those who did not. Exp(B) column (the Odds Ratio) shows that male partner who agreed that health facilities offering maternal and child wellbeing services are located far from home/work place making it is time consuming and expensive to travel there were 1.78 times less likely to register a high level of participate than those who disagreed. The probability (odds) of high level of participation was 5.50 times lower for male partner who thought that the HFs did not provide confidentiality to the patients who went for HIV testing compared to those

who felt that there was confidentiality. The probability of high participation was 4.61 times lower for male partner who thought that little had been done to accommodate male partners' reproductive needs compared to those who did not. This implies that there is a negative relationship between male partner's perception of the current MCW programmes policies and their implementation versus their level of participation in the programmes. The hypothesis that male partner's perception of the current MCW programmes policies and their implementation does not influence their level of participation in the programmes in Kiambu County was therefore rejected and the alternative hypothesis accepted. ble 394.76 logistic regression for programme related factors.

Table 78: 4.67 logistic regression for programme related factors and overall participation

	B	S.E.	Wald	df	Sig.	Exp(B)	1/Exp(B)
Provide men only Clinics(1)	1.142	0.266	18.432	1	0.000	3.133	
Health providers non welcoming(1)	-1.75	0.407	18.488	1	0.000	0.174	5.75
MCW designed For women children(1)	-1.586	0.499	10.102	1	0.001	0.205	4.88
Little done involve male partner(1)	-1.529	0.743	4.235	1	0.040	0.217	4.61
Confidentiality (HIV)(1)	-1.704	0.553	9.495	1	0.002	0.182	5.50
Confidentiality (ARV)(1)	1.034	0.815	1.610	1	0.205	2.812	
Be tested by nonresidents(1)	1.876	0.789	5.653	1	0.017	6.527	
Costly for two			6.488	2	0.039		
Costly for two(1)	-1.697	0.673	6.358	1	0.012	0.183	5.46
Costly for two(2)	-0.625	0.304	4.227	1	0.040	0.535	1.87
Time consuming(1)	-1.124	0.478	5.529	1	0.019	0.325	3.08
VCT (promised drugs)(1)	1.12	0.231	23.508	1	0.000	3.065	
Distance costly(1)	-0.576	0.261	4.870	1	0.027	0.562	1.78
Men be trained(1)	-1.996	0.832	5.755	1	0.016	0.136	7.36
Accommodate male health needs(1)	1.302	0.401	10.542	1	0.001	3.677	
Be attended by males (1)	1.849	0.636	8.452	1	0.004	6.353	
Constant	-1.155	0.275	17.640	1	0.000	0.315	3.17

Source: Author, 2015

4.4.6 Model Summary for Predictor Variables

The Nagelkerke R^2 obtained was 0.586. This means that overall variables (predictor variables) explained 58.6% of the variation in male partners' level of participation in maternal and child wellbeing programmes in Kiambu County (Table 79.4.68).

Table 79: 4.68 Summary model for the study

Model Summary for the study	
-2 Log likelihood	108.66
Cox & Snell R Square	0.431
Nagelkerke R Square	0.586

Source: Author, 2015

Logit model (Table 80.4.69) was fitted with level of participation as the dependent and (Demographic characteristics, Economic factors, Knowledge and awareness, Social cultural factors and Programme related factors) as the independent variables.

Table 80: 4.69 Logistic regression model for the study

Variables	B	S.E.	Wald	df	Sig.	Exp(B)
Demographic characteristics	-1.467	.282	27.020	1	.000	.231
Economic factors	-.435	.204	4.551	1	.033	.647
Knowledge and awareness	.267	.100	7.075	1	.008	1.306
Social cultural factors	-.229	.100	5.200	1	.023	.796
Programme related factors	-.571	.225	6.434	1	.011	.565
Constant	.700	.230	9.231	1	.002	2.014

Source: Author, 2015

Logit (p) = 0.700-1.467 Demographic characteristics-0.435Economic factors+0.267 Knowledge and awareness-0.229Social cultural factors-0.571Programme related factors (Table 80.4.69).

CHAPTER FIVE: DISCUSSION OF RESEARCH FINDINGS

5.1 Introduction

This chapter presents discussions on the major findings of the study. The discussions are based on the study objectives and the output of the descriptive and inferential statistical analyses which guided testing of research hypothesis.

5.2 Influence of predictor variables on the outcome variable

This section discusses the findings on the effects of predictor variables on male partner level of participation in MCW programmes in Kiambu County. These include the effects of:

5.2.1 Influence of male partner's demographic characteristics

Ho_1 There is no significant relationship between male partner's demographic characteristics and his level of participation in maternal and child wellbeing programmes in Kiambu County.

The study sought to establish influence of male- partners' demographic characteristics on his level of participation. Specifically, the study investigated variation in respondents' age, levels of education, length of stay in their current relationship as well as that of the ordinal position of the infant. The study aimed at establishing how variability in these demographic characteristics influenced male partner's behaviour in participating in the programmes.

The findings of the study (Table 12.4.1) revealed that medium age of respondents was 32 years with an inter-quartile range of 28-37.All male partners who participated in the study were aged between 20 and 40 years. Results from the cross tabulation

(Table 49.4.38) showed that male partner level of participation in MCW programmes decreased with increase in their age. The results from Chi-square analysis test implied a significant relationship between age of the respondents and their level of participation in the programmes at a Chi-square value of *39.9, df 2 at a p value of 0.000.*The study also realised a Spearman's correlation value of *-0.489 at a p value of 0.000.* The results of logistic regression on effects of demographic age (Table 52.4.41) revealed that the odds ratio for male partners within the age cohort 30-39 were 2.158 times less likely to register a high level of participation compared to the reference age cohort 20-29.The same was found for respondents who belonged to the age cohort 40-49 who were 1.57 times less likely to register a high level of participation compared to the reference age cohort. Increase in age was associated with lower odds of registering a high level of participation.

The above findings on demographic factors disagree with those of Ditekemena *etal*., (2011), Nkouh *et al*., (2010) in their studies carried out in sub-Saharan Africa on barriers to male involvement in maternal and child wellbeing programmes. Their studies found that respondents within the age bracket between 40-49 years registered a lower level of participation of 0.637 times lower compared to that of the lower age cohort between 20-29 years which is the reference cohort (Table 52.4.41). The findings of this study were attributed to the fact that older male partner felt that their female partner had enough experience in the programmes and could therefore attend the services alone if only their male partner supported them financially (Table 13.4.2).

The study also found that older male partner were not anxious to become fathers and therefore paid little attention to physically participating in the programmes. At the older age most male partner were established economically and could finance their female partner to consume the services in their absence (Table 13.4.2).

Understanding male partners' level of education was important in that it enabled the study determine whether variation in education levels of the participants had a significant influence on their level of participation. The study findings presented in Table 12.4.1 reveal that majority of the respondents were in the age bracket 30-39 years. Results presented in Figure 4.1 reveal that increase in respondent's level of education led to decrease in their level of participation. Chi-square analysis revealed a significant negative relationship between respondents' level of education and their level of participation at a Chi-square value of 8.616 at df 5 and a p value of 0.015. The results of logistic regression on effects of level of education on level of participation (Table 52.4.41) revealed that the odds ratio for male partners who had attained College and University level of education were 1.952 times less likely to register a high level of participation compared to the reference age cohort (secondary level of education). Increase in level of education was associated with lower odds of registering a high level of participation.

The findings did not concur with those of Ditekemena *et al*., (2011) in their study carried out in Kinshasa (DRC) where they found that the level of education of male partner did not influence their level of participation. The findings however disagree with those of Byamugisya *et al*. (2010) in their study carried out in Uganda. Their study realized that male partner who had completed 8 years of education or more were twice likely to participate in reproductive programmes than those with lower

education. These findings agree with those of studies carried out in other parts of sub-Saharan Africa (Ditekimena *et al.,* 2013) which found that male partner's level of education was a significant determinant of his participation in the programmes.

The study attributed this to the fact that majority of respondents who had attained college and university educations were engaged in wage employment. Most of these male partners lacked permission from work stations to accompany their female partners to the health facilities. This revealed in findings recorded in Table 56.4.45 which show that male partners in wage reported lower levels of high participation compared to those in self employment. Respondents in wage employment were 0.448 times less likely to register a high level of participation than those in self employment.

Understanding male partners' length of stay in the current relationship enabled the study to find out if it had a significant influence on male partner's level of participation. The study results presented in Table 14.4.3 show that majority of the respondents had been in the current relationship for more than ten years. The study findings presented in Table 49.4.38 show that majority of the respondents in younger relationships of less than five years registered a higher level of participation compared to those in older relationships of over ten years. The Chi-square test revealed a a significant negative relationship with level of participation at a value of 50.728 at df 2 and a p value of 0.000.The study also registered a correlation value of 0.404 at a p value of 0.000. Results of logistic regression test (Table 52.4.41) revealed that male partners who been in the current relationship for more than ten years were 2.956 times less likely to register a high level of participation compared to those who were in the relationship for less than five years. This was attributed to young couples' anxiety to have a partner in life or to become a father for the first time. It was also attributed to

the high mobility nature of the young men. Male partner in young relationships of less than ten years discussed reproductive wellbeing programmes with their spouses more than those in older relationships. This was attributed to the fact that the younger partners were more eager to find out what happens at the HFs than male partner in older relationships and to the fact that older female partner had gained experience in maternal and child wellbeing programmes and did not need to be escorted to the health facility. It could also imply that the male partner had participated in earlier clinics for the older children and was therefore not eager to do so. The longer duration of stay with their female partners could imply that they were more versed on matters relating to maternal and child wellbeing programmes. It could also be caused by the fact that remained to take care of older children while the female partner attended the clinics.

It was important to determine the influence of ordinal position of the infant on male partner's level of participation. The results presented in Table 15.4.4 revealed that majority of respondents in this study had their second born (second ordinal position).The findings presented in Figure 4.2 reveal that level of male partner participation in the programmes reduced with increase in ordinal position of the infant. The study findings from Chi-square tests reveal that ordinal position had a significant negative influence on level of participation at a value of 35.138, df 3 at a p value of 0.00.Results for logistic regression (odds ratio) show that male partners whose child was ordinal position two were 3.908 times less likely to register a high level of participation compared to those in the ordinal position one. Increase in the ordinal position of the infant led to decrease in the level of participation by the male partner. This could be attributed to the fact that the male partner's perception that with

increase in ordinal position of the child the female partner was well versed with the MCW services and would attend the clinics alone. It could also be attributed to the fact that the male partner may have lost the anxiety of becoming a father after the first born. Most male partners attending to the second or other births above second born may choose to concentrate on their economic activities to meet the family economic needs, or take care of the older children while the female-partner sought the MCW services.

The findings of this study of influence of male-partners' demographic characteristics on his level of participation led to rejection of the null hypothesis and acceptance of the alternative hypothesis. The model summary for demographic characteristics revealed that Nagelkerke R square was 0.404 (Table 51.4.40). This meant that demographic characteristics of male partners in Kiambu County explained 40% of the variability in their level of participation in MCW programmes.

5.2.2 Influence of economic factors and livelihood activities

$H_{O2:}$ Male partner's economic status and livelihood activities did have significant influence on his level of participation in MCW programmes in Kiambu County.

Understanding male partner's economic status and livelihood activities is important in establishing whether economic variations among the respondents could be implied for low level of participation in MCW programmes in Kiambu County. Study findings presented in Table 16.4.5 show that majority of study participants had an income of between 10,000 and 20,000.The results of study cross tabulations (Table 54.4.43) showed that increase in male partners' level of income was associated with increase in

their level of participation. Results obtained from Chi-square test revealed that male partners' level of income was a significant determinant of their level of participation in the programmes. The Chi-square value was 39.137 at df 3 and a p value of 0.001 and a Pearson's correlation of -0.463 at a p value of 0.000.Maternal and child wellbeing services are officially free in all public health facilities in Kenya, but in reality unofficial, indirect and opportunity costs pose a significant expenditure which discourages less financially stable couples from attending. This would include transport for the two, their miscellaneous expenses and the cost of abandoned livelihood activities especially due to the long hours taken at the health facility while receiving the services.

The study findings (Table 23.4.12) revealed that most of the expenses incurred in seeking maternal and child wellbeing services were put up by the male partner alone (Table 48.4.37). Their absence at the HFs was partially explained by the fact that they remained behind to pursue their economic interests to earn income for the family (Table 44.4.33, Table 46.4.35). The female partner plays a less active role in financing healthcare. However, their input is evident in the physical attendance at the health facilities. The study findings (Table 54.4.43) revealed that income levels of the male partner were implied for their level of participation with majority of respondents who had registered a high level of participation having an income above thirty thousand shillings and the lowest participation recorded among male partner with income levels below ten thousand. This could be attributed to the fact that those earning a higher pay could pay for transport for the two to the HF and to meet other expenses with ease. The study realized that most of those earning below ten thousand

per month spent most of their time on their economic activities or may not afford fare for two to the health facility or even to pay for services.

These findings concur with those of Nkuoh *et al.,* (2010) in their study in Cameroon on barriers to male involvement where they established that economic burdens of meeting reproductive health costs barred male partner from active physical participation in the programmes.

The study results presented in Table 17.4.6 show that most of the participants in this study were engaged in wage employment. The study results in Table 55.4.44 shows that majority of participants who registered a high level of participants of participation in the programmes were engaged in self employment. The nature of male partners' livelihood activities had a positive significant influence on their level of participation as indicated by a Chi-square of 42.986 at a df 1 and a p value of 0.000 and a Pearson's correlation of 0.347 at a p value of 0.000. Results of the logistic regression (odds ratio-Table 56.4.45) showed that male-partners in wage employment were 0.448 times less likely to register a high level of participation compared to those in self employment. The summary model for economic factors and livelihood activities (Table 57.4.46) indicated a Nagelkerke R square of 0.481.This meant that economic factors and livelihood activities explained 48% of the variability in male-partners' level of participation in MCW programmes in Kiambu County. The findings revealed that most of the male partners lacked time out of their livelihood activities to physically visit the health facilities with their female partners (Table 44.4.33). The self- employed male partner felt that they needed to remain at their place of work because they are the breadwinners (Table 44.4.33).Those in wage employment explained that their employers would mostly not let them out of work to accompany

their female partner to the health facilities. The employers were not under any obligation to grant their employees permission to attend maternal and child wellbeing clinics except during the first two weeks of the child birth (official paternity leave). Some male partners explained that they were granted permission but only once especially to escort the female partner for delivery or to pick them after delivery. The respondents who are in wage employment explained that many times the employers would not grant them leave to attend clinics especially because they would spend the whole day at the health facilities. Those in wage employment registered a lower physical participation index compared to the self-employed. This was attributed to the fact that the self-employed leave their jobs at will and accompany their partners because they were not restricted by employers. The study, however, found that those in wage employment registered higher financial participation than the self-employed. The study found a negative and significant relationship between livelihood activity and level of participation in MCW programmes in Kiambu County.

The findings concur with those of Boniphace (2010) in his study in Tanzania where he realized that 25% of his study respondents did not attend clinics because they were not granted leave by their employers.

These findings agree with those of Byamugisha *et al.,* (2010) in their study in Uganda on determinants of male involvement in the prevention of mother to child transmission of HIV. Their study found out that a male partner's profession affected his level of participation. The findings of this study do not however concur with their findings that *jua kali* artisans registered least participation compared to other professionals especially those in the wage employment. The current study found that

male partner in wage employment recoded least physical participation compared to the self- employed *Jua kalil artisans*..

The study findings do concur with the findings of a study by Reece *et al*., (2010) in their study in western Kenya on male partner involvement in PMTCT programmes. Their study realized that male partner with occasional jobs recorded the highest physical participation because their movements were not restricted at their work places.

The study realized that the respondents found it satisfying that the male partner provides financial support to the female partner who in turn follows and consumes the services with the infant while the male partner attends to other family activities (Table 48.4.37).

5.2.3. Influence of male partner's knowledge and awareness in MCW programmes

H_{O3} There is no significant relationship between male partner's knowledge and awareness in MCW programmes and his level of participation in the programmes.

Understanding the respondents' variability in knowledge and awareness about MCW programmes and of the male partner's role in the programmes was important in assessing how the variation influenced his level of participation in the programmes. The study findings depicted on Tables 4.48 to Table 64.4.53 and figures 4.3 to 4.5 show the relationship between male partner's knowledge and awareness in various MCW programmes and their level of participation in those programmes. Results

depicted on Table 58.4.47 revealed that there was no significant relationship between male partner's knowledge on the meaning of MCW programmes and his level of participation in the programmes in Kiambu County.

The findings presented in Table 20.4.9 show that majority of the respondents had knowledge on the right time during the pregnancy when their female partner was supposed to attend ANC. Results depicted in Table 59.4.48 show that respondents who had the knowledge registered a higher level of participation in the programmes as compared to those who did not know when she was supposed to attend the ANC. Chi-square test of independence revealed a significant relationship between male partner level of participation in the programmes and his level of awareness in the ANC programmes at a value of 7.882, df 1 at a p value of 0.005. Logistic regression test (Odds ratio-Table 64.4.53) showed that respondents who did not have the knowledge were 2.924 times less likely to register a high level of participation in the programmes compared to those who had the knowledge.

Study findings presented in Table 21.4.10 reveal that majority of the respondents did not know their role in the programmes. Results depicted in Table 61.4.50 show that male partners who had the knowledge on their role in the MCW programmes registered a higher level of participation in the programmes than those who did not have the knowledge. A Chi-square value of 11.224 at a p value of 0.002 implied that knowledge on the role of male partner was a significant determinant of his level of participation in the programmes in Kiambu County. Results of the logistic regression test (Table 64.4.53) revealed that respondents who did not have knowledge were 1.725 times less likely to register a high level of participation in comparison to those who had the knowledge. The study findings revealed that majority male partners, who

had knowledge on their role in VCT, played a more active role by accompanying their partners for ANC as well as VCT. They escorted them to the health facility early enough for delivery and financed their delivery at the health facility. Majority discussed maternal and child wellbeing programmes with their female partner. This enabled the female partners to consume all or most of the services.

The results from the study depicted on Table 23.4.12 showed that majority of the respondents did not have knowledge of the importance of couple VCT. The study findings depicted in Figure 4.3 indicate that male partner's knowledge on importance of couple VCT was a significant determinant of their level of participation in the programmes. The Chi-square test gave a value of 8.801 at a p value of 0.003 which meant that the knowledge was a significant determinant of their level of participation. Logistic regression test (Odds ratio-Table 64.4.53) showed that respondents who did not have the knowledge were 1.709 times less likely to register a high level of participation compared to those who had the knowledge.

Study findings presented in Table 24. 4.13 showed that majority of the respondents did not have knowledge on couple discordance in HIV status. The findings presented in Figure 4.4 show that knowledge on couple discordance in HIV status was a significance determinant of his level of participation in the MCW programmes in Kiambu County. The results of the logistic regression (Odds ratio) in Table 64.4.53 reveal that respondents who did not have knowledge on couple discordance were 3.212 times less likely to register a high level of participation compared to those who did not have.

The findings are in line with those of Peltzer *et al*., (2011) in a study carried out in Botswana where they realized that media campaigns improved male participation in PMTCT programmes by increasing their awareness on their role.

The findings of this study showed that male partner who had knowledge about the programmes played a major role not only in reducing the partner's risk of acquiring HIV but also in uptake of ANC, VCT and MTCT prevention programmes. These results were similar to the findings of Ditekemena *et al*., (2013) who found out that lack of knowledge on discordance of HIV status in married couples discouraged male partner participation in VCT. In their study in sub-Saharan Africa, Ditekemena *et al*., (2013) found that men lacked knowledge that they were required to attend ANC with their female partner and especially the need to be tested for HIV when they already knew their female partner's status. The study realized that male partner's who lacked or had inadequate knowledge and awareness on how MTCT of HIV takes place or may be prevented during breast-feeding do not support the female partners in providing appropriate feeding for the infant. Male partners end up leaving the whole burden to the female partner.

Findings also agree with those of a study by Ditekemena *et al*., (2013) in their study in Sub-Saharan Africa which found that men lacked knowledge that they were required to attend ANC with their partners and especially the need to be tested for HIV when they already knew their female partner's status. This led to low participation. The findings are also in line with those of a study by Kenneth *et al*., (2016) in South Africa which realised that lack of knowledge about maternal health issues led to non-participation and fear of the unknown by male partner. The findings of the current study agree with those of a study by Stephen (2015) in Turkana Kenya

which realised the need for strategies to involve men in maternal, newborn and infant health by creating awareness on their expected role. The findings from the current study show that male partner's who lacked or had inadequate knowledge and awareness on how MTCT of HIV takes place or how it may be prevented during breast-feeding may not support the female partner in providing appropriate feeding for the infant. Male partner ended up leaving the whole burden to the female partner. The findings of the study showed that male partners' knowledge on prevention of MTCT of HIV through various programmes influenced their level of participation in the programmes. The study found a positive and significant relationship between knowledge on importance of ARVs in preventing MTCT of HIV and overall male participation in the programmes.

Male partner with correct knowledge registered a higher participation in MCW programmes than those who did not have the knowledge. This is a challenge in prevention of MTCT of HIV because such male partner may not seek to know their HIV especially when they are aware of their female partner's. They perceive their female partner's HIV status is a proxy of theirs. The study results portrayed in Table 4.13 imply that there is a positive and significant relationship between knowledge on couple discordance in HIV and overall male participation. Male partner who had knowledge on couple discordance registered higher levels of participation than those who did not have the knowledge. If there is HIV discordance between such partners, then male partners are likely to infect the female partner and the foetus during pregnancy and the infant during breast feeding. The study found that male partner who had the correct knowledge on couple discordance in HIV were more likely to seek HIV testing even when their female partners' statuses were sero-negative. This

explained the absence male partner at the VCT centres because they perceived their female partner HIV status represented theirs (Table 45.4.34).

The study results in Figure 4.5 show that there is a significant relationship between male partners' knowledge on the importance of delivery at the HF in preventing MTCT of HIV and overall participation in the programmes. Male partner who had this knowledge recorded a higher level of participation in encouraging their partner to deliver at the HF than those who did not have the knowledge. The study results imply a positive significant relationship between knowledge on prevention of MTCT of HIV and overall male participation in the programmes.

The findings concur with those of Boniphace (2010) in his study in Tanzania where he realized that 21.4% of his respondents did not attend clinics because they lacked knowledge on importance of the programmes. They were not aware of their role. The findings of this study concur with the findings of a study by Ongweny (2014) in Mavoko County which found that to increase male-involvement, it was important to create awareness to the male partner on the benefits of their participation to the whole family.The findings of this study concur with those of Monica *et al.,* (2010) who carried out a study in western Kenya on men as partners in reproductive health and realized that majority of the study participants were of the opinion that creating awareness and sensitizing the men were the most important interventions to creating sustained participation in VCT programmes.

5.2.4 Influence of Socio-Cultural factors

H_{O4} There is no significant relationship between male partner's social-cultural factors and his level of participation.

The study sought to determine the influence of community related factors and social environment on male participation in the programmes. These factors are mainly at the societal level and are outcomes of the set up norms that guide gender relations and division of labour. The most pertinent was the societal perception that the field of maternal and child wellbeing was a woman's domain and male partner should give women a chance to pursue issues that are socially theirs.

The study findings recorded in Table 27.4.16 showed that majority of the respondents disagreed with the statement that women can be tested for HIV without their male-partners' consent. The study findings presented in Table 65.4.54 show that majority of the respondents who registered a high level of participation in the programmes had agreed with the statement that that women can be tested for HIV without their male-partners' consent. The Chi square test revealed a positive significant relationship between male partner's perception and his level of participation at a Chi-square value of 11.96, df 1 at a P value of 0.002. Results from logistic regression test revealed that respondents who had the perception that women cannot be tested for HIV without their male-partners' consent were 1.172 times less likely to register a high level of participation as compared to those who did not (Table 70.4.59).

The study findings presented in Table 28.4.17 show that majority of the respondents disagreed with the statement that male partners should accompany their female partners to the health facilities for MCW programmes. The findings on Table 66.4.55

showed that majority of respondents who registered a high level of participation in the programmes had agreed with the statement that male partners should accompany their female partners to the health facilities for MCW programmes. The Chi-square test revealed that there was a significant relationship between male partner's perception and their level of participation at a value of 73.976 at df 1 and a p value of 0.000 and Pearson's correlation value of -0.722 at a p value of 0.000.The logistic regression test (Odds ratio-Table 70.4.59) showed that male partners who did not agree that male partners should accompany their female partners to the health facilities for CMW programmes were 2.942 times less likely to register a high level of participation in the programmes. For example, the study found out that there was ridicule to men who physically accompanied their female partner to the health facility. They were perceived to be weak and this discouraged other male partner. For examplea respondent from Kiambu sub-County commented*: "It is culture. If my friend sees me take my wife to the clinic he will say 'huyu amekaliwa' (this one is henpecked). If he did not believe in the culture, he wouldn't burst me, but right now if I also see him take his wife I will tell him 'bwana umekaliwa na bibi nyumbani' (Respondent, Kiambu County).*

Another respondent from Kiambu reported*; You know according to our culture, men are taken as kings, so if you're seen carrying a baby, you are seen to be 'voiceless'. Also, if you are so much concerned with women, they'll see you to be voiceless (Mister, your wife controls you at home)".*

The findings concur with those of Boniphace (2010) in his study in Tanzania where he realized that 21.4% of his respondents did not attend clinics because physical and emotional participation was contrary to cultural expectations. The findings are in line with the findings of Ademola *et al.,* (2014) in their study carried out in Nigeria on perceptions and barriers to male participation. Their study found that men perceived it a good idea to accompany the partners to the clinics but putting it into practice was difficult due to societal norms and cultural barriers. The study realized that male partner will not attend ANC and VCT because traditionally men were not involved in reproductive health clinics where activities and services were typically not directed towards them. Male partner would therefore prefer VCT at another site other than at the maternal and child wellbeing clinics.

The findings from this study agree with those of Kenneth *et al*., (2016) in their study in South Africa which found that their *Tshivenda* culture does not allow them to participate in maternal Healthcare services.

These findings concur with those of Monica *et al.,* (2010) in a study carried out in western Kenya. Their study realised that culture coupled with peer pressure played a major role in preventing male partner participation in maternal and child wellbeing as depicted by the response below.

Negative cultural perceptions towards some MCW programmes led to low participation. For example, the study found that majority of the male partners were not in support of some MCW programmes such as condom use during pregnancy and alternative feeding for infants (Table 67.4.56) and Figures 4.6 and 4.7.

Majority of the respondents (Table 21.4.10) believed that it is a taboo to discuss reproductive health issues with the female partner during pregnancy. The findings of the study in Figure 4.6 show that respondents who had the perception that discussing MCW issues with their pregnant female partner was a taboo registered a low level of participation. The logistic regression test (Odds ratio-Table 70.4.59)) showed that respondents who had the perception that discussing reproductive health issues with a pregnant women is a taboo were 0.098 times less likely to register a high level of participation compared to those who did not perceive so.

Despite the challenges brought about by the prevailing cultural beliefs in Kiambu community (Table 47.4.36), male partners agreed that there are more benefits if male partner became more responsive in matters concerning their own reproductive health and that of their female partner. Among these benefits are increased understanding of pregnancy and related issues, enhanced levels of preparedness from the time the female partner is pregnant until she delivers. The current study found a negative significant relationship between the community's cultural beliefs and male partners' level of participation in the programmes.

The findings of the current study are in line with the findings of a study carried out by Falnes *et al*., (2011) in northern Tanzania where they realized that routine testing for HIV of women at the antenatal clinic was highly acceptable and appreciated by men, while other programme components, notably partner testing, condom use and the infant feeding recommendations, were met with continued resistance. The study findings show that male partners are very willing to support the health of their female partner and that of their children. Some men are even willing to denounce customs

and practices that challenge the women's health and are willing to participate in maternal and child wellbeing programmes.

The study further noted that men were perceived as intruders into the women's reproductive domain (Table 47.4.36). Male active involvement have however been prompted in the recent past due to emergence of health issues such HIV and AIDS that require concerted efforts of both partners. The study realized that programmes that support women only in reproductive health have been doomed to fail especially due to couple discordance in HIV sero-status which could lead to secondary infections during pregnancy or breastfeeding.

The study findings concur with the findings of a study by Debra *et al.,* (2014) in Maligita and Kibibi in Uganda where they carried out a cross sectional pilot study on involvement of men in maternal healthcare. Their study found that men believed pregnancy and childbirth were roles of women and men's role were traditionally defined especially provision of financial support.

The study findings are in line with those of Falnes *et al.,* (2011) in their study carried out in Tanzania on partner involvement in PMTCT. They found that male partner felt maternal and child wellbeing programmes were a woman's responsibility and male partner needed to play a passive role. The findings are also in line with the findings of studies by Byamugisha *etal*., (2010), Reece *et al*., (2010) and Nkuoh *et al.,* (2010) where they found that negative cultural perceptions about male participation in maternal and child wellbeing programmes with their partners, discouraged their participation. Men who accompanied their female partner to the health facility were perceived to be dominated by their female partner.

Results portrayed in Table 65.4.54 show a negative significant relationship between male partners' perception on female partner seeking their concept before going for VCT and their level of participation in MCW programmes. The study found out that most obstacles to involving male partner in maternal and child wellbeing programmes revolve around socio-cultural factors such as men's fear of losing control of their position as family heads (Tables 44.4.33, 46.4.35 and 47.4.36). The study found that deep-rooted cultural norms about gender roles and power hierarchy are major obstacles to male participation in the maternal and child wellbeing programmes. Women's efforts to overcome this challenge have remained a huge challenge over decades because power of decision making lies with the male partner as the family head. Male partners were not supportive of programmes where the female partner made decisions regarding maternal and child wellbeing without their consent (Table 65.4.54). For example, men did not like invitations to the health facility by their female partner. It would mean they are the ones making decisions and controlling the male partner.

The findings revealed that for most respondents, physical participation in maternal and child wellbeing programmes implied weakness. They also fear that accompanying their female partner to the maternal and child wellbeing facility would increase their vulnerability and expose any reproductive health secrets, exposures that could reduce their social status (Table 44.4.33). The study also found that women did not have the authority to request their husbands to test for HIV. This made it difficult to involve male partner in VCT through their female partner (Table 45.4.34). The study found that deep-rooted ideologies about gender roles and power hierarchy are major obstacles to male participation in the programmes (Table 44.4.33). Empowering male

partner to participate by making current programmes male-friendly should be feasible and highly prioritized for the programmes to achieve their potential. For example, the study found that although most fathers believed that HIV testing is an important part of preparing for fatherhood, there are formidable structural and psychosocial barriers to their participation (Table 45.4.34). Their study also found that knowledge on effective contraceptive methods was high; however, lack of time and overall limited awareness regarding the specific role of men in maternal and child wellbeing programmes deterred men's meaningful involvement.

The study also found that men were concerned that women's use of contraception made them not desire sex and others involved in extra-marital sexual relationships. This is blamed for the increasing rates of STD/HIV infections and out of wedlock pregnancies. The study realized that the Kiambu community cultural structures and belief systems are defined and controlled by men. This caused gender imbalance which contribute to low male partner participation in maternal and child wellbeing programmes and eventually lead to poor maternal and child health. The study found that fear of receiving a positive HIV result in the presence of their female partner discouraged male partners from attending VCT with their female partner. This would mean they lose confidentiality and would not have time to plan on what to do with the results as the family head before the female partner knows his status (Table 45.4.34). From these findings, it is apparent that there is a strong correlate between male partner's perception related to cultural connotations and their level of participation.

This finding agrees with findings of a study by Morfaw *et al.* (2013 b) in their study in Uganda on barriers and facilitators to male participation in PMTCT of HIV. The findings of this study agree with those of Mbizvo and Basset (2013) who carried out a

study in Zimbabwe, on reproductive health and AIDS in sub-Saharan Africa and found out that men preferred to make final decisions in contraceptive use, even when their female partner were responsible for obtaining contraceptives. In Zimbabwe reproductive health decisions required the written consent of the husband or male guardian. The findings of the current study also agree with those of Koo *et al*. (2013) in their study in South Africa on barriers to male partner participation in programmes to prevent mother-to-child HIV transmission. Their study found that cultural factors were a great barrier to implementation of reproductive health policies. The findings of the current study concur with those of Falnes *et al.* (2011) in their study carried out in northern Tanzania on barriers to male partner involvement in reproductive health. Their study found that men preferred to make family decisions in relation to reproductive health especially if the female partner should go for HIV test.

These findings concur with those of Kabagenyi *et al*., (2014) in their study carried out in rural districts in Uganda on barriers to male involvement in contraceptive uptake and reproductive health services. They found that reproductive health was perceived as woman's domain and due to social norms and health system factors, childbearing and rearing is a social role of women. That matter of fertility and birth planning were perceived as women's roles. Men's duty is perceived as that of providing financial aid to the family.

These findings of the current study agrees with those of Falnes *et al., (*2011) in their study in Tanzania on the potential role of mother in law in preventing mother- to-child transmission of HIV when they realized that arena for antenatal clinic, VCT, delivery and post natal clinics was defined as a typical female domain where men were out of place.

The current study found that majority of the respondents explained that healthcare providers should improve on how male partner are involved in MCW programmes through invitation letters so that they come only when it is necessary or they can be engaged at particular levels so that they would become active participants. According to respondents, this would make sure male partners do not come to HFs when they are not required.

5.2.5 Influence of programme related factors

H_{O5}The existing maternal and child wellbeing programmes do not have a significant influence on male partner's level of participation.

The findings of the study portrayed in Tables 71.4.60 to 78.4.67 and Figures 4.8 and 4.9 show that majority of the respondents were of the opinion that the current policies and programmes in maternal and child wellbeing programmes should be restructured to make them male friendly. The findings in Table 34.4.23 show that majority of the respondents agreed with the statement that men should be provided with men only clinics and visiting hours the current programmes are designed for women and children only and are not accommodative to their special needs. The results presented on Table 71.4.60 show that majority of respondents who registered a low level of participation in the programmes had supported the suggestion that men be provided with men only clinics. They explained that this would increase and sustain male participation in the programmes. The Chi square test revealed a significant relationship between male partner level of participation and his perception at a value of 90.54 df 1 and a p value of 0.000.The logistic regression test (Odds ratio-Table 78.4.67) revealed that respondents who felt that men should be provided with men

only clinics were 3.133 times less likely to register a high level of participation in the programmes.

The study findings presented in Table 38.4.27 show that majority of the respondents agreed with the statement that Healthcare providers were not welcoming to the male partners. Results portrayed on Table 71.4.60 show that there is a negative significant relationship between male partners' perception that Healthcare providers are not welcoming versus their level of participation. This is revealed by the chi-square value of 109.4 at df1 and a p value of 0.000.The findings depicted in logistic regression Table 78.4.67 show those respondents who had a perception that Healthcare providers are not welcoming to the male partners were 0.174 less likely to register a high level of participation in the programmes compared to those who did not. Some of these respondents explained that they would not be allowed to join their female partners and the infants in the consultation rooms which made their visit loose meaning (Table 34.4.23). The study also established that some healthcare providers were not welcoming to male partner who accompanied their female partner to the clinics. Some healthcare providers were rude and even abused them or their female partner. This made the male partner perceive themselves as intruders into the women's and the infants' domain and opted to keep off (Tables 44.4.33 and 47.4.36).

The study found out that men seemed very unkind and unreasonable if they sat down on seats while an expectant woman or a mother had lacked a seat due to inadequate infrastructure at the health facilities. This discouraged male partners who either walked out to wait for their partner outside or went away never to accompany their female partner to the health facility again (Table 44.4.33. The respondents expressed optimism that the men only clinics or men only times of consuming the services

would be less congested and they would spend little time at the HFs. The facilities would be less noisy than it is the current situation with mothers and the infants. The respondents further explained that men only clinics would provide men with a conducive environment where they can inquire on men's health concerns and needs (Table 44.4.33).This is not possible in the company of their female partner as is the case in the current healthcare set up. The respondents explained that offering reproductive health services to male partner at sites other than at the health facilities would make the services more accommodative to them. Some of the suggested sites include hotels, churches, bars and football fields. According to the respondents 'men only times' could be extended to evening after official working hours and over the weekends (Tables 44.4.33 and 46.4.35).

This study found that there are many explanations to Healthcare providers' harshness and unwelcoming attitude to male partners who accompany their female partners to the health facilities. These include low wages paid to Healthcare providers, lack of a functioning health infrastructure and a critical shortage of healthcare providers which demoralize the staff. The healthcare provider patient ratio is high especially during the clinics days where the providers get overworked. This is more often than not caused by inadequately staffed health facilities leading to inefficiency of the healthcare providers. The overworked staff normally became unwelcoming to the male partner because they look at them as an extra burden. The study noted that some of the healthcare providers were rude to the male partner who sits while pregnant women or those carrying babies stand. Some respondents also explained that they are not allowed into the consultation rooms with their female partners because they are perceived as intruders in women domain. Male partner who attend health facilities

with their female partner are not involved in the counseling sections or the other procedures which discourages their physical participation and contribute to low knowledge levels in the male domain.

This study found that majority of the respondents explained that during the day when the maternal and child wellbeing services are offered at the HFs the male partner are busy at their work place (Table 46.4.35. Long queues and long waiting hours is caused by limited number of days in a week when maternal and child wellbeing services are offered. This is accompanied by long procedures they have to follow from payment queues, to training sessions, consultations and actual receiving of the services. The female partner would virtually spend a whole day seeking the health services. Male partner become impatient and leave the female partner to continue with the queues never to come back to the health facilities (Table 44.4.33).The study realized that men who accompanied their female partner during delivery explained that they were not allowed to accompany them to the wards during labour and delivery. This was because unaccompanied women felt uncomfortable with men in the labour wards. Therefore delivery is treated as a feminine affair discouraging male partner from accompanying their partner another time (Tables 44.4.33 and 47.4.36).Some respondents explained that healthcare providers treated their female partner very unkindly and abused them in their presence. This made male partner feel bitter that they could not defend their female partners a factor that discouraged them from accompanying them for future clinics (Table 44.4.33).

The study also realized that during the postnatal clinics the healthcare providers paid attention to the mothers and the infants and paid little or no attention to the male partner who acted as mere escorts (Table 44.4.33). This may explain why majority of

the male partner reported that they accompanied their female partner to the health facility only once or twice. This situation is worsened by the fact that health facilities are understaffed; healthcare providers are underpaid and overworked hence their morale is very low. The study found that majority of male- partners perceived themselves as intruders who added more workload to health facilities that are already overstretched by women and children. This perception could have contributed to the low level of participation (Table 44.4.33).

This finding is in line with findings of Byamugisha *et al.,* (2010) in their study in Uganda on determinants of male partner involvement in PMTCT programmes and Ditekemena *et al.,* (2012) in their study in Congo on barriers to male partner participation. Both studies reported that rudeness and harsh treatment meted on male partner or on their female partner in their presence discouraged them from coming back to the health facilities. The study findings presented in Table 41.4.30 show that majority of the respondents agree with the statement that little has been done to involve male partners. The findings depicted in Table 72.4.61 show that majority of the respondents who registered a low level of participation in the programmes had agree with the statement that little has been done to involve male partners. The Chi-square test revealed a negative significant relationship between male partners' level of participation and their perception that little has been done to involve male partners at a Chi-square value of 22.34, df 1 and a p value of 0.000. Study findings (Table 78.4.67) from logistic regression analysis (Odds ratio) revealed that respondents who said that little had been done to involve male partner s were 0.217 times less likely to register a high level of participation in the programmes. Those who supported the statement explained that the current programmes were designed for women and

children making male partner appear as intruders or socio-outcasts (Tables 44.4.33. 45.4.34, and 47.4.36). The study also realized the need for differential counseling and orientation of the maternal and child wellbeing services for both sexes by assigning male VCT and clinic days. The respondents explained that there is need to create male friendly spaces within the clinic premises as well as offering of VCT outside normal working hours preferably in the evening after work and during weekends.

The study findings revealed in Table 42.4.31 show that majority of the respondents disagreed with the statement that MCW programmes accommodated the special reproductive health needs of the male partners. Results from the Chi-square test showed that there is a positive and significant relationship between the respondents' perception and their level of participation at a Chi-square value of 40.90, df 1 and a p value of 0.000. The findings from the logistic regression test (Odds ratio) revealed that respondents who felt that the programmes were not accommodative to their needs were 3.677 times less likely to register a high level of participation compared to those thought they accommodated their needs (Table 78.4.67).The results imply that there is a positive significant relationship between male partner's perception and their overall participation. These results also imply a positive significant relationship between male partner's perception that MCW clinics were designed for women and children only and their level of participation (Table 78.4.67). The study findings also revealed that there is insignificant relationship between male partner perception that MCW clinics were not confidential in HIV testing and their level of participation (Table 78.4.67).

Other studies (Byamugisha *et al*., 2010) had similar findings that clinics were perceived as designated and reserved for women and men were embarrassed to find themselves in female places. These findings are similar to the findings of other studies

carried out in sub-Saharan African, for example, Ditekemena *et al.*, (2012) who realized that the health facilities' set up looked very feminine discouraging male partner from attending the clinics. These findings agree with those of Kabagenyi *et al*. (2014) in their study in sub-Saharan Africa and those of Byamugisha *et al*., (2010) carried out in Uganda on determinants of male partner participation in reproductive health. Their study realized that most health facilities did not have adequate space to accommodate men, a factor that discouraged them.

The findings of the current study are in line with those of Ditekemena *et al*., (2011) in their study carried out in Democratic Republic of Congo. Their study found that venue and space constraints discouraged male partner participation in reproductive health programmes. They also found that more men attended VCT at a bar and a church venue than they did in a health facility. Their study also agrees with the current study that male partner need gender specific clinics to address male unique needs such as eligibility criteria for vasectomy. These findings agree with those of Kabagenyi *et al*., (2014) in their study in sub-Saharan Africa and those of Byamugisha *et al*., (2010) in their study carried out in Uganda on determinants of male partner participation in reproductive health. Their study realized that most health facilities did not have adequate space to accommodate men, a factor that discouraged them.

Results on Table 75.4.64 show a significant relationship between male partners' level of participation in MCW programmes and their perception that it is time consuming. This study found that respondents who perceived the programmes as time consuming recorded low participation. The findings of the current study are similar to those of Byamugisha *et al*., (2010) in their study in Uganda on determinants of male

involvement in reproductive health. Their study realized that due to burdensome procedures at the health facilities, men in wage employment and self employed are not ready to spend an entire day at the clinic. This led to low participation. These findings agree with those of Ditekemena *et al.* (2012) in their study review in sub-Saharan Africa on determinants of male maternal and child health services. They realized that in Kinshasa uptake of PMTCT services by male partner increased with extension of opening hours between 5.30pm to 8.00pm and during the weekends.

The findings of the current study are also similar to those of Byamugisha *et al. (*2010) in their study in Uganda on determinants of male involvement in reproductive health. Their study realized that due to burdensome procedures at the health facilities men in wage employment and self-employed are not ready to spend an entire day at the clinic. Study findings recorded on figure 4.18 reveal a negative significant relationship between male partner's level of participation in MCW programmes and their perception that the programmes were designed for women and children only. This study found that male partner had limited choice of family planning methods unlike women. The men could only use condom or the life lasting vasectomy that was not popular. This discouraged male partner because women's family planning choices were short term and they were the determinants of the best method making men irrelevant.

According to them, men had unmet needs; such as need for variety of male family planning methods, and need to be taught about their reproductive and sexual health. These are not included in the current MCW programmes making them less appealing to men. Male partner complained that they had been turned into mere tools in promoting women and infants' health. The respondents described the antenatal care

clinics as not male friendly Table 44.4.33).This study found that majority of the respondents explained that the current maternal and child wellbeing programmes portrayed MCW programmes as a responsibility of women (Table 46.4.35).They paid a lot of attention to feminine health issues like fertility and use of family planning, pregnancy, delivery and breastfeeding a field where men were given little attention.

The findings of this study concur with those of Koo *et al.* (2013) in their study carried out in Tswane, South Africa where male partner expressed dissatisfaction that reproductive health programmes focused overwhelmingly on women related issues excluding male partner who therefore perceived clinics as not male friendly. The male partner also complained of the narrow focus on HIV instead of the whole wellbeing of the family. They also complained of lack of opportunities for male partner to participate in the family's healthcare.

The findings from this study point out to male partner perception that use of contraceptives in reproductive health encouraged promiscuity in their female partner and would therefore not support them. This is a major drawback in use of condoms in prevention of secondary infections during pregnancy to prevent MTCT of HIV. The findings of this study reveal that long distances to the HFs and meant spending a lot of time and money to access Healthcare especially for two partners (Table 44.4.33). The male partner preferred financing their female partner to attend the clinics alone to reduce the costs.

The findings of the current study concur with those of Kenneth *et al*., (2016) in their study in South Africa where participants cited long distances from workplace to home as a factor that contributed to their non-participation in maternal healthcare services.

These findings concur with those of the findings by Ditekemena *et al*. (2012) carried out a study in sub-Saharan Africa on determinants of male involvement in maternal and child health services. Their study found that lack of decentralization of health services constrained male partner participation. This made participation time-consuming and very costly for the two partners.

These findings agree with those of a similar study carried out by Ditekemena *et al*. (2014) in Uganda on role of male partner in the prevention of mother to child HIV transmission. Their study found that health facilities offering PMTCT services were few and widely spaced making them inaccessible. Further, findings agree with those of Reece *et al.* (2010) in their study in Kenya where they found that lack of decentralized reproductive health services led to long distances to the HFs that become expensive and time-consuming. The study realized that most respondents felt that HFs did not provide adequate confidentiality during HIV testing and collection of ARVs (Table 46.4.35). These study results on Table 4.68 revealed that there is a negative significant relationship between the respondents' perception on the confidentiality of the clinics during collection of ARVs and their overall participation. Majority of the respondents who felt that the programmes did not provide confidentiality registered a low level of participation in the programmes (Table 73.4.62).

Other people always came to know of a persons' HIV status because PMTCT services and especially provision of ARVs was done during particular days of the week and at designated rooms within the health facility. This made it possible for other people to suspect one's status. This forced people to go to health facilities far from their home where they are not known. Others send other people to pick ARVs for them an act

that ended up exposing their status further. The study revealed that some male partner would want to be attended to by non-residents healthcare providers. This was caused by the fact that respondents regarded VCT centres and ARV dispensing sections of the health facilities to be very sensitive and some patients always turned away when they realized that the people offering services there are known to them. They explained that villagers always knew the people who are HIV positive in their village because the information would always leaked from healthcare providers to them. The study presupposes that integration of VCT and ARV dispensation with other healthcare services would increase level of confidentiality which in turn would encourage more people to consume the services. The study presupposes that when people are assured of confidentiality on their HIV status they will go to the health facilities for the services (Table 46.4.35).

The findings of this study agree with those of a study by Ongweny (2014) in Mavoko Kenya which found that it was important to restructure Healthcare delivery to minimize the amount of time that was spent at the HF acquiring the services. The findings of this current study concur with those of Reece *et al*. (2010) in their studies when they realized that lack of confidentiality in health facilities and social stigma associated with disclosure of their HIV status discouraged them from participating in maternal and child wellbeing programmes.

CHAPTER SIX: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter presents the summary of the major findings of the study, conclusions and the recommendations. This was done in line with the objectives of the study and based on the outcome of the descriptive and inferential statistical analyses which guided the test of research hypothesis. Each conclusion traces directly to each hypothesis in line with study objectives

6.2 Summary of the findings

This section presents the summary of major findings of the study. The study sought to establish if male partners' demographic characteristics, his economic status and livelihood activities, his knowledge and awareness in MCW programmes, socio-cultural factors and MCW programme related factors were significant determinants of their level of participation in maternal and child wellbeing programmes in Kiambu County.

Demographic characteristics

One of the objectives of the study was *to establish the influence of male partner's demographic characteristics on his level of participation in maternal and child wellbeing programmes in Kiambu County.*

The study realised that male partner within the older age cohorts registered a higher percent of low participation index compared to those in the lower age cohorts. Male partner who had been in the relationship for a longer period registered a higher

percent of low participation than those had been in the relationship for a shorter period of time. The study findings revealed that male partner's demographic characteristics were significant determinants of his level of participation in the programmes in the County. The findings further indicated that demographic characteristics had a negative relationship with his male level of participation. These findings led to rejection of the null hypothesis that male partners' demographic characteristics do not influence his level of participation in MCW programmes in Kiambu County.

Economic factors and livelihood activities

The study sought *to assess the influence of male partner's economic status and livelihood activities on his level of participation in maternal and child wellbeing programmes in the Count.* The study findings indicated that economic factors and livelihood activities were significant determinants of male partner's level of participation in the programmes in the County. Increase in a male partner's level of income was attributed to decrease in his level of participation. Male partners with higher income levels registered higher percentages of low participation compared with those with lower income. Male partner's livelihood activities was found to influence his level of participation in that male- partners in wage employment recorded a higher percent of low participation levels compared to those in self-employment. These findings led to rejection of the null hypothesis that male partners' economic status and livelihood activities are not significant determinants of their level of participation in MCW programmes in Kiambu County and led to acceptance of the alternative hypothesis.

Knowledge and awareness in MCW programmes

The study sought *to examine the influence of male partner's knowledge and awareness in maternal and child wellbeing programmes on his level of participation in maternal and child wellbeing programmes in the County*. The results indicated that male partners' knowledge and awareness in the programmes and on their role were significant determinants of their level of participation in the programmes. Specifically, male partner's knowledge and awareness in couple HIV discordance, knowledge in their role in the MCW programmes, knowledge on MTCT of HIV and on how to prevent it had significant positive relationship with their level of participation. Male partners who had the knowledge registered a lower percent of low level of participation compared to those who did not have the knowledge. These findings led to rejection of the null hypothesis that male partner's knowledge and awareness in the programmes and in their role did not significantly influence their level of participation and the acceptance of the alternative hypothesis.

Socio-cultural factors

The study sought *to determine whether social-cultural factors of the Kiambu community influenced male partner's level of participation of in maternal and child wellbeing programmes in Kiambu County.*

Male partners who had strong cultural beliefs, for example that maternal and child wellbeing programmes were women's domain and that male partners should play a passive role, registered lower percentages of high level of participation compared to those who believed that it was a responsibility for both parents. The findings further

revealed that socio-cultural factors had a significant negative relationship with male partners' level of participation in the MCW programmes in Kiambu County. Culturally induced perceptions towards MCW programmes discouraged male partners from participating in the programmes. This is against WHO guidelines that express the need for couple participation in the programmes. The findings led to rejection of the null hypothesis that socio-cultural factors are not a significant determinant of male partners' level of participation in MCW programmes in Kiambu County and led to acceptance of the alternative hypothesis.

Programme related factors

The study sought *to assess the implications of current maternal and child wellbeing programmes on the level of male partner's participation in maternal and child wellbeing programmes in Kiambu County.* Results indicated that MCW programme related factors had a significant negative relationship with the level of male partner participation in the programmes. Male partners who were satisfied or accepted the current MCW programme policies and how they were implemented registered higher percentages of high level of participation in the programmes compared to those who expressed dissatisfaction. Specifically, the perception that the current MCW programmes did not pay attention to special health needs of male partner, the programmes were unwelcoming to male partner, the programmes were designed for women and children only and lack of confidentiality in collecting ARVs had significant negative influence on male partner's level of participation. These findings led to rejection of the null hypothesis that programme related factors do not

significantly influence male partner's level of participation in MCW programmes in Kiambu County.

6.3 Conclusions of the study

Demographic characteristics

The study concludes that male partner's demographic characteristics specifically his age, ordinal position of the infant and his length of stay in the current relationship were significant determinants of his level of participation in the MCW programmes in Kiambu County.

Economic status and livelihood activities

The study concludes that male partners' economic status and their livelihood activities were significant determinants of his level of participation in maternal and child wellbeing programmes in Kiambu County.

Knowledge and awareness

The study concludes that male partners' knowledge and awareness specifically on meaning and importance of MCW programmes, importance of male partner participation as well as their role in the programmes were significant determinants of his level of participation in the programmes.

Socio-cultural factors

The study concludes that socio-cultural factors of the Kiambu community were significant determinants of male partners' level participation in maternal and child wellbeing programmes in Kiambu County.

Programme related factors

The study concludes that current maternal and child wellbeing programmes' policies and their implementation in Kiambu County are significant determinants of male partner's level of participation.

6.4 The recommendations of the study

The study recommendations are in line with the objectives, findings and conclusions of the study. Recommendations from the male partners were taken into account in formulation of the specific recommendations that would inform decision making.

Demographic characteristics

The stakeholders specifically, National of Kenya and County Government of Kiambu should strive to create awareness through basic education to increase literacy levels in the general population. This improves ability to acquire information from mass and social media on importance of male-participation in the programmes.

Economic status and livelihood activities

The study recommends increase in Kiambu County government subsidies in provision of MCW services to increase their affordability to low income earners. For example,

the government subsidies on child delivery at public health facilities should be extended to all health facilities offering maternal and child wellbeing services including private hospitals through Social Health Insurance Policies.

Knowledge and awareness

The study recommends that the Kenya National Government and County Government of Kiambu should come up with policies to increase on MCW programmes through basic education system. This will enable the people understand the importance of male partner participation in maternal and child wellbeing programmes. This can also be done through community-based interventions such as print and social media.

Social-cultural factors

The study recommends that County Government of Kiambu through stake holders in the health sector should formulate culture-sensitive strategies that address sexual and reproductive health needs of the community in which they are applied. This is meant to increase acceptability of the programmes by male gender leading to their increased participation. Healthcare providers and policy makers need to understand how men relate to women in the field of reproduction and as well as factors upon which men make decisions in reproductive issues.

Programme related factors

The study recommend that County Government of Kiambu through stake holders in Healthcare should increase the number of health facilities offering MCW services as

well as improving their equitable distribution to increase accessibility. This could be done by upgrading current level one, level two, as well as level three HFs to offer MCW services that are now offered at level four and five HFs that are few. The MCW service providers should develop services with a "male reproductive wellbeing model", based on men's sexual and reproductive needs to increase their acceptability.

The study recommends that Healthcare providers in the Kiambu County should create of partnership with male partner as key stakeholders in MCW programmes at the community as well as a national level. Men should be incorporated in MCW needs assessments, developing convincing arguments, and selecting approaches and avenues for effectively reaching men through specific outreach activities. This participatory approach is expected to improve communication and decision-making processes related to maternal and child wellbeing programmes between male and female partners leading to male participation.

The Healthcare providers in MCW sections of HFs in the County should be more effective in implementation of paternity leaves to allow male partner time off duty to accompany their female partner for the services and participate in family health programmes.

Overall recommendation of the study

There is need for the Kenya National government and the Kiambu County government to strive to limit barriers and enhance the facilitators to the male partner participation in MCW programmes. This should be done in a context specific adaptation manner to optimize the male-participation.

Recommendations for further studies

There are several conceptual areas that may need to be researched further. For instance;

Find out if there exists variation in male partner's level of participation in the programmes between urban and rural areas.

Due to scarcity of resources and the infinite nature of the needs, it is important to find out which causes of the low male partner participation needs that can be prioritised and to be addressed in the Kiambu County.

REFERENCES

Adelekan, A., Elizabeth, R.E. and Oladipupo, S.O. (2014).Married men perceptions and barriers to male participation in Prevention of Mother to Child HIV transmission of HIV in Osogbo, Nigeria. *Journal of Sexually Transmitted Diseases*. 4(6): 80-96.

Ader , H., Mellenbergh, G. and Hand, D. (2008).*Advising on Research Methods.* Accountant's companion. Huizen, the Netherlands Johannes van Kessel publishing. Edition one.

Akarro, R., Deonisia , M. and Sichona , F. (2011). An evaluation of male involvement on the programme for PMTCT of HIV and AIDS. A case study of Ilala Municipality in Dar es Salaam. *Aston Journals in Arts and Sciences*. 1(20):1-11

Alemu, Z., Abebaw, G., Lemma, D. and Kediry, A.(2016).Male partner involvement in HIV counseling and testing and associated factors among male partners to pregnant women in Gondar, Towa, Ethiopia. *Journal of Pregnancy*. 3(8):1-6.

Alfred, C. (2016).Magnitude, motivation and barriers of male partner involvement in reproductive health services in Shinyanga District, Tanzania. *Journal of Health*.1 (3):34-212

Aluisio, C. (2010). Male partner participation in PMTCT. A case of study, Kenya. *Journal of Sexuality and Gender*. 14 (3):558-566

Aluisio, C., Adams, M. S., Richardson, Barbara, A. Bosire. (2011).Reply to 'male involvement' in women and children's HIV prevention: PMTCT strategic vision 2010-215. *Journal on Challenges in Definition and Interpretation.*8 (2):124-213

AMREF, Kenya. (2010).More than facts and figures. Effectiveness of AMREF's HIV and AIDS interventions. AMREF Discussion Series, *Discussion Paper No.005.*

AMREF , Kenya (2012).Determinants of male partner involvement in promoting deliveries by skilled Attendants in Busia Kenya. *Global Journal of Health Sciences*.4 (2):18-76

AMREF. (2013).Health delivery model. An innovative approach to delivering maternal, newborn and child health services to semi-Nomadic Communities in Hard to reach regions. *AMREF Discussion Series, Discussion Paper No.001*

AMREF Health Africa (2015).Mama na Mtoto wa Afrika. *Giving Mothers New Hope.* 1 (3):15-18.

Ani, F., Abiodun, O., Sotunsa, J., Faturoti, O., Imaralu, J. and Olaleye, A . (2015).Demographic factors related to male partner involvement in reproductive healthcare services in Nigeria. *European Journal of Contraception and Reproduction.*1 (2):19-62

Arundhati, C. (2011).Male involvement in family planning and reproductive health. Case of rural central India. *An introduction to Changing India Culture, Politics and Development* .ISBN:10:9514486579.

Auvinen, J., Kylma, J. and Suominen, T. (2013). Male involvement and prevention of Mother-to-Child Transmission of HIV in Sub-Saharan Africa. *An Integrative Review on Current HIV Research.*11 (3) 169-177

Babar. S. (2014).Assessing knowledge, exploring needs. A reproductive health survey of adolescents and young adults in Pakistan.ION World clinical solutions. *Journal of Pakistan Medical Association*:1 (28) 23-143

Baggaley, R., Hensen, B., Ajose, O., Grabbe, K.L., Wong, V.J., Schilsky, A., Lo, Y.R., and Lule, F.(2012). The evolution of HIV testing and counseling in Africa. *From Caution to Urgency*.1 (10):24-71

Barker , G., Greene, M., Siegel, E. and Nascimento, M.(2010). Men and Gender equality. What men have to do with it. Bull World Health Organisation. Washington, DC. R*esearch on Women and Institutio Promundo. 1(1) 16-77*

Boniphace, Y. (2010).Willingness and participation towards Prevention of Mother to Child Transmission of HIV among males of reproductive age. A study from Kilimanjaro-Tanzania. Dar Es Salaam. *Medical Students' Journal*. 16 (1):1-26

Brusamento, S., Ghanotakis, E., Tudor Car, L., Van-Velthoven, M.H., Majeered, A. and Car, J. (2012).Male involvement for increasing the effectiveness of Prevention of Mother to Child Transmission of HIV (PMTCT) programmes. *Cochrane Data Base System.* 10 (9):4-68.

Byamugisha, R., James, K., Nulu, S. and Thorkild, T.(2012).Determinants of, male involvement in the prevention of Mother to Child Transmission of HIV programme in Eastern Uganda. *Journal of Medical Care*.2 (9):9-32

Byamugisha, R., Tumwine, J. K., Semiyaga, N. and Tylleskär, T. (2011). Determinants of male involvement in the Prevention of Mother-to-Child Transmission of HIV programmes in Eastern Uganda. Journal of *Reproductive Health*. 1 (2):7-12

Carolyn, M.A.,Yazalde, M. ,Lara,M.E.,Ruth,B.,Daphne,C.,William,W.,Rivet,K.A.and Lazaro, G.(2016).Barriers to male involvement in antenatal care in rural Mozambique. *What Men have to do with it*.1 (12):1721-1731

Champion, V.L. and Skinner, C.S. (2008). The health belief model. Knowledge, attitudes and beliefs of meditation in college students. In health behaviour and health education. *American Journal of Educational Research.*2 (4): 189-192

Champion, V.L. and Skinner, C.S. (2012).*Theoretical Foundation of Health Campaign Messages.* Linkedin Corporation ,United states. Newyork..

Chandran, E. (2004). *Research Methods.* A quantitative approach with illustrations from Christian Ministries. Daystar University ,Nairobi.

Cohen, J., Cohen, P., West, S.G., and Aiken, L.S.(2003).*Applied Multiple Regression/Correlation Analysis for the Behavioural Sciences*. 2.Hillsdale,NJ:Lawrence Erlbaum Associates. 2nd edition

Cooper, D. R., and Schindler, P.S. (2006).*Business Research Methods*.

McGraw-Hill publishing, Co. Ltd. New Delhi. Ninth edition

Cooper, D. R., and Schindler, P.S. (2011).*Business Research Methods*, McGraw-Hill publishing, Co. Ltd. New Delhi. Eleventh edition.

Creech, S. (2011).*Inferential Statistics and Data Interpretation*. Introduction to Inferential Statistical Tests. STEM student research handbook. SAS Institute Inc. Newyork.

Debra, S., May, L., and Jaya, E. (2014).The involvement of men in maternal healthcare. Cross-sectional, pilot case study for Maligita and Kibibi, Uganda. *Reproductive Health.*11 (68):1742-47558

Dharma, N.B. (2013).Involvement of males in antenatal care, birth preparedness, exclusive breast feeding and immunizations for children in Kathmandu, Nepal. *Pregnancy and Childbirth*.1 (13):14-23

Ditekemena, J., Matendo, R., Koole, O., Colebunders, R., Kashamuka, M., Tshefu, A., Kilese, N., Nanlele, D., Ryder, R. (2011). Male partner voluntary counseling and testing associated with the antenatal services in Kinshasa, Democratic Republic of Congo. *International Journal of STD and AIDS.*22 (3):165-170.

Ditekemena, J., Olivier, K., Cyril, E., Richard, M., Antoinette, T., Robert, R. and Robert. (2012).Determinants of male involvement in maternal and child health services in Sub-Saharan Africa. *Reproductive Health*.9 (32):9-32.

Dumbaugh. M., Charlotte. T., Alexanderr. M., Guus. H., Betty. K. and Zelee. H. (2014). Perceptions of, attitudes towards and barriers to male involvement in newborn care in rural Ghana, West Africa. *Pregnancy and Child Birth*.14 (1):269-321

Dzumbila-Namasasu, J. (2010).Socio-cultural factors influencing male involvement in reproductive health during pregnancy, childbirth and the postnatal period in rural districts of Malawi. Edith Cowan University. *Malawi Women and HIV http://ro.ecu.edu.au/theses/373/.*

Farlex. (2012). *Definition of Conceptual Framework.* Medical dictionary for the health professions and Nursing. Seventh Edition.

Fisher, W. (1998).*An Exact Sample Size Determination Formula for the Wright-Fisher Model and a Solution to a Conjecture about the Finite-Island Model.* Department of Mathematics, University of Montreal, Montreal.

Frances, A., Myo,M.M.,Kyu,K.T.,May,M.K.,Paul,A.A.,Chrisopher,M.,Jessica,D.and Stanley, L.(2015).*Correlates of Male Involvement in Maternal and Newborn Health:* A cross-sectional study of men in a Peri-urban region of Myanmar. Ghent University, Myammar.

Gathuto, M. N. (2014).Factors influencing male partner participation in antenatal care in Kenya. A case study of Kenyatta National Hospital, Nairobi. uonbi.ac.ke. *Journal of Pregnancy*.1 (1):1-53

Getu, D. K. (2011).*Factors related to Male Participation in Prevention of Mother to Child Transmission of HIV in Three Public Hospitals in Addis Ababa.* Ethiopia health studies research and ethics committee-University of south Africa.

Godlove, N., Dorothy, J., Pius, M., and Joseph, N. (2010).Barriers to men's participation in antenatal and prevention of Mother- to- Child HIV Transmission Care in Cameroon, Africa. *Journal of Midwifery and Women's Health.*55 (4):1-369

Haile, F. and Brahan, Y. (2014).Male partner involvement in PMTCT: A cross sectional study, Mekelle, Northern Ethiopia. *Pregnancy and Childbirth*.14 (65):223-254

Harkiran, N., and Seema, S. (2013).Men as partners in maternal health: an analysis of male awareness and attitude. *International Journal on Reproduction, Contraception, Obsteriastics and Gynaecology*.2 (3):388-392

Hashima,.N.,Margaret,L.,Mahfuz,A.M.,Masuma,B.,Sabuj,K.M.,Mosiur,R.,andPeter, N.(2012).Men's knowledge and awareness of maternal, neonatal and child Healthcare in rural Bangladesh: *Journal of Reproductive Health.* .2 (3):9:18.

Hensen, B., Baggaley, R., Wong, V.J., Grabbe, K.L., Shaffer, N., Lo, Y.R., and Hargreaves. , J. (2012). *Universal Voluntary HIV Testing in Antenatal Care settings.* A review of the contribution of provider initiated testing & counseling. Faculty of infectious diseases, London school of hygiene and tropical medicine, london.

Homsy,J., Kalamya, J., Obonyo, J., Ojwang, J., Mugumya, R., Opio,C. and Mermin, J.(2011). Routine intra-partum HIV counseling and testing for prevention of Mother to Child Transmission of HIV in a rural Ugandan hospital, (CDC)-Uganda. *JAIDS Journal of Maternal Health.* 1 (3):23-45

IRIN. (2010). HIV status in sub-Saharan Africa. pediatric HIV/AIDS in sub-Saharan Africa. *African Health Sciences.12 (3);297-304*

IRIN. (2013).Zingatia Maisha programme for men, in Western and Eastern Kenya. *African. Press International. Country Annual report.*

Julie, D., Nia, F., Scottie, B., William, C., Carolyn, M., and Muktar, H.(2014).Male involvement for the Prevention of Mother to Child Transmission of HIV. *Current HIV and AIDS reports* .11(2):109-118.

Jessica, D., Joseph, V., Stanley, L., David, S. and Wendy, H. (2016).Male involvement in reproductive, maternal and child health. *Reproductive Health*.13 (1) 81-103

Judith,Y.and Leonardi-Be, J.(2015).Male involvement and maternal health outcomes. Systematic review and meta-analysis. *Journal of Epidemiology and Community Health.* 69 (6):604-712

Kabagenyi, A., Larissa, J., Alice, R., Gorette, N., James, N. and Lynn, A. (2014).Barriers to male involvement in contraceptive uptake and reproductive health services. A qualitative study of men and women's perceptions in two rural districts in Uganda. *Reproductive Health.* 2 (11):1-21

Kalembo, F.W., Zgambo, M., Mulaga, A. N., Yukai, D., Ahmed, N.I. (2013). Association between male partner involvement and the uptake of prevention of Mother to Child Transmission of HIV (PMTCT) interventions in Mwanza District, Malawi.*doi:10.1371/journal.pone.0066517.*

Kaye, D.K.,Kakaire, O.,Nakimuli,A., Osinde,M.O.,Mbalinda,S.N., and Kakande, N.(2014).Male involvement during pregnancy and childbirth: Men's perspectives, practices and experiences during the care of women who developed childbirth complications in Mulango Hospital, Uganda. *Pregnancy and Child Birth.*1 (14):1-54

Kelvin, K., Jennifer, D., Makin., and Brian, W.C. (2013).Barriers to male partner participation in programmes to prevent Mother to Child Transmission of HIV in South Africa. AIDS Education and Prevention. *Journals of NCB NHI.* 25 (2):14-24.

Kenneth, N., Sonto, M. M. and Hilda, S.(2016).Male partners' views of involvement in maternal Healthcare services at Makhado Municipality clinics, Limpopo province, South Africa. *African Journal of Primary Healthcare and Family Medicine.*1 (1):812-929

Kivunaga, J., Timothy, A., Bange, T., Mutemwa , R., Kimani, J. and Warren, C. (2013).Male involvement in women's reproductive health in Kenya. *doi:10.1371/journal.pmed.1001373.*

Koo, K., Makin, J. and Forsyth, B. (2013).Barriers to male partner participation in programmes to prevent mother to child transmission of HIV in South Africa. *AIDS Education and Prevention.*25 (1):14-24.

Kothari, C. R. (2004). *Research Methodology: An Introduction to Methods and Techniques.* Second Edition. New age international Publishers. New Delhi.

Kothari, C. R. (2014). *Research Methodology: An Introduction to Methods and Techniques.* Third Edition. Finance and accounting. New age international Publishers, New Delhi.

Kululanga, L., Johanne, S., Address, M. and Ellen, C. (2011).Striving to promote male involvement in maternal Healthcare in rural and urban settings in Malawi. A qualitative study, in Malawi. *African Journal of Reproductive Health.*16 (1):1-157

Kwambai,T.K.,Stephanie,D.,Meghna,D.,Ameh,A.C.,Bobbie,P.,Achieng,F.,Mason,L., Laserson,F.K.and Kulle, O.F.(2013).Perspectives of men on antenatal and delivery care service utilization in rural western Kenya: A qualitative study. *Pregnancy and Childbirth.*1 (13):13-134.

Lemens, C.L. (2010).Male partner involvement in PMTCT reduces HIV transmission. *Journal of AIDS.*1 (11):11-16

Madiba, S. and Letsoalo, R. (2013). HIV disclosure to partners and family among women enrolled in prevention of mother to child transmission of HIV program and implications for infant feeding in poor resourced communities in South Africa. *Global Journal of Health Sciences*. 5 (4):1-13.

Mangeni, J.N., Mwangi, A., Mbugua, S., and Mukthar, V. (2013).Male involvement in maternal healthcare as a determinant of utilization of skilled birth attendants Kenya. *Demographic and Health Survey Working Paper 93.*

Marelign,T. and Shikur,M.(2015). Male partner's involvement in the prevention of Mother- to- Child Transmission of HIV and associated factors in Arba Minch Town and Arba Minch Woreda, Southern Ethiopia. *Biomed Research International*.DOI:10:1155/2015/763876

Mari, D., Charlotte, T., Alexander, M., Guus, H., Betty, K. and Zelee, H. (2014).Perceptions of attitudes towards and barriers to male involvement in newborn care in rural Ghana, West Africa. A qualitative analysis. *BMC Pregnancy and Childbirth*. 2 (14): 1-269

Mbonye, A., Hansen, K., Wamono, F. and Magnussen, P.(2010).Barriers to prevention of mother to child transmission of HIV service in Uganda. *Journal of Biosocial Science*. 42 (2):271-287.

Michael, T.M. and Basset, M.T. (2014).*Reproductive Health and AIDS Prevention in Sub-Saharan Africa.* The case for increased male participation. Zimbabwe medical School ,Guttmacher Institute, Harare.

Mullay, R., Lugina, H., Becker, S. (2013). Couple counseling and testing for HIV at Antenatal Clinics. *Views from Men, Women and Counselors.*1 (1):1-85

Mohlala, B., Boily, M. and Gregon, S.(2011). Randomized controlled trial of a male invitation to attend couple voluntary counseling and testing. *The Forgotten Half of the Equation.* 25 (12): 15-35.

Momoh, C., (2014). Assessing and managing FGM in \practice.FGM and public health. *Biomedical Journal* .26(9):14-17.

Monica, A. O., Sam, O. and Monica, O. (2010).Factors that influence male involvement in sexual and reproductive health in western Kenya: A qualitative study. *African Journal of Reproductive Health*.14 (4):1-44.

Morfaw, F., Mbuagbaw, L., Lehana, Thabane, L., Clarissa,R., Anna-Paula,W.,Philip, N. and John, K., Muia, E., Olenja, J., Kimani, V., And Leonard, A. (2013 a).Integrating men into reproductive health equation. Acceptability and feasibility in Kenya. *The Journal of Family Planning and Reproductive Health Care.* 42(1):1-23.

Morfaw, F., Mbuagbaw, L. and Thabane, L. (2013 b).Male involvement in prevention programmes of Mother to Child Transmission of HIV. Facilitators in Entebbe, Uganda. *A systematic Review to Identify Barriers.*2 (5):2046-4056.

Mugenda, O.M and Mugenda, A.G. (2003).*Research Methods: Qualitative and Quantitative Approaches.* Acts, Press, Nairobi.

Nanjala. M.(2012).Determinants of male partner involvement in promoting deliveries by skilled attendants in Busia, Kenya. *Global Journal of Health Science.* 2 (4):1-60

Njeru, K., Blystad, A, .Shayo, E.H, Nyamongo, I.K, Fylkesnes, K.(2011). Practicing Provider-initiated HIV testing in high prevalence settings. *Consent Concerns and Missed Preventive Opportunities* 1 (1):11-87

Nkuoh, G.N., Meyer, D.J., Tih, P.M., and Nkfusai, J., (2010). Barriers to men's participation in antenatal and prevention of mother-to-child HIV transmission care in Cameroon, Africa. *Journal of midwifery and Women's Health*.1 (1)1-369

Nkuoh, C. (2012).Communication barrier in the fight against HIV transmission. *African Journal of Reproductive Health*. 16 (1):145-157

Nyandieki, L.N., Njeru, K.M., Ng'ang'a,Z., Echoka, E. and Kombe, Y.(2016).Male-involvement in Maternal health planning key to utilization of skilled birth services in Malindi Sub-County, Kenya. *Advance in Public Health*. 4 (1):1-23

Obermeyer, C.M., Bott, S., Bayer, R., Desclaux, A.and Baggaley, R.(2013). HIV testing and care in Burkina Faso, Kenya, Malawi and Uganda. Research on population and Health, Faculty of Health Sciences, American University of Beirut. *Ethics on the Ground.*13 (2):1-14.

Ongweny- Kidero, E.A (2014).*Exploring Male-attitudes on Involvement in Antenatal Care.* The case of prevention of mother-to-child transmission of HIV in Athi river sub-location of Mavoko , Machakos County.

Olena Ivanova . (2015). *Can Male Involvement Improve Maternal Health?* International Centre for Reproductive Health, Belgium. School of Public Health 651 Huntington Avenue, Boston.

Olugbenga-Bello, A. I. , Asekun-Olarinmoye, E., Adewoe , A. O., Adeomi, A.A., and Olarewaju, S.O.(2013).Perception, attitude and involvement of men in maternal healthcare in a Nigerian community.*Journal of Public Health and Epidemiology.* 5 (6):262-270.

Olukayode , A. (2013).Male partner involvement in the prevention of Mother-to-Child Transmission of (PMTCT) of HIV programme in Mthatha, South Africa. Women's perspective. Stellenbosch University Library and Information Services. S*un Scholar Research Repository*.1 (1): 121-363.

Osoti. A, Han, H., Kinuthia, J. and Farquhar, C. (2014).*Role of Male Partners in the Prevention of Mother to Child HIV Transmission.* University of Nairobi-Kenya, Kenyatta National Hospital-Kenya, Kijabe Hospital Kenya and University of Washington.

Patton, M.Q. (2002). *Qualitative Research and Evaluation Methods.* Thousand oaks CA: sage: 4th Edition.

Peltzer, K., Jones, D., Weiss, S.M and Shikwane, E.(2011).Promoting male involvement to improve PMTCT uptake and reduce antenatal HIV infection: *A cluster Randomized Controlled Trial Protocol.*1(11): 567-778.

Peter, R. and Marya, K. (2010).*The Global challenges of HIV and AIDS*. The fourteenth conference on HIV and AIDS and the family. A publication of the population reference bureau. Abuja, Nigeria.

Ramirez-Ferrero, E. and Lusti-Narasimhan, M. (2012).The role of men as partners and fathers in the prevention of mother to child transmission of HIV and in promotion of sexual and reproductive health. *Reproductive health matters*.20 (39): 103-109.

Rebecca, J.O., Regine, U., Umar, A., Habib, A.M., and Otonoku, K.M.(2014).Barriers to male involvement in uptake of prevention of mother to child transmission of HIV in sub-Saharan Africa.*iosrjournals.org*.3 (5):01-07.

Reece, M., Hollub, A., Nangami, M., Lane, K. (2010).Assessing male spousal engagement with prevention of Mother to Child Transmission of HIV (PMTCT) programmes in western Kenya. *Psychological and Socio-Medical aspects of HIV and AIDS*.22 (6):743-750.

Republic of Kenya. (2008-2012).Kiambu District Strategic Plan for the year 2008/9-2012/3.

Republic of Kenya. (2008). Kiambu District Strategic Plan (2008 -2012).

Republic of Kenya (2008).Kenya's Vision 2030.Kenya's Contributions by the social pillar. *National development and Vision*.

Republic of Kenya (2010).Kenya National Constitution. Chapter 4 and the Bill of Rights and Entitlements of Citizens Chapter 3. *Kenya Law Reform Commission.*

Republic of Kenya (2010). *National AIDS and STI Control Programme business plan 2006/2007.*United Nations General Assembly Special Session on HIV and AIDS. Country report, Nairobi.www.nascop.or.ke

Republic of Kenya (2010).Kenya Demographic Health Survey. *Kenya National Bureau of Statistics 2008-2009www.knbs.or.ke..*

Republic of Kenya (2010).Kenya Demographic Health Survey. *Kenya National Bureau of Statistics 2014. www.knbs.or.ke.*

Republic of Kenya. (2010). Analysis of Kenya National Health Systems. *Kenya Demographic Health survey 2009. Kenya*

Republic of Kenya. (2011).Kenya National HIV and AIDS Strategic Plan. *NASCOP 2009/2010-2013/2014.*

Republic of Kenya (2012). The partnership for Maternal, Newborn and Child Health project. *Health and Health Systems*.Kenya annual report.

Republic of Kenya. (2013).HIV-AIDS on the decline in Kenya. *National AIDS and STI Control Programme.* Annual report 2013.

Republic of Kenya. (2014). Prioritisation of key populations in Kenya. Spearheading the fight against HIV AND AIDS in Kenya. *National AIDS and STI Control Programme.* Annual report 2014

Republic of Kenya. (2014).*Prevalence and Incidence of HIV Infection, Trends, and Risk Factors Among Persons Aged 15-64 ears in Kenya* .Kenya AIDS response progress report, Nairobi.

Roseline , D. (2013).*Male Partner Involvement in Maternity Care.* Case of Ablekuma South District, Accra University, Accra .

Rowan, F., Mel. and Enid. (2008).*Health Promotion Theories and Models for Program Planning and Implementation* .Zuckerman College of Public Health, University of Arizona. Department of Health promotion Sciences, Arizona.

Ruiter, C. and Kok, G. (2010).Human behaviour and health promotion. Sixty years of fear appeal research. Planning to frighten people? Think again. *Current State of Evidence.* 2(1):43-75.

Scott, A. J. and Wild, C.J. (1986).Fitting logistic models under case-control or choice based Sampling. *Journal of the Royal Statistics Society.* 47(2):497-510.

Secka,E.(2010).*Men's involvement in care and support during pregnancy and childbirth*. A qualitative study conducted in the University of Oslo Institute of Health and Society, Gambia.

Seidman, I. (2006).*Interviewing as a qualitative research.* A guide for researchers in education and the social sciences.Third edition. Teachers college Press, Columbia University, Columbia.

Sekaran. (2006).*Research methods for business*. A skill building approach. Fourth edition, John Willey and sons, ltd., New Delhi.

Shahjahan, M., Shirin,J.,Afsana,A., Hasina,A.,Rusell,K. and Kapil, A. (2013).Determinants of male participation in reproductive healthcare service. *Reproductive Health*. 10(27):1742-4755

Shiyagaya (2016).Level of male involvement and factors influencing involvement in the prevention of mother to child transmission of HIV. Faculty of Health Sciences University of Namimbia. *European Journal of Pharmaceutical and Medical Research.*3 (5):602-617.

Shuwena, A. (2016).*Perception of Male Involvement in Antenatal Care Clinics in Urban-west, Zanzibar.* University of Copenhagen (KU), Denmark

Skovdal, M., Cathrine, C., Claudius, M., Zivai, M., Constance, N. and Simeon, G. (2011).Masculinity as a barrier to men's use of HIV services in Zimbabwe. *Globalization and Health*. 7 (13):1-14.

Stephen, O., (2015).*A research paper on male involvement strategy in maternal, newborn and child health-Turkana County*. Ministry of Health-Turkana County.

Sprague ,C., Chersich, M., and Black, V., (2011). Health system weaknesses constrain and access to PMTCT and maternal HIV services in South Africa: *A qualitative Enquiry*.8 (10):1-34

UNAIDS. (2013). Efficient and sustainable HIV responses. Bentham Science Publishers. *Frontiers in Clinical Drug Research* .2 (1) 1-330.

UNICEF. (2011).*The State of the World's Children. Child Survival*. Executive summary. Newyork. Website:www.unicef.org.ISBN:978- 92-806-4558-3

UNICEF. (2012).*Children and AIDS*. Unite for children. Unite against AIDs. Fifth stocktaking report 2013.ISBN:10:978-92-806-4723-5.

UNICEF, (2016).Improving male involvement to support elimination of MTCT of HIV in Uganda. *A recent Review*. https://www.childrenandaids.org.

USAID, Kenya. (2012).Five year implementation framework for the health sector 2010- 2015. *Universal Access to Services*.1 (3):1-69

USAID, Nicaragua. (2014).An innovative approach to involving men in maternal and newborn Healthcare. Program experiences in the department of Matagalpa, Nicaragua. *Operations Research Brief.* http://bit.ly/II3J47L.

Wessel, V., Kirsty. B., Garetrh. M., Dean.p., Kathyn.S., Hanna.J., and Vuyiseka.D. (2015). Improving men's participation in preventing mother to child transmission of HIV as a maternal, neonatal, and child health priority in South Africa. *Policy Impact Collection.*12 (4):e1001811.https://doi.org/10.1371/journal.pmed.1001811

WHO/ICASA. (2010).*International Conference on AIDs in Sub-Saharan Africa*, Dakar, Senegal. Progress report 2010.

WHO/UNAIDS/UNICEF. (2010). Scaling up priority in HIV and AIDS interventions in the health sector. *Towards Universal Access*: Progress report 2010

WHO. (2012). Trends in maternal mortality. *Sexual and Reproductive Health. WHO/RHR/15.23*

WHO. (2012). Male involvement in the prevention of mother-to-child transmission of HIV. Department of Reproductive Health and Research. *Sexual and Reproductive Health ISBN:978 92 4 150367 9*

WHO (2013).HIV /AIDS: Progress towards achieving universal access to priority health sector interventions. *A strategy for the WHO African Region*. 3(2):1-38.

WHO,UNFPA and PROMUNDO. (2013). Engaging men and boys in reproductive, maternal, Newborn and Child Health. *The Partnership for Maternal and Child Health. Geneva.*1 (1):1-55.

WHO/UNFPA (2014).Male participation in promoting sexual and reproductive health agenda in Africa. *Journal of Development and Communication Studies.*3 (2):2305-7432.

WHO (2016).Male-involvement in the prevention of Mother to Child Transmission of HIV. Sexual and Reproductive Health. *Reproductive Health and Research.* 2 (1):1-30.

Wylie. T. (2012).A conceptual framework for evolving, recommender online systems. Research Methodologies. *Decision Sciences Journal of Innovative Education.*10 (3):389-412.

Yosef. J. (2015).Building a conceptual framework. Philosophy, definitions and procedure. *International Journal of Qualitative Methods*.1 (1):1-15

APPENDICES

APPENDIX I

Questionnaire on the dependent Variable

This section of the Interview guide was used to collect data on the male partner's level of participation (dependent variable) in the programmes at different levels.

1.1. Do you discuss maternal and child wellbeing issues with your female partner? (i)Yes (ii)No
If yes explain what you discuss
……
……
……
If No, explain why
……
……
……

1.2. Did you accompany your spouse to the health facility for?

a). Antenatal clinics. (i) No (ii) Yes.

(i) If Yes, state number of times
……

(ii) If no, what were the reasons?
.....
.....
.....

b). VCT. (i) No……. (ii) Yes……

(i) If no, what were the reasons?
.....
.....
.....

c). Delivery. (i) No (ii) Yes

If no, were the reasons?
.....
.....
.....

d). Postnatal Clinics? (i) No (ii) Yes.

(i) If yes state number of times
……

If NO, what were to the reasons

……
……
……..

1.3.1 Did you provide transport costs to HFs and medical expenses during?

a)Antenatal clinics? (i) Yes (ii) no

If NO, explain why

……
……
……
…

b) VCT (i) yes (ii) no

If NO, explain why

……
……
……
…

c) Delivery (i) yes (ii) no

If NO, explain why

……
……
……
…

d) Postnatal Clinics (i) yes (ii) no

If NO, explain why

……
……
……
…

1.3.1 Did you meet the costs for provision of appropriate feeding for the expectant mother/infant? (i) yes (ii) no

If NO, explain why

……
……
……
…

Questionnaire on demographic characteristics of the male partner

This section of the Interview guide was concerned with assessing demographic characteristics as determinants of the male partner's level of participation in the programmes. It is grouped into sections made up of questions which are close-ended and open ended, and two likert scales.

1.1. Which is your age cohort?

(i).19 years and below(ii) 20-29 (iii) 30-39 (iv) 40-49 (v) 50-59 (vi) 60 and above

1.2. What is your highest level of education?

(i)Never attended school (ii) Did not complete primary school (iii) Completed primary school (iv) Did not complete secondary school (v) Completed secondary school

(vi)Did not complete college/university (vii) Completed college/university

1.3. For how long have you lived with your current female partner?

Less than five years (ii) between 5-10 years (iii) More than 10 years

1.4. What religion do you belong to?

Christian (ii) Muslim (iii) other-specify…….

1.5. What is/will be the ordinal position of this child/to be born

(i) first born (ii) second born (iii) others

Questionnaire on effects of male partner's economic status and livelihood activities

This section of the Interview guide was concerned with assessing influence of economic status and livelihood activities of the respondents on their level of participation in the programmes

2.1. kind of employment you are engaged in

(i) Wage employment/office work (ii) Self employed/business

Others……

2.2. Income level in thousand K.Sh. (i) 10,000 and below (ii) 10-20 (iii) 20-30 (iv) 30 and above

Questionnaire on effect of knowledge and awareness on level of male partner participation in the programmes

This section of the interview guide concerned with assessing influence of knowledge and awareness of the male partner on MCW programmes and if it influences his level of participation in the programmes

3.1. What does maternal and child wellbeing programmes refer to? (i) know (ii) do not know

Explain.....
.....

3.2 What time of the pregnancy should a mother start attending antenatal clinics? (i) know (ii) do not know

Explain.....
.....

3.3 Are maternal and child wellbeing services offered at the HF where your partner attends clinic? (i) Know (ii) do not know

Explain……
……
…..

3.4 Does your partner consume maternal and child wellbeing services (i) know (ii) do not know

3.5 Who should attend maternal and child wellbeing clinics? (i) know (ii) do not know

Explain……
……
…….

3.6 What is the importance of maternal and child wellbeing services? (i) know (ii) do not know

Explain……
……
….

3.7 What is the role of male partner in maternal and child wellbeing programmes? (i) know (ii) do not know

Explain…….....
.....

3.8 Is it necessary for a male partner attends VCT with the pregnant partner? (i) know (ii) do not know

Explain

……
……
…….

3.9 Do you know that one partner can be HIV positive while the other is HIV negative? (i) know (ii) do not know

Explain……
……
…..

3.10 Does taking of ARVs by the expectant women prevent MTCT of HIV? (i) Know (ii) Do not know

Explain……
……
……

3.11Does delivery at the health facility by a HIV positive mother prevent mother to child transmitting of HIV (i) know (ii) Do not know

Explain…….....
.....
.

3.12 Does appropriate feeding of an infant influence his/her chance of getting HIV infection from her HIV positive mother? (i) Know (ii) Do not know

Explain……
……
……

3.14 What should be done to prevent these infections during?

(i) Pregnancy? (i) Know (ii) do not know

Explain

……
……
……

(ii) Delivery (i) Know (ii) do not know

Explain

……
……
……..

(iii) Breast feeding (i) Know (ii) do not know

Explain
……
……
…….

Questionnaire on effects of socio-cultural factors on male partner's level of participation in the programmes

This section of the Interview guide was concerned with assessing influence of socio-cultural factors on male partner's level of participation in the programmes

Write the appropriate number to reflect your opinion as follows:

Strongly agree (SA), agree (A), Undecided (U), Disagree (D), strongly disagree (SD)

i) A pregnant woman can be tested for HIV without the permission of her male partner.....

Explain reasons for your response
……
……
……

ii) Men should accompany their pregnant partner for maternal and child wellbeing services.....

Explain reasons for your response
……
……
……

iii) Should men discuss reproductive health with women reproductive issues …….

Explain reasons for your response
……
……
……

iv) Men and women should undergo HIV testing
…….

Explain reasons for your response
……

……
……

v) Maternal and Child wellbeing programmes are designed for women and children only.....

Explain reasons for your response
……
……
……

vi) A HIV positive test in a pregnant woman means she has been unfaithful to her partner.....

Explain reasons for your response
……
……
……

vii) If a pregnant woman is found to be HIV positive she should be divorced.....

Explain reasons for your response
……
……
……

viii) Maternal and Child wellbeing information should first be given to the male partner before the female partner.....

Explain reasons for your response
……
……
……

Questionnaire on effect of programme related factors on male partner level of participation in the programmes

This section of the Interview guide was concerned with assessing influence of program related factors on male partner's level of participation in the programmes

1.2.5 .1 Write the appropriate number to reflect your opinion as follows:

Strongly agree (SA), agree (A), Undecided (U), Disagree (D), and strongly disagree (SD)

i. Men should be provided with men only reproductive clinics.....

Explain reasons for your response
……
……
……

ii. At the maternal and child wellbeing clinics men should be attended to by male healthcare providers only.....
Explain reasons for your response
……
……
……

iii. Healthcare workers are not welcoming to men at the maternal and child wellbeing sections of the HFs.....
Explain reasons for your response
……
……
……

iv. Maternal and Child wellbeing sections of HFs are designed for women and children only.....
Explain reasons for your response
……
……
……

v. Maternal and Child wellbeing sections of HFs have done little to involve men.....
Explain reasons for your response
……
……
……

vi. Maternal and Child wellbeing sections of HFs do not provide confidential environment conducive for the services.....
Explain reasons for your response
……
……
……

vii. Staff at the maternal and child wellbeing sections of the HFs does not keep any secrets about HIV results of men and women who consume the services.....
Explain reasons for your response
……
……
……

viii. It is expensive for me and my partner to travel to the HFs.....

Explain reasons for your response

……
……
……

ix. It is time consuming to wait for services at the maternal and child wellbeing sections of the HFS.....

x. Explain reasons for your response

……
……
……

xi. Health facilities offering maternal and child wellbeing services are located far from home/work place and it is time consuming and expensive to travel there.....

Explain reasons for your response

……
……
……
.

xii. Men should be trained on their role in maternal and child wellbeing programmes ……..

Explain reasons for your response

……
……
……

xiii. Maternal and Child wellbeing programmes are accommodative to the male partner?

……..

Explain reasons for your response

……
……
……

Xiv .Do you think maternal and child wellbeing programmes are effective in protecting an infant from mother to child transmission of HIV infection? i) Yes ii) do not know

Explain reasons for your response

……
……
……

SECTION G: EFFECTS OF CONFOUNDING FACTORS

i) Perceived susceptibility- what do you think is the risk of mother to child transmission of HIV to a child borne of a mother who do not consume maternal and child wellbeing programmes?

Explain……
……

ii) Perceived threat-What do you think are the negative implications on the child who gets infected with HIV through mother to child transmission of HIV?

Explain……
……
……
……
……..

iii) Perceived benefits of maternal and child wellbeing programmes. Do you think male partner participation in maternal and child wellbeing programmes is beneficial in preventing the infection? (i) Yes (ii) no
Explain……
……
……
……
…….

APPENDIX II

RESPONDENT'S CONSENT FORM

(Adopted from Burns and Groove 2005:198)

You have been selected by chance to participate in a study to assess the participation of male partner in maternal and child wellbeing programmes in Kiambu County. The study is conducted by Jane kagendo Francis of Kenyatta University.

Although the study may not benefit you directly, it will provide information that might enable the Kenyan government to identify men's needs in maternal and child wellbeing programmes and assist them to meet their needs and those of their partners. The study and its procedure have been approved by the appropriate authorities. For you, these procedures include just responding to questions for about 20 minutes. You are free to ask any question about the study at any time if you need more clarification. Your participation in this study is voluntary. You are under no obligation to participate and can withdraw any time. The information collected will be coded so that they are not linked to your name and your identity will not be revealed at any time in the study. All data will be kept in secure place and will not be shared with any other person without your permission.

This consent form has been read and explained to me and I voluntarily consent to participate in this study.

Signature.....Date.....
....

I have explained this study to the above subject and I have sought his understanding for informed consent.

Interviewer's
signature.....Date.....

PENDIX III

THIS IS TO CERTIFY THAT:
MS. JANE KAGENDO FRANCIS
of KENYATTA UNIVERSITY, 79299-200
nairobi,has been permitted to conduct
research in *Kiambu County*

on the topic: "*DETERMINANTS MALE PARTNER PARTICIPATION IN MATERNAL AND CHILD WELL-BEING PROGRAMMES IN KIAMBU COUNTY, KENYA*"

for the period ending:
30th November,2016

Permit No : NACOSTI/P/15/49408/8627
Date Of Issue : 1st December,2015
Fee Recieved :Ksh 2,000

.....
Applicant's Signature

.....
Director General
National Commission for Science, Technology & Innovation