CONSTRUCTIVE MEN’S ENGAGEMENT (CME) IN ENHANCING REPRODUCTIVE HEALTH IN MAKINDU AND MUTITU SUB-COUNTIES OF KENYA

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A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY (PUBLIC HEALTH) IN THE SCHOOL OF PUBLIC HEALTH OF KENYATTA UNIVERSITY

JUNE 2014
DECLARATION

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

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DEDICATION

To my family for their immortal love, encouragement and support during the entire period of the study
ACKNOWLEDGEMENTS

I would like to express my very sincere gratitude to several people for their invaluable role in enabling me undertake and accomplish this study. I extend my utmost appreciation and very special thanks to my University supervisors, Dr. John Paul Oyore and Dr. Isaac J. Mwanzo for their exceptional guidance, patience, support, availability and enthusiasm during the planning and execution of the study.

I heartily thank the Makindu and Mutitu Sub-County Health Management Teams (SCHMTs) for facilitating this study in their respective Sub-counties and the various health facility in-charges for their unwavering assistance during the study. I am also very grateful to my study respondents, key informants and participants in focus group discussions for their priceless time and cooperation during data collection.

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# ABREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>AMREF</td>
<td>African Medical and Research Foundation</td>
</tr>
<tr>
<td>ANC</td>
<td>Antenatal Care</td>
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<td>ASRH</td>
<td>Adolescent Sexual and Reproductive Health</td>
</tr>
<tr>
<td>AU</td>
<td>African Union</td>
</tr>
<tr>
<td>CHEW</td>
<td>Community Health Extension Worker</td>
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<tr>
<td>CHW</td>
<td>Community Health Worker</td>
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<tr>
<td>CBO</td>
<td>Community Based Organization</td>
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<tr>
<td>CBS</td>
<td>Central Bureau of Statistics</td>
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<tr>
<td>CHMT</td>
<td>County Health Management Team</td>
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<td>CME</td>
<td>Constructive Men’s Engagement</td>
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<tr>
<td>CU</td>
<td>Community Unit</td>
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<tr>
<td>DHC</td>
<td>Dispensary Health Committee</td>
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<td>DHMT</td>
<td>District Health Management Team</td>
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<tr>
<td>DPHN</td>
<td>District Public Health Nurse</td>
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<tr>
<td>DPHO</td>
<td>Sub-county Public Health Officer</td>
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<tr>
<td>DoI</td>
<td>Diffusion of Innovation</td>
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<td>EmOC</td>
<td>Emergency Obstetric Care</td>
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<td>FANC</td>
<td>Focussed Ante-Natal Care</td>
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<td>FGD</td>
<td>Focus Group Discussion</td>
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<td>GEM</td>
<td>Gender Equitable Men</td>
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<tr>
<td>GoK</td>
<td>Government of Kenya</td>
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<tr>
<td>HCW</td>
<td>Health Care Worker</td>
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<td>HMIS</td>
<td>Health Management Information System</td>
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<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<tr>
<td>ICPD</td>
<td>International Conference on Population and Development</td>
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<td>IEC</td>
<td>Information Education and Communication</td>
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<td>IUD</td>
<td>Intra Uterine Device</td>
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<td>KDHS</td>
<td>Kenya Demographic and Health Survey</td>
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<td>Kenya National Bureau of Statistics</td>
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<tr>
<td>Acronym</td>
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<tr>
<td>MCH</td>
<td>Maternal and Child Health</td>
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<td>NACOSTI</td>
<td>National Council for Science Technology and Innovation</td>
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<td>NGO</td>
<td>Non Governmental Organization</td>
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<td>OR</td>
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<td>Primary Health Care</td>
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<td>PMTCT</td>
<td>Prevention of Mother to Child Transmission</td>
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<td>PPS</td>
<td>Probability Proportionate to Size Sampling</td>
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<td>RH</td>
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<td>Skilled Birth Attendant</td>
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<td>SCHMT</td>
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<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<td>Sub-Saharan Africa</td>
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<td>STDs</td>
<td>Sexually Transmitted Diseases</td>
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<td>STIs</td>
<td>Sexually Transmitted Infections</td>
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<td>TBA</td>
<td>Traditional Birth Attendant</td>
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<td>UNFPA</td>
<td>United Nations Population Fund</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children Education Fund</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>USD</td>
<td>United States of America Dollar</td>
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OPERATIONAL DEFINITIONS OF TERMS

Constructive Men’s Engagement: an approach to improving reproductive health outcomes by involving men as clients of health services, supportive partners, and agents for social change.

Health Provider Attitude: the way a health care worker thinks and feels about their clients thus influencing their behavior and ultimately service delivery.

Health Care Provider: an individual or an institution that provides preventive, curative, promotional or rehabilitative health care services in a systematic way to individuals, families or communities. An individual health care provider may be a health care professional within medicine, nursing, or allied health professions.

Health Care Services: The prevention and management of disease, illness, injury, and other physical and mental impairments in individuals delivered by health care professionals through the health care system and can either be routine health services, or emergency health services.

Health Care System: organizations and policies in place that are designed to plan and provide medical care for people. It is a complex of facilities, organizations, and trained personnel engaged in providing health care within a geographical area.

Human Resource for Health: The stock of all individuals engaged primarily in the improvement of the health of populations. The public health workforce includes those primarily involved in protecting and promoting the health of whole or specific populations, as distinct from activities directed to the care of individuals.

Individual Characteristics: includes the demographic dynamics, socio-cultural norms and perceptions, knowledge and awareness of the individuals.

Institutional Capacity: an institution’s strength in four core spheres including: Human resources – technical knowledge and people skills; Intra-organizational – key processes, systems, cultures and resources within organizations; Inter-organizational – agreements, relationships and consultative networks between organizations; External Institutional Rules and Incentives – regulations, policies and incentive schemes to encourage the uptake of reproductive health.

Non-State Actors: Individuals, or institutions whose primary purpose are in provision of Health Services, but are not a part of the State. They include service providers (for profit and not for profit), Health Civil Society organizations, NGO’s and their related management systems.
Health Program Sustainability: un-interrupted (or limited interruption) of functioning of all critical aspects of a health care program including financial, institutional, environmental, technological and socio-cultural components thus ensuring continued service delivery.

Public Health Services: The health care services concerned with the science and art of preventing disease, prolonging life and promoting health through organized efforts and informed choices of society, organizations, public and private, communities and individuals and are concerned with threats to the overall health of a community.

Reproductive Health: the right of men and women to be informed of and to have access to safe, effective, affordable and acceptable methods of fertility regulation of their choice and the right of access to appropriate health care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant.

Service Accessibility: denotes availability and adequate supply of health care services that presents an opportunity to obtain health care. This depends on financial, organizational and social or cultural barriers that limit the utilization of services. It’s anchored on affordability, physical accessibility and acceptability of services and not merely adequacy of supply.

Service Availability: refers to the physical presence of the delivery of services, encompassing health infrastructure, core health personnel, and service utilization.

Supportive Supervision: practical system of coaching and mentorship that uses objective measures to foster improvements in the procedures, personal interactions, and management of primary health care facilities. The approach focuses on meeting staff needs for management support, logistics, training and continuing education.
ABSTRACT

Reproductive health problems are the leading cause of women's ill health and death worldwide. Approximately 99% of all maternal deaths occur in developing countries, with Sub-Saharan Africa registering a maternal mortality ratio of 1,000/100,000 live births. Maternal mortality in Kenya has continued to rise since 2003, from a ratio of 414 deaths per 100,000 live births to 488 deaths per 100,000 live births in 2009. Over 56% of deliveries in Kenya are attended by unskilled people and outside health facilities. Only 28% of women receive skilled care within the first 4 critical hours following delivery. Men play cardinal and dominant roles in reproductive health. However, increasing their participation has not always been achieved. The main objective of this study was to establish individual, programmatic and healthcare provider related determinants of Constructive Men’s Engagement (CME) in reproductive health, and explore their potential for improving women's health. An interventional quasi-experimental design was applied with interventions to promote CME-RH being implemented in Makindu Sub-county for 12 months following baseline while Mutitu Sub-county served as a control site. A total of 968 men and 32 nurses participated with 484 men respondents being interviewed at baseline and end-term in both sites. Furthermore, 8 men and 10 women FGDs, in addition to 18 KII were undertaken. A GEM Scale for CME-RH was adapted and applied to establish CME-RH levels among respondents. Similarly, a Trainer of Trainers’ manual on CME-RH was also developed and used to facilitate fortnightly CME-RH sessions with groups of men in Makindu. SPSS Ver 19.1 was used for data management with Chi-square tests, correlation and regression statistics applied for analysis. At baseline, Makindu and Mutitu had 43.4% and 44.6% of men who had CME-RH respectively. However Makindu recorded 60.3%, while Mutitu had only 47.1% of men who were CME-RH compliant at post-test. On individual characteristics, education level OR= 2.095 (0.902- 4.839) p=0.004, age of respondent OR= 1.716 (1.328 -2.438) p<0.010, knowledge on the number of times a pregnant woman should attend ante-natal clinic OR =1.738 (1.239 - 2.925) p=0.008 and knowledge of conventional family planning methods OR= 0.733 (0.579 - 0.968) p=0.043 were identified as independent predictors of CME-RH. Spousal approval for use of family planning OR= 1.316 (0.06 - 2.296) p=0.002 as well as approval for access to FP services by young unmarried couples OR= 2.881 (1.783 - 5.271) p<0.001 were also significant. Programmatic independent predictors of CME-RH were identified as having male only RH meetings/trainings OR= 1.094 (0.766 - 1.703) p=0.015, lack of confidentiality among ANC/MCH staff OR=1.297 (0.793 - 2.237) p=0.016 and the perception that RH programs have done little to involve men OR=1.963 (1.289 - 2.19) p=0.003. The capacity of health care providers including their skills, competencies and attitude also greatly influenced CME-RH. This study recommends promotion of CME-RH to be prioritized while reproductive health programs should adopt a multi-sectoral approach in design and implementation. Trainings and health promotion meetings targeting men on RH matters should always be organized for men only. Ways must also be devised to ensure staff at ANC/MCH clinics observe confidentiality with regard to client information, while RH programs must engender men to play seminal roles as prevalent at household and community level. Research would be valuable to unravel cultural values and practices that could be harnessed to promote CME-RH in Kitui and Makueni Counties.
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Reproductive health problems are the leading cause of women's ill health and death worldwide (WHO, 2012). When both women and men are taken into account, reproductive health conditions are the second-highest cause of ill health globally, after communicable diseases (UNFPA, 2009). Though almost entirely preventable, reproductive health problems remain widespread in much of the developing world. They ruin lives, burden families, tax health systems and weaken countries (WHO, 2012). The costs range from the sorrow of a motherless child to the diminished energy and productivity of millions of women. They include maternal deaths, unintended pregnancies, high fertility, abandoned children, unsafe abortions and AIDS, as well as sexually transmitted infections and the cancers, infertility and new-born illnesses associated with them (UNICEF, 2012).

Sexual and reproductive health (SRH) is a prerequisite of all millennium goals, particularly those related to gender and health (UNFPA, 2009). The most direct link is MDG 5 which seeks to improve maternal health. The goal sets to realize by 2015, universal access to reproductive health including contraceptive prevalence rate, adolescent birth rate, antenatal care coverage and unmet need for family planning. The many costs of unsafe abortions far outweigh the price of the contraceptives that could prevent such suffering. The risk of death of children aged below 5 years in Kenya triples upon the death of a mother. Improving maternal health is thus a prerequisite to improving new-born, child survival and health (MoPHS, 2010b). According to the Kenya National Reproductive Health Strategy, skilled care during pregnancy, delivery and post-partum period is one of the most fundamental health care services for averting maternal and new-born mortality (MoPHS, 2009b). Besides, contraception/family planning services avert
pregnancies especially in young women thereby preventing increased cases of unwanted pregnancies and subsequent unsafe abortions that lead to 13 percent of deaths among adolescents in sub-Saharan Africa (UNFPA, 2008). Compared with women in their twenties, adolescents are twice as likely to die during child birth. Moreover, majority of disabilities especially obstetric fistula are more prevalent in adolescents following early pregnancies and childbirth. There is need for information, education and quality service delivery to men, women, adolescents and youth on reproductive health (MoPHS, 2009b).

In July 2010, Heads of African States signed the “Heads of States Declaration on Maternal, Infant and Child Health and Development” during the African Union Summit in Kampala indicating strong commitment and prioritization by governments on maternal health. The declaration has 3 core pillars which include; providing sustainable financing by enhancing domestic resource allocation to reproductive health; advocating for greater Global Fund commitment specifically to maternal, new-born and child health and; launching the Campaign for Accelerated Reduction of Maternal Mortality in Africa (CARMMA) in all countries (MoPHS, 2010b).

As a response to the African Union (AU) call, the government of Kenya in August 2010 launched the “National Roadmap for Accelerating Maternal and New-born Health in Kenya”. The Roadmap provides clear guiding principles that should be followed in provision of healthcare services in order to scale up access to reproductive health. These include health system approach, complementarity, partnerships and a clear definition of roles. Others include promotion of gender equity and equality, male involvement and enhancement of transparency and accountability (MoPHS, 2010b)
Men, as well as women, play key roles in reproductive health, including family planning, but increasing men's participation has been difficult and adopting new perspectives can help. These must recognize that men play important, often dominant roles in decisions crucial to women's reproductive health (WHO, 2007). Men are also more interested in family planning than often assumed but need communication and services directed specifically to them (Green et al., 2005). Understanding and influencing the balance of power between men and women can contribute greatly towards improving reproductive health behaviour. Notably, couples who talk to each other about family planning and reproductive health can reach better, healthier decisions (UNFPA, 2008).

A study in Eastern Uganda noted that policy-makers and service providers increasingly recognize that reaching men is a winning strategy, with benefits for both men and women (Byamugisha et al., 2010). There is value in making men full partners and advocates for good reproductive health (UNFPA, 2006). Men are ready to change their behaviour towards family planning and other reproductive health. Health practitioners must thus find new ways to encourage sexual responsibility, to foster men's support of their partners' contraceptive choices, and to address the reproductive health care of couples (Green et al., 2005). Designing strategies that sustainably ensure male involvement in reproductive health presents a potential breakthrough (MoH, 2005).

1.2 Statement of the Problem

Men play limited roles in reproductive health issues, normally viewed as solely for women. Their active participation would immensely improve the health of women and children (Beatrice et al., 2007). Consequently, the question today is no longer whether to involve men, but rather how to
meaningfully engage them. In a study on male participation in Southern Thailand, it was noted that the key challenge is how reproductive health care providers can best increase men’s participation and how they can communicate effectively with men (Natirutthakorn, 2004). The concern is how providers can reach more men and meet men's needs besides encouraging more men to care about reproductive health (MoPHS, 2010b). Although various attempts have been made to scale up male participation in Makindu and Mutitu Sub-counties, their involvement is still dismal and much lower than the national average (MoPND, 2005). This is despite the poor reproductive health indicators in the area as indicated in Table 1.0 below, and investment of significant resources to scale up male involvement by government and other development partners (MoPHS, 2010d)

<table>
<thead>
<tr>
<th>Key Indicator</th>
<th>Makindu and Mutitu Sub-Counties</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Mortality Ratio (per 100,000 births)</td>
<td>497</td>
<td>488</td>
</tr>
<tr>
<td>Women seeking at least 4 ante-natal care visits</td>
<td>42%</td>
<td>47%</td>
</tr>
<tr>
<td>Births delivered by a skilled attendant (SBA)</td>
<td>31%</td>
<td>44%</td>
</tr>
<tr>
<td>Women seeking post-natal care services</td>
<td>36%</td>
<td>47%</td>
</tr>
<tr>
<td>Contraceptive Prevalence Rate (CPR)</td>
<td>35%</td>
<td>59%</td>
</tr>
</tbody>
</table>

Limited knowledge exists on the various determinants of men’s participation in reproductive health and how they could be harnessed to realize better health outcomes for women. The understanding of men's motivations and what engages them is incomplete. This study sought to establish these determinants and propose sustainable mechanisms of addressing them.

1.3 Research Questions
The research questions that were considered in this study were:

i. What is the level of Constructive Men’s Engagement in reproductive health in Makindu and Mutitu Sub-counties?

ii. How do individual characteristics influence Constructive Men’s Engagement in reproductive health in Makindu and Mutitu Sub-counties?

iii. How do programmatic factors influence Constructive Men’s Engagement in reproductive health in Makindu and Mutitu Sub-counties?

iv. How does service provider technical capacity influence Constructive Men’s Engagement in reproductive health in Makindu and Mutitu Sub-counties?

1.4 Hypotheses

1.4.1 Null Hypothesis

i. There is no significant difference in the level of Constructive Men’s Engagement in reproductive health in Makindu and Mutitu Sub-counties.

ii. Individual characteristics do not influence Constructive Men’s Engagement in reproductive health in Makindu and Mutitu Sub-counties.

iii. Programmatic factors do not influence Constructive Men’s Engagement in reproductive health in Makindu and Mutitu Sub-counties.

iv. Technical capacity of health service providers does not influence Constructive Men’s Engagement in reproductive health in Makindu and Mutitu Sub-counties.

1.5 Objectives of the Study
1.5.1 Broad Objective

The broad objective was to establish determinants of Constructive Men’s Engagement in enhancing reproductive health in Makindu and Mutitu Sub-counties.

1.5.2 Specific Objectives

i. To assess the level of Constructive Men’s Engagement in reproductive health in Makindu and Mutitu Sub-counties.

ii. To determine the individual characteristics that influence Constructive Men’s Engagement in reproductive health in Makindu and Mutitu Sub-counties.

iii. To establish how programmatic factors influence Constructive Men’s Engagement in reproductive health in Makindu and Mutitu Sub-counties.

iv. To assess how service provider technical capacity influences Constructive Men’s Engagement in reproductive health in Makindu and Mutitu Sub-counties.

v. To develop a Trainer of Trainers (ToT) manual for promotion of CME-RH and an instrument to measure levels of CME-RH.

1.6 Significance of the Study

The government through the community strategy aims to increase male participation in health activities (MoH, 2005). This is as a result of the realization that men, in most disadvantaged communities are critical (at times the sole) decision makers on healthcare matters (Natirutthakorn, 2004) and Sedgh et al., 2007). This study sought to explore the individual characteristic factors, programmatic and service provider technical capacity related determinants to male participation in reproductive health. Applying an adopted GEM Scale for CME-RH, the study also assessed the levels of CME-RH in the two areas of focus. The findings are very useful
in supporting the Makindu and Mutitu Sub-County Health Management Teams (SCHMTs) and the Ministry of Health in the process of implementing Community Health and Reproductive Health strategies. Specifically, the CME-RH Facilitators’ Manual developed in the course of this study and the GEM-Scale for assessing CME-RH are invaluable tools for promoting CME-RH at Sub-County, County and national level. Development partners and civil society organizations across Africa could also adapt and utilize the recommendations to improve reproductive health programming including design and implementation. The results will possibly ignite informed discourse on emerging gender roles in healthcare, amidst rising poverty in rural areas.

1.7 Conceptual and Theoretical Framework

The main concepts used in this study originated from review of various literature. Perspectives of various authors were considered in the selection and definition of relevant concepts forming the conceptual framework of this research. White et al., (2003) found out that the theory of Diffusion of Innovations (DOI) is the most used in programmes trying to involve men in reproductive health projects. The main theories used to construct the conceptual framework for this study were the DOI theory and the social cognitive theory as elaborated below.

From the theory of DOI, the concept of adoption was adopted and adapted (Glanz et al., 2002). This concept in theory refers to the uptake of the programme (reproductive health) by the target audience (men). According to the DOI, the decision to adopt a programme is influenced by three types of knowledge: awareness knowledge that the innovation exists; procedural knowledge about how to use the innovation; and principles knowledge, or understanding how the innovation works (Glanz et al., 2002).
Diffusion is the process by which an innovation (in this case CME-RH) is communicated through certain channels over time among the members of a social system. It is a special type of communication, in that the messages are concerned with new ideas. This newness of the idea in the message content of communication is what gives diffusion its special character. The newness means that some degree of uncertainty is certainly involved (Dearing, 2009). Diffusion is thus a kind of social change, defined as the process by which alteration occurs in the structure and function of a given social system. When new ideas are invented, diffused, and are adopted or rejected, leading to certain consequences, social change occurs. The four main elements of diffusion are therefore innovation, communication channels, time, and the social system (Rogers, 2003).

Similarly, an innovation is an idea, practice, or object that is perceived as new by an individual or community. It matters little, so far as human behaviour is concerned, whether or not an idea is "objectively" new as measured by the lapse of time since its first use or discovery. The perceived newness of the idea for the individual or community determines their reaction to it. If the idea seems new to the individual, it is an innovation. Rogers (2003), argues that there are five elements that determine the rate of adoption of an innovation. These include;

**Relative advantage:** this is the degree to which an innovation is perceived as better than the idea it supersedes. The degree of relative advantage may be measured in economic terms, but social-prestige factors, convenience, and satisfaction are also often important components. It does not matter so much whether an innovation has a great deal of "objective" advantage. What matters is whether an individual perceives the innovation as advantageous. The greater the perceived relative advantage of an innovation such as CME-RH the more rapid its rate of adoption is going to be.
**Compatibility:** the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters. An idea that is not compatible with the prevalent values and norms of a social system will not be adopted as rapidly as an innovation that is compatible. The adoption of an incompatible innovation often requires the prior adoption of a new value system.

**Complexity:** the degree to which an innovation is perceived as difficult to understand and use. Some innovations are readily understood by most members of a social system; others are more complicated and will be adopted more slowly. New ideas that are simpler to understand will be adopted more rapidly than innovations that require the adopter to develop new skills and understandings.

**Trialability:** the degree to which an innovation may be experimented with on a limited basis. New ideas that can be tried on the instalment plan will generally be adopted more quickly than innovations that are not divisible. An innovation that is trialable represents less uncertainty to the individual who is considering it for adoption, as it is possible to learn.

**Observability:** the degree to which the results of an innovation are visible to others. The easier it is for individuals to see the results of an innovation, the more likely they are to adopt. Such visibility stimulates peer discussion of a new idea, as friends and neighbours of an adopter ask him or her for innovation-evaluation information about it.

In this study, individual characteristics including demographics, knowledge and awareness as well as community socio-cultural norms were used as potential factors influencing men’s adoption of CME-RH. Men need to know that reproductive health programme exists, they need to know what roles they can play in the programme and they need to know how reproductive health works. This however is socially constructed and must be understood within such context.
From the social cognitive theory, the concepts of environment and situation were adopted and adapted (Glanz et al., 2002). The concepts of environment and situation in this theory refer to the objective factors that can affect a person’s behaviour but are physically external to that person and are external to the cognitive representation of the environment by that person (Glanz et al., 2002). In this study, these concepts were used in the conceptualization of programmatic and service provider technical capacity factors including required competencies and attitude. The role of Institutional Capacity and Programme Sustainability is explicitly recognized in enhancing improved outcomes in RH. However, it was noted that these two aspects were also an outcome largely of the technical capacity of the health care workers who manage the facilities and the whole value chain of health care provision. The following model greatly referred to the strategies proposed in National Reproductive Health Policy of 2009 to 2015 (MoPHS, 2009) and served as a guide to this study.

**Individual and Community Characteristics**
- Demographic dynamics
- Socio-cultural norms & perceptions
- Knowledge and awareness
CHAPTER TWO: LITERATURE REVIEW

2.0 Global Context
Access to reproductive health, particularly family planning and maternal health services, helps women and young girls to avoid unwanted pregnancies or early pregnancies, unsafe abortions as well as pregnancy related disabilities (Health Policy Initiative, Task Order 1, 2010 and USAID, 2010). This means that women stay healthier, are more productive, and have more opportunities for education, training and employment, which, in turn, benefits entire families, communities and nations (UNFPA, 2009). Every year, 287,000 women across the world die from pregnancy-related causes (WHO, UNFPA, and World Bank, 2012). For every woman who dies, 20–30 women suffer short- or long-term illness or disability, including severe anaemia, damage to the reproductive organs, severe postpartum disability (such as obstetric fistula), chronic pain or infertility (UNFPA and Guttmacher, 2009).

Only about one half of the 123 million women who give birth each year receive antenatal, delivery and newborn care. To protect their health and that of their infants, women need access to basic health care during pregnancy and delivery. But in developing countries, there are too few properly equipped health facilities, and those that do exist rarely provide all of the care that women and babies need (Guttmacher, 2010). The number of maternal deaths is highest in countries where women are least likely to have a skilled professional, such as a trained midwife, doctor or other trained health professional, at delivery (WHO, 2010). An estimated 222 million women in the developing world who want to avoid or delay pregnancy are not using a modern method of contraception (Shusheela, 2012).

Meeting all unmet needs for modern methods of contraception would reduce the number of pregnancy-related deaths by 79,000. Of these, 48,000 would be prevented in sub-Saharan Africa alone (Guttmacher, 2012). Maternal and newborn deaths slow economic growth and lead to global productivity losses of some $15 billion each year. Conversely, investing in improved
health for women and babies has far-reaching benefits for nations. For instance, between one-third and one-half of Asia’s economic growth from 1965 to 1990 has been attributed to improvements in reproductive health and reductions in infant and child mortality and fertility rates (UNICEF, 2012). Notably, in low- and middle-income countries, only 57 per cent of an estimated 1.5 million pregnant women living with HIV in 2011 received the antiretroviral medicines needed to prevent HIV transmission to their babies (UNICEF, 2012).

2.1 African Context

Approximately 99% of all maternal deaths occur in developing countries (UNFPA, 2009). The highest maternal mortality ratio of about 1,000 maternal deaths per 100,000 live births occurs in sub-Saharan Africa (WHO, 2009). In Sub-Saharan Africa a woman faces a 1,000 times greater risk of dying when pregnant or while giving birth, compared to one in Europe (USAID, 2010). Between 1990 and 2010, Africa has reduced maternal deaths by 41 per cent. Over the same period, it has also reduced under-five mortality by 33 per cent. Despite progress, 57 per cent of all maternal deaths occur on the continent, giving Africa the highest maternal mortality ratio in the world. Maternal mortality rates vary from country to country. While the lifetime risk of dying from pregnancy-related complications is 1 in 4,700 in the industrialized world, the lifetime risk of an African woman dying from pregnancy related complications is 1 in 39 (UNFPA, WHO, UNFPA, 2012).

Weak health systems in most countries in Sub-Saharan Africa contribute to the slow pace of improvement (United Nations, 2008 and Prata. et al., 2008). Poor infrastructure, low health care financing and inadequate health worker skills and densities are impediments that need to be addressed in order to improve maternal health (USAID, 2006). Limited access to family planning results in some 76 million unintended pregnancies every year in the developing world alone.
Each year, 19 million abortions are carried out under unsanitary or medically unsound conditions resulting in some 68,000 deaths (UNFPA, 2007). Many women who seek abortions are married and are usually poor and struggling to provide for children they already have (Prata et al., 2008). Research suggests that 1 in 10 pregnancies will end in unsafe abortion, with Asia, Africa and Latin America accounting for the highest numbers (Lule et al., 2007). Unsafe abortion is one of the main reasons women and girls seek emergency care. In sub-Saharan Africa, where high fertility multiplies the dangers mothers face over a lifetime, 1 in 16 women is likely to die as a consequence of pregnancy; in some of the poorest parts, as many as 1 in 6 face this risk (UNFPA, 2007). In this region post-abortion care takes up one fifth to half of all gynaecological beds (WHO, 2009). Fearing exposure and judgmental attitudes from providers, many women delay seeking life-saving treatment until it is too late (Sedgh et al., 2007).

At the 1994 International Conference on Population and Development (ICPD), 179 governments pledged to make reproductive health care universally available "as soon as possible as and no later than 2015" (Ashford, 2008). Though the goal of universal reproductive health care was not explicitly included as one of the MDGs, there is widespread international agreement that the MDGs can be met only with a redoubling of efforts and resources for reproductive health and rights (Bernstein, 2006).

2.2 Status of Reproductive Health in Kenya

The 2009 Kenya Demographic and Health Survey (KDHS) reported a decline in key maternal health indicators in the country. Maternal mortality in Kenya has continued to rise since 2003, from a ratio of 414 deaths per 100,000 live births in 2003 to 488 deaths per 100,000 live births in 2009 (KNBS, 2003 and KNBS, 2009). In some regions such as north eastern province, the ratio is
as high as 1,300 deaths per 100,000 live births. This translates to about 21 women dying every day due to complications of pregnancy and child birth. Estimates indicate that for every woman who dies, 30 more are maimed by lifelong disabilities such as fistula (MoPHS, 2010b). At this rate it is unlikely the country will achieve reduction of maternal mortality target of not more than 147 for every 100,000 live births by 2015 (MoPHS, 2009b).

According to the 2009 KDHS, over half (56%) of deliveries in Kenya are attended by unskilled people with approximately 57% of all deliveries happening outside health facilities. Further, only 28% of women receive skilled care within the first 4 critical hours following delivery, when the risk of maternal death is highest. Despite these risks, only 47% of expectant women fully attend the required 4 Antenatal Care (ANC) service visits while a greater majority (92%) visits at least once (KNBS, 2009). Rural women and less educated women are far less likely than others to receive skilled birth attendant during delivery and to deliver in a health facility (AMREF, 2009). Mother’s age at birth is also inversely related to the likelihood of receiving medical assistance during delivery and delivering in a health facility (MoH, 2005). On the other hand, urban mothers (75%) are twice as likely as rural mothers (37%) to have skilled birth attendant.

The likelihood of a skilled birth attendant also increases substantially with the mother’s educational level, from 19% among mothers with no education to 73% among mothers with at least some secondary education (KNBS, 2009). The 2009 KDHS also shows that although contraceptive use is scientifically proven to reduce maternal death, contraceptive use prevalence rate is at 46% and the unmet need for contraception stands at 25%. Social and cultural beliefs and practices, low awareness and empowerment, lack of information and male involvement as well as
high levels of poverty impede demand and utilization of reproductive health services (MoPHS, 2009b).

The Kenya Vision 2030 targeted to reduce maternal mortality ratio from 488 deaths per 100,000 live births down to 147 deaths per 100,000 live births by 2012. The Vision also committed to accelerate skilled birth attendance from 44% to 90% by 2012 (Ministry of Planning, 2008). Furthermore, in its 2008 to 2012 strategic plan the then Ministry of Public Health and Sanitation planned to increase utilization of cost-effective reproductive health services by 50%. It also proposed to increase deliveries by skilled attendants from 42% to 60% (MoPHS, 2009a). Besides, the National Reproductive Health Policy (2007) sought to enhance the reproductive health status of all Kenyans by increasing equitable access to reproductive health services, improving quality, efficiency and effectiveness of service delivery at all levels and improving responsiveness to the client needs. The then Ministry of Public Health and Sanitation however concurred that this would not be realized if innovative strategies were not developed and implemented (MoPHS, 2009b).

2.3 Overview of Reproductive Health in Makindu and Mutitu Sub-counties

Makindu and Mutitu Sub-counties lie in the lower eastern province of Kenya which is among the poorest in the country with 56% of the population living in absolute poverty (Ministry of Planning 2008). According to the 2009 Housing and Population Census, Makindu Sub-county had a total population of 120,291 people with 28,870 women of reproductive age (15 to 49 years). Similarly, Mutitu Sub-county had 119,345 people with 28,643 being women of reproductive age (KNBS, 2010). The Sub-county Annual Operational Plans for both Sub-counties (AOP 6) indicate that 85% of births are conducted at home (outside the health facilities) and obstetric care services are not available in most of the rural health facilities (MoPHS, 2010d). Though the government of Kenya has invested resources in the improvement of
reproductive health, the benefits of these efforts are minimal (MoPHS 2010d). Some marginalized communities in Arid and Semi-Arid Areas (ASAL) such as Makindu and Mutitu have received insignificant benefits from these investments due to their low literacy levels, low incomes, debilitating cultural practices, poor health seeking behavior, and general unavailability of health services. Limited participation of men in reproductive health has been cited as a key hindrance to improvement of health indicators in the two areas (Ministry of Planning, 2005).

2.4 The Place of Men in Reproductive Health

Maternal deaths and disability could be reduced dramatically if every woman had access to health services throughout her life cycle, especially during pregnancy, child birth and post-delivery (UNFPA, 2009). Men's participation is a promising strategy for addressing some of the world's most pressing reproductive health problems. Men play very important roles in the lives of women and need to feel morally compelled to be engaged and supportive of all efforts to reduce maternal deaths because they are also part of the solution (Natirutthakorn, 2004).

Millions of pregnancies are unintended, and each year many thousands of women die as a result of these pregnancies (WHO, 2009). At the same time, surveys, mostly in Africa, find that many men favour family planning and are concerned about reproductive health (Westoff, 2006). In 8 of 12 countries with surveys of men, at least 70% of men approve of family planning (UNFPA, 2009). Increasingly, men are making reproductive decisions together with their wives thus suggesting that men's reproductive health behaviour is ready to change (Green et al., 2005).

Men's participation is crucial to enabling millions of women to avoid unintended pregnancies (Green et al., 2005). Of the 175 million pregnancies each year, about 75 million are unintended, according to estimates by the United Nations Population Fund (UNFPA, 2007). An estimated
100 million married women have unmet need for family planning (UNFPA, 2009). There are probably much unmet needs among unmarried women as well. While most husbands and wives agree about using contraception, couples who disagree, or in which the wife thinks that her husband disapproves make up a substantial share of couples with unmet need (Bernstein S and Edouard, 2007). The two further indicate that many married women who want to avoid pregnancy are not using contraception because their husbands object.

Qualitative studies among married women with unmet needs for family planning demonstrate the powerful role that their husbands play in determining whether they use contraception. In Uttar Pradesh, India, 87% of women with unmet needs said that the decision to use contraception ultimately rests with the husband (UNFPA, 2006). Husbands' objections reflect a variety of reasons, including not only desire for more children or opposition to family planning but also worries about their wives' health, side effects of contraception, lack of information, and little discussion of family planning (Sedgh et al., 2007; Solo et al., 2005 and Campbell et al., 2006).

The World Health Organization shows that as HIV and AIDS spreads throughout the world, along with an increase in some other STDs, the need for men to practice safer sexual behaviour is becoming ever more urgent (WHO, 2008). Men thus need to use condoms correctly and consistently and to limit their number of sexual partners (Byamugisha et al., 2010). Also, social change is needed in cultures that tolerate men's sexual promiscuity and condone unhealthy gender norms. The HIV and AIDS epidemic has thus put men's sexual behaviour in the spotlight with too many men still engaging in risky sexual practices, including having multiple sex partners, and not using condoms consistently (Barot, 2008). In several Asian and African countries, some older men seek out virgin girls, known as cherry girls, whom they believe to be safe from HIV (Zevenbergen, 2009).
Men's sexual behaviour puts women at risk with the strongest predictor for HIV infection by women being a husband who had been diagnosed with an STD (UNFPA, 2009). Women are more susceptible physiologically to the viral and bacterial agents that cause them. Consequently, men transmit infections to women more efficiently than women do to men (Reynolds et al., 2006). Men are eight times more likely to transmit HIV to a female partner through repeated, unprotected sexual intercourse than women are to transmit the virus to men (UNFPA, 2008). The World Health Organization estimates that each year there are more than 330 million cases of curable STDs among adults worldwide (WHO, 2008). This figure includes 89 million new cases of Chlamydia infection, 62 million new cases of gonorrhoea, and 12 million new cases of syphilis. The vast majority of these cases, as with HIV/AIDS cases, occur in the developing world, particularly sub-Saharan Africa (UNFPA, 2008). STDs such as gonorrhoea and Chlamydia can cause infertility in men and women, if left untreated (Reynolds et al., 2006). WHO further estimates that 8% to 22% of infertility worldwide is due to male causes and thus treating men's STDs early would help to reduce the social stigma and abuse some women receive when they do not conceive (WHO, 2008).

2.5 CME as an Approach and Emerging Perspectives

CME is an approach to improving reproductive health outcomes by involving men as clients of health services, supportive partners, and agents for social change (Omar and Krishna, 2010). New information, new understanding, and new approaches promise to help men become full partners in better reproductive health. Men, as well as women, play key roles in reproductive health, including family planning, but increasing men's participation has been difficult (Nairrutthakorn, 2004 and Green et al., 2005). Emerging perspectives according to UNFPA recognize that:
• Men play important, often dominant roles in decisions crucial to women's reproductive health;
• Men are more interested in family planning than often assumed but need communication and services directed specifically to them;
• Understanding—and influencing—the balance of power between men and women can help improve reproductive health behaviour;
• Couples who talk to each other about family planning and reproductive health can reach better, healthier decisions (UNFPA, 2009)

In the past decade programs have begun to view men from new perspectives. Policy-makers and service providers increasingly recognize that reaching men is a winning strategy, with benefits for both men and women (POLICY Project, 2007). There is merit in making men full partners and advocates for good reproductive health. Men are ready to change their behaviour toward family planning and other reproductive health (Fajans et al., 2006). Furthermore, there is need to encourage sexual responsibility, to foster men's support of their partners' contraceptive choices, and to address the reproductive health care of couples (Campbell et al., 2006).

In a pilot involving men in rural Ghana it was demonstrated that while often neglected in the past, men are an important audience (Nyonator et al., 2007). They note that providing information, education, and communication (IEC) about reproductive health is key to gaining their interest and support. Program experience of the last decade demonstrates that communication can change men's health behaviour for the better (The ACQUIRE Project, 2005). An awareness of gender offers a new way to understand the complex relationships between men and women that affect their reproductive health behaviour (Zevenbergen, 2009). IEC campaigns can promote new gender roles for men, encourage couple communication and help to foster joint
decision-making about reproductive health. In communicating with men, experience teaches the value of reaching out to men in the places where they gather and feel comfortable and thus are more receptive to new information (UNFPA, 2009).

Men need information about contraceptive methods and when they know the facts about male methods, they are more likely to use them. Providers thus need to offer sensitive counselling to men, whose concerns often differ from those of women. Men are more likely to use reproductive health services that are part of a range of services that interest them (UNFPA, 2008). Men's participation is a promising strategy for addressing some of the world's most pressing reproductive health problems (Solo et al., 2005). Men can help slow the spread of human immune deficiency virus/acquired immune deficiency syndrome (HIV/AIDS) and other sexually transmitted diseases (STDs); prevent unintended pregnancies and reduce unmet needs for family planning; foster safe motherhood and practice responsible fatherhood; and stop abusing women (UNFPA, 2009).

2.6 Gender Dimensions in CME

The 1994 International Conference on Population and Development (ICPD) was unprecedented in its call for countries to promote men's support in the struggle for gender equality and encourage their involvement and shared responsibility in all areas of family life and reproductive health. The Millennium Development Goals (MDGs) give little explicit attention to men's roles, although the need to involve men in their realization is apparent (Turquet et al., 2008). As a matter of principle, men, especially those who are marginalized by poverty or other circumstances, have needs and rights that deserve greater attention (Sedgh et al., 2007).
As a practical matter, men wield preponderant power across all areas of public and private life. Their cooperation is essential not only in the domestic and community spheres, but also in the wider realm of national politics, finance and governance. Gender equality, and the social transformation it implies, is most likely to be achieved when men recognize that the lives of men and women are interdependent and that the empowerment of women benefits everyone (Green et al., 2005).

Where pregnancy is defined as a women's issue, the participation of men in the decisions and responsibilities it entails may be limited. Yet helping men and communities appreciate the risks of pregnancy can improve a woman's chance of obtaining life-saving care (Natirutthakorn, 2004). In Uganda, educating fathers about safer childbirth discouraged unsafe home deliveries. Similarly, in India, training physicians to involve men in maternity care resulted in more husbands accompanying their wives to antenatal clinics. Besides, in rural China, it was found that where husbands shared domestic chores and parenting responsibilities, women were more likely to receive prenatal care, to reduce their workloads before giving birth and to deliver under more sanitary conditions (UNFPA, 2009).

Poverty reduction, gender equality and reproductive health go hand in hand (United Nations, 2008). They are interrelated and mutually reinforcing, and all have positive effects that can last for generations. Social and cultural assumptions about appropriate female and male roles strongly affect decisions regarding reproduction and sexual behaviour, which in turn influence prospects for social and economic development (Ministry of Planning, 2005). When restrictive norms and stereotypes are transmitted to children, the cycles of gender discrimination, poor health and poverty are perpetuated. The effects show themselves in
direct and indirect ways, most dramatically in the incidence of maternal deaths and injuries, and HIV infections (USAID, 2006).

Men play a key role in bringing about gender equality since, in most societies, men exercise preponderant power in nearly every sphere of life, ranging from personal decisions regarding the size of families to the policy and programme decisions taken at all levels of Government (Levine et al., 2006 and Byamugisha et al., 2010). It is essential to improve communication between men and women on issues of sexuality and reproductive health, and the understanding of their joint responsibilities, so that men and women are equal partners in public and private life (Lule et al., 2007 and POLICY Project, 2007).

2.7 The Concept of CME in Reproductive Health

Men’s participation in women’s health programmes has been a source of interest in many years, even though its meaning continues to vary from source to source. Men’s participation can be viewed from programme perspectives and may mean men supporting choices and rights of their female partners, or men doing something about their own reproductive and sexual behaviour as a way of protecting their partners (Lee, 1999). Men’s participation may mean many things, depending on the couple and community; some men may choose to go to the clinic with their female partners, get involved in actual reproductive health service utilization, while many choose not to visit the health facility, but instead support their partners in improving their reproductive health in other ways, pay their partner’s health care and/or provide transport for their partner to reach the clinic (Rutenberg et al., 2002).

The topic of men’s involvement is also complicated by the wide range of terms used in the literature to qualify it. The terminology includes: men’s participation, men’s responsibility, male
motivation, male involvement, men as partners, and finally men and reproductive health (Drennan, 1998). The terminology used does not matter as long as the purpose is to describe the process of social and behavioural change that is needed for men to play more responsible roles in reproductive health services. A further challenge is posed by the difficulty of measuring men’s involvement. Measuring the ideal degree of participation is very difficult because male involvement is so couple-specific (Green et al., 2005).

2.8 Strategies for CME in Reproductive Health

Kenya’s roadmap to accelerating reduction of maternal and new-born morbidity emphasizes the need for evidence based programming, strengthening of delivery services at all levels and promotion of partnerships (MoPHS, 2010b). Most importantly, the roadmap stresses the need for enhanced male involvement as equal partners for sustainable results. However, since women bear a disproportionate burden in reproductive health and childbearing, efforts directed at men should not come at the expense of women or deflect scarce resources from programmes that women desperately need (UNFPA, 2009). The solution thus according to the Kenya’s MoPHS Roadmap is to involve men in ways that benefit both sexes and promote gender equality as an explicit aim (MoPHS, 2010b). The results of various initiatives suggest that efforts to reach both men and women could further progress toward international development goals (Turquet et al., 2008 and Bernstein S, 2006). Consequently, various strategies have been employed to promote male participation in reproductive health. These include:

2.8.1 Men as Clients

This is the most common and earliest approach and focuses on and aims to make reproductive health information and services more accessible and attractive to men. According to the Ministry
of Public Health and Sanitation, this includes overcoming the idea that reproductive health is a woman's concern and the fact that services are often designed for, or are, primarily used by women (MoPHS, 2010b). In this approach, men are encouraged to use reproductive health services to meet their own needs and to reduce the reproductive health burden on women (Green M et al., 2005). The strategy reflects recognition of men’s reproductive health needs and the reality that improving men’s health has positive effects for their sexual partners. Men often report that shame in seeking health services and are likely to do so only as a last resort (Campbell et al., 2006).

2.8.2 Men as Partners

This approach recognizes men's influence on reproductive health options and decision and encourages men and women to deal jointly with issues such as contraception, emergency plans for labour and delivery, voluntary HIV counselling and testing, and post-abortion counselling (Ashford, 2008 and Natirutthakorn, 2004). It is guided by the realization that men can be key allies in achieving better reproductive health for their sexual partners. Programming for men as supportive partners of women reflects men’s roles as primary health decision makers in the family and recognizes men’s greater access to information and resources. This addresses men and women’s reproductive health needs within the context of their relationship as a couple and encourages men to communicate openly with their partners; others try to reach out to men as primary gatekeepers and decision makers in communities. Further, this approach may go beyond reproductive health to engage men in wider issues, such as gender-based violence and female genital mutilation/cutting (UNFPA, 2008).
2.8.3 Men as Agents of Positive Change

This involves men being engaged fully in promoting gender equality and social change. The strategy offers men opportunities to reflect on their own history and experiences, to question gender attitudes and to recognize how gender inequities harm their partners and themselves (Zevenbergen, 2009). This challenges attitudes and behaviours that compromise not only men’s health and safety, but that of women and children. It helps men to understand how gender norms can negatively affect their lives and those of their partners and families. This self-examination challenge men to develop healthier alternatives to prevailing notions of gender and masculinity, particularly those that affect their reproductive health and that of their families. Consequently, men question and address entrenched social norms and attitudes in the face of social pressure. However, involving men more effectively presents a dilemma that raise ethical and human rights issues (Prata et al., 2008). Overlooking existing power imbalances between men and women may have the unintended consequence of reinforcing inequities and male control over women’s decision making (Green et al., 2005). This is especially critical in the area of reproductive health. A clear and explicit gender-responsive approach is necessary in order to develop sustainable policies and programmes (Ramchandran, 2007 and PATH, 2008).

2.9 Existing Understanding of the Various Determinants

Various studies have documented generalized and community-specific determinants of male participation in reproductive health. These include individual characteristics such as
demographic, socio-cultural, knowledge and awareness related variables. Others include
programmatic and service provider related factors. Below is a presentation of the current
understanding of the questions which this study sought to answer.

2.9.1 Individual Characteristic Determinants

In the past, population studies and reproductive health, unlike other development fields,
focused almost exclusively on women, specifically on their fertility and reproductive lives
(UNFPA, 2007 and Natirutthakorn, 2004). Very little information was collected about men
and as a result, few reproductive health services and programmes reflect the specific needs
and perspectives of men (Green et al., 2005). Studies now show that men's age of sexual
initiation tends to be earlier than women's, and that they have more sexual partners, both
outside and within marriage (KNBS, 2009). In developing countries the majority of men aged
20 to 24 report sexual initiation before their 20th birthday. Although this varies significantly
by region, in some countries up to 35 per cent report sexual initiation before their 15th
birthday (UNFPA, 2008).

Marriage is relatively infrequent among men in their early twenties or younger. However,
young men tend to have more sexual partners than older men, which reinforce the need to
give special attention to this age group (Population Council, 2008). Despite these trends
reproductive health still remains primarily women's responsibility (Green et al., 2005). A
large percentage of married men aged 25 to 39, particularly in sub-Saharan Africa report that
they have not discussed family planning with their partners (Sedgh et al., 2007 and Solo et
al., 2005). Male methods such as condoms and vasectomy, account for only a small
percentage of global contraceptive use. Fewer than half of men living in rural areas know of a
source for obtaining condoms (Westoff, 2006). A troubling proportion of men with sexually
transmitted infections do not inform their sexual partners. In some developing countries, at least 3 in 10 men aged 15 to 54 do not tell their partners (UNFPA, 2008 and Reynolds et al., 2006).

Awareness and knowledge about reproductive health is important for men’s involvement; men need information about reproductive health issues and their possible role in these services and how they can access them (Kumah, 1999). As espoused above, according to the theory of DOI, adoption of programmes’ by recipients is influenced by knowledge and awareness (Glanz et al., 2002). Lack of knowledge by men may be due to inadequate access to information about reproductive health. In a study on factors influencing men’s involvement in Tanzania it was noted that men felt marginalized by the inadequacy of access to information as they received second hand information through their wives (Burke et al., 2004). More so in Pakistan, researchers found that even women identified lack of information among men as a serious issue and wished that dissemination programmes’ could also be held for their male partners (Kamal, 2002). The level of ignorance amongst men in most reproductive health settings is so significant that very few are even aware that their female partners are accessing related services (Baggaley et al., 2000). It is clear that providing reproductive health information to men has benefits, as it is associated with an increase in the uptake of interventions by women (MoPHS, 2009b).

All cultures have values that give meaning and provide guidance to humans as they interact with their social world (Giddens, 2001). These values and beliefs influence men and women living in the same society about what are considered appropriate roles and responsibilities for each gender (Zevenbergen, 2009). Notably, these values and perceptions are sometimes reinforced by social institutions like traditional and religious groups in the community (Kumah, 1999). A number of
cultural factors which limit men’s ability to take an active role in the reproductive health within particular communities have been identified. There exists various unfavourable social and religious climate in some societies where sexual matters are not discussed openly and men may feel uncomfortable talking about reproductive health needs with their partners and health workers (Zevenbergen, 2009). Some cultural norms and taboos in Africa reinforce negative stereotypes about male involvement in reproduction matters, and some even condone abuses of women’s reproductive rights by men (Kumah, 1999). Although gender is considered culture-specific, there is consistency across cultures in the difference between women’s and men’s roles, access to resources, and decision-making authority (UNFPA, 2008).

Reports on male involvement projects in Zimbabwe revealed cultural beliefs reinforcing the community perception of men who publicly supported their wives by accompanying them to the clinic as “weak” or “bewitched” (Rutenberg et al., 2002). In Tanzania it was found that because of cultural norms, men preferred to receive information about reproductive health from fellow men who were their peers or older, and in gender-specific groups (Burke et al., 2004). Consequently, social and gender-related issues also affect men as they may engage in high-risk behaviours more frequently than women in order to meet the perceived expectations of social norms (Zevenbergen, 2009).

2.9.2 Programmatic Determinants of CME-RH

Programmatic factors can also be a barrier to men’s involvement in reproductive health services. Reproductive health services have hitherto been designed to meet women’s and children’s needs and these results in men not considering these programmes as a source of information and help for them (Byamugisha et al., 2010). Furthermore, because service providers are mostly females,
they may be biased towards female related services (UNFPA, 2009). Besides, reproductive health programmes have done very little to involve men, this despite acknowledging their key roles and positive experiences in other reproductive health programmes like family planning services (Rutenberg et al., 2002). They further note that antenatal and mother and child health clinics are women’s spaces that cannot be easily adapted to accommodate men.

Men want to make use of the existing public health care facilities, but the way these facilities function is not very conducive to their utilization because of constraints related to the time schedule and the expenses involved (Natirutthakorn, 2004). In Tanzania, it was found that men considered themselves marginalized by reproductive health programmes (Burke et al., 2004). Lack of privacy in many antenatal settings is also a hindrance as it compromises confidentiality and so discourages men from utilizing the services, for fear of stigmatization (Green et al., 2005). The manner in which reproductive health services are provided and organized can therefore be a limiting factor to men’s involvement.

2.9.3 Determinants Related to Service Provider Technical Capacity

Inadequate knowledge, skills and inappropriate attitudes can all form obstacles to good health care. Advances in insights into treatment and diagnosis, as well as changes in roles and responsibilities, require continuous professional development among health workers. In fact, a lifelong learning process must be developed at the start of a professional career in the health sector (WHO, 2006). The method most frequently used to upgrade skills and knowledge for health care providers in resource-poor settings is off-site training courses and seminars. As an intervention to improve practices of health providers in the reproductive health domain, these have not proven to be very effective (WHO, 2006; Rowe et al., 2005; Potter & Brough, 2004).
This might have been due to a lack of problem analysis and training-needs assessment (Potter & Brough, 2004). It may also be related to the mismatch between training contents and skills required in the field and the choice of target group or training methods (Mathauer & Imhoff, 2006). Apart from training subjects and methods, access to training opportunities among health workers also vary (Mathauer & Imhoff, 2006; Dieleman et al., 2006). Lack of competences occurs because of limited access to training and inadequate training methods, subject matter and target group.

Availability of skilled health workers, in adequate numbers, is key to achieving improved service quality and responsiveness in reproductive health service delivery. The Ministry of Public Health and Sanitation Reproductive Health Strategic Plan 2008-2012 has recognized that in order to improve quality and responsiveness there must be adequate health workers at Levels 1, 2 and 3 through reduction of the staff vacancy rate by 40% between 2008-2012 (MoPHS and MoMS, 2009b). In addition, capacity building in reproductive health will be invigorated during the plan period so as to ensure that by 2012, every health worker receives at least a 5-day training every year, as is the policy. This underscores the value that the government of Kenya attaches to enhancing the skills and knowledge of staff.

In Kenya, trained midwives provide normal delivery services at all levels of care, referring complications to Medical Officers and Specialists from Level 4 upwards (MoPHS, 2010a). Training, recruiting, deploying and retaining skilled health personnel are central elements in improving reproductive health and health care generally (MoPHS, 2010b). However, many core reproductive and sexual health interventions can be made by mid-level professionals and paramedical workers (WHO, 2006). The challenge is to determine the cadres of health workers,
skills and forms of training that are most necessary to provide the prioritized reproductive and sexual health services (MoPHS, 2009a). Enabling conditions need to be created for health workers to realize their full potential and to motivate them to work with all population groups. This includes performance of health workers on the supply side, and public awareness of client rights on the demand side (MoPHS, 2009b). Health care provider attitudes need also to be addressed in order to attract more clients for the services on offer and also to optimize on performance (MoH, 2005 and WHO, 2006).

CHAPTER THREE: MATERIALS AND METHODS

3.0 Study Design

An interventional quasi-experimental design was employed to gather data from men residing in Makindu and Mutitu Sub-counties of Makueni and Kitui Counties in Kenya. Makindu Sub-county was purposefully chosen due to the prevailing poor reproductive health indicators and
low male participation in reproductive health compared to other Sub-counties in the lower eastern region and national averages. Mutitu Sub-county was also purposively selected to serve as a control site because it recorded similar reproductive health outcomes and indicators related to male participation in reproductive health. Besides, both areas had similar geographical and socio-economic characteristics. Notably, Mutitu Sub-county is approximately 230KM from Makindu and thus minimized chances of contaminating the control population.

The design was considered suitable for this study compared with full randomization which would have been untenantably expensive for such a study. It also minimized threats to external validity as natural environments do not suffer the same problems of artificiality as compared to a well-controlled laboratory setting. Since quasi-experiments are natural experiments, findings in one may be applied to other subjects and settings, allowing for some generalizations to be made about population. Also, this kind of experimentation is efficient in longitudinal research that involves longer time periods which can be followed up in different environments. Besides, they are exceptionally useful in evaluating the impact of public policy changes, educational interventions or large scale health interventions and a valuable tool, especially for the applied researcher (Fisher, 2002).

This study involved men aged 18 – 54 years in Makindu and Mutitu Sub-counties. Makindu Sub-county had the intervention group while Mutitu Sub-county had the control group. The adapted GEM Scale and other research instruments were administered to randomly sampled men in both sites. The intervention component involved interactive group education sessions on CME-RH for all men in Makindu Sub-county conducted by trained facilitators. Intervention activities were guided by a field-tested manual developed by the researcher for promoting attitude and behaviour change on reproductive health among men. The manual included a set of
70 activities that were developed and pre-tested with groups of men at Sub-county level. These activities were organized under three CME-RH themes: Men as clients of reproductive health services; Men as partners in reproductive health and; Men as agents of social change in matters related to reproductive health. The activities in the manual were designed to be carried out in brainstorming exercises, discussion sessions, and individual reflections during a once-a-fortnight session for about two hours each over a 12-month duration.

Trained adult men facilitated the sessions with supervision by Public Health Officers (PHOs) in the Sub-county. Besides, 19 nurses serving in the eight rural dispensaries in Makindu and the Maternal and Child Health clinics at the Makindu Sub-county Hospital were sensitized on CME-RH once per month. A standard manual was developed for nurses covering the three CME-RH thematic areas. The adapted GEM Scale and other research instruments were administered in the 13th month to sampled men in both intervention (Makindu) and non-intervention (Mutitu) sites. This design was conceptualized as illustrated below:

![Diagram](image-url)
indicates the treatment that was administered to the intervention group. The control group did not receive any organized intervention during the study period.

3.1 Variables

3.1.1 Dependent Variables

Constructive Men’s Engagement in Reproductive Health (CME-RH) was the key dependent variable for this study. CME-RH was measured using a Gender Equitable Men’s (GEM) Scale adapted from similar studies across the world. It focussed on the three seminal pillars of CME-RH including Men as Clients of health services; Men as Partners in reproductive health and; Men as Agents of positive change in society and at household level. This assessment enabled understanding of the actual level of CME-RH in the two Sub-Counties and also the association between CME-RH and the various independent variables.

3.1.2 Independent Variables

The independent variables for this study at the individual level included the socio-cultural norms and perceptions, demographics (age, family size, levels of education and income, occupation and marital status) and knowledge on reproductive health. At the programmatic level the study focused on accessibility, availability as well as CME-RH appropriateness of reproductive health services. Further, in regard to the service provider technical capacity, the skills, knowledge, attitude, perceptions of the health care workers were considered key independent variables for this study.

3.2 Study Area
3.2.1 Location of the Study

The study was conducted in Makindu and Mutitu Sub-counties which are part of Makueni and Kitui Counties of Kenya respectively. Makindu Sub-county boarders Kibwezi to the East while Kathonzweni and Nguu lie to its North and West respectively. It covers an area of 1,327Km² with four locations including Nguumo, Makindu, Kiboko and Twaandu (KNBS, 2010). The Sub-county consists of 15 sub-locations and 27 villages. It has one government hospital at Makindu Township and 7 dispensaries. Similarly, Mutitu Sub-county borders Katulani to the West, Mwingi South to the North while Mutomo and Nzambani lie to its East and South respectively. It covers an area of 7,437 Km² with 3 locations including Mutitu, Zombe and Mwitika, and has 28 sub-locations. The Sub-county has 6 dispensaries only. Both Sub-counties have a warm and sub-humid climate with mean annual temperature and rainfall of 26°C and 500 mm per annum respectively. They are majorly inhabited by the Kamba community although there are traces of other ethnic groups particularly in market centres. The literacy level is about 55% and over 60 per cent of the people subsist on less than 1US$ per day. Both Sub-counties register maternal mortality ratio of 497/100,000 live births which is higher than the national average of 488/100,000 (MoPHS, 2010c and KNBS, 2009).

3.2.2 Justification of the Study Area

The 2009 Kenya Demographic and Health Survey (KDHS) indicated a clear dichotomy in key maternal health indicators between communities living in highly productive agricultural zones and the Arid and Semi-Arid Lands (ASALs). Makindu and Mutitu Sub-Counties of Makueni and Kitui Counties respectively lie in the marginal ASAL areas of Kenya. The two Sub-Counties register an absolute poverty level of 77% compared to the 73% recorded at national level.
Whereas Kenya has a maternal mortality ratio (MMR) of 488/100,000 live births, the area records an MMR of 497/100,000 (KNBS, 2009). Similarly, the under five mortality ratio stands at 84/1,000 live births compared to 74/1,000 live births nationally. Contraceptive Prevalence Rate (CPR) and skilled birth attendance (SBA) is only 35% and 31% respectively. In Kenya, CPR and SBA is estimated at 59% and 44% respectively (MoPHS, 2010d). The two areas also record lowest scores in key maternal health indicators in the two counties of former Eastern Province. Furthermore, the Kamba community who inhabit Makindu and Mutitu are strongly patriarchal. Various authors including Zevenbergen (2009) have argued that men socialized in communities that have a strong patriarchal inclination are less likely to participate meaningfully in matters related to reproductive health. Notably, access to healthcare is also low in the area due to the limited number of health facilities, health care worker skills and attitude, besides community’s ability to pay for medical costs (MoPHS, 2010d).

3.3 Target Population

The 2009 Housing and Population Census indicate that Makindu Sub-county has four locations with a population of 120,291 people. Nguumo location has 26,112 residents; Makindu location has 33,459; Kiboko 20,583 while Twaandu has 40,137 people. The same report indicates that Mutitu Sub-county has a population of 119,345 people within 3 locations including Mutitu (39,357), Zombe (36,478) and Mwitika (43,510). The target population for the study was the 43,040 adult men residing in the two Sub-counties. Makindu and Mutitu Sub-counties have 26,464 and 26,256 adult men respectively. In Makindu, these include 5,744 in Nguumo location, 7,361 in Makindu location, 4,528 in Kiboko location and 8,831 in Twaandu location. In Mutitu, Mutitu Location has 8,659, Zombe 8,025 while Mwitika has 9,572 adult men (KNBS, 2010). Most of the residents are subsistence farmers, with some practicing pastoralism and trading in livestock, foods and grain.
3.4 Sampling Techniques and Sample Size

3.4.1 Sampling Techniques

Makindu and Mutitu Sub-counties were selected due to their poor maternal and child health indicators. The two areas also record the poorest indicators of male participation in reproductive health in the lower eastern parts of Kenya. The two Sub-counties are over 200 Kilometres apart. This ensured that the intervention group did not contaminate the control group. Notably, both areas have similar geographical, social and economic characteristics. The survey was designed to collect information from households within the Sub-counties. A multistage sampling technique was applied and all the seven locations included in the survey. Random probability sampling was then used to identify sub-locations and villages from a list obtained from the respective Sub-county Commissioners’ offices. Being a semi-arid rural setting, households in both areas were evenly distributed with no significant variations in settlement. Consequently, with the help of Community Health Workers (CHWs) and village elders from the sampled villages, a list of all men who met the inclusion criteria was compiled for each of the two Sub-counties. Respondents were then selected from the respective list using the table of random numbers. The household survey was conducted with a target sample of 484 men at pre-intervention and a similar number at post-intervention thus yielding 968 men in total. Survey respondents were men aged from 18 to 54 years (KNBS, 2009). This age bracket was considered appropriate as it has been applied in the Kenya Demographic and Health Surveys (KDHS) of 2003 and 2009 and would thus allow comparability. This is the age when men are considered most active in reproductive health issues. The sampling frame for the study comprised the village administrative units in each Sub-county. Two sub-locations were selected randomly from each of the seven locations while 16 and 12 villages were selected randomly from the identified sub-locations in Makindu and Mutitu Sub-counties respectively as illustrated in Table 2.0 below.
Probability Proportionate to Size Sampling (PPS) was applied to allocate respondents across the respective administrative units in the two Sub-Counties.

**Table 2.0: Sampling Frame for the CME-RH Study**

<table>
<thead>
<tr>
<th>Administrative Unit/Population</th>
<th>Makindu Sub-County</th>
<th>Mutitu Sub-County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Size</td>
<td>120,291 People</td>
<td>119,345 People</td>
</tr>
<tr>
<td>Location (All sampled)</td>
<td>Nguumo, Makindu, Kiboko, Twaandu</td>
<td>Mutitu, Zombe, Mwitika</td>
</tr>
<tr>
<td>Sub-location (Randomly selected two sub-locations from each location)</td>
<td>Kiboko – Muuni and Ndovoini Makindu – Kiu and Manyatta Kiboko – Kasuvi and Nthia Twaandu – Mitendeu and Ngakaa</td>
<td>Mutito-Masasini and Musukini Zombe – Malatani and Kasunguni Mwitika – Makongo and Kavingo</td>
</tr>
<tr>
<td>Villages (Randomly selected two villages from each sub-locations)</td>
<td>16 Villages</td>
<td>12 Villages</td>
</tr>
<tr>
<td>Male respondents (Randomly selected from household lists developed by respective Community Health Workers and proportionate to population of the village)</td>
<td>Pre-test – 242 men Post-test – 242 men</td>
<td>Pre-test – 242 men Post-test – 242 men</td>
</tr>
</tbody>
</table>

Sampling in qualitative studies differs fundamentally from quantitative approaches. Therefore to gather qualitative data, sampling focused on key actors to maximize diversity and provide flexibility needed for an interactive process. Purposive sampling was used to select Key Informants (KIs) who provided information on the research questions. Identification of KIs particularly SC-HMT members was done through the Ministry of Health officials. Study participants for Focus Group Discussions (FGDs) at community level were selected purposively in the target sites and included adult men and women from the 7 locations. Sampling for FGDs aimed to create a homogenous group with similar experiences to facilitate free dialogue. Factors such as education level, occupation and age were considered for FGD participants. A total of 8
and 10 FGDs for men and women respectively with between 9 and 11 participants each were conducted separately while 18 Key Informants were interviewed. Annex 1 show a tabulation of the methodologies applied.

3.4.2 Sample Size Determination

The sample size was determined using Fischer’s (1998) formula:

\[ n = \frac{Z^2 \cdot pq \cdot D}{d^2} \]

- \( n \) = minimum sample size (for population >10,000) required
- \( Z \) = the standard normal deviate at the required confidence level, (set at 1.96 corresponding to 95%, Confidence level adopted for this study)
- \( p \) = population proportion estimated to have a particular characteristic (38% of men in Makindu and Mutitu Sub-counties accompanying their partners for ANC) (MoPHS, 2010d)
- \( q \) = 1-\( p \)
- \( d \) = the degree of accuracy required (usually set at 0.05)
- \( D \) = the design effect

Substitution in the formula:

\[ n = \frac{1.96^2 \times 0.38 \times (1-0.38) \times 1}{0.05^2} \]

\[ n = 362.03 \approx 362 \]

An extra 30% (108) was added to cater for the anticipated non-responses, spoilt questionnaires and to increase the power of the study (University of Florida, 2013). This gave 470 respondents at pre-intervention and a similar number (470) at the post-intervention stage i.e. 940 respondents. However, during the study a total of 968 respondents were interviewed. The population of Makindu and Mutitu Sub-counties had no significant difference. On this basis, a total of 484 respondents were sampled at baseline and a similar number (484) at end line from adult men in each Sub-county that fitted the study selection criteria.
3.4.3 Inclusion Criteria

This study targeted men residing in Makindu and Mutitu Sub-counties who fitted within the set criteria. Only men aged 18 to 54 years with a gravid partner/spouse or one with a child aged below 24 months participated to ensure high level of recall. The respondents had also to be of sound mind and also voluntarily willing to participate.

3.4.4 Exclusion Criteria

The exclusion criteria included men who did not reside in Makindu and Mutitu Sub-Counties. Further, men outside the age bracket of 18 to 54 years were excluded from the study. Besides, those without a gravid spouse/partner or a child aged below 24 months were not interviewed. Similarly anybody who was deemed to be of unsound mind or was unwilling to voluntarily participate was excluded from this study.

3.5 Construction of Research Instruments

After thorough literature review, incisive consultations with supervisors and discussions with DHMTs in Makindu and Mutitu Sub-counties, zero drafts of the tools for the study were developed. The draft questionnaires, interview schedules, discussion guides and action plans were shared with supervisors and key stakeholders including the Sub-county Medical Officers (DMO), Sub-county Public Health Officers (DPHO), Sub-county Public Health Nurses (DPHN), divisional PHOs, CHWs, village elders and colleagues for input. Their contributions were then incorporated. The tools were later piloted during a reconnaissance survey and further refined to ensure they captured the envisaged data accurately and consistently. The instruments were framed in such a way that vital information was gathered in tandem with the research questions. The information included socio-demographic characteristics, perception, knowledge
and attitude on reproductive health, spousal relationships, access and utilization of reproductive health services.

**3.6 Reconnaissance Survey**

A reconnaissance survey was conducted to ensure that the tools that were used for the study attained the requisite validity and reliability. Ten percent (10%) of respondents were therefore randomly sampled from the neighbouring Kibwezi Sub-county and questionnaires administered to them. Key Informant Interview schedules and Focussed Group Discussion (FGD) guides were also piloted with two members of the DHMT and one group of men respectively from Kibwezi Sub-county. The data collected was cleaned, edited, coded and analysed using SPSS Ver 19. This process and the preliminary results obtained immensely helped in improving the draft tools for the study.

**3.7 Validity and Reliability**

**3.7.1 Validity**

Validity refers to the accuracy and meaningfulness of inferences, which are based on the research results. It is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study (Mugenda and Mugenda, 1999). To ensure tool validity a pilot was undertaken with ten percent (10%) of questionnaires and an FGD carried out with one men group. Consequently the tools were refined for precision, clarity and inclusiveness. In order to ensure data quality, cross-checking and inspection of the information gathered from the pilot study was also done. The study instruments were then adjusted to ensure content, concurrent and face validity. Appropriate corrective measures ensured that the instruments gathered valid information during the study. All the piloted respondents were comfortable with the content information that the researcher wanted to know about them. These included their socio-
demographic variables, perception, knowledge and attitude towards reproductive health, spousal relationship in addition to access and utilization of reproductive health services. This helped to ascertain the content validity of the instruments. Further, research questions were framed in view of the study objectives to increase validity of the study.

### 3.7.2 Reliability

Reliability is the measure of the degree to which a research instrument yields consistent results or data after repeated trials (Leedy, 2001). This was attained by allowing colleagues at the Community Health Department, the DMOs, DPHNs, DPHOs, PHOs and CHWs provide valuable critique to the draft tools and their inputs incorporated. Piloted data was also analysed to check whether the tools actually answered the study questions. Data was collected in indigenous language, Kiswahili and English depending on the language that a study subject preferred or understood better. Where applicable, double checking of the information given was done while getting response from the study subject in order to further raise the level of reliability on the information provided. After collection, questionnaire, interview and FGD data was also compared for triangulation. Respondent and situational consistency was observed by ensuring that the trained research assistants collected standard data. Besides, raw data was edited in the field and centrally cleaned before entry into the computer.

### 3.8 Data Collection Techniques

#### 3.8.1 Household Surveys

The survey was conducted across 968 men in households within the two Sub-counties. Locally recruited and trained field workers collected data on detailed information on men’s knowledge,
awareness, attitude and practices on various aspects of reproductive health. These included maternal/obstetric care, recognizing and acting on need for referral or seeking care outside the home and follow up for women. It also focused on family planning, ante-natal, peri-natal and post-partum care. Gender dimensions in reproductive health including gender violence were also explored. Overall, the survey endeavoured to document the individual characteristics and program related determinants of male participation in reproductive health.

3.8.2 Focus Group Discussions (FGDs)

Eight (8) FGDs were conducted separately with men in the two Sub-counties. In order to understand women’s perceptions on CME-RH, a further 10 FGDs (6 in Makindu and 4 in Mutitu) were conducted with women residing in the two areas. These were considered sufficient and enabled participation from all the seven (7) locations in both sub-counties. Participants were selected with the aid of village elders and CHWs. The number of participants averaged from 9-11 persons per session. All discussions were conducted at convenient venues for the participants. Biographical data of all participants was collected to assess homogeneity of the groups and examine the relationships between findings and these variables. An attempt was made to capture group interaction through recording non-verbal expressions. Ten (10) Research Assistants under the guidance of the researcher collected this data. Two types of recording was used; written notes and tape recording. Written notes provided backup copies in case of mechanical failure or human error and to capture non-verbal cues. All discussions were done in languages understandable to the participants and recordings conducted within the boundaries of confidentiality agreed at the time of discussions. The discussions focused on issues outlined in the household survey approach detailed above.
3.8.3 Key Informant Interviews (KII)

Ten (10) interviews with Sub-County Health Management Teams (SC-HMT) members were conducted to explore male perceptions on reproductive health. The SC-HMT members included the Sub-County Medical Officer of Health, Sub-County Public Health Nurse, Public Health Officer, Reproductive Health Coordinator and Community Strategy Coordinator. Further, eight (8) KII were undertaken with two elders, one religious and one Community Based Organization (CBO) leader from each of the two Sub-Counties. Key Informant Interviews were used to elicit information on their understanding and perspectives on determinants of male participation in reproductive health. All the qualitative data collection tools were developed through preliminary discussions with DHMT members and after reviewing important documents.

3.8.4 Assessment of Health Care Providers

A semi-structured questionnaire was developed to assess the various technical capacity of health care providers related determinants of Constructive Male Engagement in reproductive health. This tool was applied to all the 26 nurses working in rural dispensaries and the 6 nurses of the MCH at the Makindu Sub-county hospital. This is where majority of people seek health care in the two Sub-counties. This tool focused on the technical skills, knowledge and attitude of the providers regarding CME in reproductive health.

3.8.5 Gender Equitable Men (GEM) Scale for Reproductive Health

A Gender-Equitable Men (GEM) Scale was adopted from Pulerwitz and Gary (2007) and Measure DHS (2010) for use in assessing the level of CME-RH in the two Sub-counties. The scale constituted 24 key CME-RH elements across three domains including men as clients, partners and agents of social change. High scores represented high support for CME-RH with Agree being scored as 3, Partially Agree as 2, and Do Not Agree as 1. Score summation for each
respondent was then undertaken based on the above scores to give the GEM Scale score. The possible minimum was 24 with a maximum of 72 points. Respondents for whom more than one third of the scale items were not answered were dropped from the analysis. For respondents missing less than one third of the scale items, the missing items were replaced (imputed) with the mean of the item across all respondents. In this particular study, a score of 36 points on the GEM Scale was applied as a cut-off level denoting presence of appropriate level of CME-RH in the study population. Thirty six (36) lies at the median of the total possible scores (72), in the GEM Scale tool. Besides indicating the level of CME-RH in Makindu and Mutitu Sub-counties, further analyses was executed to test associations between the GEM Scale and key variables such as utilization of reproductive health services and birth planning.

3.9 Data Management, Analysis and Presentation

3.9.1 Quantitative Data

Statistical Package for Social Sciences (SPSS) version 19.1 (Predictive Analytic Software) was employed for data management and analysis in order to enhance data quality. After cross-checking the questionnaires for errors, they were serialized and data coded in a codebook for processing and analysis. Processed data was again cross-checkered for errors and then classified and tabulated. Analysis was done using descriptive statistics including frequencies while variables were presented through means, median and standard deviation. Chi-square was employed to test the null hypothesis and statistical significance accepted at p values of less than 0.05. More so, further analysis was undertaken using correlation and regression statistics. The key dependent variable was Constructive Men’s Engagement in Reproductive Health (CME-RH) while independent variables included individual characteristics, programmatic factors and health care service provider technical capacity. The study sought to establish whether and how these
factors influence CME-RH in Makindu and Mutitu. Data was also analysed to assess the levels of CME-RH in both sites at pre and post-test.

3.9.2 Qualitative Data

Capturing and processing of qualitative data included tape recording of sessions, transcription and translation from local (Kamba) language to English. Tape recording of qualitative data is important for capturing exact wording and citations of participants. Furthermore, it enables thorough analysis of the gathered data. In this research, all FGDs with men and women were tape recorded, after gaining participants’ informed consent. Tape recordings were later transcribed. When not in English, the recording were directly transcripted and then translated from local language into English. Three (3) Transcriber Assistants transcribed the tape recordings. The assistants were recruited from the local Research Assistants, were all minimally having a bachelor’s degree and fluent in Kamba language. All assistant transcribers used the same software – Listen N Write – and worked along the same guidelines for transcription. Potential difficulties with terminology, and general misunderstandings of words or wordings were addressed by thoroughly checking all transcripts. In order to ensure highest possible quality of transcription within the time available, Transcriber Assistants were provided with feedback on their transcripts after the first round of transcription, and transcripts were spot checked for errors and accuracy, which ensured sufficient quality of data for analysis and result writing. In addition triangulation of data was undertaken to ensure validity of the findings. This was done by seeking confirmation for what was found from a wider range of sources. Triangulation furthermore provided insight into discrepancies in experiences or views among stakeholder levels. Data analysis was done through semi-open coding. Codes were both derived from theory and from data. Main codes used for coding corresponded with the three (3)
Constructive Men’s Engagement (CME-RH) pillars described in the conceptual framework. These included men as clients; men as partners and men as agents of positive social change. The researcher also took field notes based on observations and post interview debriefings. These notes were included in the qualitative data set. Transcribed interviews were then entered into NVivo8, a qualitative data analysis tool (QSR International, Cambridge, MA). A thematic qualitative analysis approach with an iteratively developed set of codes was used to examine the data. To further support the authenticity of findings and auditability of analytic process, the researcher developed memos about his analytic decision-making and conducted participant validation exercises.

3.10 Data Quality Control Measures

3.10.1 Quality Control at Data Collection Stage

Cross checking and inspection of the information on the questionnaires was done in order to ensure data quality. Research instruments were thoroughly scrutinized to ensure that the data collected was accurate and unambiguous. This exercise was undertaken concurrently with data collection in order to attain high levels of completeness, consistency and uniformity of the collected data. Accuracy was realized by ensuring that all study instruments with in-correctable contradictory information are discarded and replaced with others.

3.10.2 Quality Control during Data Entry and Processing

All questionnaire data was double entered and verified before being analysed. This decreased the likelihood of errors because it is unusual for the same entry error to occur twice. Further, the statistical tool utilized for data entry and analysis contained interval checks to alert the researcher of any missing variables and so due correction was effected instantly. Besides, thorough
investigation for inconsistencies between information presented in the figures and information discussed in the text was made. Multiple comparisons of various independent variables and the dependent variable also helped to ensure validity of the data.

3.11 Logistical and Ethical Considerations
A 4x4 vehicle was used to transport the principal researcher and the 10 Research Assistants within the area targeted during a particular day. The principal researcher provided overall coordination and oversight to the exercise. Ethical approval was obtained from Kenyatta University Ethics and Research Committee (KUERC) and research permit granted by National Commission for Science, Technology and Innovation (NACOSTI). Notifications for the study was sent and confirmed to participants two weeks prior to carrying out the field research to give them ample time to prepare for the interview and discussions. Friendly rapport preceded personal interviews with respondents, and their voluntary consent to participate sought by explaining the purpose of the study in a language and manner appropriate to them (Marshall, 2005). Sensitive questions adopted an induction process to avoid embarrassment while strict confidentiality of the information obtained was observed. Debriefing was also done to the respondents before closure of the interview while findings were shared to participants through the Ministry of Health and respective community health workers.

CHAPTER FOUR: RESULTS

4.0 Socio-demographic Characteristics of Respondents
Study findings showed no significant differences in terms of socio-demographics at baseline and end term for respondents in Makindu and Mutitu. At pre-test, Makindu and Mutitu had 13.2%
and 14.0% respectively of respondents within the age bracket of 18 to 19 years. Similarly, those aged 50 to 54 years were 12.8% in Makindu and 14.5% in Mutitu. At post-test, this age category had 16.1% and 13.6% in Makindu and Mutitu respectively. In terms of religion, Protestants took larger proportions in both sites and at the different study points. At baseline, 47.1% and 46.7% of respondents in Makindu and Mutitu respectively belonged to the protestant churches. This trend was mirrored at end term where 55.0% and 46.7% of respondents in Makindu and Mutitu were Protestants. Those who professed the Muslim faith were minority with only 5.0% and 6.2% of the respondents at baseline in Makindu and Mutitu respectively. Results on education levels showed that 35.1% and 38.9% had completed primary level in Makindu and Mutitu respectively at pre-test. Similarly, majority (54.1%) and 48.7% of respondents in Makindu and Mutitu respectively earned between Ksh. 3,000 to Ksh. 9,000 per month as illustrated in table 4.3 below.
### Table 4.3: Socio-demographic Characteristics of Respondents

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 to 19 years</td>
<td>32 (13.2)</td>
<td>34 (14.0)</td>
<td>33 (13.6)</td>
<td>36 (14.9)</td>
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<tr>
<td>20 to 29 years</td>
<td>110 (45.4)</td>
<td>45 (18.6)</td>
<td>41 (16.9)</td>
<td>45 (18.6)</td>
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<tr>
<td>30 to 39 years</td>
<td>49 (20.2)</td>
<td>76 (31.4)</td>
<td>69 (28.5)</td>
<td>76 (31.4)</td>
</tr>
<tr>
<td>40 to 49 years</td>
<td>20 (8.2)</td>
<td>52 (21.5)</td>
<td>60 (24.8)</td>
<td>52 (21.5)</td>
</tr>
<tr>
<td>50 to 54 years</td>
<td>31 (12.8)</td>
<td>35 (14.5)</td>
<td>39 (16.1)</td>
<td>33 (13.6)</td>
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<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roman Catholic</td>
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<td>95 (39.3)</td>
<td>76 (31.4)</td>
<td>95 (39.3)</td>
</tr>
<tr>
<td>Muslim</td>
<td>12 (5.0)</td>
<td>15 (6.2)</td>
<td>19 (7.9)</td>
<td>15 (6.2)</td>
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<tr>
<td>Protestants</td>
<td>114 (47.1)</td>
<td>113 (46.7)</td>
<td>133 (55.0)</td>
<td>113 (46.7)</td>
</tr>
<tr>
<td>Traditional religion</td>
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<td>19 (7.8)</td>
<td>14 (5.8)</td>
<td>19 (7.8)</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single/never married</td>
<td>30 (12.4)</td>
<td>13 (5.4)</td>
<td>23 (9.5)</td>
<td>13 (5.4)</td>
</tr>
<tr>
<td>Married</td>
<td>201 (87.6)</td>
<td>229 (94.6)</td>
<td>219 (90.5)</td>
<td>229 (94.6)</td>
</tr>
<tr>
<td><strong>Length of stay with current partner/spouse</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than five years</td>
<td>85 (35.1)</td>
<td>76 (31.4)</td>
<td>94 (38.8)</td>
<td>91 (37.6)</td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>79 (32.6)</td>
<td>65 (26.9)</td>
<td>48 (19.8)</td>
<td>60 (24.8)</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>50 (20.7)</td>
<td>89 (36.8)</td>
<td>77 (31.8)</td>
<td>78 (32.3)</td>
</tr>
<tr>
<td>No applicable</td>
<td>28 (11.6)</td>
<td>12 (5.0)</td>
<td>23 (9.5)</td>
<td>13 (5.4)</td>
</tr>
<tr>
<td><strong>Spouse's age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 years and below</td>
<td>11 (4.5)</td>
<td>4 (1.6)</td>
<td>5 (2.1)</td>
<td>4 (1.7)</td>
</tr>
<tr>
<td>20 to 29 years</td>
<td>122 (50.4)</td>
<td>101 (41.8)</td>
<td>86 (35.6)</td>
<td>101 (41.8)</td>
</tr>
<tr>
<td>30 to 39 years</td>
<td>54 (22.3)</td>
<td>66 (27.2)</td>
<td>62 (25.6)</td>
<td>65 (26.9)</td>
</tr>
<tr>
<td>40 to 49 years</td>
<td>22 (9.0)</td>
<td>33 (13.6)</td>
<td>41 (16.9)</td>
<td>33 (13.6)</td>
</tr>
<tr>
<td>50 and above</td>
<td>5 (2.0)</td>
<td>26 (10.8)</td>
<td>25 (10.4)</td>
<td>26 (10.7)</td>
</tr>
<tr>
<td>Not applicable</td>
<td>28 (11.6)</td>
<td>12 (5.0)</td>
<td>23 (9.5)</td>
<td>13 (5.4)</td>
</tr>
<tr>
<td><strong>Highest level of education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
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<td>108 (44.6)</td>
<td>65 (26.8)</td>
<td>63 (26.1)</td>
</tr>
<tr>
<td>Primary completed</td>
<td>85 (35.1)</td>
<td>94 (38.9)</td>
<td>124 (51.2)</td>
<td>89 (36.8)</td>
</tr>
<tr>
<td>Primary not completed</td>
<td>36 (14.9)</td>
<td>24 (9.9)</td>
<td>53 (21.9)</td>
<td>22 (9.1)</td>
</tr>
<tr>
<td>Secondary completed</td>
<td>46 (19.0)</td>
<td>8 (3.3)</td>
<td>0 (0.0)</td>
<td>55 (22.7)</td>
</tr>
<tr>
<td>Secondary not completed</td>
<td>61 (25.2)</td>
<td>2 (0.8)</td>
<td>0 (0.0)</td>
<td>3 (1.2)</td>
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<tr>
<td>Tertiary/university</td>
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<td>6 (2.5)</td>
<td>0 (0.0)</td>
<td>10 (4.2)</td>
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<tr>
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<td>&lt; Ksh. 3000</td>
<td>52 (21.4)</td>
<td>73 (30.1)</td>
<td>36 (14.9)</td>
<td>72 (29.7)</td>
</tr>
<tr>
<td>Ksh. 3000-9000</td>
<td>126 (52.1)</td>
<td>117 (48.4)</td>
<td>131 (54.1)</td>
<td>118 (48.7)</td>
</tr>
<tr>
<td>&gt; Ksh. 9001</td>
<td>64 (26.5)</td>
<td>52 (21.5)</td>
<td>75 (31.0)</td>
<td>52 (21.5)</td>
</tr>
</tbody>
</table>

### 4.1 Specific Objective 1: Level of CME-RH in Makindu and Mutitu

#### 4.1.1 CME-RH Levels Pre and Post Intervention

Study findings demonstrated that at pre-test, only 43.4% of respondents in Makindu had appropriate CME-RH levels as compared with 44.6% found in Mutitu. Similarly, approximately
57.7% and 55.4% of respondents in Makindu and Mutitu respectively were not CME-RH compliant at the start of this study. However, after 12 months of undertaking various targeted CME-RH interventions in Makindu, 60.3% of the respondents scored as required on the GEM-Scale compared with only 47.1% of respondents in Mutitu. Within the study period CME-RH in Makindu improved by a score of 16.9% on the GEM-Scale, while Mutitu recorded an increase of only 2.5%. As illustrated in figure 4.2, the level of CME-RH was found to be statistically significant for the intervention site, Makindu ($\chi^2=14.483$, df=2, $p<0.001$) while for the control site, Mutito, the CME-RH level was not significant ($\chi^2=0.136$, df=2, $p=0.938$).

![CME-RH Levels at Pre and Post Intervention in Makindu and Mutitu](image)

**Figure 4.2: CME-RH Levels at Pre and Post Intervention in Makindu and Mutitu Sub-Counties**

These post-intervention findings on levels of CME-RH in Makindu and Mutitu Sub-Counties were corroborated during discussions with men and women in both sites. One female participant during an FGD held at Kiboko Dispensary in Makindu indicated thus;

"It is like a miracle. Since you started having meetings with our husbands they have shown a keen interest in our health issues. Nowadays, my husband always enquires how I am doing health wise and I really feel good, appreciated and
valued. It’s a new life for me. Can you imagine last week he asked me whether I
had been screened for breast and cervical cancer? What do you think I felt? I
wish this was done like ten years ago.”

However, opinions of women FGD participants in Mutitu in regard to male involvement in
reproductive health issues contrasted sharply with their Makindu counterparts. Generally,
minimal engagement was reported with women desiring their husbands/partners could get more
involved. This position was aptly captured by a middle aged FGD participant at Kasunguni in
Zombe location of Mutitu;

“These men, they are very unfair to us. Just ask them how to make us pregnant and
mistreat us. They expect us to carry the pregnancy and attend clinics besides
taking required care for the older children. Don’t forget our husbands come first at
home. Then look at our area. We have to trek more than five kilometres with
donkeys daily in search of water and firewood. And that time you’re pregnant. The
man just sits and will ask you for water to bath and food. How you make this
happen, is none of his business. Some women even deliver on the road as they toil
while their husbands loiter in markets and shopping centres. They only boast how
they have this or that number of children. It’s not easy for us.”

4.1.2 Companionship of Wife/Partner to ANC Clinic

With regard to accompanying wife/partner while attending ANC/MCH clinic during pregnancy,
the response rate in Makindu prior to the intervention was only 26.0% compared to 47.7%
recorded after the intervention. This was accompanied by a parallel drop in the number of
partners opposed to accompanying their spouses to the ANC/MCH clinics from 2.4% to 2.3%
over the intervention period. Regarding the control site Mutitu, there was a slight increase (1.3%)
in the number of men accompanying their wives/partners to the ANC/MCH clinic during pregnancy. This was also accompanied by a drop in the proportion of men opposed to accompanying their wives/partners to the ANC clinic from 5.8% to 4.5%.

![Attendance of ANC/MCH Clinic with Partner during Pregnancy](image)

**Figure 4.3: Attendance of ANC/MCH Clinic with Partner during Pregnancy**

These findings regarding accompanying spouse/partner to ANC/MCH clinic mirror discussions with men and women in FGDs. Men in Makindu were found to be more receptive of this idea compared with their counterparts in Mutitu. During an FGD (men) in Mitendeu in Twaandu of Makindu Sub-County, one participant noted that;

“It is very important to accompany your wife to the ante-natal clinic. I do it every month when she’s supposed to see the nurse. This way, I get to know how the baby is progressing and how best I should support the mother. I also get an opportunity
to freely learn a few health tips. Somehow, I feel I am in control of my wife and family.”

This opinion was not shared by FGD (both men and women) participants in Mutitu Sub-County. Men in Mutitu would rather ante-natal clinics were left within the domain of their wives. During a discussion at Kavingo in Mwitika location of Mutitu, a participant quipped;

“Perhaps it is important for me to accompany my wife to the ante-natal clinic, but, how will I fit? The room (ANC) is always full of expectant women and crying children. The women there might even think I am crazy. But, what about men themselves? They’ll think I am enjoying the company of their wives or my wife is ordering me around. Men should be left to support their wives with fare but not attending the clinic with them. It’s not acceptable.”

4.1.3 Discussion on Pregnancy with Wife/Partner

Prior to the intervention, only 30.4% of the respondents interviewed were discussing with their wives/partners about their pregnancy. This proportion increased by 4.5% after the intervention to stand at 34.9% in Makindu. Similarly, the proportion of men opposed to discussing with their wives/partners dropped from 19.6% before the intervention to 15.1% after the intervention. At the control site, there was a minimal increase of 0.2% in the proportion of men discussing pregnancy with their wives/partners which was accompanied by similar decrease in the number of respondents opposed to such discussion from 29.5% to 29.3%.
Figure 4.4: Discussing With Wife/Partner about their Pregnancy

Notably, FGD participants’ views on couples discussing pregnancy mirrored the quantitative results presented above. Women in Mutitu were particularly categorical regarding their spouses willingness to discuss their pregnancies. During an FGD in Malatani (Zombe) one woman participant explained;

“Our men are either shy or they don’t care. You bring up the issue of your pregnancy because you want a discussion and they will brush it aside with other issues like tilling the land or local politics. The last time I tried, my husband laughed off and told me he’s neither a midwife nor has he ever been a woman. Meaning he knows little about pregnancies. What he wants are children. I really felt insulted”

On the contrary, the experience of women in Makindu seemed men were getting more accommodative in regard to discussing pregnancy with their partners/spouses. The general report of women during FGDs indicated that most men were taking time to discuss the progress of their wives pregnancy. One woman participant at Ndovoini indicated that;
“During my last pregnancy, my husband and I would sit quite often to review my progress. He would enquire what the nurse said during my clinics and how he can support me. This helped me a lot because he not only provided the material support required but also the psychological and emotional needs. That was very important.”

4.1.4 Couple Counselling and Testing for HIV

With respect to joint counselling and testing for HIV with wife/partner, 22.3% of the respondents reported having had a joint HIV counselling and testing session together with their wives prior to the intervention in Makindu. However, this rose to 26.4% after the intervention, representing a 4.1% increase. There was a slight decrease in the number of men who reported having been counselled and tested for HIV jointly with their wives/partners at the control site Mutitu from 25.6% to 25.0%. The proportion of respondents who had not had joint counselling and testing for HIV with their wives/partners increased from 24.4% to 25.0 representing a 0.6% increase as indicated in figure 4.5.

![Couple counseling and Testing for HIV](image)

**Figure 4.5: Couple Counselling and Testing for HIV**
During triangulation, results showed that FGD discussions were representative of these findings. In Ngaaka sub-location of Twaandu location of Makindu one lady participant noted that;

“Most of our husbands now see the need to also get tested for HIV with us during the ante-natal clinics. Last month, my husband and I visited the clinic and we were tested together. He was very excited with the results”

A religious leader who was interviewed as a Key Informant at Mwitika in Mutitu had a varying opinion regarding couple counselling and testing for HIV;

“Men here cannot accept such a thing (being tested together with their wives). May be they fear the results or just do not understand why it is important. They would rather sneak and be tested separately then keep the results to themselves. Stigma is still very high in this community”

4.1.5 Preparation of a Birth plan with Wife/Partner before Delivery

With regard to having a birth plan with wife/partner before birth of a child, 28.9% of the respondents reported having had one prior to the intervention in Makindu, but which rose to 35.1% after the intervention representing an increase of 6.2%. The proportion of men in the same site whose spouses did not have such a birth plan dropped by a similar margin from 21.1% prior to the intervention to 14.9% after the intervention. At the control site in Mutitu, there was a slight increase (0.7%) in the number of men having a birth plan with their wife/partner before birth of a child from 29.5% to 30.2%. This was also accompanied by a drop in the proportion of men who reported not having a birth plan for their child from 20.5% to 19.8% as indicated in figure 4.6.
Figure 4.6: Preparing a Birth Plan with Wife/Partner before Delivery

Results from FGDs further showed more women in Makindu had husbands who supported their wives to develop a birth plan compared to those in Mutitu. During an FGD at Muuni village in Kiboko location of Makindu, one of the women shared that;

“.....you see this baby. When I was pregnant, my husband and I sat and prepared a detailed plan of how I will carry the pregnancy, attendance to the ante-natal clinic and delivery itself. We agreed where I will go for delivery and started saving some money for it. I did not overstay at the hospital due to lack of money after being discharged like the previous time. This helped us a lot...”

However, women in Mutitu had a different narrative in regard to birth planning with their spouses/partners. This was aptly captured by one woman participant in an FGD held at Masasini in Zombe;

“.....what birth plans? With who, our husbands? The sole role of a husband here is to make you pregnant, then leave you to figure out how to handle the rest. I can
imagine sitting with my husband after I have conceived discussing the challenging journey to getting a baby. That would be so fulfilling to any woman…”

4.1.6 Decision Making on Family Planning With Wife/Partner

On joint decision with wife/partner regarding use of family planning, 30.4% of the respondents reported engaging their partners in deciding on FP methods prior to the intervention. After the intervention, there was a marked increase of 8.9% to 39.3% after the intervention. The proportion of respondents who were not engaging their wives/partners on FP decisions dropped from 19.6% prior to the intervention to 10.7% after the intervention. There was a slight increase in the number of men engaging their wives/partners in FP decision making at the control site Mutitu from 26.2% to 26.7%. The proportion of respondents who were not engaging their wives/partners in FP decision making dropped from 23.8% to 23.3%, representing a 0.5% decrease.

Figure 4.7: Joint Decision on Family Planning with Spouse/Partner
Notably, KII and FGD (men and women) discussions in both sites concurred with the findings indicated above. Men seemed to enjoy being consulted on family planning matters in Makindu though this was not prevalent in Mutitu. A middle aged FGD male participant at Kasuvi in Kiboko vividly captured this perception;

“Nowadays we have made it (family planning) very consultative. Like me, we discuss the various options with my wife and agree on the best depending on what we want. You see, for instance we can’t opt for a permanent method because we are still young and want one or two more children. This makes me feel in charge of my family on all matters….the way a man should....”

However, men in Mutitu felt this was indulging too much into issues that women could easily handle. At Makongo in Mwitika a male participant was emphatic that;

“Women go to the clinic and get sufficient information there regarding family planning. They can easily choose with the help of the nurse which method to use. I am not a nurse so I am not sure whether I would be of any help to her”.

### 4.1.7 Companionship of Wife/Partner During Delivery

With regard to accompanying their wife/partner to clinic/place of delivery, 26.2% of the respondents reported having accompanied their wives/partners to clinic/place of delivery during the last pregnancy in Makindu prior to the intervention. This rose to 30.0% after the intervention representing an increase of 3.8%. The proportion of men in the same site who did not accompany their wives/partners to clinic/place of delivery, dropped by a similar margin from 23.8% prior to the intervention to 20.0% after the intervention. At the control site in Mutitu, the proportion of men accompanying their wives/partners to clinic/delivery place increased slightly by 0.8% from
27.7% to 28.5%. This was also accompanied by a minimal drop in the proportion of men who reported not accompanying their wives/partners from 22.3% to 21.5% as shown in figure 4.8.

![Graph showing accompanying wife/partner during delivery](image)

**Figure 4.8: Accompanying Spouse/Partner during Delivery**

Although not many men were keen to accompany their wives during delivery, it was evident those in Makindu were keen to at least take them to the hospital. This was captured by a woman in Manyatta in Makindu;

“…..men?…..they are cowards when it comes to giving birth. They cannot even get close to the labour ward, let alone enter the place. Although at least nowadays most of them accompany their wives to the hospital for the admission then leave them with an auntie or mother in law. They then disappear to the market and tease other men until the baby is born...”

Notably, very minimal support was reported during FGD and KII interviews in Mutitu as shared by a male participant in an FGD at Makongo village of Mwitika;

“…..we must separate roles here...this thing of labour wards is for women only. What will I be going to do there? Imagine a full bearded man like me with his
family just watching women giving birth. It’s an abomination! I could lose my sight! Their husbands might also accuse me of having other funny ideas. Here when a woman needs to go to the hospital for delivery, she calls other women friends and relatives to help her. Alternatively, there are many Traditional Birth Attendants here who can always help”

4.2 Specific Objective 2: Individual Characteristics as Determinants of CME-RH

4.2.1 Influence of Age on CME-RH

In respect of age, respondents with CME-RH (17.4% at pre-test and 25.2% at post-test) were aged between 20-29 years in Makindu while Mutitu had 13.2% in the same category but aged 30-39 years at both pre and post-test. Among the category of respondents, without CME-RH, 28.1%, at pre-test, and 11.9%, at post-test, of the respondents were aged 20-29 years in Makindu with 17.8% aged 30-39 years at pre and post-test in Mutitu District. From the study findings, age of the respondent was found to be statistically significant ($\chi^2 = 11.406$, $df=3$, $p=0.010$) and thus associated with CME-RH as shown in table 4.4 below.

Table 4.4: Influence of Age on CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Without CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
</tr>
<tr>
<td>Age</td>
<td>19 years and below</td>
<td>37(15.3)</td>
<td>26(10.7)</td>
</tr>
<tr>
<td></td>
<td>20 to 29 years</td>
<td>68(28.1)</td>
<td>42(17.4)</td>
</tr>
<tr>
<td></td>
<td>30 to 39 years</td>
<td>23(9.5)</td>
<td>26(10.7)</td>
</tr>
<tr>
<td></td>
<td>40 to 49 years</td>
<td>9(3.7)</td>
<td>11(4.5)</td>
</tr>
</tbody>
</table>

$\chi^2 = 11.406$, $df=3$, $p=0.010$
4.2.2 Influence of Religion on CME-RH

With regard to religion, study findings indicated that those with CME-RH were protestant respondents at 17.3% at pre-test and 33.1% at post-test in Makindu while in Mutitu, 21.5% at pre-test and 20.7% at post were protestants. Among the Muslims respondents, those with CME-RH at 3.3% during pre-test and 5.8% during post-test in Makindu and 2.9% in Mutitu at pre and post-test. Among respondents who were Roman Catholics, 16.5% at pre-test and 18.2% at post-test had CME-RH in Makindu with 16.1% at pre-test and 19.4% at post-test in Mutitu. Among the respondents who were practicing traditional religion, 6.2% at pre-test and 3.3% at post-test had CME-RH in Makindu while Mutitu had 4.1% and 3.7% respectively. Thus, from the study findings, religion was found not to be statistically significant ($\chi^2=7.314, df=3, p=0.063$) and therefore not associated with CME-RH as indicated in table below.

Table 4.5: Influence of Religion on CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Chi Square test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
</tr>
<tr>
<td>Religion</td>
<td>Roman Catholic</td>
<td>39(16.1)</td>
<td>40(16.5)</td>
<td>46(19.0)</td>
</tr>
<tr>
<td></td>
<td>Muslim</td>
<td>14 (5.8)</td>
<td>8 (3.3)</td>
<td>18 (7.4)</td>
</tr>
<tr>
<td></td>
<td>Protestants</td>
<td>52(21.5)</td>
<td>42(17.3)</td>
<td>61(25.1)</td>
</tr>
<tr>
<td></td>
<td>Traditional religion</td>
<td>32(13.2)</td>
<td>15 (6.2)</td>
<td>9 (3.7)</td>
</tr>
</tbody>
</table>

4.2.3 Marital Status

Among respondents with CME-RH, 36.8% at pre-test, 53.7% at post-test in Makindu, 42.2% at pre-test, and 44.2% at post-test in Mutitu were married. Similarly, respondents without CME-RH, 50.8% at pre-test and 36.8% at pre-test in Makindu and 52.2% at pre-test and 50.2% at post-
test in Mutitu were married. Table 4.6 illustrates that marital status of the respondent was found to be statistically significant ($\chi^2 = 3.118$, df=1, p=0.007) and thus associated with CME-RH.

**Table 4.6: Association of Marital Status and CME-RH**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Makindu Pre-test</th>
<th>Makindu Post-test</th>
<th>Mutitu Pre-test</th>
<th>Mutitu Post-test</th>
<th>Chi Square test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital status</td>
<td>Single/never married</td>
<td>Without CME-RH n (%) 14 (5.8)</td>
<td>With CME-RH n (%) 7 (2.9)</td>
<td>Without CME-RH n (%) 6 (2.5)</td>
<td>With CME-RH n (%) 7 (2.9)</td>
<td>$\chi^2=3.118$</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>123 (50.8)</td>
<td>89 (36.8)</td>
<td>127 (52.2)</td>
<td>102 (42.2)</td>
<td>Df=1 P=0.007</td>
</tr>
</tbody>
</table>

4.2.4 Length of Stay with Spouse

With respect to the length of stay with current spouse/partner, 16.1% respondents with CME-RH had stayed with their current spouse/partner for 5-10 years at pre-test and 26.0% at post-test had stayed for less than five years in Makindu. In Mutitu, 16.5% of respondents in the same category, had stayed with their current spouse/partner for more than 10 years at pre-test and 15.7% had stayed less than five years. Among the category of respondents without CME-RH, 21.1% respondents at pre-test had stayed with their current spouse/partner for less than five years and 14.5% at post-test had stayed with their current spouse/partner for more than 10 years in Makindu. In comparison, 21.5% at pre-test and 21.9%, at post-test had stayed with their current spouse/partner for less than five years in Mutitu. From the findings of the study, the duration of stay with spouse/partner was not found to be statistically significant ($\chi^2 =6.93$, df=3, p=0.074) and therefore not associated with CME-RH as indicated in table 4.7.
### Table 4.7: Association of Length of Stay with Spouse and CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th></th>
<th>Chi Square test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Without</td>
<td>With</td>
<td>Without</td>
<td>With</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>CME-RH</td>
<td>CME-RH (% )</td>
<td>CME-RH</td>
<td>CME-RH (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>n (%)</td>
<td></td>
<td>n (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Duration in marriage/relationship</td>
<td>Less than five years</td>
<td>51 (21.1)</td>
<td>34 (14.0)</td>
<td>52 (21.5)</td>
<td>34 (14.0)</td>
<td>31 (12.8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 to 10 years</td>
<td>50 (20.7)</td>
<td>39 (16.1)</td>
<td>37 (15.3)</td>
<td>28 (11.6)</td>
<td>23 (9.5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>More than 10 years</td>
<td>23 (9.5)</td>
<td>17 (7.0)</td>
<td>39 (16.1)</td>
<td>40 (16.5)</td>
<td>35 (14.5)</td>
</tr>
<tr>
<td></td>
<td>No applicable</td>
<td>13 (5.4)</td>
<td>15 (6.2)</td>
<td>6 (2.5)</td>
<td>6 (2.5)</td>
<td>7 (2.9)</td>
<td>16 (6.6)</td>
</tr>
</tbody>
</table>

### 4.2.5 Age of Spouse

With respect to the age of spouse, respondents with CME-RH (16.1%) at pre-test and 22.3% at post-test in Makindu and 15.3% at pre-test and 19.4% at post-test in Mutitu had spouses aged between 20-29 years. Among respondents without CME-RH, 26.0% of those interviewed at pre-test and 13.2% at post-test in Makindu and 22.3% at pre-and post-test in Mutitu said that their spouses were in the age category 20-29 years. As can be deduced from the study findings, age of spouse was found to be statistically significant ($p<0.010,$) and therefore associated with CME-RH as indicated in table 4.8.
Table 4.8: Influence of Spouse’ Age on CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Fisher’s Exact test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu Without CME-RH n (%)</td>
<td>Makindu With CME-RH n (%)</td>
<td>Mutitu Without CME-RH n (%)</td>
</tr>
<tr>
<td>Spouses</td>
<td>19 years and</td>
<td>2 (0.8)</td>
<td>9 (3.7)</td>
<td>1 (0.4)</td>
</tr>
<tr>
<td>age</td>
<td>below</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20 to 29 years</td>
<td>63 (26.0)</td>
<td>39 (16.1)</td>
<td>54 (22.3)</td>
</tr>
<tr>
<td></td>
<td>30 to 39 years</td>
<td>45 (18.5)</td>
<td>29 (12.0)</td>
<td>45 (18.5)</td>
</tr>
<tr>
<td></td>
<td>40 to 49 years</td>
<td>11 (4.5)</td>
<td>11 (4.5)</td>
<td>16 (6.6)</td>
</tr>
<tr>
<td></td>
<td>50 and above</td>
<td>3 (1.2)</td>
<td>2 (0.8)</td>
<td>12 (5.0)</td>
</tr>
<tr>
<td>years</td>
<td>Not applicable</td>
<td>13 (5.4)</td>
<td>15 (6.2)</td>
<td>6 (2.5)</td>
</tr>
</tbody>
</table>

4.2.6 Highest Level of Education

When asked about their highest level of education, 14.9%, at pre-test, and 36.8% of respondents at post-test in Makindu with CME-RH indicated that they had completed primary education while 17.8 % of respondents in Mutitu had no formal education at pre-test and 13.6% at post-test had completed primary school. In the same category of respondents, those who had completed tertiary/university education had least respondents at 0.8% in Makindu and 1.2% in Mutitu. Similarly, among the category of respondents without CME-RH, most of those interviewed in Makindu (20.2%) at pre-test had completed primary education and 16.1% at post-test had no formal education. In Mutitu those without CME-RH, 22.3%, at pre-test and 23.1% at post-test had completed primary education. Study findings thus indicate that respondent’s level of education was found to be statistically significant (p<0.001) and therefore associated with CME-RH as shown in table 4.9.
Table 4.9: Association of Highest Level of Education with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test Makindu</th>
<th>Post-test Makindu</th>
<th>Pre-test Mutitu</th>
<th>Post-test Mutitu</th>
<th>Fisher’s Exact test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>With or Without CME-RH (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No formal education</td>
<td>2 (0.8)</td>
<td>0 (0.0)</td>
<td>45 (18.6)</td>
<td>39 (16.1)</td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Primary completed</td>
<td>49 (20.2)</td>
<td>36 (14.9)</td>
<td>54 (22.3)</td>
<td>35 (14.5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary not completed</td>
<td>15 (6.2)</td>
<td>21 (8.7)</td>
<td>17 (7.0)</td>
<td>22 (9.1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secondary completed</td>
<td>36 (14.9)</td>
<td>20 (8.3)</td>
<td>13 (5.4)</td>
<td>0 (0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secondary not completed</td>
<td>28 (11.6)</td>
<td>23 (9.2)</td>
<td>0 (0.0)</td>
<td>2 (0.8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tertiary/University</td>
<td>13 (5.4)</td>
<td>15 (6.2)</td>
<td>5 (2.1)</td>
<td>1 (0.4)</td>
<td></td>
</tr>
</tbody>
</table>

4.2.7 Spouse Highest Level of Education

With regard to the spouse’s highest level of education, 14.9% of respondents in Makindu with CME-RH at pre-test and 21.5% at post-test indicated that they had completed primary education while in Mutitu 13.2% at pre-test and 17.4% at post-test indicated that they had no formal education had not completed primary education and also had not completed secondary education.. Among respondents without CME-RH, 26.4% of those interviewed in Makindu at pre-test had no formal education and 11.6% at post-test had spouses who had completed primary education while in Mutitu 14.0% at pre-test and 19.0 at post-test had no formal education, had not completed primary education and also had not completed secondary education. From the study findings, the level of education of the spouse was found to be statistically significant ( p<0.001) and therefore associated with CME-RH as illustrated in table 4.10.
Table 4.10: Influence of Spouse Highest Level of Education on CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test Makindu</th>
<th>Pre-test Mutitu</th>
<th>Post-test Makindu</th>
<th>Post-test Mutitu</th>
<th>Fisher’s Exact test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
</tr>
<tr>
<td>Highest level of education of the spouse</td>
<td>No formal education</td>
<td>64 (26.4)</td>
<td>0 (0.0)</td>
<td>34 (14.0)</td>
<td>32 (13.2)</td>
<td>14 (5.8)</td>
</tr>
<tr>
<td></td>
<td>Primary completed</td>
<td>45 (18.5)</td>
<td>36 (14.9)</td>
<td>33 (13.6)</td>
<td>24 (9.9)</td>
<td>28 (11.6)</td>
</tr>
<tr>
<td></td>
<td>Primary not completed</td>
<td>5 (2.1)</td>
<td>21 (8.7)</td>
<td>19 (7.9)</td>
<td>22 (9.1)</td>
<td>14 (5.8)</td>
</tr>
<tr>
<td></td>
<td>Secondary not completed</td>
<td>1 (0.4)</td>
<td>30 (12.4)</td>
<td>32 (13.2)</td>
<td>15 (6.2)</td>
<td>18 (7.4)</td>
</tr>
<tr>
<td></td>
<td>Tertiary/university</td>
<td>1 (0.4)</td>
<td>13 (5.4)</td>
<td>6 (2.5)</td>
<td>6 (2.5)</td>
<td>6 (2.5)</td>
</tr>
<tr>
<td></td>
<td>Not applicable</td>
<td>11 (4.5)</td>
<td>15 (6.2)</td>
<td>4 (1.7)</td>
<td>3 (1.2)</td>
<td>9 (3.7)</td>
</tr>
</tbody>
</table>

4.2.8 Living Sons and Daughters

When asked about the number of their living sons and daughters, 14.9% of the respondents before intervention with CME-RH in Makindu indicated that they had two while in Mutitu; 10.7% indicated that they had three children. After the intervention, a similar trend was noted with 18.6% in Makindu indicating that they had 0-1 while 10.3% in Mutitu indicated 3. Among respondents without CME-RH level, 17.4% of those interviewed before intervention in Makindu indicated that they had three living sons and daughters while in Mutitu 14.0% of the respondents indicated that they had five living sons and daughters. Further, in this category, after the intervention, 9.5% of those interviewed in Makindu indicated two as the number of their living sons and daughters while in Mutitu 13.6% indicated that they had three children. Study findings thus show that the number of living sons and daughters a respondent had was statistically significant (p<0.001) and therefore associated with CME-RH as shown in table 4.11.
Table 4.11: Association of Living Sons and Daughters with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categorical Variable</th>
<th>Pre-test Makindu Without CME-RH n (%)</th>
<th>With CME-RH n (%)</th>
<th>Post-test Makindu Without CME-RH n (%)</th>
<th>With CME-RH n (%)</th>
<th>Mutitu Without CME-RH n (%)</th>
<th>With CME-RH n (%)</th>
<th>Fisher’s Exact test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of sons and daughters</td>
<td>0-1</td>
<td>38 (15.7)</td>
<td>17 (7.0)</td>
<td>2 (0.8)</td>
<td>2 (0.8)</td>
<td>38 (15.7)</td>
<td>17 (7.0)</td>
<td>2 (0.8)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>33 (13.6)</td>
<td>36 (14.9)</td>
<td>11 (4.5)</td>
<td>17 (7.0)</td>
<td>33 (13.6)</td>
<td>36 (14.9)</td>
<td>11 (4.5)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>42 (17.4)</td>
<td>13 (5.4)</td>
<td>32 (9.1)</td>
<td>26 (10.7)</td>
<td>42 (17.4)</td>
<td>13 (5.4)</td>
<td>32 (9.1)</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>6 (2.5)</td>
<td>7 (2.9)</td>
<td>30 (8.3)</td>
<td>14 (5.8)</td>
<td>6 (2.5)</td>
<td>7 (2.9)</td>
<td>30 (8.3)</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>5 (2.1)</td>
<td>6 (2.5)</td>
<td>34 (14.0)</td>
<td>13 (5.4)</td>
<td>5 (2.1)</td>
<td>6 (2.5)</td>
<td>34 (14.0)</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>4 (1.7)</td>
<td>7 (2.9)</td>
<td>7 (2.9)</td>
<td>15 (6.2)</td>
<td>4 (1.7)</td>
<td>7 (2.9)</td>
<td>7 (2.9)</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>3 (1.2)</td>
<td>5 (2.1)</td>
<td>11 (4.5)</td>
<td>8 (3.3)</td>
<td>3 (1.2)</td>
<td>5 (2.1)</td>
<td>11 (4.5)</td>
</tr>
<tr>
<td></td>
<td>&gt;10</td>
<td>3 (1.2)</td>
<td>1 (0.4)</td>
<td>2 (0.8)</td>
<td>2 (0.8)</td>
<td>3 (1.2)</td>
<td>1 (0.4)</td>
<td>2 (0.8)</td>
</tr>
</tbody>
</table>

4.2.9 Monthly Income

With regard to the respondents monthly income, 22.3% of the respondents with CME-RH in Makindu during pre-test and 39.7% during post-test and in Mutitu 18.2%, pre-test and 23.9%, post-test of respondent with CME-RH had an income of between Kshs. 3,000-9,000. Similarly, among respondents without CME-RH, 29.8%, at pre-test and 14.5% at post-test in Makindu and 30.2%, pre-test and 24.8%, post-test in Mutitu were earning between Kshs. 3,000-9,000 per month. The household income per month was found not to be statistically significant ($\chi^2 = 5.327$, $df=2$, $p=0.070$) and therefore not associated with CME-RH as indicated in table 4.12.
Table 4.12: Influence of Monthly Income on CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Chi Square test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
</tr>
<tr>
<td>Income bracket per month</td>
<td>&lt;Ksh. 3000</td>
<td>36 (14.9)</td>
<td>16 (6.6)</td>
<td>34 (14.0)</td>
</tr>
<tr>
<td></td>
<td>Ksh. 3000-9000</td>
<td>72 (29.8)</td>
<td>54 (22.3)</td>
<td>73 (30.2)</td>
</tr>
<tr>
<td></td>
<td>&gt; Ksh. 9001</td>
<td>29 (12.0)</td>
<td>35 (14.5)</td>
<td>27 (11.2)</td>
</tr>
</tbody>
</table>

Notably, men in FGDs reported that due to socio-economic difficulties, they did not have time to seek reproductive health services with their partners as demonstrated by this respondent from Mutitu:

"I am busy trying to make ends meet. There are no jobs and we have not had rains for three years now. It’s not easy. I don’t have time to go with her to the antenatal clinic. Again, I don’t have enough money to pay transport for two people. You know we have to struggle to look for money to provide for our families".

Low levels of income were further compounded by alcohol abuse. Participants decried growing alcohol abuse as an important factor for non-participation of men in reproductive health matters. In most FGDs daily overconsumption of alcohol by male partners was particularly implicated as a catalytic event for physical violence towards women. An FGD participant in Makindu explained that:

“In our village illicit beer is available all over and men spend all the little money they get to make themselves happy. When they come home, they sleep likes logs till the following day morning. Sometimes they beat their wives to prove they are men”.

\( \chi^2 = 5.327 \)  
Df=2  
P=0.070
enough but unfortunately cannot do anything to them in bed. Also they cannot even give them money to go to the clinic and buy food even when they are pregnant”

4.2.10 Knowledge on ANC Attendance

With regard whether women should attend antenatal care clinic during pregnancy, respondents with CME-RH in both Makindu and Mutitu scored highest in affirmative. Makindu had 23.6% at pre-test and 49.2% at post-test while 23.9% of respondents at pre-test and 26.9% at post-test in Mutitu with CME-RH agreed there was need for pregnant women to attend ANC. Similarly, 30.6% at pre-test and 26.0% at post-test of respondents without CME-RH in Makindu and 27.3% at pre-test and 29.3% at post-test in Mutitu did not see the need for ANC. Thus, from the study findings, knowledge on ANC attendance by pregnant women was found to be statistically significant ($\chi^2=11.406; Df=3; P=0.006$) and therefore associated with CME-RH as shown in the table 4.13 below.

Table 4.13: Knowledge on ANC Attendance and Association with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Chi Square test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Without</td>
<td>With</td>
<td>Without</td>
<td>With</td>
</tr>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>Should</td>
<td>YES</td>
<td>63(26.0)</td>
<td>57(23.6)</td>
<td>68(28.1)</td>
</tr>
<tr>
<td>women</td>
<td>attend</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>clinic</td>
<td>during</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pregnancy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NO</td>
<td>74(30.6)</td>
<td>48(19.8)</td>
<td>66(27.3)</td>
<td>50(20.7)</td>
</tr>
</tbody>
</table>
4.2.11 Knowledge on Minimum Number of ANC Visits

The minimum number of visits to ANC clinics by pregnant women mirrored results of the need for these services. Approximately 25.6% at pre-test and 46.3% at post-test in Makindu and 23.1% at pre-test and 26.0% at post test respondents with CME-RH in Mutitu indicated that pregnant women should attend ANC at least four times. Notably, 31.0% and 27.7% at pre and post-test respectively of respondents without CME-RH in Makindu indicated that women should attend less than four visits while in Mutitu 29.8% at pre-test in Mutitu thought that pregnant women should pay less than four ANC visits and 26.9% at post-test indicated the same number of visits. As shown below, study findings revealed that knowledge of the minimum ANC visits required for a pregnant was statistically significant ($\chi^2=21.037$; Df=3; P=0.008) and therefore associated with CME-RH as shown in table 4.14.

### Table 4.14: Association of Awareness on Minimum Number of ANC Visit with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categ ory</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Chi Square Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
</tr>
<tr>
<td>Minimum number of times a</td>
<td>≥4</td>
<td>61(25.2)</td>
<td>62(25.6)</td>
<td>56(23.1)</td>
</tr>
<tr>
<td>pregnant woman should attend</td>
<td></td>
<td>(25.2)</td>
<td>(25.6)</td>
<td>(23.1)</td>
</tr>
<tr>
<td>ANC clinic</td>
<td>&lt; 4</td>
<td>76(31.0)</td>
<td>43(18.2)</td>
<td>45(18.5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(31.0)</td>
<td>(18.2)</td>
<td>(18.5)</td>
</tr>
</tbody>
</table>

Df=3 P=0.008
4.2.12 Knowledge of Family Planning Methods

Significant differences were noted concerning respondents’ knowledge on the various methods of family planning available for both men and women. In Makindu, 31.8% of men at pre-test and 45.5% at post-test who had CME-RH knew three or more methods while approximately 28.5% at pre-test and 29.3% at post-test of men with CME-RH fell in Mutitu knew three or more methods. Further, 24.8% and 6.2% of respondents without CME-RH at pre and post-test respectively in Makindu and 26.0% and 21.1% during pre and post-test respectively in Mutitu could mention three or more FP methods. As illustrated in table 4.15, knowledge of family planning options by men in the two sub-counties was found to be statistically significant ($\chi^2=13.600$; Df =3; P=0.043) and thus associated with CME-RH.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
</tr>
<tr>
<td></td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
</tr>
<tr>
<td>Types of Family Planning methods known by respondent</td>
<td>≥3</td>
<td>60(24.8)</td>
<td>77(31.8)</td>
</tr>
<tr>
<td></td>
<td>&lt; 3</td>
<td>77(32.2)</td>
<td>28(11.6)</td>
</tr>
</tbody>
</table>

$\chi^2=13.600$  
Df=3  
P=0.043

4.2.13 Awareness on Prevention of Mother-to-Child Transmission (PMTCT)

In order to test respondents’ knowledge on Prevention of Mother to Child Transmission (PMTCT), a proxy question was administered on the need to counsel and test pregnant women for HIV. Approximately 25.6% at pre-test and 47.1% at post-test of respondents with CME-RH
in Makindu and 26.0% and 31.0% in Mutitu at pre and post-test respectively in the same category concurred that a pregnant woman should indeed be tested for HIV. However, findings revealed a sizeable number (34.7% at pre-test and 30.2% at post-test in Makindu and 17.4% at pre-test and 28.9% at post-test in Mutitu) who were not CME-RH compliant and did not see the need to test pregnant women for HIV. As indicated in table 4.16, study findings revealed that knowledge on the need for an HIV test during pregnancy was statistically significant ($\chi^2=45.632$; Df =3; P<0.001) and thus associated with CME-RH.

Table 4.16: Awareness on PMTCT and its association with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Chi Square Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
</tr>
<tr>
<td></td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
</tr>
<tr>
<td>Whether a pregnant women should be tested for HIV</td>
<td>YES</td>
<td>54(22.3)</td>
<td>62(25.6)</td>
<td>63(26.0)</td>
</tr>
<tr>
<td></td>
<td>NO</td>
<td>83(34.7)</td>
<td>41(17.4)</td>
<td>71(29.3)</td>
</tr>
</tbody>
</table>

4.2.14 Couple Counselling and Testing for HIV

Couple counselling and testing for HIV is a critical element in PMTCT. In this study, a proxy question to test awareness on this requirement was administered to respondents. Notably, approximately 45.5% at post-test up from 24.4% at pre-test in Makindu who had CME-RH identified couple counselling and testing as important while in Mutitu, 28.9% at pre-test and 29.3% at post-test of respondents with CME-RH identified couple counselling and testing as important. In comparison, 39.7% at pre-test and 27.7% at post-test of respondents in Makindu
and 38.8% and 29.8% at pre and post-test respectively in Mutitu without CME-RH indicated that couple counselling was not necessary. A small number (17.4% and 11.9% at pre and post-test respectively of respondents in Makindu and 16.5% at pre-test and 23.1% at post-test in Mutitu in Mutitu) within this GEM Scale score noted that couple counselling and testing was crucial. As shown in table 4.17, finding revealed that awareness on the need to undergo couple counselling and testing was statistically significant ($\chi^2=31.623; \text{Df}=3; P<0.001$) and thus associated with CME-RH.

Table 4.17: Couple Counselling and Testing and its Association with CME-RH

<table>
<thead>
<tr>
<th>Variable Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Chi Square Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
</tr>
<tr>
<td>Whether spouse/partner of a pregnant woman should be tested for HIV together YES</td>
<td>42(17.4)</td>
<td>59(24.4)</td>
<td>40(16.5)</td>
</tr>
<tr>
<td>NO</td>
<td>95(39.7)</td>
<td>46(18.6)</td>
<td>94(38.8)</td>
</tr>
</tbody>
</table>

4.2.15 Delivery by a Skilled Birth Attendant (SBA)

Delivery under the care of a skilled birth attendant (SBA) is a core component in reproductive health with life saving potential. Respondents were thus assessed on their level of awareness regarding where delivery should be conducted. Health facilities present the best opportunity for support by a SBA compared with home delivery more often than not conducted by Traditional Birth Attendants (TBA). In this study, 26.4% at pre-test and 46.3% at post-test of respondents with CME-RH in Makindu and 24.4% at pre-test and 28.5% at post-test in Mutitu indicated the
need to deliver in a health facility. Further, 20.2% and 24.4% at pre and post-test of respondents without CME-RH in Makindu and 24.0% at pre-test and 21.9% at post-test in Mutitu were of similar opinion. However, 36.4%, at pre-test, and 15.3%, at post-test, of respondents in Makindu and 31.8% at pre-test and 31.0% during post-test in Mutitu without CME-RH vouched for delivery at home. Further analysis showed that knowledge on recommended place of delivery was statistically significant ($\chi^2=32.417; Df=3; P<0.001$) and thus associated with CME-RH.

**Table 4.18: Association of Deliver by a Skilled Birth Attendant and CME-RH**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test Makindu</th>
<th>Post-test Makindu</th>
<th>Pre-test Mutitu</th>
<th>Post-test Mutitu</th>
<th>Chi Square test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where delivery should take place</td>
<td>Health Facility</td>
<td>49(20.2)</td>
<td>64(26.4)</td>
<td>58(24.0)</td>
<td>58(24.4)</td>
<td>$\chi^2=32.4$</td>
</tr>
<tr>
<td></td>
<td>Home</td>
<td>88(36.4)</td>
<td>41(16.9)</td>
<td>77(31.8)</td>
<td>48(19.8)</td>
<td>17 Df=3 P=0.001</td>
</tr>
</tbody>
</table>

**4.2.16 Awareness on Post-Natal Care (PNC)**

Postnatal care (PNC) is one of the largely ignored areas in reproductive health. Most mothers and healthcare providers are inclined to just assessing the new born and providing required immunization. However, this study revealed that about 47.5% at post-test compared to 28.1% at pre-test of respondents in Makindu and 26.0% at pre-test and 31.8% at post test in Mutitu who were CME-RH compliant knew that a woman who has just given birth should be assessed by a healthcare worker. Similarly, 19.8% and 15.3% at pre and post-test of respondents without CME-RH in Makindu and 19.8% at pre-test and 16.9% at post-test in Mutitu shared a similar opinion. However, 36.8% at pre-test and 24.4% at post test in Makindu and 36.8% and 36.0% at
pre and post-test respectively in Mutitu of respondents without CME-RH did not see the need for Post-Natal Care. As indicated in table 4.19, results revealed that awareness regarding PNC was statistically significant ($\chi^2=13.192; \text{Df}=3; P<0.001$) and therefore associated with CME-RH.

**Table 4.19: Association of Knowledge on PNC with CME-RH**

<table>
<thead>
<tr>
<th>Variable Category</th>
<th>Makindu Pre-test</th>
<th>Makindu Post-test</th>
<th>Mutitu Pre-test</th>
<th>Mutitu Post-test</th>
<th>Chi Square Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
</tr>
<tr>
<td>Whether a woman who has just delivered should attend post-natal clinic</td>
<td>YES</td>
<td>48(19.8)</td>
<td>68(28.1)</td>
<td>48(19.8)</td>
<td>63(26.0)</td>
</tr>
<tr>
<td></td>
<td>NO</td>
<td>89(36.8)</td>
<td>37(15.3)</td>
<td>89(36.8)</td>
<td>45(19.1)</td>
</tr>
</tbody>
</table>

**4.2.17 Previous Use of a Family Planning Method**

Regarding whether the respondents had ever used an FP method, 25.2% of those with CME-RH before intervention in Makindu and 24.8% in Mutitu, of those interviewed and fell in that category had not. Further, after the intervention, 53.3% of the respondents with CME-RH in Makindu had used an FP method while 20.7% of respondents from Mutitu had not. Among respondents without CME-RH level, 35.1% in Makindu and 31.8% in Mutitu indicated that they had never used an FP method. Table 4.20 shows that in this same category, 24.4% at post-test in Makindu had used an FP method while 27.3% in Mutitu had not. From the study findings, ever using an FP method by the respondent was found not statistically significant ($\chi^2 = 6.080, df=1, p=0.777$) and therefore not associated with CME-RH.
Table 4.20: Association of Previous Use of a Family Planning Method with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Chi Square test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td></td>
</tr>
<tr>
<td>FP use</td>
<td>Yes</td>
<td>52 (21.5)</td>
<td>44 (18.2)</td>
<td>57 (23.6)</td>
<td>48 (19.8)</td>
<td>χ² = 6.080, Df=1, p = 0.777</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>85 (35.1)</td>
<td>61 (25.2)</td>
<td>77 (31.8)</td>
<td>60 (24.8)</td>
<td>36 (14.9)</td>
</tr>
</tbody>
</table>

4.2.18 Current Use of a Contraceptive

Regarding current use of an FP method to avoid or delay pregnancy, 25.2% of those with CME-RH in Makindu before intervention indicated they were not using any method with a similar trend (31.8%) in Mutitu indicating that they were not using any method to avoid or delay pregnancy. During post-test, 36.8% of respondent in this category in Makindu were using a FP method while 33.1% in Mutitu were not. Among respondents without CME-RH, 35.1% of the respondents from Makindu at pre-test and 31.8% in Mutitu reported not currently on an FP method while 33.1% respondents during post-test from Makindu indicated that they were using a FP method with 27.3% in Mutitu not using any method to avoid or delay pregnancy. From the study findings indicated in table 4.21, current use of an FP method by the respondent was found not statistically significant (χ² = 0.0800, df = 1, p = 0.777) and therefore not associated with CME-RH.
Table 4.21: Current Use of a Contraceptive and its Association with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Chi Square test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Without</td>
<td>With</td>
<td>Without</td>
<td>With</td>
<td>Without</td>
<td>Without</td>
</tr>
<tr>
<td>use of FP</td>
<td>Yes</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>by either</td>
<td>52 (21.5)</td>
<td>44 (18.2)</td>
<td>57 (23.6)</td>
<td>48 (19.8)</td>
<td>80 (33.1)</td>
<td>89 (36.8)</td>
</tr>
<tr>
<td>spouse</td>
<td>No</td>
<td>85 (35.1)</td>
<td>61 (25.2)</td>
<td>77 (31.8)</td>
<td>60 (24.8)</td>
<td>36 (14.9)</td>
</tr>
</tbody>
</table>

4.2.19 Decision Making on Use of Current Contraceptive

Concerning decision making with respect to the current use of FP method, 25.2% respondents at pre-test in Makindu indicated they did not get involved as the decision maker while in Mutitu 24.8% indicated that they did not get involved. At post-test, 45.6% of the respondents from Makindu with CME-RH reported the spouse as the decision maker while 25.6% of the respondents from Mutitu did not participate in decision-making. In the category of respondents without CME-RH level, a similar trend was reported with 31.0% during pre-test from Makindu and 36.4% in Mutitu reporting not being involved in decision-making. After intervention, 24.4% of the respondents in Makindu indicated spouse/partner as the decision maker for use of current FP method while in Mutitu, 31.4% of the respondents indicated that they were not involved in decision-making. From the study findings, the decision maker on type of FP to use was found to be statistically significant (p<0.001) and therefore associated with CME-RH as indicated in table 4.22.
Table 4.22: Decision Making on Contraceptives and Association with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Fisher's Exact test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Makindu Without CME-RH n (%)</td>
<td>Makindu With CME-RH n (%)</td>
<td>Mutitu Without CME-RH n (%)</td>
</tr>
<tr>
<td>Who decided on the FP method used</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own idea</td>
<td>2 (0.8)</td>
<td>1 (0.4)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Spouses/partner</td>
<td>60 (24.8)</td>
<td>43 (17.8)</td>
<td>46 (19.0)</td>
</tr>
<tr>
<td>Not applicable</td>
<td>75 (31.0)</td>
<td>61 (25.2)</td>
<td>88 (36.4)</td>
</tr>
</tbody>
</table>

FGD discussions also revealed that poor communication between men and their female partners led to poor male involvement while good couple communication was associated with high CME-RH and greater support between husband and wife. This was illustrated by one woman in Mutitu who noted:

“Couples that sit and talk a lot always have a way to discuss most family issues. This will include matters on family planning, the methods available and what the woman and man can use and also support during pregnancy. But due to many problems nowadays, most couples are running up and down looking for something to put on the table and have no time for each other. It then becomes very hard to the man to support the wife”

4.2.20 Satisfaction with FP Services

When asked whether they were satisfied with the services offered the last time they accessed FP services, 33.5% of respondents with CME-RH during pre-test, in Makindu indicated that they were satisfied with the services offered while in Mutitu, 30.2% indicated that they were satisfied...
with the services offered similar to those who were not satisfied. After the intervention, 59.5% in Makindu and 26.0% of respondents in Mutitu from this category indicated that they were satisfied. Among respondents without CME-RH, during pre-test, 40.5% in Makindu reported having been satisfied with the FP services offered while 31.4% in Mutitu were not satisfied. After intervention, 34.7% in Makindu and 29.3% respondents in Mutitu without CME-RH, reported having been satisfied with the services offered. As indicated in the study, the respondent’s satisfaction with the last access to FP services was found to be statistically significant ($\chi^2 = 4.447$, $df=1$, $p=0.035$) and therefore associated with CME-RH as indicated in table 4.23.

Table 4.23: Influence of Satisfaction with FP Services on CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Chi Square test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>98 (40.5)</td>
<td>81 (33.5)</td>
<td></td>
</tr>
<tr>
<td>FP service satisfaction</td>
<td>Yes</td>
<td>58 (23.9)</td>
<td>73 (30.2)</td>
<td>$\chi^2 = 4.447$</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>39 (16.1)</td>
<td>24 (9.9)</td>
<td>Df=1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 (0.8)</td>
<td>76 (31.4)</td>
<td>$P=0.035$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35 (14.5)</td>
<td>35 (14.5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 (0.8)</td>
<td>2 (0.8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>71 (29.3)</td>
<td>63 (26.0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>57 (23.6)</td>
<td>51 (21.1)</td>
<td></td>
</tr>
</tbody>
</table>

4.2.21 Approval for Use of Contraceptives by Couples

With regard to approval for use of family planning to avoid or delay pregnancy among couples, 17.4% of the respondents with CME-RH, during pre-test, from Makindu agreed with FP use while 14.9% of the respondents in Mutitu within the same CME-RH category strongly disagreed. At post-test, in the same category, 32.6% of respondent agreed in Makindu while in Mutitu, 15.7% strongly disagreed. For respondents without CME-RH, 19.0% of those interviewed during pre-test in Makindu agreed with FP use among couples while 17.4% of the respondents from
Mutitu strongly disagreed with FP use. After intervention, 21.5% of respondents who had no CME-RH in Makindu strongly agreed with the statement while 14.9% in Mutitu disagreed with use of FP among couples. As can be deduced from the findings of the study in table 4.24, approval for use of FP by couples was found to be statistically significant (p<0.001) and therefore associated with CME-RH.

Table 4.24: Approval for Use of Contraceptives and Association with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categor y</th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Fisher’s Exact test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
</tr>
<tr>
<td>Approval</td>
<td>Strongly agree</td>
<td>36 (14.9)</td>
<td>20 (8.3)</td>
<td>7 (2.9)</td>
<td>19 (7.9)</td>
<td>52 (21.5)</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>46 (19.0)</td>
<td>42 (17.4)</td>
<td>36 (14.9)</td>
<td>22 (9.1)</td>
<td>36 (14.9)</td>
</tr>
<tr>
<td></td>
<td>Unsure</td>
<td>21 (8.7)</td>
<td>15 (6.2)</td>
<td>17 (7.0)</td>
<td>10 (4.1)</td>
<td>6 (2.5)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>37 (15.3)</td>
<td>17 (7.0)</td>
<td>32 (13.2)</td>
<td>21 (8.7)</td>
<td>2 (0.8)</td>
</tr>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>7 (2.9)</td>
<td>11 (4.5)</td>
<td>42 (17.4)</td>
<td>36 (14.9)</td>
<td>0 (0.0)</td>
</tr>
</tbody>
</table>

4.2.22 Friends Approval to Use Contraceptives

When asked about their friends in the community approving use of FP to avoid or delay pregnancy, 22.3% of respondents during pre-test in Makindu with CME-RH and 20.2% in Mutitu agreed with the statement. In the same category, during post-test, 28.5% in Makindu and 16.9% in Mutitu agreed with this statement. Among respondents without CME-RH, 21.1% in Makindu during pre-test and 18.2% in Mutitu agreed that their friends in the community would approve FP use among couples to avoid or delay pregnancy. Similarly, during post-test, 20.2% in Makindu strongly agreed while 26.0% in Mutitu agreed with the statement. From the study
findings shown in table 4.25, approval by friends in the community for FP use was found to be statistically significant using Fischer’s Exact test (p<0.048) and therefore associated with CME-RH.

Table 4.25: Association of Friends Approval to Use Contraceptives and CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Makindu</th>
<th>Mutitu</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Fisher’s Exact test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval of use family planning to avoid or delay a pregnancy by the respondents’ friends</td>
<td>With CME-RH (%)</td>
<td>With CME-RH (%)</td>
<td>With CME-RH (%)</td>
<td>With CME-RH (%)</td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>20 (8.3)</td>
<td>26 (10.7)</td>
<td>31 (12.8)</td>
<td>49 (20.2)</td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>Agree</td>
<td>51 (21.1)</td>
<td>44 (18.2)</td>
<td>49 (20.2)</td>
<td>31 (12.8)</td>
<td></td>
</tr>
<tr>
<td>Unsure</td>
<td>14 (5.8)</td>
<td>10 (4.1)</td>
<td>16 (6.6)</td>
<td>18 (7.4)</td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>24 (9.9)</td>
<td>43 (17.8)</td>
<td>10 (4.1)</td>
<td>0 (0.0)</td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>8 (3.3)</td>
<td>6 (2.5)</td>
<td>8 (3.3)</td>
<td>0 (0.0)</td>
<td></td>
</tr>
</tbody>
</table>

Notably, friends seemed to have a major sway on decisions related to CME-RH as demonstrated by a participant at an FGD held at Kiboko in Makindu:

"I believe it is not good to follow your wife to the clinic. Even though she exposes her privacy to you at home but when you reach the antenatal clinic it is different. So it is better she goes alone. Also, if I accompany my wife to the dispensary every time she goes for her checkups, my friends would think I am a weakling. They would laugh at me. I will not be able to associate with them again”.

4.2.23 Spousal Approval for Use of Family Planning

When posed with the statement on whether their spouse would approve of couples using FP to avoid or delay pregnancy, 22.7% the respondents in Makindu and 22.3% in Mutitu with CME-
RH during pre-test agreed with the statement. During post-test 30.6% in Makindu and 18.2% in Mutitu with CME-RH agreed with this statement regarding spousal approval for FP. Within the category of respondents without CME-RH, a similar trend was evident during pre-test with 21.5% of them in Makindu and 19.8% in Mutitu agreeing that their spouses would approve of the same while during post-test, 21.1% in Makindu strongly agreed with 18.2% in Mutitu agreeing. As shown from the findings in table 4.26, using Fischer’s Exact test, approval by spouse for couples to use FP was found to be statistically significant (p<0.001) and therefore associated with CME-RH.

Table 4. 26: Influence of Spouse Approval of Family Planning on CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categor y</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Fisher’ s Exact test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval of use family planning to avoid or delay a pregnancy by the respondents’ spouse</td>
<td>Strongly agree 33 (13.6) 37 (15.3) 27 (11.2) 32 (13.2) 51 (21.1) 56 (23.1) 33 (13.6) 37 (15.3)</td>
<td>Agree 52 (21.5) 55 (22.7) 48 (19.8) 54 (22.3) 30 (12.4) 74 (30.6) 44 (18.2) 46 (19.0)</td>
<td>Unsure 10 (4.1) 13 (5.4) 9 (3.7) 5 (2.1) 14 (5.8) 14 (5.8) 19 (7.9) 16 (6.6)</td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>Disagree 23 (19.5) 13 (5.4) 13 (5.4) 8 (3.3) 1(0.4) 2 (0.8) 26 (10.7) 5 (2.1)</td>
<td>Strongly disagree 19 (7.9) 7 (2.9) 7 (2.9) 9 (3.7) 0 (0.0) 0 (0.0) 6 (2.5) 10 (4.1)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.2.24 Perceived Unfaithfulness Regarding Women Using Contraception

When posed with the statement that a woman who uses contraception will be unfaithful to her husband, 12.4% of the respondents during pre-test in Makindu with CME-RH strongly disagreed with the perception while in Mutitu (12.0%) of the respondents in the same category agreed. Contrarily, 29.3% of the respondents in Makindu during post-test disagreed with the statement
while 11.6% in Mutitu were unsure about this perception. Among the category of respondents without CME-RH, 14.5% of those interviewed during pre-test in Makindu strongly disagreed with the same statement while 17.4% of respondents in Mutitu agreed that a woman who uses contraceptives will be unfaithful to her husband. During post-test, a similar trend was evident where 13.6% in Makindu disagreed with the perception while an equal number (13.6%) in Mutitu agreed with the statement. As can be deduced from the findings of the study, the respondent’s perception that a woman who uses contraception will be unfaithful to her husband was found statistically significant ($\chi^2 = 26.932$, $df = 4$, $p < 0.001$) and therefore associated with CME-RH as illustrated in table 4.27.

### Table 4.27: Association of Perceived Unfaithfulness by Women Using Contraception and CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Chi Square Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td></td>
</tr>
<tr>
<td></td>
<td>With CME-RH (%)</td>
<td>With CME-RH (%)</td>
<td>With CME-RH (%)</td>
<td></td>
</tr>
<tr>
<td>A woman who uses contraception will be</td>
<td>Strongly agree</td>
<td>22 (9.1)</td>
<td>11 (4.5)</td>
<td></td>
</tr>
<tr>
<td>unfaithful to her husband</td>
<td></td>
<td>14 (5.8)</td>
<td>16 (6.6)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>25 (10.3)</td>
<td>25 (10.3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unsure</td>
<td>24 (9.9)</td>
<td>15 (6.2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>31 (12.8)</td>
<td>24 (9.9)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>35 (14.5)</td>
<td>30 (12.4)</td>
<td></td>
</tr>
</tbody>
</table>

|                                               |                               | Makindu                       | Mutitu                        |                 |
|                                               | With CME-RH (%)               | With CME-RH (%)               | With CME-RH (%)               |                 |
|                                               | Strongly agree                | 22 (9.1)                      | 11 (4.5)                      |                 |
|                                               | Agree                         | 25 (10.3)                     | 25 (10.3)                     |                 |
|                                               | Unsure                        | 24 (9.9)                      | 15 (6.2)                      |                 |
|                                               | Disagree                      | 31 (12.8)                     | 24 (9.9)                      |                 |
|                                               | Strongly disagree             | 35 (14.5)                     | 30 (12.4)                     |                 |

### 4.2.25 Number of Sons Preferred by Community

When asked about the number of sons that people in the community want to have, 19.0% of the respondents during pre-test in Makindu and 19.8% in Mutitu with CME-RH indicated two as the preferred number. During post-test, 32.6% in Makindu preferred two while 25.2% in Mutitu
indicated three as the preferred number. Among respondents without CME-RH, 23.1% of those interviewed in Makindu during pre-test indicated two as the number of sons that people in the community want to have while in Mutitu there 20.2% of the respondents indicated three as the preferred number. In the same category, 14.9% of respondents without CME-RH during post-test reported two as the number of sons people in the community want to have with 32.6% in Mutitu indicating three as the preferred number. As indicated in table 4.28, study findings indicate that the number of sons people in the community want to have was statistically significant using Fishers exact test (p<0.001) and therefore associated with CME-RH.

Table 4.28: Association of Number of Sons Preferred and CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th></th>
<th></th>
<th></th>
<th>Post-test</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Fisher's Exact Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of sons people in the community want to have</td>
<td>1</td>
<td>12 (5.0)</td>
<td>11 (4.5)</td>
<td>6 (2.5)</td>
<td>8 (3.3)</td>
<td>7 (2.9)</td>
<td>1 (0.4)</td>
<td>14 (5.8)</td>
<td>42 (17.4)</td>
<td>P&lt;0.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>56 (23.1)</td>
<td>46 (19.0)</td>
<td>29 (12.0)</td>
<td>48 (19.8)</td>
<td>36 (14.9)</td>
<td>79 (32.6)</td>
<td>35 (14.5)</td>
<td>61 (25.2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>46 (19.0)</td>
<td>28 (11.6)</td>
<td>49 (20.2)</td>
<td>29 (12.0)</td>
<td>20 (8.3)</td>
<td>42 (17.4)</td>
<td>79 (32.6)</td>
<td>51 (21.1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>13 (5.4)</td>
<td>10 (4.1)</td>
<td>35 (14.5)</td>
<td>20 (8.3)</td>
<td>12 (5.0)</td>
<td>11 (4.5)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>6 (2.5)</td>
<td>7 (2.9)</td>
<td>11 (4.5)</td>
<td>3 (5.4)</td>
<td>10 (4.1)</td>
<td>6 (2.5)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>2 (0.8)</td>
<td>3 (1.2)</td>
<td>4 (1.7)</td>
<td>0 (0.0)</td>
<td>6 (2.5)</td>
<td>1 (0.4)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>2 (0.8)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>1 (0.4)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>3 (1.2)</td>
<td>3 (1.2)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>3 (1.2)</td>
<td>3 (1.2)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.2.26 Number of Daughters Preferred by Community

Among respondents who had CME-RH, 14.5% in Makindu and 16.9% in Mutitu, indicated two as the number of daughters that people in the community want to have during pre-test. During post-test, 36.0% of respondents in Makindu, indicated 2 as the preferred one daughter while
33.1% preferred not to have a daughter. A similar trend was observed among respondents without CME-RH level where 23.1% in Makindu during pre-test indicated two daughters as the number that people in the community would want to have and 21.9% in Mutitu indicating two daughters. In the same category of respondents without CME-RH, at post-test, 15.7% of the respondents in Makindu preferring two daughters and 33.5% of the respondents from Mutitu preferring not to have a daughter. From the study findings illustrated in table 4.29, the number of daughters people in the community want to have was statistically significant using Fishers exact test (p<0.001) and therefore associated with CME-RH.

### Table 4.29: Association of Number of Daughters Preferred and CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th></th>
<th></th>
<th>Post-test</th>
<th></th>
<th></th>
<th>Fisher’s Exact Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of daughters people in the community would want to have</td>
<td>0</td>
<td>1 (0.4)</td>
<td>1 (0.4)</td>
<td>3 (1.2)</td>
<td>0 (0.0)</td>
<td>81 (33.5)</td>
<td>80 (33.1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>19 (7.9)</td>
<td>32 (13.2)</td>
<td>16 (6.6)</td>
<td>24 (9.9)</td>
<td>16 (6.6)</td>
<td>25 (10.3)</td>
<td>33 (13.6)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>56 (23.1)</td>
<td>35 (14.5)</td>
<td>53 (21.9)</td>
<td>41 (16.9)</td>
<td>38 (15.7)</td>
<td>87 (36.0)</td>
<td>14 (5.8)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>52 (21.5)</td>
<td>25 (10.3)</td>
<td>49 (20.2)</td>
<td>28 (11.6)</td>
<td>19 (7.9)</td>
<td>19 (7.9)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2 (0.8)</td>
<td>6 (2.5)</td>
<td>6 (2.5)</td>
<td>8 (3.3)</td>
<td>11 (4.5)</td>
<td>6 (2.5)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>5 (2.1)</td>
<td>4 (1.7)</td>
<td>7 (2.9)</td>
<td>7 (2.9)</td>
<td>7 (2.9)</td>
<td>8 (3.3)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>2 (0.8)</td>
<td>2 (0.8)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>3 (1.2)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>1 (0.4)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>1 (0.4)</td>
<td>1 (0.4)</td>
<td>0 (0.0)</td>
</tr>
</tbody>
</table>

### 4.2.27 Duration before First Child after Marriage

When asked about the duration that a couple should take before having their first child, 33.1%, at post-test compared to 41.3%, at pre-test, of respondents in Makindu and 34.7% at pre-test and 24.0% at post-test in Mutitu with CME-RH indicated that couples should have their first child...
within one year of marriage. A similar trend was noted with respondents without CME-RH. However, a few respondents with CME-RH (2.5% at pre-test and 5.4% at post test in Makindu and 11.2% and 12.0% at pre and post-test respectively in Mutitu) indicated that a couple should have their first child in more than one year. Thus the duration of stay before getting first child after couple marries was found to be statistically significant ($\chi^2 = 6.209$ Df =2, P=0.045) and therefore associated with CME-RH as shown in table 4.30.

Table 4.30: Duration before First Child after Marriage and Association with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Chi Square test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
</tr>
<tr>
<td></td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
</tr>
<tr>
<td>After a couple gets married, how long should it be before they have their first child</td>
<td>Within one year</td>
<td>72 (29.8)</td>
<td>100 (41.3)</td>
<td>92 (38.0)</td>
</tr>
<tr>
<td></td>
<td>More than one year</td>
<td>8 (3.3)</td>
<td>6 (2.5)</td>
<td>22 (9.7)</td>
</tr>
<tr>
<td></td>
<td>Up to the couple</td>
<td>57 (23.6)</td>
<td>59 (24.4)</td>
<td>20 (8.3)</td>
</tr>
</tbody>
</table>

### 4.2.28 Importance of Educating Women

With respect to the importance of women being educated, 36.4% of the respondents at post-test in Makindu and 28.1% in Mutitu with CME-RH strongly agreed that women education is paramount in the community. This compared well with response during pre-test where 20.7% in Makindu and 23.6% in Mutitu strongly agreeing. A similar response was noted among respondents without CME-RH with 22.7% at pre-test and 28.1 at post-test of those interviewed in Makindu and 26.0%, at pre-test, and 28.5%, at post-test, in Mutitu strongly agreed with the statement. As shown in table 4.31, the importance of a woman in the community to be educated
was statistically significant using Fishers exact test (p<0.001) and therefore associated with CME-RH.

**Table 4.31: Importance of Women Education and Association with CME-RH**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categor y</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
</tr>
<tr>
<td>In this community it is important for a woman to be educated</td>
<td>Strongly Agree</td>
<td>55 (22.7)</td>
<td>50 (20.7)</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>45 (18.6)</td>
<td>40 (16.5)</td>
</tr>
<tr>
<td></td>
<td>Unsure</td>
<td>1 (0.4)</td>
<td>4 (1.7)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>26 (10.7)</td>
<td>11 (4.5)</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>14 (5.8)</td>
<td>0 (0.0)</td>
</tr>
</tbody>
</table>

**4.2.29 Importance of Women to be Married**

Posed with the statement that it is important for a woman in the community to be married, majority of the respondents with CME-RH (26.4% at pre-test and 24.4% at post-test) in Makindu and 23.1% and 21.5% at pre and post-test in Mutitu strongly agreed that a woman should be married. Similarly, among the category of respondents without CME-RH, 25.6% at pre-test and 23.6% at post-test) in Makindu and (28.9% and 27.3% at pre and post-test respectively) in Mutitu strongly agreed with the statement. However, a few of the respondents with CME-RH disagreed with the statement, 1.2% at pre-test and 0.8% at post-test in Makindu and 2.9% at pre and post-test in Mutitu. That it is important for a woman to be married was statistically significant using Fishers exact test (p<0.001) and therefore associated with CME-RH as shown in table 4.32.
Table 4.32: Association of Importance of Women to be married and CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Fishers Exact Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
</tr>
<tr>
<td>In this community it is important for a woman to be married</td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>62 (25.6)</td>
<td>64 (26.4)</td>
<td>70 (28.9)</td>
<td>56 (23.1)</td>
</tr>
<tr>
<td>Agree</td>
<td>47 (19.4)</td>
<td>32 (13.2)</td>
<td>54 (22.3)</td>
<td>36 (14.9)</td>
</tr>
<tr>
<td>Unsure</td>
<td>2 (0.8)</td>
<td>3 (1.2)</td>
<td>0 (0.0)</td>
<td>2 (0.8)</td>
</tr>
<tr>
<td>Disagree</td>
<td>12 (5.0)</td>
<td>3 (1.2)</td>
<td>4 (1.7)</td>
<td>7 (2.9)</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>14 (5.8)</td>
<td>3 (1.2)</td>
<td>6 (2.5)</td>
<td>7 (2.9)</td>
</tr>
</tbody>
</table>

4.2.30 Responsibility of Women to Avoid Conception

Regarding whose responsibility it is to avoid getting pregnant, 22.7% at pre-test of the respondents in Makindu with CME-RH agreed with the statement that it is the woman’s responsibility to avoid getting pregnant and 11.2% at post-test disagreed while in Mutitu, 17.8% at pre-test and 15.3% at post-test agreed with the statement. Among respondents without CME-RH, 20.7% at pre-test in Makindu and 25.2% in Mutitu agreed that the responsibility to avoid getting pregnant belong to the woman. However, during post-test, 16.5% in Makindu disagreed with the statement while 18.6% in Mutitu agreed that the responsibility to avoid getting pregnant belong to the woman. Thus from the study findings shown in table 4.33, the perception that it is a woman’s responsibility to avoid getting pregnant was not found to be statistically significant ($\chi^2=5.55, \ df=4, p=0.235$) and therefore not associated with CME-RH.
Table 4.33: Responsibility of Women to Avoid Contraception and Association with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Chi Square Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
<td></td>
</tr>
<tr>
<td>It is a woman's responsibility to avoid getting pregnant</td>
<td>Strongly Agree</td>
<td>37 (15.3)</td>
<td>23 (9.5)</td>
<td>38 (15.7)</td>
<td>32 (13.2)</td>
<td>18 (7.4)</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>50 (20.7)</td>
<td>55 (22.7)</td>
<td>61 (25.2)</td>
<td>43 (17.8)</td>
<td>15 (6.2)</td>
</tr>
<tr>
<td></td>
<td>Unsure</td>
<td>20 (8.3)</td>
<td>7 (2.9)</td>
<td>4 (1.7)</td>
<td>10 (4.1)</td>
<td>5 (2.1)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>12 (5.0)</td>
<td>8 (3.3)</td>
<td>21 (8.7)</td>
<td>10 (4.1)</td>
<td>40 (16.5)</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>7 (2.9)</td>
<td>8 (3.3)</td>
<td>10 (4.1)</td>
<td>13 (5.4)</td>
<td>18 (7.4)</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 5.550 \]  
\[ Df=4 \]  
\[ P=0.235 \]

4.2.31 Joint Couple Decision on Having Children

When posed with the statement that a couple should decide together if they want to have children, 21.1% at pre-test and 32.2% at post-test of the respondents with CME-RH in Makindu agreed with joint couple decision on having children while 24.4% at pre and post-test in Mutitu agreed to the statement. Among the category of respondents without CME-RH, 21.9% at pre-test and 18.6% at post-test of those interviewed in Makindu and approximately 22.3% at pre-test and 22.7% at post-test in Mutitu agreed with the same statement. A few respondents with CME-RH level, (1.7%, pre-test and 7.9, post-test) in Makindu and 0.8%, pre-test and 1.7%, post-test in Mutitu strongly disagreed with joint decision making among couples Using Fishers exact test, joint decision making on having children was found to be statistically significant (p<0.001) and therefore associated with CME-RH as illustrated in table 4.34.
A couple should decide together if they want to have children

Table 4.34: Association of Joint Couple Decision on Having Children and CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Fishers Exact Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
</tr>
<tr>
<td></td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
</tr>
<tr>
<td>A couple should decide together if they want to have children</td>
<td>Strongly Agree</td>
<td>24 (9.9)</td>
<td>28 (11.6)</td>
<td>39 (16.1)</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>53 (21.9)</td>
<td>51 (21.1)</td>
<td>54 (22.3)</td>
</tr>
<tr>
<td></td>
<td>Unsure</td>
<td>44 (18.2)</td>
<td>18 (7.4)</td>
<td>31 (12.8)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>13 (5.4)</td>
<td>4 (1.7)</td>
<td>6 (2.5)</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>3 (1.2)</td>
<td>4 (1.7)</td>
<td>4 (1.7)</td>
</tr>
</tbody>
</table>

4.2.32 Responsibility of Care Giving to Children

When posed with the statement that changing diapers, giving the kids a bath and feeding the kids is the mother’s responsibility, 14.9%, of the respondents at pre-test in Makindu with CME-RH and 16.9% at pre-test, in Mutitu strongly agreed with the perception agreed with the statement. During post-test, 25.2% in Makindu and 19.0% in Mutitu of respondents with CME-RH agreed with the statement. Among the category of respondents without CME-RH, 27.3%, pre-test of those interviewed in Makindu and 22.7% from Mutitu strongly agreed with the same statement. Among respondents in the same category, at post-test, 11.2% of the respondents in Makindu and 24.8% in Mutitu agreed with the statement while. Thus from the study findings shown in table 4.35, the perception that it is a woman’s responsibility to give care to the child was found to be statistically significant ($\chi^2 = 19.589, df=3, p=0.001$) and therefore associated with CME-RH.
Table 4.35

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Chi Square Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Changing diapers, giving the kids a bath, and feeding the kids are the mothers' responsibility</td>
<td>Strongly Agree</td>
<td>66 (27.3)</td>
<td>36 (14.9)</td>
<td>55 (22.7)</td>
<td>41 (16.9)</td>
<td>16 (6.7)</td>
<td>16 (6.7)</td>
<td>37 (15.3)</td>
<td>31 (12.8)</td>
<td></td>
<td></td>
<td>$\chi^2=19.589$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agree</td>
<td>25 (10.3)</td>
<td>35 (14.5)</td>
<td>47 (19.4)</td>
<td>31 (12.8)</td>
<td>27 (11.2)</td>
<td>61 (25.2)</td>
<td>60 (24.8)</td>
<td>46 (19.0)</td>
<td></td>
<td></td>
<td>Df=3 P&lt;0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unsure</td>
<td>8 (3.3)</td>
<td>6 (2.5)</td>
<td>10 (4.7)</td>
<td>8 (3.3)</td>
<td>6 (2.5)</td>
<td>16 (6.7)</td>
<td>28 (11.6)</td>
<td>9 (3.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>17 (7.0)</td>
<td>12 (5.0)</td>
<td>19 (7.9)</td>
<td>10 (4.7)</td>
<td>21 (8.7)</td>
<td>45 (18.6)</td>
<td>20 (8.3)</td>
<td>19 (7.9)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Disagree</td>
<td>21 (8.7)</td>
<td>16 (6.6)</td>
<td>13 (5.4)</td>
<td>8 (3.3)</td>
<td>21 (8.7)</td>
<td>8 (3.3)</td>
<td>11 (4.5)</td>
<td>9 (3.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.2.33 Joint Decision on Type of Contraceptive

With respect to making decision on the type of contraceptive to use, 20.2% at pre-test of the respondents from Makindu with CME-RH and 22.3% in Mutitu agreed that a man and a woman should decide together what type of contraceptive to use of the respondents agreed. Among the same category of respondents with CME-RH, at post-test, 28.5% in Makindu and 21.1% in Mutitu of these respondents agreed that the type of contraceptive to use should be a decision by both the man and woman. Within the category of respondents without CME-RH, at pre-test, 22.3% in Makindu and 21.5% in Mutitu agreed that a man and a woman should decide together
what type of contraceptive to use while at post-test, 19.0% in Makindu strongly agreed with the statement with 19.8% in Mutitu agreeing to the statement. From the study findings indicated in table 4.36, joint decision between a man and a woman on the type of method to use was found to be statistically significant (p<0.001) and therefore associated with CME-RH.

Table 4.36: Association of Joint Decision on Type of Contraceptive and CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Fishers Exact Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>A man and a woman should decide together what type of contraceptive to use</td>
<td>Strongly Agree</td>
<td>43 (17.8)</td>
<td>39 (16.1)</td>
<td>46 (19.0)</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>54 (22.3)</td>
<td>49 (20.2)</td>
<td>52 (21.5)</td>
</tr>
<tr>
<td></td>
<td>Unsure</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>14 (5.8)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>33 (13.6)</td>
<td>4 (1.7)</td>
<td>28 (11.6)</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>7 (2.9)</td>
<td>9 (3.7)</td>
<td>1 (0.4)</td>
</tr>
</tbody>
</table>

4.2.34 Discussing Family Planning with Spouse

With regard to discussing family planning with their partner, 21.5% of the respondents at pre-test in Makindu with CME-RH were in agreement with the statement while 11.6% in Mutitu disagreed. At post-test, 22.7% in Makindu agreed with the statement while 14.0% in Mutitu disagreed. Among respondents without CME-RH, 17.8% of those interviewed at pre-test in Makindu agreed of the same statement on discussing FP between partners while 17.4% in Mutitu disagreed with the statement. Among the same category of respondents without CME-RH at post-test, there was a tie between those who agreed and strongly agreed with the statement.
(14.0%) in Makindu while in Mutitu, 13.7% of these respondents disagreed. As can be deduced from the findings of the study indicated in table 4.37, discussing family planning with partner was found to be statistically significant using Fischer’s exact test ( p<0.001) and therefore associated with CME-RH.

Table 4.37: Discussing Family Planning with Spouse and Association with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Fishers Exact Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td>Without CME-RH n (%)</td>
<td>With CME-RH n (%)</td>
<td></td>
</tr>
<tr>
<td>I feel comfortable discussing family planning with my partner</td>
<td>Strongly Agree</td>
<td>37 (15.3)</td>
<td>35 (14.5)</td>
<td>23 (9.5)</td>
<td>23 (9.5)</td>
<td>34 (14.0)</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>43 (17.8)</td>
<td>42 (21.5)</td>
<td>25 (10.3)</td>
<td>26 (10.7)</td>
<td>34 (14.0)</td>
</tr>
<tr>
<td></td>
<td>Unsure</td>
<td>8 (3.3)</td>
<td>15 (6.2)</td>
<td>18 (7.4)</td>
<td>12 (5.0)</td>
<td>5 (2.1)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>31 (12.8)</td>
<td>11 (4.5)</td>
<td>42 (17.4)</td>
<td>28 (11.6)</td>
<td>11 (4.5)</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>18 (7.4)</td>
<td>2 (0.8)</td>
<td>26 (10.7)</td>
<td>19 (7.9)</td>
<td>12 (5.0)</td>
</tr>
</tbody>
</table>

4.3 Specific Objective 3: Programmatic Determinants of CME-RH

4.3.1 Conducting Male-only Reproductive Health Trainings

With regard to having RH meetings/trainings for men only, at pre-test, 12.4% of the respondents with CME-RH in Makindu and 16.9% in Mutitu strongly disagreed that there should be men only RH meetings/trainings while during post-test, 13.6% in Makindu strongly disagreed and 14.0% of the respondents in Mutitu in the same category disagreed. Among respondents without CME-RH, 16.1% of those interviewed during pre-test in Makindu strongly agreed while 16.5% in Mutitu strongly disagreed with having male only RH meetings/trainings. At post-test, the
same category of respondent without CME-RH level, 14.0% in Makindu strongly disagreed with male only RH meetings/trainings while in Mutitu 14.9% disagreed with the statement. As indicated from the findings in table 4.38, having male only RH meetings/trainings was found to be statistically significant (p<0.001) and therefore associated with CME-RH.

Table 4.38: Association of Conducting Male-only RH Trainings with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Fishers Exact Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
</tr>
<tr>
<td></td>
<td>Without CME-RH (%)</td>
<td>With CME-RH (%)</td>
<td>Without CME-RH (%)</td>
<td>With CME-RH (%)</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>39 (16.1)</td>
<td>25 (10.3)</td>
<td>26 (10.7)</td>
<td>16 (6.6)</td>
</tr>
<tr>
<td>Agree</td>
<td>35 (14.5)</td>
<td>29 (12.0)</td>
<td>31 (12.8)</td>
<td>22 (9.1)</td>
</tr>
<tr>
<td>Unsure</td>
<td>14 (5.8)</td>
<td>0 (0.0)</td>
<td>7 (2.9)</td>
<td>5 (2.1)</td>
</tr>
<tr>
<td>Disagree</td>
<td>26 (10.7)</td>
<td>21 (8.7)</td>
<td>30 (12.4)</td>
<td>24 (9.9)</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>23 (9.5)</td>
<td>30 (12.4)</td>
<td>40 (16.5)</td>
<td>41 (16.9)</td>
</tr>
</tbody>
</table>

4.3.2 Facilitation of Reproductive Health Trainings

With respect to having RH meetings/trainings facilitated by male health workers, 15.7% of the respondents, at pre-test, of those with CME-RH in Makindu and 16.5% in Mutitu strongly agreed. At post-test, 16.1% in the same category, of those interviewed in Makindu were strongly in agreement with having male health workers facilitate RH meetings/trainings while in Mutitu, 16.1% strongly disagreed with the statement. Among respondents who were not CME-RH compliant at pre-test, those who strongly agreed to having male health workers facilitate RH
meetings/trainings were 21.5% in Makindu and 22.3% in Mutitu. At post-test, 15.3% respondents without CME-RH in Makindu strongly agreed with the statement while in Mutitu those who strongly agreed tied with those who strongly disagreed to the same at 11.6% in Mutitu. As illustrated in table 4.39, facilitation of RH meetings/trainings by male health workers was found to be statistically significant using Fisher’s exact test (p<0.001) and therefore associated with CME-RH.

Table 4. 39: Facilitation of RH Trainings and Association with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Fishers Exact Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
</tr>
<tr>
<td>At the RH trainings men should be facilitate d to by male health workers only</td>
<td>Witho ut CME-RH n (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td></td>
<td>52 (21.5)</td>
<td>38 (15.7)</td>
<td>54 (22.3)</td>
</tr>
<tr>
<td>Agree</td>
<td></td>
<td>46 (19.0)</td>
<td>28 (11.6)</td>
<td>38 (15.7)</td>
</tr>
<tr>
<td>Unsure</td>
<td></td>
<td>4 (1.7)</td>
<td>2 (0.8)</td>
<td>12 (5.0)</td>
</tr>
<tr>
<td>Disagree</td>
<td></td>
<td>21 (8.6)</td>
<td>9 (3.7)</td>
<td>14 (5.8)</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td></td>
<td>14 (5.8)</td>
<td>28 (11.6)</td>
<td>16 (6.6)</td>
</tr>
</tbody>
</table>

The lack of space to accommodate male partners in MCH clinics was reported to adversely impact male involvement. Male FGD participants complained that clinics are often unable to concurrently accommodate pregnant women and their partners because of a lack of space. Gender specific services to address uniquely male issues do not exist. Key informants emphasized that targeted interventions for men, such as tailored messages, specific health
education sessions, and innovative strategies to identify male friendly venues would be valuable for increasing male involvement. In Mutitu a KI noted that:

“Men have their own very unique reproductive health needs which must be addressed specially. If you lump them up with women, they often feel it’s not adding any value and they stop coming eventually. Men will also not be comfortable mixing up with pregnant women and babies in the MCH clinic anyhow. Their dignity and ego as men come first, then their health and that of their partners. We cannot ignore this reality”

4.3.3 Healthcare Workers Attitude Towards Men at ANC/MCH Clinics

When posed with the statement that health workers do not like to see men at ANC/MCH clinics, 14.9% of the respondents, at pre-test, with CME-RH in Makindu strongly disagreed with the perception while 9.9% in Mutitu agreed. In the same category, 15.7% at post-test were in disagreed in Makindu while in Mutitu, 14.0% were unsure. Among the category of respondents without CME-RH, 18.2% of those interviewed at post-test strongly disagreed with the same statement in Makindu while in Mutitu 14.0% agreed. Within the same category of respondents at post-test, 12.8% in Makindu disagreed with the statement while 12.4% in Mutitu were agreed with the statement. From the findings of the study, the perception that health workers do not like to see men at ANC/MCH clinics was found not statistically significant ($\chi^2 =6.359, df=4, p=0.174$) and therefore not associated with CME-RH as shown in table 4.40.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Chi Square Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
</tr>
<tr>
<td></td>
<td></td>
<td>With</td>
<td>With</td>
<td>With</td>
</tr>
<tr>
<td></td>
<td></td>
<td>With</td>
<td>With</td>
<td>With</td>
</tr>
<tr>
<td>Health workers do not like to see men at ANC/MCH clinics</td>
<td>ut CME-RH n (%)</td>
<td>CME-RH n (%)</td>
<td>ut CME-RH n (%)</td>
<td>CME-RH n (%)</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>----------------</td>
<td>-------------</td>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>18 (7.4)</td>
<td>19 (7.9)</td>
<td>25 (10.3)</td>
<td>21 (8.7)</td>
</tr>
<tr>
<td>Agree</td>
<td>35 (14.5)</td>
<td>20 (8.3)</td>
<td>34 (14.0)</td>
<td>24 (9.9)</td>
</tr>
<tr>
<td>Unsere</td>
<td>17 (7.0)</td>
<td>15 (6.2)</td>
<td>18 (7.4)</td>
<td>22 (9.1)</td>
</tr>
<tr>
<td>Disagree</td>
<td>23 (9.5)</td>
<td>15 (6.2)</td>
<td>33 (13.6)</td>
<td>22 (9.1)</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>44 (18.2)</td>
<td>36 (14.9)</td>
<td>24 (9.9)</td>
<td>19 (7.9)</td>
</tr>
</tbody>
</table>

$\chi^2=6.359$  
Df=4  
P=0.174

Similarly, one Key Informant indicated that:

“Reproductive health care often neglects the role of men during their wives’ pregnancy examination or contraceptive procedures. Therefore, MCH clinics must accommodate the need for couples to attend consultations and reproductive health examinations. In addition, the urgency of extending the clinic’s service hours is important to reach male clients who work during working hours. The other reason for making couple-friendly clinics is to enable effective and efficient visits for couples to reproductive health providers”

**4.3.4 Focus of ANC/MCH Clinics towards Women and Children**

Concerning the perception that ANC/MCH clinics are made for women and children only, 18.6% of the respondents with CME-RH, during pre-test, in Makindu strongly disagreed with the perception while 12.0% in Mutitu disagreed. However, in the same category of respondents with CME-RH, during post-test, a slightly different trend was observed where 21.1% of those interviewed disagreed with the same statement regarding ANC/MCH clinics while in Mutitu...
13.6% agreed. Within the category of respondents without CME-RH, 15.7% of them during pre-test in Makindu strongly disagreed with the perception that ANC/MCH clinics are for women and children while 22.7% in Mutitu agreed with this perception. During post-test, 12.4% in Makindu strongly disagreed while 13.2% of respondents without CME-RH in Mutitu disagreed with the statement. From the findings illustrated in table 4.41, that ANC/MCH clinic are meant for women and children only was found to be statistically significant ($\chi^2 = 13.617, df=4, p<0.009$) and therefore associated with CME-RH.

### Table 4.41: Focus of ANC/MCH Clinics and Association with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Chi Square Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
</tr>
<tr>
<td></td>
<td>Without</td>
<td>With</td>
<td>Without</td>
<td>With</td>
</tr>
<tr>
<td></td>
<td>CME-RH</td>
<td>CME-RH</td>
<td>CME-RH</td>
<td>CME-RH</td>
</tr>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>ANC/MCH clinics are made for women and children only</td>
<td>Strongly Agree 27 (11.2) 16 (6.6) 17 (7.0) 20 (8.3)</td>
<td>16 (6.6) 31 (12.8) 16 (6.6) 34 (14.0) 27 (11.2) 20 (8.3)</td>
<td>$\chi^2 = 13.617$ Df=4 P=0.009</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agree    33 (13.6) 18 (7.4) 55 (22.7) 24 (9.9)</td>
<td>16 (6.6) 34 (14.0) 16 (6.6) 34 (14.0) 26 (10.7) 33 (13.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unsure   20 (8.3) 12 (5.0) 7 (2.9) 7 (2.9)</td>
<td>15 (6.2) 13 (5.4) 16 (6.6) 8 (3.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disagree 19 (7.9) 14 (5.8) 29 (12.0) 29 (12.0)</td>
<td>19 (7.9) 51 (21.1) 32 (13.2) 26 (10.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree 38 (15.7) 45 (18.6) 26 (10.7) 28 (11.6)</td>
<td>30 (12.4) 17 (7.0) 27 (11.2) 27 (11.2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4.3.5 Perceived Confidentiality of ANC/MCH Staff

When posed with the statement that staff at the ANC/MCH clinic do not keep any secret about the health of clients, 13.6% of the respondents during pre-test of those with CME-RH in Makindu were unsure while 11.2% in Mutitu agreed with the perception. In the same category of
respondents at post-test, 15.7% of those interviewed in Makindu disagreed while 12.0% in Mutitu agreed that the staff at the ANC/MCH clinic do not keep any secret about health of their clients. Within the category of respondents without CME-RH level, 20.2% of them at pre-test, in Makindu and 14.9% in Mutitu were unsure with the perception. In this category, at post-test, 13.6% in Makindu agreed while 13.6% in Mutitu were unsure that staffs at the ANC/MCH clinic do not keep any secret about the health of clients. From the study findings shown in table 4.42, the perception that staff at the ANC/MCH clinic do not keep any secret about health of clients was found to be statistically significant ($\chi^2 =11.406$, $df=3$, $p=0.010$) and therefore associated with CME-RH.

Table 4.42: Perceived Confidentiality of ANC/MCH Staff and Association with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Without</td>
<td>With</td>
</tr>
<tr>
<td>Staff at the MCH/ANC do not keep any secret about health of clients</td>
<td>Strongly Agree</td>
<td>28 (11.6)</td>
<td>25 (10.3)</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>23 (9.5)</td>
<td>23 (9.5)</td>
</tr>
<tr>
<td></td>
<td>Unsure</td>
<td>49 (20.2)</td>
<td>33 (13.6)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>25 (10.3)</td>
<td>9 (3.7)</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>14 (5.8)</td>
<td>15 (6.2)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>14 (5.8)</td>
<td>15 (6.2)</td>
</tr>
</tbody>
</table>
4.3.6 Involvement of Men in RH Programs

When asked about their opinion on the statement that RH programs have done very little to involve men, 14.9% of respondents with CME-RH during pre-test indicated they were unsure in Makindu while 10.3% in Mutitu strongly disagreed. After intervention, 18.6% of respondents in this category in Makindu agreed that RH programs have done very little to involve men while 13.2% disagreed in Mutitu. 17.4% of the respondents without CME-RH at pre-test in Makindu disagreed that RH programs have done very little to involve men while 16.5% in Mutitu were unsure. Further, during post-test 10.7% in Makindu and 14.9% Mutitu strongly disagreed. This showed that RH programs have done very little to involve men was found to be statistically significant ($\chi^2 = 26.491, df=4, p=0.001$) and therefore associated with CME-RH as shown in table 4.43.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Chi Square Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Without</td>
<td>With</td>
<td>Without</td>
<td>With</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>CME-RH n</td>
<td>CME-RH n (%)</td>
<td>CME-RH n</td>
<td>CME-RH n (%)</td>
<td></td>
</tr>
<tr>
<td>RH programs have done very little to involve</td>
<td>Strongly</td>
<td>9 (3.7)</td>
<td>7 (2.9)</td>
<td>20 (8.3)</td>
<td>21 (8.7)</td>
<td></td>
</tr>
<tr>
<td>men</td>
<td>Agree</td>
<td>40 (16.5)</td>
<td>22 (9.1)</td>
<td>19 (7.9)</td>
<td>23 (9.5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unsure</td>
<td>33 (13.6)</td>
<td>36 (14.9)</td>
<td>40 (16.5)</td>
<td>18 (7.4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>42 (17.4)</td>
<td>18 (7.4)</td>
<td>27 (11.2)</td>
<td>21 (8.7)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly</td>
<td>13 (5.4)</td>
<td>22 (9.1)</td>
<td>28 (11.6)</td>
<td>25 (10.3)</td>
<td></td>
</tr>
</tbody>
</table>

$\chi^2 = 26.491, df=4, p<0.001$
Similarly, participants complained that most health facilities offered reproductive health services only on weekday mornings, when the majority of men are at work. They noted that permanent reproductive health services would facilitate the services uptake even for men with difficult work schedules as indicated by an FGD participant in Mutitu:

“I have a casual job at Nzambani town from morning to evening, Monday to Saturday to feed and educate my children. This clinic is only open on weekdays. Although I would like to be with my wife at the clinic, what should we do? Should I resign? If this clinic was opening on Sundays or late evening daily or at least some days, I would also come for counselling on issues of reproductive health not only for my wife but myself too”

4.3.7 Attendance to MCH/ANC Clinics on Invitation

On men attending ANC/MCH clinic on the invitation of a health worker, 21.1% of the respondents with CME-RH in Makindu before intervention, strongly disagreed while 12.4% in Mutitu disagreed. After intervention, 21.5% of respondents in Makindu and 19.8% in Mutitu agreed with the statement. Among the category of respondents without CME-RH, 21.9% of those interviewed before intervention in Makindu strongly disagreed with the same statement while 20.7% of the respondents in Mutitu disagreed. After the intervention, 16.1% of them in Makindu agreed while in Mutitu there was a tie among respondents who strongly agreed and agreed at 16.1%. As indicated in table 4.44, attendance of ANC/MCH clinic on the invitation of a health worker was found to be statistically significant using Fisher’s exact test (p<0.001) and therefore associated with CME-RH.
Table 4.44: Attendance of MCH/ANC Clinic on Invitation and Association with CME-RH

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test</th>
<th></th>
<th></th>
<th></th>
<th>Post-test</th>
<th></th>
<th></th>
<th>Fishers Exact Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td>Mutitu</td>
<td>Makindu</td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>9 (3.7)</td>
<td>8 (3.3)</td>
<td>29 (12.0)</td>
<td>4 (1.7)</td>
<td>36 (14.9)</td>
<td>42 (17.4)</td>
<td>39 (16.1)</td>
<td>31 (12.8)</td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td>Agree</td>
<td>9 (3.7)</td>
<td>8 (3.3)</td>
<td>6 (2.5)</td>
<td>29 (12.0)</td>
<td>39 (16.1)</td>
<td>52 (21.5)</td>
<td>39 (16.1)</td>
<td>48 (19.8)</td>
<td></td>
</tr>
<tr>
<td>Unsure</td>
<td>31 (12.8)</td>
<td>1 (0.4)</td>
<td>4 (1.7)</td>
<td>10 (4.1)</td>
<td>5 (2.1)</td>
<td>10 (4.1)</td>
<td>5 (2.1)</td>
<td>8 (3.3)</td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>35 (14.5)</td>
<td>37 (15.3)</td>
<td>50 (20.7)</td>
<td>30 (12.4)</td>
<td>2 (0.8)</td>
<td>22 (9.1)</td>
<td>25 (10.3)</td>
<td>7 (2.9)</td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>53 (21.9)</td>
<td>51 (21.1)</td>
<td>45 (18.6)</td>
<td>25 (10.3)</td>
<td>14 (5.8)</td>
<td>20 (8.3)</td>
<td>20 (8.3)</td>
<td>20 (8.3)</td>
<td></td>
</tr>
</tbody>
</table>

4.3.8 Distance to ANC/MCH Clinics

Regarding the statement that ANC/MCH clinics are conducted very far from home and that transport is expensive, 20.2% of the respondents during pre-test with CME-RH in Makindu disagreed while within the same category of respondents from Mutitu, 14.9% strongly agreed. During post-test, a similar trend was observed among respondents in this category with 16.5% in Makindu disagreeing that ANC clinics are conducted very far from their home and that transport is very expensive compared to 12.8% in Mutitu who strongly agreed. Within the category of respondents without CME-RH level, 12.0% of them at pre-test in Makindu disagreed that ANC/MCH clinics are conducted very far from home and that transport is expensive while in Mutitu, 15.7% of them strongly agreed with the statement. During post-test, 15.3% in Makindu and strongly disagreed while 16.9% in Mutitu with the statement. From the findings of the study shown in table 4.45, the distance from home to where the ANC/MCH clinics are conducted and
the transport cost was found to be statistically significant ($\chi^2 = 9.547$, $df=4$, $p<0.049$) and therefore associated with CME-RH.

**Table 4. 45: Association of Distance to MCH/ANC Clinics with CME-RH**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Pre-test Without CME-RH (%)</th>
<th>Post-test Without CME-RH (%)</th>
<th>Chi Square test</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANC/MCH clinics are conducted very far from your home and transport is expensive</td>
<td>Strongly Agree</td>
<td>Makindu 18 (7.4) Mutitu 38 (15.7)</td>
<td>Makindu 15 (6.2) Mutitu 36 (14.9)</td>
<td>$\chi^2 = 9.547$ $df=4$ $p&lt;0.049$</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>Makindu 29 (12.0) Mutitu 37 (15.3)</td>
<td>Makindu 27 (11.2) Mutitu 28 (11.6)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unsure</td>
<td>Makindu 25 (10.4) Mutitu 11 (4.5)</td>
<td>Makindu 4 (1.7) Mutitu 8 (3.3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>Makindu 20 (8.3) Mutitu 31 (12.8)</td>
<td>Makindu 13 (5.4) Mutitu 13 (5.4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Makindu 25 (10.4) Mutitu 17 (7.0)</td>
<td>Makindu 25 (10.3) Mutitu 37 (15.3)</td>
<td></td>
</tr>
</tbody>
</table>

FGDs also identified geographical constraints as impacting on uptake of health services and male participation. Lack of decentralized services is a reason for low health services uptake and limited male involvement in Makindu and Mutitu. According to a Key informant in Makindu:

“The distance that the male partners have to travel to the clinics for participating in the education and counselling, the costs of the transport to the clinics and the amount of time per appointment at the clinic are barriers to male involvement in reproductive health”.

FGD participants further argued that health facilities were few and located far from the people, making the health services such as family planning and ANC inaccessible to the people. Most of the male participants wanted the health services to be implemented and extended to their villages or close to their homes in order to save them the costs of time and travel fee. While having an FGD in Kaunguni in Makindu, one man lamented:
Imagine from here to the Nairobi – Mombasa highway in Ksh. 100 using the ‘boda boda’, and then I have to pay another Ksh. 50 to Makindu Sub-county Hospital. That means I need over Ksh. 300 for a return trip and this is the only health facility available for us. The government should open our own facility here or conduct regular outreaches. We do not have the money or the time to always go to Makindu not unless it is a serious emergency.”

4.4 Specific Objective 4: Technical Capacity of Healthcare Workers

Healthcare workers play a pivotal role in overseeing and undertaking promotion of CME-RH at facility and community levels. However this is only achievable if these practitioners have requisite technical competencies and attitudes. However, in both Makindu and Mutitu Sub-counties minimal efforts had been instituted by mid 2012 to build healthcare workers’ capacity in aspects related to CME-RH.

4.4.1 Trainings Provided to Health Care Workers

Table 4.46 illustrate the nature of trainings and support received by healthcare workers in the two Sub-counties. Results show that out of the interviewed 32 nurses serving at the MCH clinics in both sub-counties, Makindu took the largest share of those trained in various CME-RH fields
because of the intervention undertaken. At pre-test, 47.4% and majority, 53.8% of nurses in Makindu and Mutitu respectively had been trained on Focused Ante-natal Care (FANC) compared with majority 52.6% and 53.8% at post test in Makindu and Mutitu respectively. Specific training on CME-RH had only been undertaken to nurses in Makindu (82.2%) with none recorded in Mutitu. Similarly, only 38.5% at pre-test and 46.2% at post-test of respondents in Mutitu had been provided support supervision by the CHMT compared with 47.7% at pre-test and 73.7% at post-test in Makindu.

Table 4. 46: Nature of Trainings and Support Received by HCWs in Makindu and Mutitu

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Makindu (n=19) (%)</td>
<td>Mutitu (n=13) (%)</td>
</tr>
<tr>
<td>Emergency Obstetric Care (EmOC)</td>
<td>8 (42.1)</td>
<td>6 (46.2)</td>
</tr>
<tr>
<td>Focused Ante-natal Care (FANC)</td>
<td>9 (47.4)</td>
<td>7 (53.8)</td>
</tr>
<tr>
<td>Family Planning Services</td>
<td>7 (36.8)</td>
<td>6 (46.2)</td>
</tr>
<tr>
<td>Constructive Men’s Engagement (CME) in RH</td>
<td>0 (Nil)</td>
<td>0 (Nil)</td>
</tr>
<tr>
<td>Support supervision by CHMT (bi-annual)</td>
<td>9 (47.4)</td>
<td>5 (38.5)</td>
</tr>
</tbody>
</table>

4.4.2 Attitude of Healthcare Workers

The attitude of healthcare workers significantly determines the quality of service provided to clients at a facility. Results showed that majority, 57.9% and 53.8% during pre-test and 89.5% and 61.5% during post-test in Makindu and Mutitu respectively, of nurses disagree that men do not indeed require reproductive health trainings. Further, 47.4% at pre-test compared to only 5.2% at post-test in Makindu and 53.8% and 46.2% Mutitu at pre and post-test respectively of
the health workers thought that reproductive health is a women’s issue. Majority (78.9% at pre-test and 84.2 at post-test in Makindu and 69.2% at pre-test and 76.9% at post-test in Mutitu) of the respondents did not feel that ANC/MCH clinics are made for women and children. Contrary to this, most (78.9% during pre-test and 84.2% at post-test in Makindu and 76.9% at pre and post-test in Mutitu) nurses were opposed to men accompanying their spouses to these clinics. Notably, 89.5% of respondents at post-test compared to 52.6% during pre-test in Makindu indicated that family planning is not a hard subject to discuss with men, while in Mutitu, 52.6% at pre-test and 30.8% at post-test were of the similar opinion as shown in table 4.47.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Makindu (n=19)</td>
<td>Mutitu (n=13)</td>
</tr>
<tr>
<td>Men do not require RH trainings</td>
<td>YES n (%)</td>
<td>NO n (%)</td>
</tr>
<tr>
<td>RH is a women’s issue</td>
<td>8 (42.1)</td>
<td>11 (57.9)</td>
</tr>
<tr>
<td>Men should accompany their spouses to ANC/MCH</td>
<td>9 (47.4)</td>
<td>10 (52.6)</td>
</tr>
<tr>
<td>ANC/MCH clinics are meant for women and children only</td>
<td>4 (21.1)</td>
<td>15 (78.9)</td>
</tr>
<tr>
<td>Family planning is a hard subject to discuss with men</td>
<td>9 (47.4)</td>
<td>10 (52.6)</td>
</tr>
</tbody>
</table>

Both men and women in FGDs reported that harsh, critical language directed at women by health care workers was a barrier to male participation. Harsh treatment of men by health providers discouraged them from returning or participating in reproductive health activities. In Mutitu a participant shared that:
“The nurse at the dispensary is very rude and talks to us as though she’s addressing children. At times she even asks very sensitive questions on our health in front of our wives and children. This is very bad particularly for men. It is really demeaning and puts us down. She has no respect for us. We thus don’t feel like visiting the facility for those services. At times she does not even allow men access to MCH clinics where reproductive health services are offered. Perhaps she needs some training in customer service”

However, some Key Informants from the Ministry of Public Health and Sanitation (MoPHS) offered some explanations for provider harshness and lack of respectful care to patients. These included provider low salaries, lack of a functioning health infrastructure and a critical shortage of health care providers. One member of the DHMT in Makindu argued that:

“While these are certainly realities working in this area, it is clear that further training in nursing, midwifery and medical schools on the principles of family-centered care, combined with improved customer care communications are urgently needed. When there is limited physical space to accommodate male partners, providers will have difficulties incorporating male partners. This situation is worsened when health care workers are understaffed, underpaid and overworked. There is a serious staffing and financial crisis in our health care systems”.

With the realization that this was unlikely to improve overnight, Key Informants pointed out those alternative models of care, targeted at men, are imperative if men are to participate in reproductive health activities. These may include implementation of systems improvement strategies to improve patient attendance and flow through the health system; use of an appointment system and/or letter of invitation by the health provider; broadening services to the
evenings and weekends; and consideration of multiple venues not traditionally associated with health care provision such as bars, bus stops and churches. All agreed that access to health services for male partners should be prioritized. There was consensus that in order to maximize CME-RH benefits, a family centred approach was important since other members of mother’s family such as mother’s father, brothers and others male friends also may have an impact on the CME-RH. Actions should thus be taken as well to involve those significant other people.

Participants in FGDs also identified financial constraints of health facilities as impacting health services uptake and CME-RH. They reported that some health providers charged extra beyond the official MCH fees to bridge their own financial gaps. In both Sub-counties it was pointed out that frequently women have to wait for a long time before receiving health services because of burdensome administrative procedures which result in poor patient services in health facilities. Men, who frequently are in the paid workforce, are often not in a position to spend virtually the entire day participating in such a way. In addition, Key Informants noted that health services providers in the area are often overworked, stressed, and have to work in an infrastructure with severely limited resources. In such context, the quality of services is compromised and taking care of participating male partners is considered an additional burden. One Sub-county Public Health Nurse (DPHN) pointed out that:

“Most of our facilities have only one nurse. The community has to employ a few more people to support the facility otherwise it will be impossible. In most areas people are very poor and cannot afford to pay extra staff. The nurse is left to struggle with everything. Don’t forget they have no lab; KEMSA is not sending drugs and other supplies as required, no transport for emergencies and government and
community is on our case. It is actually by grace that we are able to even serve women here. As for men, what do you think we can do now with this kind of situation?”

4.5 Specific Objective 5: Development of a ToT Manual and GEM-Scale for CME-RH

In order to ensure a standardized way of promoting CME-RH in Makindu sub-county, the researcher undertook thorough literature review and drafted a Trainer of Trainers (ToT) manual for CME-RH. This draft was then subjected to review by the supervisors, peers and relevant MoH staff in the sub-county. The Sub-county Public Health Nurse (SC-PHN) who is also the focal person for reproductive health in the sub-county provided invaluable insights. The draft was later refined and used to build the capacity of Community Health Extension Workers (CHEWs) who then cascaded these skills and knowledge to Community Health Workers (CHWs). The CHWs then convened fortnightly sessions with men in their villages and engaged on their role in reproductive health.

The manual adopts a modular, practical approach and is aimed at health care providers in all primary care (level 2) facilities. Each Module has an overview at the beginning stating the estimated timing for learning activities as well as materials required. The guide is meant to be highly interactive. By promoting active involvement, the module aims to help participants begin problem-solving, strategizing and action planning for themselves and their colleagues in the area of men’s involvement in reproductive health. It also adopts an Ecological Model that provides a conceptual framework for a comprehensive approach to working with men. It emphasizes that to change individual behaviour, programs need to work with individuals, address the systems and
groups that influence individuals such as peers, families, communities and policies. Key sections include;

4.5.1 Proposed Training Techniques

The suggested process will enable facilitators to easily navigate through the materials for both preparation and implementation. Specific points to highlight or summarize various topics are not intended to serve as dogmatic scripts for facilitators but to serve as a guide on key messages to be conveyed and so that the sessions can be run with minimum reading from the Facilitator’s manual during the training. The techniques proposed include: Lectures; discussions; brainstorming; case study; role plays; question and answers session; group work and feedback.

4.5.2 Suggested Training Materials

This depends on modules presented. This includes; Flip chart paper (newsprint); Colored markers; Writing paper and pens for participants; carrying bag for participants’ resource materials; Tape or pins (for hanging flip chart pages); Copies of notes; Highlighter pens (so participants can mark important sections or points in the required resource materials) and Copies of evaluation forms.

5.5.3 Assessment of Learning and Performance

The review and evaluation during training apply the principles of adult learning. This consists of attendance and active participation, pre-tests, post-tests and question-and-answer sessions. Other methods used include observations, skills practice, and role plays. Pre- and post-test questionnaires to assess knowledge, attitude, and practice (KAP) were completed by all participants on the first and last days of the course, respectively. They were handed in
anonymously, but participants were expected to write a unique identifier on the pre- and post-test instruments in order to assess the individual improvement in knowledge and skills.

4.5.4 Assessment of Learners’ Perceptions and Feelings

The perceptions and feelings of the participants about the course were assessed using an anonymous daily evaluation sheet. ToTs are supposed to prepare the chart with the total number of days or sessions written in a horizontal line. This is then used to discuss the group’s energy level, possible success, or possible dissatisfaction.

4.5.5 Modules Contained in the CME-RH ToT Manual

The CME-RH ToT Manual has twelve (12) modules that cover both technical aspects of reproductive health and also equips the learner with skills to facilitate sessions on CME-RH. The modules also include aspects of resource mobilization, monitoring as well as evaluation. The specific modules include; introduction and concepts of reproductive health; men’s role in family planning; men’s role in safe motherhood; HIV, STI prevention and couple counselling; child health and community child care; gender issues, sexual and reproductive health rights; involving adolescent boys and youth in reproductive health; skills on behaviour change communication; leadership skills; conflict management and decision making; public relation, networking and partnership and; monitoring and evaluation. It also contains suggested questions for pre test and post test assessment and training Schedule for the ToTs. A full version of the ToT Manual for CME-RH is attached to this thesis as appendix IX.
4.5.6 Gender-Equitable Men (GEM) Scale for CME-RH

The researcher followed a similar process as explained in section 4.5 above to develop a Gender-Equitable Men (GEM) Scale to measure CME-RH. The scale constitutes 24 key CME-RH elements across three domains that include men as clients, partners and agents of social change. High scores represent high support for CME-RH with Agree being scored as 3, Partially Agree as 2, and Do Not Agree as 1. Score summation for each respondent is then computed based on the above scores to give the GEM Scale score. The possible minimum is 24 with a maximum of 72 points. In this particular study, a score of 36 points on the GEM Scale was applied as a cut-off level denoting presence of appropriate level of CME-RH in the study population. Thirty six (36) lies at the median of the total possible scores (72), in the GEM Scale tool. Besides indicating the level of CME-RH in Makindu and Mutitu Sub-counties, further analyses was executed to test associations between the GEM Scale scores and key RH variables. The comprehensive GEM Scale is attached as appendix VIII.

4.6 Independent Predictors of CME-RH

Binary logistic regression was subsequently employed to measure the relationship between the categorical dependent variable (CME-RH) and the independent variables, which were found to be statistically significant and therefore associated with CME-RH. This was achieved by using probability scores as the predicted values of the dependent variable which was indicated by the odds ratio (OR) as shown in the table 4.48. On individual characteristics, the analysis gave education level OR = 2.095 (0.902-4.839) p=0.004 and age of respondent OR = 1.716 (1.328-2.438) p<0.010 as the independent demographic predictors of CME-RH. Further, regarding knowledge and awareness of RH, knowledge on the number of times a pregnant woman should attend ante-natal clinic OR = 1.738 (1.239-2.925) p=0.008 and knowledge of conventional
family planning methods OR= 0.733 (0.579 - 0.968) p=0.043 were also identified as independent predictors of CME-RH. In relation to socio-cultural norms and perceptions, spousal approval for use of family planning OR= 1.316 (0.06 - 2.296) p=0.002 as well as approval for access to FP services by young unmarried couples OR= 2.881 (1.783 - 5.271) p<0.001 were also found to be predictors of CME-RH. With respect to programmatic factors, independent predictors of CME-RH were identified as having male only RH meetings/trainings OR= 1.094 (0.766 - 1.703) p=0.015, lack of confidentiality among ANC/MCH staff OR=1.297 (0.793 - 2.237) p=0.016 and the perception that RH programs have done little to involve men OR=1.963 (1.289 - 2.19) p=0.003. This was fully collaborated during Key Informant Interviews and Focused Group Discussion sessions.

Table 4. 48: Independent Predictors of CME-RH

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>P Value</th>
<th>OR</th>
<th>95% C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower Limit</td>
</tr>
<tr>
<td>Age (ref=within 30 to 39 years)</td>
<td>0.010</td>
<td>1.716</td>
<td>1.328</td>
</tr>
<tr>
<td>Knowledge of ANC attendance (ref=high knowledge)</td>
<td>0.008</td>
<td>1.738</td>
<td>1.239</td>
</tr>
<tr>
<td>Knowledge of FP methods (ref=high knowledge)</td>
<td>0.043</td>
<td>0.733</td>
<td>0.579</td>
</tr>
<tr>
<td>Spouse approval for FP use (ref=high approval)</td>
<td>0.002</td>
<td>1.316</td>
<td>0.06</td>
</tr>
<tr>
<td>Approval for FP access to young unmarried couple</td>
<td>0.001</td>
<td>2.881</td>
<td>1.783</td>
</tr>
<tr>
<td>Program Factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men only RH meetings/trainings (ref=high approval)</td>
<td>0.015</td>
<td>1.094</td>
<td>0.766</td>
</tr>
<tr>
<td>Lack of confidentiality by ANC/MCH staff (ref=high approval)</td>
<td>0.016</td>
<td>1.297</td>
<td>0.793</td>
</tr>
<tr>
<td>Men not involved in RH programs (ref=high approval)</td>
<td>0.003</td>
<td>1.963</td>
<td>1.289</td>
</tr>
</tbody>
</table>
CHAPTER FIVE: DISCUSSION OF THE FINDINGS

5.0 Level of CME-RH in Makindu and Mutitu Sub-Counties

This study sought to identify various determinants of CME-RH among men in Makindu and Mutitu Sub-counties in Eastern Province of Kenya. It intended to assess whether and how individual characteristics including socio-demographics, program related factors and service provider determinants such as skill, competencies and attitude influence CME-RH in the two Sub-counties. As noted in a male involvement study in Northern Thailand, reproductive behavior and decision-making are embedded in social relations and institutions that operate from the micro to the macro level; kinship groups, gender relations and culturally-defined gender roles, economic and labor relations, traditional health systems, local political structures, religious affiliations, and informal peer networks (Natirutthakorn, 2004).

The study findings revealed that there were low levels of Constructive Men’s Engagement in Reproductive Health in Makindu and Mutitu Sub-counties at pre-intervention. The study found that Makindu and Mutitu had 43.4% and 44.6% of men who had CME-RH respectively at baseline. However Makindu recorded 60.3% of men who were CME-RH compliant while Mutitu
had only 47.1% of men who were in this category at post-test. Generally, respondents who had higher levels of CME-RH were more engaged in RH compared to those who had low levels of CME-RH across all the groups. There was significant improvement in the levels of male engagement in RH following the interventions in Makindu Sub-county as compared to Mutitu which had a slight improvement over that period of time.

It has been demonstrated that efforts to increase men’s involvement in reproductive health can be enhanced via widespread information about reproductive health through various mass media. Improving the couples’ knowledge about topics related to reproductive health by using IEC programs and by maximizing the role of the community health workers and health care providers is important for building deeper understanding of the subject in the society (World Health Organization, 2013). Program planners should take into account research and field experience that shows where men congregate, their perceived needs, and the most appealing channels for them to get information on reproductive health. These include men organizations, peer education and counselling, men friendly clinics, mass media, socio marketing and work place (Giedion et al., 2013 and Wananani et al., 2013).

Available discourse in health care posits that access and quality are inter-related. If demand represents the social context in which health, sexuality, and reproduction are experienced and acted upon, access is the social interface between services and the community (Mainthia et al., 2013). Assessing access requires determining the extent to which services may be obtained at a level of effort, and of monetary, opportunity and social cost, that are acceptable to and within the means of poor, marginalized and vulnerable people. A range of factors determines access: availability, affordability, acceptability, convenience, and knowledge (Ministry of Health, 2013).
Quality is the social experience of services and relates to the extent to whether a program is responding to the perceived needs and demands of clients and potential clients. Assumptions of clients and potential clients about quality often differ from those of providers, managers, and policy-makers. A critical but often neglected aspect of quality is client-provider interactions, an understanding of which is essential for improving the quality of care particularly in reproductive health (Sprague et al., 2011).

Studies have also made a strong case for enhancing existing sources of social capital as a critical means for increased CME-RH. Social capital refers to social institutions, social networks, and social relationships that shape the quality of a society's social interactions. Indeed, social capital is not just the sum of institutions which underpin a society, but the glue that holds them together (Zevenbergen, 2009 and Ntaganira et al., 2008). Capacity-building of the existing informal and formal community-based support networks and organizations is thus essential for enhancing social capital and for bringing about sustained behavior change. Capacity-building of community structures includes support to self-help groups/community-based care/support networks, support to microcredit schemes to reduce economic vulnerability and insecurity, strengthening rights and health networks of women and informal and formal networks of men to address issues of gender equity and reproductive health, and strengthening existing mechanisms for community participation, including village-development committees, women's groups, community health leadership, and the capacity of community-based groups to undertake advocacy work. This is in recognition that CME-RH exists within this context and will be better and sustainably improved if promoted in an integrated manner.

5.1 Influence of Individual Characteristics on CME-RH
The study assessed various individual characteristics of respondents including demographics such as age, income levels, occupation and marital status. Respondent’s knowledge, awareness, believes and practices related to reproductive health were also assessed. The demographic characteristics that influence CME-RH in Makindu and Mutitu Sub-counties are age, religious affiliation, marital status, the duration of time spouses have been living together, level of education, whether spouses live apart due to location of the work places, and involvement of spouses in making decisions concerning financial expenditure.

5.1.1 Age and Marital Status

In its 2008 report, UNFPA argues that reproductive health is not only culturally-specific, but also gender-specific. Therefore, decisions relating to sexuality, fertility, reproduction, and health may be determined by a range of gender-specific factors, such as relations of power and control within marriage, households, and kin groups; the economic and symbolic value of fertility; women's position regarding paid work and access to childcare resources (UNFPA, 2008).

Regression analysis results in this study indicated that CME-RH is strongly affected by marital status followed by the time the married couple have been living together, level of education, spouses not living together due to work, age, joint decision on financial expenditure and religion. Findings indicated that men in their middle ages are more involved in reproductive health than younger and older men. The high number of men in the middle aged with CME-RH is attributed to child bearing. Most of couples with CME-RH aged from 30 to 39 have the desired number of children and have adopted family planning methods to avoid getting more children. The younger couples who have not lived together for long have low CME-RH because they want children and are gaining knowledge in reproductive health. The older couples aged above 50
years have low CME-RH perhaps because they are no longer involved in child bearing and are nearing their retirement from work.

These findings are in congruent with similar studies that have reported that middle age is associated with male involvement. In a review of male involvement in maternal and child health in Sub-Saharan Africa, it was found that male involvement was 1.2 times higher among men whose female partners were 25 years or older. Monogamous partners and co-habiting men were twice and 1.6 times respectively more likely to be involved (Ditekemena et al., 2012).

Notably, younger men generally report having their first sexual experience earlier than their female counterparts. Surveys have found that young men initiate sexual activities on average one to two years earlier than young women (Mainthia et al., 2013). Young men typically know little about their own or their partners’ sexuality, communicate about sex very little in their relationships, and tend to believe numerous sexual myths. An African regional conference reported that most teenage men are not well informed about sexuality, safe sex, condoms and other contraceptives, and that young men are far less likely than young women to be targeted by health communications and services (Jessica et al., 2012).

In Botswana researchers noted young men’s attitudes towards sex, females, and relationships in general often cause negative health and social consequences. Because many cultures associate multiple sexual partners with manhood, young men may feel pressured to engage in sexual behaviours that put them, and their partners, at risk. Cultural norms, peer pressure, and lack of self-confidence may discourage young men from obtaining reproductive health information and counselling. For instance, many young men attempt self-treatment of STIs and consult non-medical sources, such as pharmacy staff and friends, for advice (Wananani et al., 2013).
The marital status of the respondents influences CME-RH. Married men in Makindu and Mutitu Sub-counties have higher levels of CME-RH than single, divorced or widowed men. Married men are more concerned with reproductive health issues because they have or plan to have children. Moreover, married men are actively involved in tackling reproductive health problems presented by their spouses. On the other hand, single, divorced or widowed men recorded low CME-RH perhaps because they are not in regular contact with reproductive health issues affecting women. Unlike married men, those who are not married are not greatly obliged to solve reproductive health challenges affecting their partners thus their low CME-RH. The level of CME-RH is also dependent on the time that spouses have lived together. The spouses in Makindu and Mutitu Sub-counties who have lived together for more than 10 years recorded higher CME-RH.

This study concurs with similar finding in rural Northern Nigeria which indicated that as spouses stay longer in their marriage, men become more involved in the reproductive health issues affecting their spouses. The longer the couple stays together the higher the number of children they possibly have and the more they become knowledgeable on reproductive health. Even the couple who have stayed longer and do not have children are more informed on reproductive health as they seek medical guidance and intervention (Doctor et al., 2013).

5.1.2 Religious Affiliation

Religious affiliation did not emerge as key factor that influences CME-RH. Although the proportion of men in Makindu and Mutitu Sub-counties with CME-RH was higher among Protestants followed by Roman Catholic and Muslim faithful, the differences were not significant. However other studies focusing on specific elements of reproductive health note that religious views and beliefs concerning women and reproductive health issues affect those aspects
of CME-RH. For instance, the Roman Catholic discourages use of contraception like condoms and birth control pills. Islamic teachings on the other hand encourage minimal interaction between men and women. Religion can thus sometimes act as a barrier to support reproductive health, as in Uganda where the Anglican Church followers express a greater acceptance of family planning than Catholics and believers of Islam do (Byamugisha et al., 2010). Divergent religious views on gender and reproductive health therefore influence only specific elements of CME-RH and not the comprehensive spectrum of reproductive health which this study focussed on.

5.1.3 Level of Education

A UN report by the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda notes that education is one of the most important means of empowering people with the knowledge, skills and self-confidence necessary to participate fully in the development process including reproductive health (United Nations, 2013). In this study, the level of education significantly influences CME-RH. CME-RH in Makindu and Mutitu Sub-counties increases with the increase in level of education. Majority of men who recorded low CME-RH have been educated up to primary school. The level of CME-RH increases among men who have attained secondary school education or tertiary education. Majority of residents in Makindu and Mutitu Sub-counties cannot afford tertiary education and secondary education. Low levels of education in the region have contributed to low levels of knowledge in reproductive health consequently affecting CME-RH.

These findings mirror a study in Uganda that found that men who had completed 8 or more years of education were twice more often involved in reproductive health compared with those with
less than 8 years of education (Byamugisha et al., 2010). Similarly, a research in Ghana revealed that the level of men’s education influences spousal fertility preferences. A husband’s level of educational attainment especially beyond primary level influences his wife to limit childbearing. Men’s preferences for smaller families can lead women to desire fewer children. This means less responsibility and more spare time for women to be involved in social activities. A smaller family will allow women to raise their status through attaining higher education or by joining the labour force (Ditekemena et al., 2012).

On the other hand, women’s education alone is unlikely to change spousal fertility preferences. However, women with a higher level of education tend to receive pre-natal and post-natal care in a hospital or private doctors’ practice, and be attended by trained midwives in home delivery processes. In this decision to receive pre- and post-natal care, however, the women’s education level plays a more important role than her husband’s education level does (Sen Gen, 2010).

5.1.4 Monthly Income Levels and Occupation

Income was not an important factor in CME-RH in RH in Makindu and Mutitu Sub-counties. However, majority of the residents of the two Sub-counties are poor and earn a monthly income of less than 3,000 Kenyan Shillings (37.5 US dollars per month). The high level of poverty in the region has potential to hinder access to health care in the two Sub-counties as most of the families cannot afford expensive medical services. However, this only applies to facility based services and not the broad realm of CME-RH that includes support at family and community level. The study however noted that even though the government has availed cheaper reproductive health services, the health centres are few and residents travel longer distances to the health facilities while most of the families cannot afford fare to and from the health facilities. Fewer men accompany their spouses to the health centres and hence the low CME-RH in the
The study also established that men were predominantly making decisions on how all earned cash is spent in the family. Women are not equally involved in planning for financial expenditure in majority of the families in Makindu and Mutitu Sub-counties. Therefore, women cannot present reproductive health concerns in the family budget leading to low CME-RH. This could a gender relations issue and not necessarily whether the money available at family level can be allocated to meeting reproductive health needs. Studies conducted elsewhere in Sub-Saharan Africa however indicate that male partners with higher income were more likely to participate in reproductive health, though mainly in terms of providing the cash required and not necessarily accompanying the spouse to clinic and required moral support (Ditekemena et al., 2012).

With regard to occupation this study agrees to findings in Uganda where taxi drivers and “Bodaboda” riders (motorbike taxi riders) were found to be less likely to participate than men with other professions such as farmers or construction workers (Byamugisha et al., 2010). Other authors have also corroborated these findings. For instance in Kenya, researchers found that men having only an occasional job were less likely to participate in MCH services (Reece et al., 2010). Another similar study in Rwanda demonstrated that men with a well-paid job were more likely to participate in MCH interventions compared to those not well paid (Delvaux et al., 2009).

5.1.5 Knowledge and Awareness of Reproductive Health

The study investigated how knowledge and awareness of reproductive health affects CME-RH. The parameters that were investigated included knowledge on the number of children a respondent would wish to have, knowledge on family planning methods and knowledge on HIV
status. The study established that most pregnancies in Makindu and Mutitu Sub-counties are not planned for. Majority of the spouse do not discuss the number of children that they want to have and when to have the children. The low levels of involvement of the spouses in making decisions on whether to have children contributes to the low CME-RH in the region.

Knowledge of family planning methods emerged as a major factor that influences CME-RH in Makindu and Mutitu Sub-counties. Majority of the respondents are aware of family planning methods such as male condoms, oral pills, injection and IUD. However, 56.4% of the respondents have not used a family planning method to stop their wives from becoming pregnant. The respondents who were not using any method to avoid or delay pregnancy cited the need to have children, side effects and health concerns as the main reasons for their lack of use of birth control methods. Couples who were using family planning method at the time of the study recorded higher levels of CME-RH compared with those who were not using.

Studies have demonstrated that men who are well informed about reproductive health are aware of their spouse’s wellbeing related to health. Men’s knowledge of reproductive health is important because they play a role as the chief decision makers in the family. For instance in family planning, the knowledge of particular importance to men includes receiving proper information about modern contraceptives that are available to be chosen in a family planning program including pills, IUD, injectable, implants, condom, vasectomy and tubectomy for both husband and wife. Knowledgeable men are concerned about their wives’ health and during crucial periods like pregnancy especially, they accompany their wives to antenatal care clinics (Msuya et al., 2008). The widely used method of family planning used by respondents practicing birth control is male condom and most families practicing birth control undertake joint decisions.
The main reasons why respondents who practice birth control chose the adopted method were ease of access, recommendation by others, affordability, confidentiality and advise from counsellors.

Key Informant Interviews and Focused Group Discussions revealed that communication was a key challenge in creating awareness on reproductive health. Studies have clearly shown that the most effective communication approaches are those in which behavior change is reinforced from within peer groups and in which information is received and exchanged based on relationships of trust (Ditekemena et al., 2012). Enabling environments need to be created to support and motivate peer educators and community agents including through training, supervision, and incentives. Creating awareness on reproductive health through a peer program would greatly address this gap and would train men to reach their peers with information and referral for services (Omar and Krishna, 2010). As peer influences are an important determinant of sexual beliefs and practices, peer educators can often provide support that counters negative peer pressure. For instance, peer education can provide men with opportunities to examine the myths that have shaped their own attitudes about themselves and about women. Men generally respond well to peer educators and welcome the opportunity to talk about their feelings and their roles as men; they find them credible, approachable and helpful (Reece et al., 2010).

In its 2013 - 2017 Health Strategic and Investment Plan, the Government of Kenya recognizes that reproductive health programming requires an awareness of local systems of knowledge and health practice. Cultural context is thus central to the response to health and illness, with knowledge relating to health and ill-health shaped by culturally-specific practices which vary between different social groups or networks. Consequently, the meanings attributed to health-
related behaviour by health professionals are often very different to those of lay-people. The social experience of health and illness contributes to the construction of local knowledge that informs health-seeking behaviour (MoH, 2013).

5.1.6 Socio-Cultural Norms and Perceptions

Various studies have shown that far from being an individual decision-making process, reproductive behavior is shaped by social relations and institutions at the local level, such as kinship groups, informal social networks, local political institutions, and religious and spiritual advisors and healers, which are influenced by and are the product of the wider social, political, economic and historical processes (Falnes et al., 2011). However, inattention to context is evident in many reproductive health interventions and policies. Notably, reproductive rights discourse focuses on the rights of the individual, often to the exclusion of the wider social and economic conditions within which rights are defined and realized. Such a perspective underplays the extent to which the poor and vulnerable are unable to realize their rights to the economic and social resources vital for the protection of their health and well-being (Aluisio et al., 2011).

This study established that socio-cultural norms and perception plays a major role in CME-RH in Makindu and Mutitu Sub-counties. Men with CME-RH in the region have different perceptions from those without CME-RH regarding socio-cultural norms. Unlike men without CME-RH, men with CME-RH approve of married couples using FP to avoid/delay pregnancy and think that their spouse and most of their friends would approve of couples using family planning to avoid or delay a pregnancy. Men with CME-RH feel comfortable discussing family planning with their partners unlike those without. Men with CME-RH agreed that a couple should decide together if they want to have children and type of contraceptive to use. Men without CME-RH neither
approve of recently married couples’ use of family planning methods nor a young unmarried woman having access to family planning. Similarly, men without CME-RH believed that a man who lets his wife use FP will lose control over her, and a woman who uses contraception will be unfaithful to her husband. Men without CME-RH generally perceived family planning and taking care of the children as a woman’s responsibility.

These findings are collaborated by various studies which show that culture influences men’s attitudes towards reproductive health. The cultural and religious background of an individual can have a significant effect on men’s attitudes toward family planning and reproductive health. Culture persuades the members of a society to act according to a tradition that has been in existence for generations. There are some cultural beliefs that the norm of family life is related to children: children will raise the family status, are an asset to the labour force and social security, and a preference for a son is as a result of the potential for the longevity of the clan (Zevenbergen, 2009).

In a study to understand barriers to men’s participation in antenatal and prevention of mother-to-child HIV transmission care in Cameroon the research team identified various cultural barriers to male involvement, with negative perceptions towards men attending MCH services being conspicuously highlighted. In their report, men who accompanied their wives to reproductive health clinics were perceived as being dominated by their wives (Nkuoh et al., 2010). Frequently men perceive that these services are designed and reserved for women, thus are embarrassed to find themselves in such “female” places. Certain women too, do not like to be seen with their male partner attending the services (Byamugisha et al., 2011). A related study conducted in Kenya showed that certain male clients trust traditional healers but not hospitals and therefore do
not attend reproductive health clinics (Reece et al., 2010). Authors on partner violence seem to concur that culture should be seen as a dynamic response to specific local circumstances: continuously created and recreated in the course of social interaction. This conceptualization of culture provides a lens through which to understand reproductive health decision-making (Ntaganira et al., 2008).

5.2 Programmatic Determinants of CME-RH

Constructive Men’s Engagement in Reproductive Health in Makindu and Mutitu Sub-counties is influenced by programmatic determinants such as training of both male and female together, presence of men at ANC/MCH clinics and involvement of men in reproductive health programs. Men with CME-RH and those without CME-RH expressed diverse views on the programmatic factors. Majority of men without CME-RH prefer having male only reproductive health trainings and meetings. Men without CME-RH are not comfortable when they share reproductive health forum with women and prefer having male-only meetings. The uneasiness manifested when women and men are mixed denotes lack of openness in couples regarding reproductive health. The lack of open discussion on reproductive health matters leads to low CME-RH in Makindu and Mutitu Sub-counties. On the contrary, men with CME-RH are more open to discuss reproductive health matters and are willing to be trained together with women.

The presence of men at the ANC/MCH clinics is also a major factor in CME-RH. Majority (60%) of men without CME-RH felt that health workers do not like to see men at the ANC/MCH clinics as compared to 40% of those with CME-RH. The findings indicate that there is low level of collaboration between men and women towards reproductive healthcare in Makindu and Mutitu Sub-counties. Men without CME-RH feel that ANC/MCH clinics are made for women
and children only. The lack of access to ANC/MCH clinics by men hinders the dissemination of appropriate information on reproductive health. The impact of little knowledge on reproductive health is manifested in minimal involvement of men in reproductive health matters. Reproductive health programs in Makindu and Mutitu Sub-counties have not fully involved men. Men who participated in the study felt that RH programs have done very minimal to increase the number of male participants. The shortage of male participants in RH programs has hindered commitment of men towards reproductive health. The unequal gender representation emerged as a key factor accounting for low CME-RH in the Makindu and Mutitu Sub-counties. These findings compare well with other studies elsewhere.

In a study on factors influencing men’s involvement in reproductive health in Tanzania, researchers found that the source and the order of information flow on new programmes like reproductive health were important for the involvement of men (Falnes et al., 2011). Men consider themselves traditionally as bringers of health information to the family. If information on reproductive health interventions is first given to women, this information is less trusted by men. Men prefer to receive the information directly from health workers and in gender-specific groups, because cultural norms do not encourage mixing of men and women when discussing reproductive health issues (Mohlala et al., 2011).

Similar findings are reported by Horizon Programme in a study conducted in Zambia and Kenya on feasibility and acceptability of reproductive health. The study found that attempts to involve male partners are most successful when information is provided directly to men and most preferably outside the antenatal clinic setting, which is perceived by men as exclusive women. This lack of friendliness of MCH clinics to men was again identified as a barrier by Horizon
Programme in another multi-sites study which found that in Zimbabwe, female clients at the ANC clinic considered men as intruders, and that clinics were usually closed at the times when working men could easily access them. The findings also report the perceptions among many that male involvement is for the benefit of women and not men (Horizon Programme, 2003).

In Cameroon, studies revealed that men did not like to attend the local ANC clinics and would prefer to be served at a distance from home for fear of lack of confidentiality at their local clinic, and of stigma and discrimination (Nkuoh et al., 2010). A similar study in Botswana reported that community members (including men) had opinions, beliefs, and values that directly affected their decisions about participating in reproductive health programmes. They also noted that men were less informed than women and this disparity in knowledge could be attributed to the place and manner in which information is usually shared, mostly by female health workers at antenatal clinics, where men are unlikely to be found (Wananani et al., 2013).

A study on awareness, use and unmet need for Family Planning in Rural Northern Nigeria found that there are several obstacles for men in receiving reproductive health services for them and their wives. Notably men notice that maternal and child health clinics especially provide services for women and children (Doctor et al., 2013). The lack of appropriate health care services for men is primarily because reproductive health programs neglect men’s needs for comprehensive information and services. Further, reproductive health programs appear not to make sufficient efforts in attracting men to fully participate in the program. There are only a few clinics that serve only men clients with counselling and contraceptive use. In addition, clinics perhaps need to open at special times to deal with men’s working hours so they can go to MNCH clinics after work (Mainthia et al., 2013).
The significance of the male-friendly reproductive health services in Makindu and Mutitu Sub-counties can be seen through an improvement of male involvement and by breaking the male domination in the household. An example of the couple approach in reproductive health services is the concept of maternal health services. The task of male participation in this area is to fulfil their wives’ reproductive health needs during pregnancy which includes sexual and emotional changes during pregnancy, details of pregnancy stages, including complications of pregnancy, child delivery, advantages and techniques of breast feeding, infant development, preventive health care, and treatment of infant morbidity (Mainthia et al., 2013 and Ditekemena et al., 2012).

Acceptance of reproductive health services by men extends through the process of diffusion and adoption. For instance, the number of contraceptive users will increase when information about contraceptive methods is widespread in the society (Sprague et al., 2011). Then, the numbers of men who adopt contraception will rise soon after they become aware of the information through publicity, peer discussion, and provider’s suggestions. The effort to build greater acceptance for the society can be made by maximizing the function of Information, Education, and Communication (IEC) program (Ministry of Health, 2013). Peer group discussions could involve men who already have CME-RH, family field workers, local stakeholders, traditional and religious leaders. These groups are meant to inform, educate, and communicate with men who still do not understand, and have a low CME-RH score.

As envisioned in the Government of Kenya Health Policy 2012-2030, reproductive health programs should emphasize men’s health needs in a larger way in programs that cut across
sectoral boundaries (Ministry of Health, 2012). In addition, future training programmes for CHWs need to be enriched with the communication skill for facing the men who still apply traditional value towards reproductive health. In this context, CHWs should provide IEC not only to women, but also to men, with the extended visiting hours to suit men’s working hours. Health care facilities should be open conveniently to encourage men to visit and get information and services related to reproductive health.

5.2.1 Focus on Men in Service Delivery

Reproductive health programs have for years focused their attention on targeting women to use maternal and child health services. In order to reach the goals envisaged by reproductive health interventions, the main challenge faced by policy makers in developing countries is to make society recognize the advantages of the program and allow its proper implementation. Even today, females continue to be the focus of reproductive health programs which seem to ignore the role that males should play (Sen Gen, 2010).

The disadvantage of the female orientation of these programs is that it precludes a proper coverage of reproductive health which encompasses some issues such as sexuality, STDs, HIV/AIDS, and infertility that call for men and women as partners. Without the active participation of husbands in these activities, the goals for improving reproductive health among women become difficult to achieve (Mainthia et al., 2013). Furthermore, the female focus of the reproductive health programs fails to recognize the dominant role of males in the household in making decisions about the family health. A study in Thailand found that women were dependent on their husband’s decisions in family planning and reproductive health. Indeed, sometimes husbands do not allow their wives to use contraceptives. Divorce and abandonment
are the punishment for those wives who secretly use contraceptives without their husband’s permission (Natirutthakorn, 2004). A similar situation exists in most African communities. A husband’s approval is important because the decisions about matters that deal with family life are mostly made by the husband (Ditekemena et al., 2012).

The benefit of involving men in reproductive health activities could also improve women’s participation in family planning. Studies in Brazil, Indonesia, and elsewhere have found that there is a growing number of female clients who have received their right for using contraception since their husbands have received family planning information, and attended couples’ counselling about sexuality (Giedion, et al., 2013). Further, a study in Nigeria shows that there is significant improvement in men’s contraceptive prevalence, especially among educated, young, urban residents, for both men and women, who receive family planning counselling. However, men in general do not feel comfortable seeking services from family planning clinics, and actually often feel embarrassed (Doctor et al., 2013). Notably, reproductive health clinics have tried, with mixed success, to attract men by adding a separate entrance and waiting area for males, creating special hours, hiring more male clinic staff and outreach workers, offering free condom supplies, and training staff to treat male clients more respectfully and sensitively (Reece et al., 2010).

Ideally, programs for men should educate about reproductive health while fostering the well-being of participants and being empathetic to male values, motivation and feelings. The programs should include decision making and life planning skills that combine sexual health with a broad range of general health services (Ministry of Health, 2013). Some authors opine that perhaps opportunities for social and economic advancement should be coupled with
knowledge or skills in reproductive health. Programs should also uphold the need for equity and respect in male/female relationships as long as they refrain from blaming men while exploring the impact of male privilege (Ntaganira et al., 2008 and Zevenbergen, 2009). Most importantly, reproductive health program content should be based on the needs for male identity (Nkuoh et al., 2010). This will ensure broad acceptance, ease of scale up and sustainability of the program.

5.3 Technical Capacity of Healthcare Workers
Health service providers’ technical capacity is a major determinant of Constructive Men’s Engagement in Reproductive Health in Makindu and Mutitu Sub-counties. The impact of technical capacity of health service providers on CME-RH was determined in respect to health service providers’ training in reproductive health, involvement of Sub-county Health Management Team (SCHMT) in reproductive health care and health service providers’ attitude towards reproductive health. A small percentage (5.2%) of health service providers in Mutitu and Makindu Sub-counties has undertaken training in Constructive Men’s Engagement (CME) in Reproductive Health. The presence of fewer health personnel with specific training in CME-RH contributes to low rates of CME-RH in the region. Male involvement in reproductive health calls for concerted efforts at household, community and healthcare system levels. Therefore, when there is a shortage of health service providers with requisite capacity in CME-RH, the impact of RH programs is negatively affected leading to low CME-RH. In order to raise the levels of CME-RH in Mutitu and Makindu Sub-counties, there is a need for more trained personnel in CME-RH and disciplines in reproductive health such Emergency Obstetric Care (EmOC), Focused Antenatal Care (FANC), Family Planning Services, Post Abortion Care, Comprehensive Abortion Care, Adolescent Sexual and Reproductive Health (ASRH).
The health care facilities in Mutitu and Makindu Sub-counties are annually visited by Sub-county Health Management Teams. Despite the supervision by SCHMT, study findings revealed that there is low CME-RH in the region. These visits have not improved the levels of CME-RH because emphasis has not been put on the role of men in attaining reproductive health goals. The teams do not carry out strict follow-up on the initiatives intended to encourage male participation in reproductive health programs hence the low CME-RH registered. The study further observed that in spite of availability of most contraceptive methods is most health facilities, utilization was still very low.

Studies have demonstrated that encouraging men to be involved in reproductive health needs an active approach from health service providers (Doctor et al., 2013). There is urgency for policy makers to design programs that improve men’s knowledge and acceptance of the reproductive health. The providers must have the ability to provide counselling to men. The counsellors must have the ability to support men to talk about their sexuality and absorb the knowledge about gender inequality (Nkuoh et al., 2010). Consequently, providers must advance an effective IEC program when they have direct contact with their clients. Motivation from the men who already use reproductive health services during focus group discussions is another way to support and encourage men to talk about sex and reproductive health. The barrier to this approach could come from the large number of female community health workers. The barriers could also happen because of men’s working hours. As a result, health care providers must serve male clients on the weekend when they do not go for work. This means health care providers have extra working hours (MoH, 2013).
Health service providers’ attitude influences the success of productive health programs. Health service providers in Mutitu and Makindu Sub-counties are of the opinion that men should be trained in reproductive health in order to improve the levels of CME-RH in the region. Health service providers’ do not show discrimination in provision of services at MCH/ANC clinics on any basis. All women are accorded necessary attention despite their status and are taught how to live hygienic lives as part of reproductive health. The health care providers stated that RH should not be viewed as women’s issue and instead both genders should be involved.

According to health care providers family planning should not be a hard subject for women and men to discuss together and men should accompany their spouses to ANC/MCH clinics. The study findings show that service providers have the right attitude towards reproductive health but the levels of CME-RH remain low due to lack of effort from the healthcare system to effectively implement mechanisms that change the attitude of men towards reproductive health. These finding are in congruent with a similar study in Rwanda that noted that health care providers’ attitudes and knowledge about men’s reproductive health needs significantly impact their clients. For instance some providers tend to recommend the same contraceptives to their clients because of their previous satisfaction with the contraceptive. Notably, lack of training for vasectomy procedures makes it unavailable for male clients who want to use that method. For these reasons, men finally end up showing low contraceptive prevalence (Ntaganira et al., 2008).
6.0 General Overview

Men’s intimate involvement in sex and reproduction cannot be disputed. Yet for much of its history, researchers focused almost exclusively on the fertility behaviour of women, paying little attention to men’s roles in reproductive health. There has been a formal recognition that more equitable relations between men and women and reproductive rights are important ends in themselves as well as the central means of improving health outcomes. Men constitute an important asset in efforts to improve women’s health. Efforts to involve them in ways that transform gender relations and promote gender equity contribute to a broader development and rights agenda. In this regard, this study makes various conclusions and recommendations on individual characteristics, programmatic aspects and health care worker capacity elements that influence Constructive Men’s Engagement in reproductive health.

6.1 Conclusions of the Study

Based on the stated specific objectives, this study makes conclusions as below elucidated:

6.1.1 Level of CME-RH in Makindu and Mutitu Sub-Counties

1. Makindu and Mutitu Sub-counties are at different levels of Constructive Men’s Engagement in Reproductive Health. This study found that Makindu and Mutitu had 43.4% and 44.6% of men who had CME-RH respectively at pre-test. However, Makindu recorded 60.3% of men who were CME-RH compliant while Mutitu had only 47.1% of men who were in the same category at post-test. The differences in CME-RH were attributed to various key individual, programmatic and healthcare providers’ technical capacity related factors as espoused in sub-section 6.2, 6.3 and 6.4 below.
2. Consequently, the null hypothesis stating that there are no significant differences in the levels of CME-RH in Makindu and Mutitu Sub-Counties is hereby rejected.

6.1.2 Individual Characteristics Influencing CME-RH

1. The key demographics that influence CME-RH in Makindu and Mutitu Sub-counties are education level OR= 2.095 (0.902- 4.839) p=0.004 and age of respondent OR= 1.716 (1.328 -2.438) p<0.010. This study reveals that men with post primary level of education tends to engage in a more constructive way in regard to reproductive health compared with men who don’t have conventional education or those who have attained up to primary level of education. Similarly, men within the age bracket of 30 to 39 years are more likely to engage in reproductive health issues compared with their counterparts who are younger or older.

2. Knowledge and awareness by men of reproductive health matters significantly influences their CME-RH. The key aspects of reproductive health that significantly influenced CME-RH were knowledge on the number of times a pregnant woman should attend antenatal clinic OR =1.738 (1.239 - 2.925) p=0.008 and knowledge of conventional family planning methods OR= 0.733 (0.579 - 0.968) p=0.043. The study found that men who were aware that women should attend ANC and those who knew more than three (3) methods of family planning had required level of CME-RH.

3. Some socio-cultural norms and perceptions were also identified as predictors of CME-RH. Spousal approval for use of family planning OR= 1.316 (0.06 - 2.296) p=0.002 as well as approval for access to FP services by young unmarried couples OR= 2.881 (1.783 - 5.271) p<0.001 significantly influenced CME-RH. Men who could easily approve FP
use by either their spouses of young unmarried couples were found to record high levels of CME-RH.

4. On this basis, the null hypothesis postulating there are no individual characteristics influencing CME-RH in Makindu and Mutitu Sub-Counties is thus hereby rejected.

6.1.3 Programmatic Determinants

1. In regard to programmatic factors, preference for male only RH meetings/trainings OR=1.094 (0.766 - 1.703) p=0.015, lack of confidentiality among ANC/MCH staff OR=1.297 (0.793 - 2.237) p=0.016 and the perception that RH programs have done little to involve men OR=1.963 (1.289 - 2.19) p=0.003 were found to significantly influence CME-RH. Results showed that men would be more comfortable attending reproductive health meetings and training alone without being mixed up with women. This would allow them to discuss their health issues without undue hindrance. This study revealed that perceived lack of confidentiality of staff at the ANC/MCH clinics discouraged men from seeking reproductive health services and thus significantly influenced CME-RH. Similarly, lack of involvement of men in reproductive health programs significantly influenced CME-RH. Study showed that men’s minimal involvement in reproductive health initiatives in the two Sub-Counties contributed to low CME-RH levels.

2. The null hypothesis thus indicating that CME-RH is not influenced by various programmatic factors in Makindu and Mutitu Sub-Counties is hereby rejected.
6.1.4 Technical Capacity of Healthcare Workers

1. The capacity of healthcare providers including their skills, competencies and attitude greatly influenced CME-RH in Makindu and Mutitu Sub-counties. Owing to CME-RH sessions conducted for healthcare workers in Makindu for the one year of intervention, their skills and attitudes in relation to CME-RH improved greatly. This led to improved CME-RH among men in Makindu compared to Mutitu where no intervention was undertaken.

2. This study therefore rejects the null hypothesis that, CME-RH in Makindu and Mutitu Sub-Counties is not influenced by health service provider technical capacity.

6.5 Recommendations of the Study

This study proposes several recommendations for both national and county governments and other stakeholders to improve constructive men’s participation in reproductive health as follows:

6.5.1 Recommendations for Policy and Practice

1. As a result of the low CME-RH in Makindu and Mutitu, the Ministry of Health and other partners should prioritize promotion of CME-RH in the two Sub-Counties. Training should commence with Health Care Providers who will be supported to cascade this to Community Health Workers and later to men. This should then be implemented across the country with a specific focus on men.

2. Education level and income were noted to significantly influence CME-RH. In this regard, it would be valuable for reproductive health program designers to adopt a multi-sectoral approach when developing RH programs and strategies. Stakeholders in education and
livelihood support should be involved in promotion of CME-RH. In the short-term primary and high schools could be used as platforms to promote and inculcate appropriate CME-RH at an early age.

3. Implementers including non-state and state actors particularly at county and sub-county levels should ensure that trainings, dialogue days and meetings targeting men on matters related to reproductive health should always be arranged for men only. This will provide them valuable space to freely share their experience.

4. The Ministry of Health must devise ways to ensure staff at ANC/MCH clinics observe confidentiality with regard to client information. Health Care Workers serving at these points must uphold confidentiality and reassure patients of the same.

5. Reproductive health programs that do not involve men can not realize optimal impact. Therefore, all reproductive health programs must seek to have men play a central role as beneficiaries of RH information, services and other BCC processes as is the case at household and community level. This will ensure buy-in by men and eventual success of the program.

6. In order to improve the skills and attitude of HCWs on issues related to CME-RH, the Ministry of Health both at County and National level should prioritize capacity building of healthcare workers serving at ANC/MCH clinics in CME-RH. This could be done through actual refresher trainings coupled with mentorship sessions via supportive supervision by Sub-County Health Management Teams (SC-HMTs).
6.5.2 Recommendation for Further Research

1. The study noted various cultural practices that hindered constructive male engagement in the study population. However it would be useful to undertake a research on possible cultural values and practices that could be harnessed to promote CME-RH in Kitui and Makueni Counties.

2. A study to establish the definite health and socio-economic impact of CME-RH in a select population would add immense value towards influencing policy makers and development partners. This would ensure solid commitment to CME-RH and allocation of necessary resources.
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## APPENDICES

### Appendix I: Study Methods and Participants

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<thead>
<tr>
<th>Data collection technique</th>
<th>Category of participants</th>
<th>Number of study participants</th>
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<tr>
<td><strong>Sub-county level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key Informant Interviews</td>
<td>DHMT members; MOH, SC-PHN, SC-PHO, SC- Reproductive Health Coordinator and SC- Community Health Coordinator</td>
<td>10 (5 in each Sub-county)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Community level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household survey</td>
<td>Men</td>
<td>968</td>
</tr>
<tr>
<td>FGDs</td>
<td>Men FGDs</td>
<td>8 (4 in each Sub-county)</td>
</tr>
<tr>
<td></td>
<td>Women FGDs</td>
<td>10 (6 in Makindu, 4 in Mutitu)</td>
</tr>
<tr>
<td>Key Informant Interviews</td>
<td>Opinion leaders; 2 Elders, 1 Religious leader, 1CBO Leader</td>
<td>8 (4 in each Sub-county)</td>
</tr>
</tbody>
</table>

### Appendix II: Sampling Procedure

<table>
<thead>
<tr>
<th>Sampling Unit</th>
<th>Sampling Procedure</th>
<th>Makindu Sub-County</th>
<th>Mutitu Sub-County</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location</strong></td>
<td>Purposively sample all</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td><strong>Sub-location</strong></td>
<td>Random sampling</td>
<td>8</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td><strong>Village</strong></td>
<td>Random sampling</td>
<td>16</td>
<td>12</td>
<td>28</td>
</tr>
<tr>
<td><strong>Actual sample</strong></td>
<td>Table of Random Numbers</td>
<td>484</td>
<td>484</td>
<td>968 Respondents</td>
</tr>
</tbody>
</table>
Appendix III: Consent form

(Instruction to the interviewer: Read this consent form aloud and clearly to the respondent)

Good morning/ Good afternoon. My name is George Kimathi. I am a Doctor of Philosophy (PhD) student at Kenyatta University, Nairobi. I am here to carry out a study on determinants of constructive men engagement in reproductive health. The information you give is important and therefore kindly be sincere in your responses.

Some of these questions will be about your personal life. I am aware that some of these questions are sensitive, but the information you give me will be kept strictly confidential and at no time will you be required to identify yourself by name.

Your participation in this study is voluntary. You can refuse to answer all or some of the questions but I will appreciate your help in answering all the questions. It is important to note that your participation will not affect your ability to use health facilities or any other services. I am hoping that you will participate since your participation and views are highly valued and important.

Declaration
I have been informed about this study and understand its purpose and objectives. I understand the details, have been informed about the requirements and hereby agree to participate in the study.

Signature of Respondent………………………………….Date…………………….

Signature of interviewer………………………………….Date …………………….
Appendix IV: Research Questionnaire – Adult Men

Survey Number [ ][ ][ ]

Location: ---------------------------------------------------------------

Sub location: [ ][ ][ ]

Village: ---------------------------------------------------------------

Date: Day [ ][ ] Month [ ][ ] Year [ ][ ][ ][ ][ ]

Interviewer ID [ ][ ][ ]

Data Entry ID [ ][ ][ ]

SECTION 1: INDIVIDUAL CHARACTERISTICS

Sub-section 1.1: Demographics

1.1 In which age category do you fall?

19 years and below [ ]1
20 to 29 years [ ]2
30 to 39 years [ ]3
40 to 49 years [ ]4
50 to 59 years [ ]5
60 and above [ ]6

1. What is your religion?

Roman Catholic [ ]1
Muslim [ ]2
Protestants [ ]3
Traditional religion [ ]4
Others [ ]5
None [ ]6
2. What is your current marital status?  
   Single/ never married [   ] 1  
   Married [   ] 2  
   Divorced/ separated [   ] 3  
   Widowed [   ] 4

3. For how long have you been living with your current wife/partner?  
   Less than five years [   ] 1  
   5 to 10 years [   ] 2  
   More than 10 years [   ] 3

4. What is your spouse’s age?  
   19 years and below [   ] 1  
   20 to 29 years [   ] 2  
   30 to 39 years [   ] 3  
   40 to 49 years [   ] 4  
   50 to 59 years [   ] 5  
   60 and above [   ] 6

5. What is your highest level of education?  
   No formal education [   ] 1  
   Primary completed [   ] 2  
   Primary not completed [   ] 3  
   Secondary completed [   ] 4  
   Secondary not completed [   ] 5  
   Tertiary completed [   ] 6  
   Tertiary not completed [   ] 7  
   University [   ] 8

6. What is your spouse’s highest level of education?  
   No formal education [   ] 1  
   Primary completed [   ] 2  
   Primary not completed [   ] 3  
   Secondary completed [   ] 4  
   Secondary not completed [   ] 5  
   Tertiary completed [   ] 6  
   Tertiary not completed [   ] 7  
   University [   ] 8

7. How many living sons and daughters do you have?  
   Sons [   ] [   ]
Daughters [ ][ ]

8. Do you currently work outside the home for cash?
   Yes [ ] 1
   No [ ] 2 — SKIP TO Q11

9. Of the money you earn, do you decide how to spend all of the money, some of the money or none of the money?
   Decide how all money is spent [ ] 1
   Decide on how some of the money is spent [ ] 2
   Don’t decide on how any of the money is spent [ ] 3

10. Does your spouse work outside the home for cash?
    Yes [ ] 1
    No [ ] 2

11. Of the money your spouse earns, do they decide on how all the money is spent, some of the money or none of the money?
    Decide how all money is spent [ ] 1
    Decide on how some of the money is spent [ ] 2
    Don’t decide on how any of the money is spent [ ] 3
    Not applicable [ ] 4

12. What is your income bracket per month in Kenya shillings? (Tick as appropriate) 1. Less than 1000 (), 2. 1000-3000 (), 3. 3001–6000 (), 4. 6001–9000 (), 5. 9001–12000 (), 6. Over 12,000 ()

13. When your spouse was with your last baby (or current baby if pregnant) did she want to become pregnant then, did she want to wait until later, did she not want to be pregnant at all, or did she not think about it?
    Wanted to be pregnant then [ ] 1
    Wanted to wait until later [ ] 2
    Did not want to be pregnant [ ] 3
    Did not think about it [ ] 4

14. When would you like to have your next baby? (Do not read choices: Tick One)
    Spouse currently pregnant [ ] 1
    As soon as possible [ ] 2

Sub-section 1.2: Knowledge and Awareness of Reproductive Health
15. What is the ideal number of children you would like to have? 

16. What is the ideal number of sons you would like to have? 

17. What is the ideal number of daughters you would like to have? 

18. Now I would like to ask you about family planning - that is the various ways or methods that a couple can use to avoid or delay a pregnancy. Which ways or methods have you heard about? (DO NOT READ THE CHOICES: Tick all mentioned and probe for more)

- Oral pills
- Injection
- Condom (male)
- Condom (female)
- Male sterilization
- Female sterilization
- IUD
- Diaphragm/ foam/ jelly
- Safe period/ Rhythm
- Withdrawal
- Abstinence
- Breastfeeding
- Implant
- Not heard of any methods

19. I would now like to read you some statements about family planning methods, for each one can you tell me whether you strongly agree, agree, unsure, disagree or strongly disagree: (1=Strongly agree, 2= agree, 3=unsure, 4=disagree, 5=strongly disagree)

A. Using family planning causes deformities in children
   1 2 3 4 5

B. The threads of the coil can be felt by the man’s penis
   1 2 3 4 5

C. The coil may disappear in a woman
   1 2 3 4 5

D. Using family planning reduces the libido
   1 2 3 4 5

20. I would now like to ask you about your use of family planning methods. Have you ever used a method to stop your wife from becoming pregnant?
21. Which methods have you used in the past (tick all that are mentioned: probe for all)
   [ ] Condom (male)
   [ ] Male sterilization
   [ ] Diaphragm/ foam/ jelly
   [ ] Safe period/ Rhythm
   [ ] Withdrawal
   [ ] Abstinence

22. Are you or your partner currently using a method to avoid or delay pregnancy?
   Yes [ ] 1
   No [ ] 2

23. Which methods are you currently using (tick all that are mentioned: probe for all)
   [ ] Condom (male)
   [ ] Male sterilization
   [ ] Diaphragm/ foam/ jelly
   [ ] Safe period/ Rhythm
   [ ] Withdrawal
   [ ] Abstinence

24. Who made the decision to use this particular method that you are now using?
   Own idea [ ] 1
   Spouses/ partner [ ] 2
   Joint decision [ ] 3
   Health provider [ ] 4
   Other person [ ] 5

25. When your spouse last accessed family planning services what was the main reason you chose to go to that service and not another service? TICK ONE ONLY
   Easy to access 1
   Affordable 6
   Provider attitude 2
   Providers are competent 7
   Good quality 3
   Recommended by others 8
   Lack of alternative 4
   Confidentiality 9
   Couple friendly 5
   Youth friendly 10
   Male friendly 11
   Counselling services 12
   Other reason 13

26. When your spouse last accessed family planning services were you satisfied with the service?
   Yes [ ] 1
   No [ ] 2
27. What is the **MAIN** reason you are not currently using any method to avoid or delay pregnancy (TICK ONE ONLY: DO NOT ASK OF THOSE CURRENTLY USING FAMILY PLANNING)

- Want children [ ] 1
- Wife opposed [ ] 2
- Costs too much [ ] 3
- Side effects [ ] 4
- Health concerns [ ] 5
- Hard to obtain [ ] 6
- Religion [ ] 7
- Opposed to FP [ ] 8
- Fatalistic [ ] 9
- Infrequent sex [ ] 10
- Don’t know [ ] 11
- Other [ ] 12

28. Have you ever had a test for HIV?
   - Yes 1
   - No 2

29. Did you receive the results of your HIV test?
   - Yes [ ] 1
   - No [ ] 2

30. Has your spouse ever had a test for HIV?
   - Yes [ ] 1
   - No [ ] 2
   - Don’t know [ ] 3

31. Did your spouse receive the results of their HIV test?
   - Yes [ ] 1
   - No [ ] 2
   - Don’t know [ ] 3

**Sub-section 1.3: Socio-Cultural Norms and Perceptions**

32. I would now like to read you some statements about what you may think about those who use family planning methods, for each one can you tell me whether you strongly agree, agree, unsure, disagree or strongly disagree: (1=strongly agree, 2= agree, 3=unsure, 4=disagree, 5=Strongly disagree)

   A. In general I approve of couples using family planning to avoid or delay a pregnancy
      1 2 3

   B. I think that most of my friends in this community would approve of couples using family planning to avoid or delay a pregnancy
C. I think that my spouse would approve couples using family planning to avoid or delay a pregnancy

D. I approve of a young recently married couple with no children using family planning to avoid or delay a pregnancy

E. I approve of a young unmarried woman having access to family planning

F. A woman who uses contraception will be unfaithful to her husband

G. A man who lets his wife use contraception will loose control of her

H. A couple who do not want children are not normal

33. How many sons do you think people in this community want to have? [     ]

34. How many daughters do you think people in this community want to have? [     ]

35. What do you think is the ideal age at marriage for women in this community? [     ]

36. What do you think is the ideal age at marriage for men in this community? [     ]

37. After a couple gets married, how long should it be before they have their first child? (Don’t read choices to the respondent)
   Within one year 1
   More than one year 2
   Up to the couple 3

38. I would now like to read you some statements, for each one can you tell me whether you strongly agree, agree, unsure, disagree or strongly disagree: (1=strongly agree, 2= agree, 3=unsure, 4=disagree, 5=Strongly disagree)

   a. In this community it is important is for a woman to be educated

   b. In this community it is important is it for a woman to be married
39. Do you participate in any groups activities in the community? (tick all mentioned)

Health care □ Women’s groups □
Sports □ Men’s groups □ Charity groups □
Enterprise □ Other □ None □

40. Which of these groups has your spouse participated in? (tick all mentioned)
Voluntary Savings and Loan (VSL) □ Health care □ Women’s groups □ Charity groups □
Men’s groups □ Other (specify) □
Sports □ Enterprise □ None □

41. I would now like to read you some statements and for each one I would like you to tell me whether you strongly agree, agree, unsure, disagree or strongly disagree: (1=strongly agree, 2= agree, 3=unsure, 4=disagree, 5=Strongly disagree)

a. It is a woman’s responsibility to avoid getting pregnant

b. A couple should decide together if they want to have children

c. Changing diapers, giving the kids a bath, and feeding the kids are the mothers’ responsibility

d. A man and a woman should decide together what type of contraceptive to use

e. I feel comfortable discussing family planning with my partner

SECTION 2: PROGRAMMATIC DETERMINANTS

Instruction: circle the appropriate number reflecting the respondent opinion as follows

Strongly agree(SA), Agree(A), Undecided(U), Disagree(D), Strongly disagree(SD)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Men should have male only RH meetings/trainings</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>2. At the RH trainings men should be facilitated to by male health workers only</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>3. Health workers do not like to see men at ANC/MCH clinics</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>4. ANC/MCH clinics are made for women and children only</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>5. MCH/ANC clinics should be opened at the weekends so that men can</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
</tbody>
</table>
6. Staff at the MCH/ANC do not keep any secret about health of clients
   - 5
   - 4
   - 3
   - 2
   - 1

7. RH programmes have done very little to involve men
   - 5
   - 4
   - 3
   - 2
   - 1

8. You can attend MCH/ANC clinics if invited by health worker
   - 1
   - 2
   - 3
   - 4
   - 5

9. ANC/MCH clinics are conducted very far from your home and transport is expensive
   - 5
   - 4
   - 3
   - 2
   - 1

Total score

SECTION 3: MALE ENGAGEMENT

3.1 Did your wife/partner attend ANC/MCH clinic the last time she was pregnant?
   - Yes
   - No
   - Don’t know

3.2 Did you discuss with your wife/partner about her pregnancy last time she was pregnant?
   - Yes
   - No
   - Don’t know

3.4 Have you ever gone together with your wife/partner to an MCH/ANC clinic?
   - Yes
   - No
   - Don’t know

3.6 Have you ever been counselled and tested for HIV together with your wife/partner at a MCH/PMTCT clinic?
   - Yes
   - No
   - Don’t know
3.7 What kind of support do you give your wife/partner when she’s pregnant and immediately after birth?

- Household chores
- Financial and material
- Psychological (encouragement, love)
- None
- Don’t know

3.8 Did you have a birth plan with your wife/partner the last time she was pregnant?

- Yes
- No
- Don’t know

3.9 Do you decide methods of family planning together with your wife/partner?

- Yes
- No
- don’t know

3.10 Did you apportion money specifically to cater for maternity during the last time your wife/partner was pregnant?

- Yes
- no
- don’t know

3.11 Did you accompany your wife/partner to maternity/delivery place the last time she was pregnant?

- Yes
- No
- Don’t know

Thank you for your time
Appendix V: Healthcare Worker Capacity Assessment Tool

1.0 IDENTIFICATION

Name of health facility .................................................................

Sub location: [   ] [   ] [   ]

Type of health facility
   Sub-county hospital [   ]1
   Sub-Sub-county hospital [   ]2
Health center [ ] 3
Dispensary [ ] 4

Ownership of health facility
Government [ ] 1
Non Governmental Organization (NGO) [ ] 2
Faith Based Organization [ ] 3
Individual [ ] 4
Other .. Specify [ ] 5

Officer in charge of health facility
Medical Doctor [ ] 1
Clinical Officer [ ] 2
Registered Nurse [ ] 3

Number of health workers at the health facility

Medical doctors
Clinical Officer
Nurses
Nutritionists
Pharmacist

2.0 HEALTH SERVICE PROVIDER TECHNICAL CAPACITY

2.1 Have you been trained on the following courses?

<table>
<thead>
<tr>
<th>#</th>
<th>TRAINING</th>
<th>YEAR</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Emergency Obstetric Care (EmOC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Focused Antenatal Care (FANC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Family Planning Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Constructive Men’s Engagement (CME) in RH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Post Abortion Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Comprehensive Abortion Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>HIV/AIDS Management (PMTCT, CCC, VCT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Adolescent Sexual and Reproductive Health (ASRH)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Voluntary Male Circumcision</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.2 Have you been supervised by the DHMT
(1) YES  (2) NO
If YES how many times per year [ ] [ ]

2.3 Does you the facility have 100% of offered contraceptive methods
(1) YES  
(2) NO
### 3.0 HEALTH SERVICE PROVIDER ATTITUDE

Instruction: circle the appropriate number reflecting the respondent opinion as follows

**Strongly agree** (SA), **Agree** (A), **Undecided** (U), **Disagree** (D), **Strongly disagree** (SD)

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Men do not require RH trainings</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. RH is a women’s issue</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. Men should accompany their spouses to ANC/MCH clinics</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. ANC/MCH clinics are made for women and children only</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5. Dirty women should not be served at MCH/ANC clinics</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6. Family planning is a hard subject to discuss with men</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7. Only weak and idle men accompany their women for MCH clinics</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total score**

---

**Thank you for your time**

---

**Appendix VI: Guide for Focus Group Discussion (FGD) – Men and Women**

1) Where do most women deliver in this community?

2) Where do they go for ANC and PNC?
3) Do men discuss pregnancy issues with their wives/partners? If yes what do they discuss? If no why?

4) Do men accompany their wives/partners to MCH/ANC clinic? If yes how often? If no why?

5) What kind of support do men give their wives/partners when they are pregnant and immediately after birth? Probe for: Household chores, Financial and material, Psychological/emotional (encouragement, love)

6) Do men prepare birth plans together with their wives/partners? Probe further for yes and no.

7) How are decisions regarding methods of family planning made? Probe for men’s role

8) Do men/families apportion money specifically to cater for maternity? Probe further for yes and no

9) Do men accompany their wives/partners to maternity/delivery places? Probe for yes and no

Appendix VII: Guide for Key Informant Interviews (KII)

1) Which are the key health problems/challenges that affect this community?
2) What mechanisms exist in the community for mitigation of the impacts of these health problems?

3) What are the main reproductive health issues in this community?

4) Which are the main barriers to RH in the community?

5) How can the identified barriers to RH in the community be addressed?

6) What socio-cultural practices negatively and positively influence reproductive health?

7) How do men in this community participate in RH? Probe for FP decisions, accompanying spouse to clinic and maternity, birth plans; material/financial, emotional/psychological support during pregnancy and after delivery.

8) What roles do you think men should play in RH?

9) What are the motivating factors and barriers to male participation in RH?

Appendix VIII: GEM Scale for CME-RH

Adopted from Pulerwitz, Julie and Gary Barker (2007) and MEASURE DHS (2010)

<table>
<thead>
<tr>
<th>Sn.</th>
<th>Elements of CME-RH (24 items across 3 domains: Men as clients, Men as partners and; Men as agents of social change)</th>
<th>Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Agree (3)</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Men should use condoms during intercourse with a woman other than his spouse</td>
</tr>
<tr>
<td>2</td>
<td>Vasectomy is good for men</td>
</tr>
<tr>
<td>3</td>
<td>Men should go for VCT services</td>
</tr>
<tr>
<td>4</td>
<td>Men should attend clinics regularly for check up on their reproductive health</td>
</tr>
<tr>
<td>5</td>
<td>It is good for a woman to discuss her pregnancy with her husband</td>
</tr>
<tr>
<td>6</td>
<td>Men should accompany their wives/partners to MCH/ANC clinics</td>
</tr>
<tr>
<td>7</td>
<td>Couples should be counselled and tested for HIV together at a MCH/PMTCT clinic</td>
</tr>
<tr>
<td>8</td>
<td>Men should support their wives financially during pregnancy and immediately after delivery</td>
</tr>
<tr>
<td>9</td>
<td>A man should assist his wife with household chores during pregnancy and immediately after delivery</td>
</tr>
<tr>
<td>10</td>
<td>A man should develop and apply a birth plan with his wife</td>
</tr>
<tr>
<td>11</td>
<td>Couples should decide family planning methods together</td>
</tr>
<tr>
<td>12</td>
<td>During pregnancy couples should apportion and keep a specific amount of money to cater for maternity/delivery</td>
</tr>
<tr>
<td>13</td>
<td>Men should accompany their wives to maternity/delivery place</td>
</tr>
<tr>
<td>14</td>
<td>A man should not have the final word about decisions in his home</td>
</tr>
<tr>
<td>15</td>
<td>Couples should use family planning methods to avoid or delay pregnancies</td>
</tr>
<tr>
<td>16</td>
<td>A woman who uses contraception will not be unfaithful to her husband</td>
</tr>
<tr>
<td>17</td>
<td>Although important, it is not a must for a woman to get married</td>
</tr>
<tr>
<td>18</td>
<td>A woman should not tolerate violence in order to keep her family together</td>
</tr>
<tr>
<td>19</td>
<td>A couple should decide together if they want to have children</td>
</tr>
<tr>
<td>20</td>
<td>Changing diapers, giving the kids a bath, and feeding the kids are not the responsibility of mothers’ only</td>
</tr>
<tr>
<td>21</td>
<td>A man does not need other women for sex besides his wife</td>
</tr>
<tr>
<td>22</td>
<td>A woman’s most important role is not to take care of her home and cook for her family</td>
</tr>
<tr>
<td>23</td>
<td>You talk about sex, not just do it</td>
</tr>
<tr>
<td>24</td>
<td>Men do not need sex more than women do</td>
</tr>
</tbody>
</table>

**Scoring and calculating the GEM Scale**

1. High scores represent high support for CME-RH. **Agree** is scored as 3, **Partially Agree** as 2, and **Do Not Agree** as 1.

2. Score summation for each respondent is then undertaken based on the above scores. This gives the GEM Scale score
3. The possible minimum is 24 and the maximum is 72

4. Respondents for whom more than one third of the scale items are not answered, should be dropped from the analysis. For respondents missing less than one third of the scale items, the missing items should be replaced (i.e. imputed) with the mean of the item across all respondents.

5. The continuous GEM Scale scores can be used in analyses as is, or it can be recoded into different formats for different types of analyses and interpretations.

6. For coding purposes, the continuous GEM Scale is trichotomized into “high,” “moderate,” and “low” support for CME-RH by splitting the scale into three equal parts. The range is based on thirds in the range of possible scores: for the GEM Scale, low CME-RH is 1–24, moderate is 25–48, and high is 49–72.

7. For the purpose of this study, a score of 36 points on the GEM Scale will be applied as a cut-off level denoting presence of appropriate level of CME-RH in the study population. This is the median score.

8. Typical analyses include testing associations between the GEM Scale and key variables such as utilization of family planning services and birth planning, as well as comparisons of GEM Scale scores before and after an intervention.

Appendix IX: CME-RH Facilitators Training Guide

Constructive Men’s Engagement in Reproductive Health (CME-RH)
1.0 KEY PILLARS OF CME-RH

Constructive Men’s Engagement in Reproductive has three core pillars which include: men as clients of RH services; men as supportive partners of women’s reproductive health and; men as agents of positive change in society.

Men as clients of RH services: fostering the good health of men is a direct and obvious benefit of incorporating men in reproductive health. It needs emphasis to provide reproductive health services to men in much the same fashion that women have received these benefits. There is no doubt that men have their own set of unmet reproductive health needs and concerns that need to be addressed. The behaviours and values of men affect the health and well-being of women. By leaving men out of sexual and reproductive health interventions only the symptoms experienced by women are addressed, and the heart of the underlying problem remains unexamined or unchallenged.

Men as supportive partners for women’s reproductive health: recent projects have demonstrated significant potential in encouraging men’s positive roles in improving men’s and women’s sexual and reproductive health. Involving men in reproductive health, either through having them accompanying women or through having them be users in their own right, makes it possible to ensure their support for women’s decisions. Men can improve and impede, they can be allies and resources in efforts to improve dimensions of reproductive health.

Men as agents of change within the community: Including male perspectives at the policy level also sends a strong message about the importance of men’s sexual and reproductive rights. Male inclusion in reproductive policies can have an important positive effect on the health of families and children through men’s role as fathers and heads of the household.

2.0 MOVING INTO ACTION THROUGH APPLICATION OF THE ECOLOGICAL MODEL

The Ecological Model provides a conceptual framework for a comprehensive approach to working with men. It emphasizes that to change individual behavior, programs need to work with
individuals, address the systems and groups that influence individuals such as peers, families, communities and policies.

Levels of the Ecological Model

1. Strengthening Individual Knowledge and Skills
Helping men to understand how gender and social norms can put them, their partners, and families at risk and how to promote alternate, healthier behaviors

2. Creating Supportive Peer and Family Structures
Educating peers and family members about health risks and ways they can support individuals to take actions that promote health and safety

3. Educating Health Service Providers
Educating providers about male engagement so they can transmit skills and knowledge to others and also encourage and support men to seek healthcare and support their partners’ access to health information and services

4. Mobilizing Community Members
Educating community members about health risks and ways they can support individuals to take actions that promote health and safety. Mobilizing groups and individuals to develop strategies for promoting male involvement

5. Changing Organizational Practices
Adopting policies, procedures, and organizational practices that support efforts to increase men’s involvement

6. Influencing Policy Legislation at the Societal Level
This includes development of strategies to change policies to influence outcome. In this way, it is clear that policy work affects, and is affected by community education. This, in turn, affects and impacts the ways individuals in a given community regard a particular issue. For each level, the model helps participants to identify, WHAT actions to take, WHO should take this action and HOW the success of this action should be assessed.

3.0 ORGANIZATION OF THE GUIDE
The facilitators guide adopts a modular, practical approach and is aimed at health care providers in all community-based institutions. Supporting material is provided in the format of PowerPoint
slides, handouts, flip-chart content, group work templates, evaluation forms, etc. Each Module has an overview at the beginning stating the estimated timing for learning activities as well as materials required. The guide is meant to be highly interactive. By promoting active involvement, the Guide aims to help participants begin problem-solving, strategizing and action planning for themselves and their colleagues in the area of men’s involvement in reproductive health.

**Selected Training Techniques**

The suggested process will enable facilitators to easily navigate through the materials for both preparation and implementation. Specific points to highlight or summarize various topics are not intended to serve as dogmatic scripts for facilitators but to serve as a guide on key messages to be conveyed and so that the sessions can be run with minimum reading from the Facilitator’s Guide during the teaching. The techniques are: Lectures; discussions; brainstorming; case study; role plays; question and answers session; group work and feedback.

**Suggested Training Materials**

This depends on modules presented. This includes; Flip chart paper (newsprint); Colored markers; Writing paper and pens for participants; carrying bag for participants’ resource materials; Tape or pins (for hanging flip chart pages); Copies of notes; Highlighter pens (so participants can mark important sections or points in the required resource materials) and Copies of evaluation forms.

**Assessment of Learning and Performance**

The review and evaluation during training will apply the principles of adult learning. This will consist of attendance and active participation, pre-tests, post-tests and question-and-answer sessions. Other methods that will be used include observations, skills practice, and role plays. Pre- and post-test questionnaires to assess knowledge, attitude, and practice (KAP) are completed by all participants on the first and last days of the course, respectively. They are handed in anonymously, but participants are expected to write a unique identifier on the pre- and post-test instruments in order to assess the individual improvement in knowledge and skills.

**Assessment of Learners’ Perceptions and Feelings**
The perceptions and feelings of the participants about the course will be assessed using an anonymous daily evaluation sheet. Prepare the chart with the total number of days or sessions written in a horizontal line. This could be used to discuss the group’s energy level, possible success, or possible dissatisfaction.

4.0 MODULES
The CME-RH Facilitators Guide has twelve modules that cover both technical aspects of reproductive health and also equips the learner with skills to facilitate sessions on CME-RH. The modules also include aspects of resource mobilization, monitoring as well as evaluation.

MODULE 1: INTRODUCTION AND CONCEPTS OF REPRODUCTIVE HEALTH

Session 1.1: Introductions and Expectation

Goal: To provide an interactive way for participants to know each other

Objectives:
• To allow participants to introduce themselves
• To give participants a chance to know each other
• To establish ground rules and group norms

Session 1.2: Purpose of Training

Goal: To help participants’ gain a range of knowledge and attitudes on issues relating to reproductive health

Objectives:
Upon completion of the training, the participants should be able to:
• Understand the benefits of getting reproductive health services
• List the most common reproductive health problems affecting men and women
• Describe men’s roles in the use of various contraceptive and family planning methods
- Describe some basic signs and symptoms of sexually transmitted infections (STIs) in men and women
- Understand the men’s roles in safe motherhood

**Session 1.3: Reproductive Health Issues**

**Goal:**
To create awareness of the female and male reproductive systems in order to understand the importance of active participation of men in reproductive health

**Objectives:**
- To identify traditional and cultural practices which contribute to high morbidity and mortality of mother and child
- To develop a supportive attitude that encourages and sustains men's involvement in reproductive matters
- Describe the factors affecting Reproductive Health

**MODULE 2: MEN’S ROLE IN FAMILY PLANNING**

**Goal:** To alleviate men’s doubts about family planning methods and promote support for the use by their spouses

**Objectives:**
- Know the meaning and understand family planning as a part of reproductive health.
- Be familiar with different family planning methods
- Understand the difference between preventing pregnancy and preventing the transmission of HIV or other STIs with different family planning methods

**MODULE 3: MEN’S ROLE IN SAFE MOTHERHOOD**
Session 3.1 Men in Antenatal Care (ANC)

**Goal:** To give great support to the pregnant partner and prevent health problems in both the foetus and the mother

**Objectives:**
- Ensure that every pregnant woman has adequate focused antenatal care (FANC) and seeks care at the time of delivery and afterwards
- Male partners to help a pregnant woman prepare a birth plan, that is, what to do when the time comes
- Ensure adequate Nutrition during pregnancy
- Male partners to recognize the warning signs during pregnancy and childbirth and have plans and resources for getting immediate skilled help.
- Prevention of diseases by encouraging all pregnant mothers to sleep under ITNs to prevent malaria.

Session 3.2 Men’s Role during Delivery and Post Natal Care

**Goal:** Enable men to understand their role during delivery and the period immediately after delivery

**Objectives:**
- Men to learn about potential postpartum complications and be ready to seek help if they occur
- Making sure that post-partum women get good nutrition. Extra vitamin A and food strong in iron to prevent anemia
- Men involvement to ensure the woman and child get plenty of rest and also help with heavy housework

**MODULE 4:** HIV, STI PREVENTION AND COUPLE COUNSELLING

Session 4.1: Mother to Child Transmission (MTCT)
Goal: To introduce to participants the different types of STIs and the effect on the human body

Objectives:

• Understand the three ways HIV can be transmitted from mother to child
• List the risk factors for each mode of transmission

Session 4.2: Role of Men in Prevention of Mother to Child Transmission (PMTCT) of HIV

Goal: Gain knowledge on strategies for the prevention of Mother to Child Transmission (PMTCT)

Objectives:

• To name specific interventions for PMTCT
• Understand main options for infant feeding and advantages and disadvantages of each

MODULE 5: CHILD HEALTH AND COMMUNITY CHILD CARE

Goal: Ensure men become more involved in their children’s health, physical and emotional development

Objectives:

• To understand elements of child health
• To outline health priorities in of children
• Describe how to recognize common childhood illnesses and decision making for action

MODULE 6: GENDER ISSUES, SEXUAL AND REPRODUCTIVE RIGHTS

Goal: Create a long term transformative prevention responses to GBV
Objectives:
- To train and educate community leaders on violence against men and women and its impact on the community.
- To enhance the capacity of community and its leaders to develop strategies to address the varied impact of violence in the family and community.
- To strengthen community structures to better respond to violence in families through changed attitudes and perceptions

MODULE 7: INVOLVING ADOLESCENT BOYS AND YOUTH IN REPRODUCTIVE HEALTH

Goal: Role of adolescent boys and young men in reproductive health, talks about the importance of reaching boys earlier in life

Objectives:
- To emphasize the importance of viewing boys and young men as allies to improving sexual and reproductive health outcomes.

MODULE 8: SKILLS ON BEHAVIOUR CHANGE COMMUNICATION

Goal: To foster critical skills to participants on communication strategies for behavior change.

Objectives:
- To understand types of communication
- To Identify barriers to effective communication
- To understand the importance of effective communication in increasing the number of men involved in Reproductive Health

MODULE 9: LEADERSHIP SKILLS
Goal: Understand how leadership skills are important in the process of involving men in reproductive health

Objectives:

• Understand and explain the term leadership
• State the key functions of a leader
• Identify various leadership styles and state their limitation and strengths
• Outline the qualities of a good leader

MODULE 10: CONFLICT MANAGEMENT AND DECISION MAKING

Goal: To develop the skills necessary to deal effectively with opposition

Objectives:
To understand how to apply problem solving techniques

MODULE 11: PUBLIC RELATION, NETWORKING AND PARTNERSHIP

Goal: To understand the importance of community works together for success and sustainability without duplicating activities and resources

Objectives:

• Identify ways of promoting partnership in the community
• To understand the advantages of partnership

MODULE 12: MONITORING AND EVALUATION

Goal: To understand basic skills for monitoring and evaluation and be able to measure progress towards expected results
Objectives:

- To understand the importance of M&E
- Understand important data to collect and avoid duplication of efforts.
- To understand how to Prepare simple reports and findings

SUGGESTED QUESTIONS FOR PRE TEST AND POST TEST ASSESSMENT

1) What are the three ways a mother can transmit HIV to her baby?
2) What are some things that increase the risk of transmission during pregnancy?
3) What are some things that increase the risk of transmission during labour and delivery?
4) What are some things that increase the risk of transmission during breastfeeding?
5) Women with HIV should not have children.
6) Anyone who wants to prevent getting an STI can do so.
7) Men need sex more than women do.
8) A man should have the final word about decisions in his home.
9) Women who carry condoms are “easy.”
10) A man and a woman should decide together what type of contraceptive to use.
11) GBV prevention and RH programs are only for women and girls.
12) A man is more of a “man” if he fights in a war.
13) A woman should tolerate violence in order to keep her family together.
14) There are times when a woman deserves to be beaten.
15) If a man sees another man beating a woman, he should stop it.
16) Sexual relations are a satisfying activity for men; for women, a reproductive activity.
17) Sexually transmitted infections (STIs) occur if a man has intercourse with a menstruating woman.
18) Women are solely responsible for determining the sex of the child.
19) The sexual urge is reduced in persons who have undergone vasectomy.
## Appendix X: CME-RH Training Schedule

### Constructive Men’s Involvement in Reproductive Health (CME-RH) Training Programme

<table>
<thead>
<tr>
<th>Proposed Duration</th>
<th>Module/Session</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DAY 1</strong></td>
<td></td>
</tr>
<tr>
<td>1 Hour 15 Minutes</td>
<td>Course Introduction, Review of Agenda and Individual Introductions and Expectations</td>
</tr>
<tr>
<td>45 Minutes</td>
<td>Pre-test: Knowledge and Opinions Survey</td>
</tr>
<tr>
<td><strong>DAY 2</strong></td>
<td></td>
</tr>
<tr>
<td>1 Hour</td>
<td>Introduction in Reproductive Health</td>
</tr>
<tr>
<td>1 Hour</td>
<td>Men’s Role in Family Planning</td>
</tr>
<tr>
<td><strong>DAY 3</strong></td>
<td></td>
</tr>
<tr>
<td>1 Hour</td>
<td>Men’s Involvement in ANC</td>
</tr>
<tr>
<td>1 Hour</td>
<td>Men’s Involvement in Delivery and Post natal Care</td>
</tr>
<tr>
<td><strong>DAY 4</strong></td>
<td></td>
</tr>
<tr>
<td>40 Minutes</td>
<td>HIV/STI Prevention &amp; couple Counselling</td>
</tr>
<tr>
<td>45 Minutes</td>
<td>Child health and community child care</td>
</tr>
<tr>
<td>1 Hour</td>
<td>Gender Issues, Sexual &amp; Reproductive Rights</td>
</tr>
<tr>
<td><strong>DAY 5</strong></td>
<td></td>
</tr>
<tr>
<td>45 Minutes</td>
<td>Involving Adolescent Boy and Youth</td>
</tr>
<tr>
<td>45 Minutes</td>
<td>Skills on Behaviour Change Communication</td>
</tr>
<tr>
<td>45 Minutes</td>
<td>Leadership Skills, Conflict Management &amp; Decision Making</td>
</tr>
<tr>
<td><strong>DAY 6</strong></td>
<td></td>
</tr>
<tr>
<td>45 Minutes</td>
<td>Public Relation, Networking &amp; Partnership</td>
</tr>
<tr>
<td>45 Minutes</td>
<td>Monitoring and Evaluation, Action Planning</td>
</tr>
<tr>
<td>1 Hour</td>
<td>Post-test: Knowledge and Opinion Survey; Reflection</td>
</tr>
</tbody>
</table>

## Appendix XI: Research Permit
Appendix XII: Map of Makindu Sub-county
Appendix XIII: Map of Makueni County
Appendix XIV: Map of Mutitu Sub-county
Appendix XV: Location of Makindu and Mutitu Sub-counties