

INFLUENCE OF COMMUNITY EMPOWERMENT PROGRAMS INITIATIVES ON  
MATERNAL MORTALITY: THE CASE OF NGAREMARA WARD, ISIOLO COUNTY,  
KENYA

By

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A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN PROJECT PLANNING  
AND MANAGEMENT OF THE UNIVERSITY OF NAIROBI

2015

## DECLARATION

I declare that this research project report is my original work and has not been submitted either wholly or in part to this or any other university for academic award.

Sign .....

Date.....

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L50/68840/2013.

This research project report has been submitted for examination with my approval as university supervisor

Sign .....

Date.....

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## **DEDICATION**

This research project is dedicated to my family especially my parents Mr. and Mrs. Samuel Ndungu Ndegwa, through whom I got encouragement to enable me, strive and prepare this research project report.

## ACKNOWLEDGEMENTS

No one succeeds in the goal of his or her life and career without the support, encouragement and friendship of many caring people. As I reflect over the past years, I realize there have been many family members, friends, peers, colleagues and academics who have inspired, urged and prodded me to achieve as much as was humanly possible. I extend to you all my gratitude.

My special thanks and appreciation goes to Prof. Christopher Gakuu for his patience, time, effort, insight and professional guidance from the outset of the project up to this far. You have been consistently caring and accessible. I would also like to recognize the technical guidance of Dr. John Mbugua.

I acknowledge my parents Mr. and Mrs. Samuel Ndungu Ndegwa for their support through prayer. To my sister and niece and friends, thank you all for being there when i needed you most.

My colleagues from the September 2013 M.A PPM class, with whom we burnt midnight oil together in group discussions as well as ensuring that tasks were completed in time. I would not have come this far without your support.

Finally to all who have been involved by providing, moral support, technical support or otherwise. I appreciate you all.

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## ACRONYMS

ANC	Antenatal Care
AIDS	Acquired immune deficiency syndrome
APHRC	African Population and Health Research Center
BCC	Behavioral communication change
C.E.P	Community Empowerment Program
DHMT	District Health Management Team
FP	Family planning
FGDs	Focused Group Discussions
GOK	Government of Kenya
HIV	Human immune deficiency virus
KDHS	Kenya Demographic and Health Survey
MCH	Maternal and Child Health
MDG	Millennium Development Goals
MMR	Maternal Mortality Ratio
NGOs	Non-Governmental Organizations
PMTCT	Prevention of mother to child transmission
PNC	Post natal Care
SRH	Sexual reproductive health
SPSS	Statistical Package for Social Sciences
TBA	Traditional Birth Attendant
CPHO	County Public Health Officer
WHO	World Health Organization

## ABSTRACT

This research study sought to determine the effectiveness of community empowerment programs in promoting maternal health as well as barriers hindering expectant mothers from seeking available services from the health centers. The target population was 3556 people aged between 13-49 years in Isiolo central. The study adopted descriptive design and a representative sample of 46 stakeholders were selected as the study respondents. A total of 20 community members visiting 2 randomly chosen health centers were sampled and exit interviews conducted. 6 health service providers were also interviewed. Two focus groups comprising of 10 people each were held with community health workers and mothers who had delivered their babies at the available health centers. In-depth interviews were held with 10 Key informants to give detailed information and insights regarding the area of study. Data was collected by use of administered questionnaires. In depth interviews and focus groups discussions were conducted using informant guides. Editing of the completed questionnaires was done before coding process. The Structured and Unstructured questionnaires were coded and overall data processing done using Statistical Package Social Sciences SPSS. Grouping and coding of data was done to enable processing and tabulation. Frequencies were run and tabulation done for analysis of the responses. Multiple responses were also processed and integrated in analysis. Triangulation was done and data presented using tables and percentages. Percentages and table numbers were used for describing differences between variables. For qualitative data, detailed narrative was used to summarize data. The study established that cultural beliefs and practices, social and family support has greater influence to the uptake of sexual reproductive health services offered at the health centers in Isiolo County. Level of education and knowledge on MCH and SRH services, level of income and accessibility to health centers as well as support offered by men to their spouses in MCH, contribute the least to uptake of MCH services at the health centers. This study recommends that the government of Kenya, Nongovernmental organization, community based organization and other entities involved to do more sensitization and awareness creation on MCH services among community members in Isiolo county as well as increase and equip the health centers in the region. Male involvement campaign led by local leaders will also boost the support obtained by women from their spouses in seeking health services. The study recommends a further research on the challenges faced by peer educators and CHW in mobilization for MCH service uptake.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the study

An estimated 289 000 women died in 2013 due to complications in pregnancy and childbirth across the globe, down from 523 000 in 1990. This shows a 45% reduction in maternal deaths since 1990. (UNICEF, 2013) Developing countries account for 99% (286 000) of the global maternal deaths with sub-Saharan Africa region alone accounting for 62% (179 000) followed by Southern Asia (69 000). Oceania is the region with the fewest maternal deaths at 510. (WHO, 2013). In Kenya Between 6000 and 8000 women die every year during childbirth; the current maternal mortality rate is 488 deaths per 100,000 live births. Kenya has made little progress in reducing this to achieve the commitment set in the Millennium Development Goals of 147 deaths per 100,000.

In Isiolo county, Maternal mortality rate stands at 790/100,000 (Kenya Bureau of Statistics, 2009) making it one of the counties with the most number of maternal deaths recorded in Kenya. Maternal mortality is one of the indicators of reproductive health status of the population. Efforts to reduce maternal deaths have for decades been a focal point of international agreements and a priority for Women's rights and health groups throughout the world because a maternal death is one of life's most tragic outcomes. The irony is that almost all maternal deaths are entirely preventable given proper medical surveillance and intervention. (USAID, 2014)

In the last round of censuses, the United Statistics Statistical Division (UNSD) encouraged many developing countries to include questions on pregnancy related deaths as a way of helping improve on the quantity and quality of data needed in the estimation of maternal mortality in the world. (Populations council, 1999) This was subsequently adopted in the 2009 Kenya Population and Housing census. (KDHS, 2009) Respondents were asked to report any death in the household in the last 12 months prior to enumeration. These were subsequently named the recent deaths in the household. Among the deceased females age 12 to 49 subsequent questions will be asked on whether the female deaths were pregnancy related (i.e. during pregnancy, during delivery or within two months after delivery).

Another WHO study, also published in "The Lancet Global Health", adds new knowledge about why these women are dying. "Global causes of maternal death: a WHO systematic analysis", finds that more than 1 in 4 maternal deaths are caused by pre-existing medical conditions such as diabetes, HIV, malaria and obesity, whose health impacts can all be aggravated by pregnancy. This is similar to the proportion of deaths during pregnancy and childbirth from severe bleeding.(WHO, 2012)

Maternal death refers to the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.(WHO,2014). This survey data is intended to deepen understanding of the communities in Isiolo, inform project implementation and the future measurement of impact and change in the community. It shall also assist in identifying key policy priorities and knowledge gaps which have informed a research proposal. Communities will be able to discuss the data and the implications as part of a shared process of prioritization of community based initiatives. The data will also provide a reference point for the annual reflection and ongoing program planning process.

The World Health Organization recommends an interval of at least 24 months between deliveries to optimize maternal, perinatal and infant outcomes. Pregnancies that are too close together can result in newborns being born with a low birth weight and with a higher risk of death. Frequent pregnancies can also compromise the woman's nutritional status. (Anglican Overseas Aid , 2012)

Treatment of common childhood illnesses and good immunization coverage are fundamental aspects of improving the health of women and children. Most of the common causes of maternal death are preventable. (Nancy Achieng, 2012)

The Government of Kenya has a target of skilled birth attendance for 90% of deliveries by 2015 with the aim of reducing maternal deaths. Given that 92.1% of the surveyed communities delivered at home supported by family members or a TBA, understanding more about the role of TBAs and SBAs and addressing some of the barriers to accessing health services should be a priority project intervention. This is particularly important given the relationship between increased ANC attendance and the likelihood of a supervised delivery. There is also scope to

build on the knowledge and practice of women and TBAs in understanding and managing complications of delivery and appreciating when to refer women for specialist care. Similarly culturally appropriate education about nutrition during pregnancy, building on the existing knowledge about birth spacing, improving rates of childhood immunization, the promotion of tetanus toxoid for pregnant women, facilitating the use of treated bed nets and improving understanding of maternal to child transmission of HIV could all influence MCH outcomes among these communities. (MOH, 2004)

## **1.2 Statement of the problem**

The extensive aim of participation in development is to actively involve people and communities in identifying problems, formulating plans and implementing decisions over their own lives. (DFID, 2002). In Isiolo county, Maternal mortality rate stands at 790/100,000 (KDHS, 2009) making it one of the counties with the most number of maternal deaths recorded in Kenya. There is growing consensus worldwide that ending preventable maternal deaths can be achieved by ensuring that every woman has access to quality health care. Women in Isiolo do not experience autonomy in decision-making especially related to reproductive and contraceptive choices (KDHS, 2014). Many young women resort to abortions to achieve spacing between pregnancies, which are often performed by untrained personnel that lead to high-risk situations (Santhya and Jejeebhoy, 2002, 104). Women are regularly blamed for infertility and childlessness, while their husbands are unwillingly to get tested to establish the cause of infertility in the couple.

Isiolo has its own cultural practices that affect reproductive choices and maternal health. Rural women from Isiolo are more likely to seek the aid of midwives (known as nkaitishoni), and have home-births. Childbirth is viewed as a time for women to interact with the divine, and fully realize their femininity through the painful process of birth. Village midwives see it as their duty to facilitate these virtues within women during childbirth (Ram, 1994). This differs greatly from the perspective of doctors and nurses in government facility. It was found that women do not travel alone to the health care facilities and are almost always accompanied by other adults. Consequently, rural poor women would have a harder time traveling to health facilities as a result of the cost and distance. The necessity of finding a travel companion could disrupt the daily schedule of both individuals and potentially cause a loss of wages.

### **1.3 Purpose of the study**

The purpose of this study was to determine the influence of community empowerment programs initiatives on maternal mortality rate in Isiolo central sub county

### **1.4 Objectives of the study**

The study was guided by the following objectives:

1. To determine the extent to which economic empowerment provided by community empowerment programs influence the rate of maternal mortality in Isiolo County.
2. To assess the extent to which peer education provided by community empowerment programs influence the rate of maternal mortality in Isiolo county
3. To determine the extent to which strengthening of health facilities supported by community empowerment programs influences the rate of maternal mortality in Isiolo county
4. To establish the extent to which male sensitization by community empowerment programs influences the rate of maternal mortality in Isiolo sub county

### **1.5 Research Questions**

From the above objectives, the following research questions were developed:

1. To what extent does economic empowerment provided by community empowerment programs influence the rate of maternal mortality in Isiolo County?
2. To what extent does peer education provided by community empowerment programs influence the rate of maternal mortality in Isiolo County?
3. How does health facility strengthening supported by community empowerment programs influence the rate of maternal mortality in Isiolo County?
4. To what extent does male involvement sensitization created by community empowerment programs influence the rate of maternal mortality in Isiolo County?



## **1.6 Significance of the Study**

The study hoped to inform government policy with regard to designing changes to streamline the management of various community empowerment programs to enhance more participation by the community. Additionally the study anticipated to help the program managers in policy formulation for development projects by incorporating all the stakeholders towards achieving the target outcome in projects. The findings will be useful to the community to find ways to own the community projects by enhancing more participation. The non-governmental organizations (N.G.Os) and international agencies who engage in projects will find this study useful with regard to the importance and participation of the community to ensure success of the projects. The study shall also provide a basis on which academic researchers can do further studies on community participation and community projects

## **1.7 Assumptions of the study**

The study assumed that most respondents were truthful in their responses. It is also assumed that health is the priority for most people hence the need for this study. Health professionals were assumed to view health care in a different manner than layperson

## **1.8 Limitations of the study**

The study was carried out in the administrative county in North Eastern, Kenya. The main limitation of the study is that some of the respondents may have given socially acceptable responses to please the researcher and not to expose the negative side of the community empowerment program's role in reducing maternal mortality. However, efforts were made in explaining to the respondents, the importance of the study and requesting the respondents to be sincere and honest. Another limitation was the low literacy levels among pastoral communities which made it difficult for respondents to understand the questions posed. However efforts were made by the data collector to explain questions in the local language.

## **1.9 Delimitations of the study**

The study targeted only programs whose objectives have direct relationship with maternal health, helping attain the fifth millennium development goal. The study was conducted in one administrative sub county which is practically rural set up, the findings may be generalized to other rural areas with caution. The study is also limited to program implementing personnel, government officials and local community. Even though most infant and child deaths are tied to maternal deaths, this study exclusively focused on maternal mortality.

## **1.10 Definition of significant Terms**

**Antenatal care:** Antenatal care is the care a woman receives from health care professionals during her pregnancy. The purpose of antenatal care is to monitor the mother's health, the baby's health and support the woman to make plans which are right for you.

**Community Empowerment Programs:** Initiatives by the government, nongovernmental organizations, individuals and other stakeholders intended at improving maternal health in the county to provide necessary training and resources where need be.

**Economic empowerment:** Equipping the community with necessary information and resources to enable them practice safe health practices and improve their way of living.

**Health facility strengthening:** Making necessary improvements in health workforce, service delivery, health information systems, equipment and supplies, with leadership and finance combined.

**Maternal mortality:** The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.

**Maternal mortality ratio:** Maternal mortality ratio is the number of women who die from pregnancy-related causes while pregnant or within 42 days of pregnancy termination per 100,000 live births.

**Male Involvement:** Engagement and support provided by men in sexual reproductive health to their female counterparts such as decision making, taking part in household chores among other responsibilities.

**Peer Education:** refers to the process whereby well-trained and motivated people undertake informal or organized educational activities with their peers (those similar to themselves in age, background, or interests).

### **1.11 Organization of Study**

Chapter One of this study introduces the problem statement and describes the specific problem addressed in the study as well as design components. This chapter also highlights the purpose, objectives, significance, assumptions, limitations and delimitation of the study. Chapter Two looks at available works and literature done on factors influencing maternal health and the role of community empowerment programs by scholars who have studied the subject in other maternal health contents. The chapter provides a conceptual framework which outlines the relationship between the dependent and the independent variables identified in the study. Chapter Three presents the methodology and procedures used for data collection and analysis. It also describes target population, research instruments and ethical considerations applied in the study. Chapter Four presents analysis and interpretation of the data collected from the field. Qualitative methods were used in the analysis. Summary of the key findings from the study as per the set objectives and discussion of the findings and recommendations are provided in Chapter Five

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter looks at available works and literature done on factors influencing maternal health and the role of community empowerment programs by scholars who have studied the subject in other maternal health contents. The chapter also provides a conceptual framework which outlines the relationship between the dependent and the independent variables identified in the study.

#### 2.2 Influence of economic status on maternal mortality

Every year more than half a million women die from preventable complications caused by childbirth or from pregnancy-related issues. (WHO, 2014)The large majority (99%) of these maternal deaths occur in low-income countries. In Kenya, maternal mortality, as well as associated maternal morbidity, is a serious public health concern. Along with the United Nations, the government of Kenya is committed to achieving the Millennium Development Goal (MDG) 5, which is: To reduce the maternal mortality ratio by 75% between 1990 and 2015.The current study shows that use of delivery care services is associated with socioeconomic development and can be enhanced by societies that focus on general issues such as schooling, economic well-being, and gender-based discrimination. (Anglican Overseas Aid, 2013).According to, (The Lancet, 2014), circumstances acquiescent to intervention by skilled health providers are engaged in the casual mechanisms for about 80% of maternal deaths, and currently, the main strategy for reducing maternal mortality has been to scale up access to delivery care during the time of delivery.

While skilled birth attendance and emergency obstetric care are essential to securing significant reductions in maternal mortality, health service extension by itself is not sufficient. In most home deliveries in Kenya, such services are not utilized. The reasons for this under-utilization have not been satisfactorily investigated. (Commission on the Status of Women, 2011) . The relationships between economic empowerment and improved health status in terms of child mortality,

nutrition, immunization coverage, and contraceptive use have been documented in Kenya. However, Women's economic situation and utilization of child delivery care services is a salient problem that has received less attention. Present evidence suggests that the available maternal health services are not utilized appropriately in regions where the need for such services is most prevalent, such as areas with deprived populations. Due to gender inequalities, women in poor populations often discover themselves even further disadvantaged within the deprived population, as a result of being the poorest among the poor and the least educated within the insufficiently educated.(PPD, 2013) However, economic empowerment of women in relation to health care utilization is not well explored. The aim of the study is to investigate the associations between Women's economic empowerment and their utilization of maternal health services in Kenya.

### **2.3 Peer education and mortality rates**

In the context of this study, peer education is the process whereby well-trained and motivated women undertake informal or organized educational activities with their peers (those similar to themselves in age, background, or interests). (NOPE, 2011) These activities, occurring over an extended period of time, are aimed at developing Women's knowledge, attitudes, beliefs, and skills and at enabling them to be responsible for and to protect their own health. Peer education can take place in small groups or through individual contact and in a variety of settings: churches, workplaces, street settings, shelters, or wherever women gather. (Gould, J. & Lomax, A. 1993)

This study reviews what we know of the track record of programs focused on reducing maternal mortality. We have not identified an intervention whose effectiveness at reducing maternal mortality is strongly supported by the available evidence. There exists credible success stories, but they have hinged on broad, systemic improvements to the provision of health care, which is likely outside the scope of a program run by a charity. In south Asia, community mobilization through Women's groups reduced the rate of neonatal mortality, probably through improved solidarity, decision making, preventive care, care-seeking, and health-service accountability. (John Sciacca and Tina Appleton, 1996)

Most births in African countries occur at home, especially in rural areas, and many deaths in infants might be prevented if mothers are given advice about feeding, infant care, danger signs, MTCT, HIV testing and treatment, and care-seeking. (Reginald Fennell, 1993). In Africa, no trials of community mobilization through Women's groups, and only one trial of counseling for exclusive breastfeeding, have been done to assess effects on child mortality. Milburn K. A in his article "critical review of peer education with young people with special reference to sexual health. Health Education, 1995" says, The effects of community mobilization through Women's groups, and health education through female volunteer peer counselors on rates of maternal morbidity and mortality will be assessed in the study.

Peer education is being implemented by youth reproductive health and HIV prevention programs around the world. Peer education approaches offer many benefits to programs, target audiences, and communities, and empirical evidence has shown that well-designed and well-implemented programs can be successful in improving youth's knowledge, attitudes, and skills about reproductive health and HIV prevention. (USAID, 2012). However, the quality of peer education varies tremendously. Very often, programs are called "peer education" when they are in reality outreach activities. Even when well designed, programs sometimes face great challenges in implementation. Peer educators can misunderstand the scope and limits of their activities because of lack of communication about expectations. (NOPE, 2010). A young person's peer group has a strong influence on the way he or she behaves. This is true of both risky and safe behaviors. Not surprisingly, young people get a great deal of information from their peers on issues that are especially sensitive or culturally taboo.

Peer education makes use of peer influence in a positive way. (Klein, N., Sondag, K., & Drolet, J, (1994). Peer education is also a way to empower young people; it offers them the opportunity to participate in activities that affect them and to access the information and services they need to protect their health.

## **2.4 Influence of Health facilities strengthening on maternal mortality**

Factors that increase maternal death can be direct or indirect. Generally, there is a distinction between a direct maternal death that is the result of a complication of the pregnancy, delivery, or management of the two, and an indirect maternal death that is a pregnancy-related death in a patient with a preexisting or newly developed health problem unrelated to pregnancy. Fatalities during but unrelated to a pregnancy are termed accidental, incidental, or non-obstetrical maternal deaths. WHO notes that in 2014 the major direct causes of maternal deaths globally are: severe bleeding/hemorrhage (27%), infections (11%), unsafe abortions (8%), high blood pressure during pregnancy (pre-eclampsia. (African Population and Health Research Center (APHRC). 2002) (14%), obstructed labour (9%), blood clots/embolism (3%) and pre-existing conditions (28%). Indirect causes are malaria, anaemia, HIV/AIDS, and cardiovascular disease, all of which may complicate pregnancy or be aggravated by it. Lack of access to skilled medical care during childbirth, the travel distance to the nearest clinic to receive proper care, number of prior births, barriers to accessing prenatal medical care and poor infrastructure all increase maternal deaths.(WHO,2013)

Unsafe abortion is a major cause of maternal death. According to the World Health Organization, every eight minutes a woman dies from complications arising from unsafe abortions. Complications include hemorrhage, infection, sepsis and genital trauma globally, preventable deaths from improperly performed procedures constitute 13% of maternal mortality, and 25% or more in some countries where maternal mortality from other causes is relatively low, making unsafe abortion the leading single cause of maternal mortality worldwide.

### **2.4.1 Medical Technologies**

Technologies have been designed for resource poor settings that have been effective in reducing maternal deaths as well. The non-pneumatic anti-shock garment is a low-technology pressure device that decreases blood loss, restores vital signs and helps buy time in delay of women receiving adequate emergency care during obstetric hemorrhage. It has proven to be a valuable

resource. Condoms used as uterine tamponades have also been effective in stopping postpartum hemorrhage. (GBC Health, 2013)

#### **2.4.2 Public health concerns**

Public health refers to "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." It is concerned with threats to health based on population health analysis. (Hardey, Michael, 2008)The population in question can be as small as a handful of people, or as large as all the inhabitants of several continents (for instance, in the case of a pandemic). The dimensions of health can encompass "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity", as defined by the United Nations' World Health Organization. Public health incorporates the interdisciplinary approaches of epidemiology, bio statistics and health services. Environmental health, community health, behavioral health, health economics, public policy, insurance medicine and occupational safety and health are other important sub fields.(White F., 2013).

The focus of public health intervention is to improve health and quality of life through prevention and treatment of disease and other physical and mental health conditions. This is done through surveillance of cases and health indicators, and through promotion of healthy behaviors. Examples of common public health measures include Promotion of hand washing, breastfeeding, delivery of vaccinations, and distribution of condoms to control the spread of sexually transmitted diseases. Modern public health practice requires multidisciplinary teams of public health workers and professionals including physicians specializing in public health/community medicine/infectious disease, psychologists epidemiologists, bio statisticians, medical assistants or Assistant Medical Officers, public health nurses, midwives, medical microbiologists, environmental health officers / public health inspectors, pharmacists, dental hygienists, dietitians and nutritionists, veterinarians, public health engineers, public health lawyers, sociologists, community development workers, communications experts, bioethicists, and others.(Christin L. Hancock, 2001)



Today, most governments recognize the importance of public health programs in reducing the incidence of disease, disability, and the effects of aging and other physical and mental health conditions, although public health generally receives significantly less government funding compared with medicine. In recent years, public health programs providing vaccinations have made strides in promoting health, including the eradication of smallpox, a disease that plagued humanity for thousands of years.

Public health surveillance has led to the identification and prioritization of many public health issues facing the world today, including HIV/AIDS, diabetes, waterborne diseases, zoonotic diseases, and antibiotic resistance leading to the reemergence of infectious diseases such as tuberculosis. Although the prioritization of pressing public health issues is important, (Laurie Garrett, 2012) argues that there are following consequences. When foreign aid is funneled into disease-specific programs, the importance of public health in general is disregarded. This public health problem of stove piping is thought to create a lack of funds to combat other existing diseases in a given country.

### **2.4.3 Policies and implementation**

The biggest global policy initiative for maternal health came from the United Nations' Millennium Declaration which created the Millennium Development Goals. The fifth goal of the United Nations' Millennium Development Goals (MDGs) initiative is to reduce the maternal mortality rate by three quarters between 1990 and 2015 and to achieve universal access to reproductive health by 2015.

According to WHO, 2012, Countries and local governments have taken political steps in reducing maternal deaths. Researchers at the Overseas Development Institute studied maternal health systems in four apparently similar countries: Rwanda, Malawi, Niger, and Uganda. In comparison to the other three countries, Rwanda has an excellent recent record of improving maternal death rates. Based on their investigation of these varying country case studies, the researchers conclude that improving maternal health depends on three key factors: Reviewing all maternal health-related policies frequently to ensure that they are internally coherent, Enforcing

standards on providers of maternal health services and any local solutions to problems discovered should be promoted, not discouraged. (WHO, 2013)

## **2.5 Male Involvement strategy in curbing maternal mortality**

Men's involvement is a critical component in the uptake of sexual reproductive health (SRH) services aimed at improving Women's reproductive health with increased interest in the last two decades. The development of strategies for encouraging male participation in reproductive health is therefore essential to improving Women's health status (Pranitha Maharaj 2000).

The 1994 International Conference on Population and Development (ICPD) in Cairo, and the 1995 Fourth World Conference on Women in Beijing formally recognized the role of men in promoting gender equality and better reproductive health for both men and women. Men's lack of participation in reproductive health not only damages their own health, but also contributes to the reproductive ill health of their female partners and children. In India for example, the involvement of men in family planning method use is limited by men avoiding direct use family planning but the methods used by the women were at the discretion of their husbands. (Saha KB et al, 2007). In Zimbabwe men reported making the final decisions in contraceptive use, even when women were responsible for obtaining contraceptives (Mbizvo MT and Adamchack DJ 1991) while in Madagascar the key barriers to use of Family Planning included gaps in knowledge about contraceptive methods; dissatisfaction with some modern contraceptive methods; and concern about social opposition to using contraceptives, largely from male partners (Bodo Randrianasolo et al 2008). However, limited attempts have been made to explore the role and impact of men's involvement in Women's uptake of SRH services in Kenya more so in pastoralist communities such as Isiolo.

### **Knowledge Gap**

While previous surveys and research has clearly indicated the maternal health concerns and suggested initiation of projects to reduce maternal mortality among pastoralist communities, little research has been carried out to assess the effectiveness of the approaches being employed

during implementation of such programs/projects. This research therefore seeks to provide answers in this area that is critical to programs implementation and determination of projects cost effectiveness as well as governance in general.

## **2.6 Theories of Education**

When undertaking a peer education program, the objectives are often to reinforce positive behaviors, to develop new recommended behaviors, or to change risky behaviors in a target group. Why and how do people adopt new behaviors? The fields of health psychology, health education, and public health provide relevant behavioral theories that explain this process. It is important to be aware of these theories, because they provide a theoretical base that explains why peer education is beneficial. Moreover, these theories can help guide the planning and design of peer education interventions. The following theories and models of behavior change are of particular relevance for peer education.

### **Theory of participatory education**

This theory states that empowerment and full participation of the people affected by a given problem is a key to behaviour change. This means that many advocates of peer education believe that the process of peers talking among themselves and determining a course of action is key to the success of a peer education project. The Theory of Participatory Education has also been important in the development of peer education (Freire, 1998). Empowerment, in the Freirian sense, results through the full participation of the people affected by a given problem or condition. Through such dialogue the affected community collectively plans and implements a response to the problem condition in question. Many advocates of peer education claim that this horizontal process of peers (equals) talking among themselves and determining a course of action is key to the impact of peer education on behavioural change. (Freire P. , 1973)

### **Social learning theory**

Social learning theory (Albert Bandura) posits that learning is a cognitive process that takes place in a social context and can occur purely through observation or direct instruction, even in the absence of motor reproduction or direct reinforcement. In addition to the observation of behavior, learning also occurs through the observation of rewards and punishments, a process

known as vicarious reinforcement. The theory expands on traditional behavioral theories, in which behavior is governed solely by reinforcements, by placing emphasis on the important roles of various internal processes in the learning individual.(Bandura, Albert, 1963).

Through observational learning a model can bring forth new ways of thinking and behaving. With a modeled emotional experience, the observer shows an affinity towards people, places and objects. They dislike what the models do not like and like what the models care about. Television helps contribute to how viewers see their social reality. Media representations gain influence because people's social constructions of reality depend heavily on what they see, hear and read rather than what they experience directly. Any effort to change beliefs must be directed towards the socio cultural norms and practices at the social system level. Before a drama is developed, extensive research is done through focus groups that represent the different sectors within a culture. Participants are asked what problems in society concern them most and what obstacles they face, giving creators of the drama culturally relevant information to incorporate into the show.(Bandura, Albert 1977)

## 2.7 Conceptual Framework

Fig 1 below illustrates the conceptual framework describing how the variables interrelate.

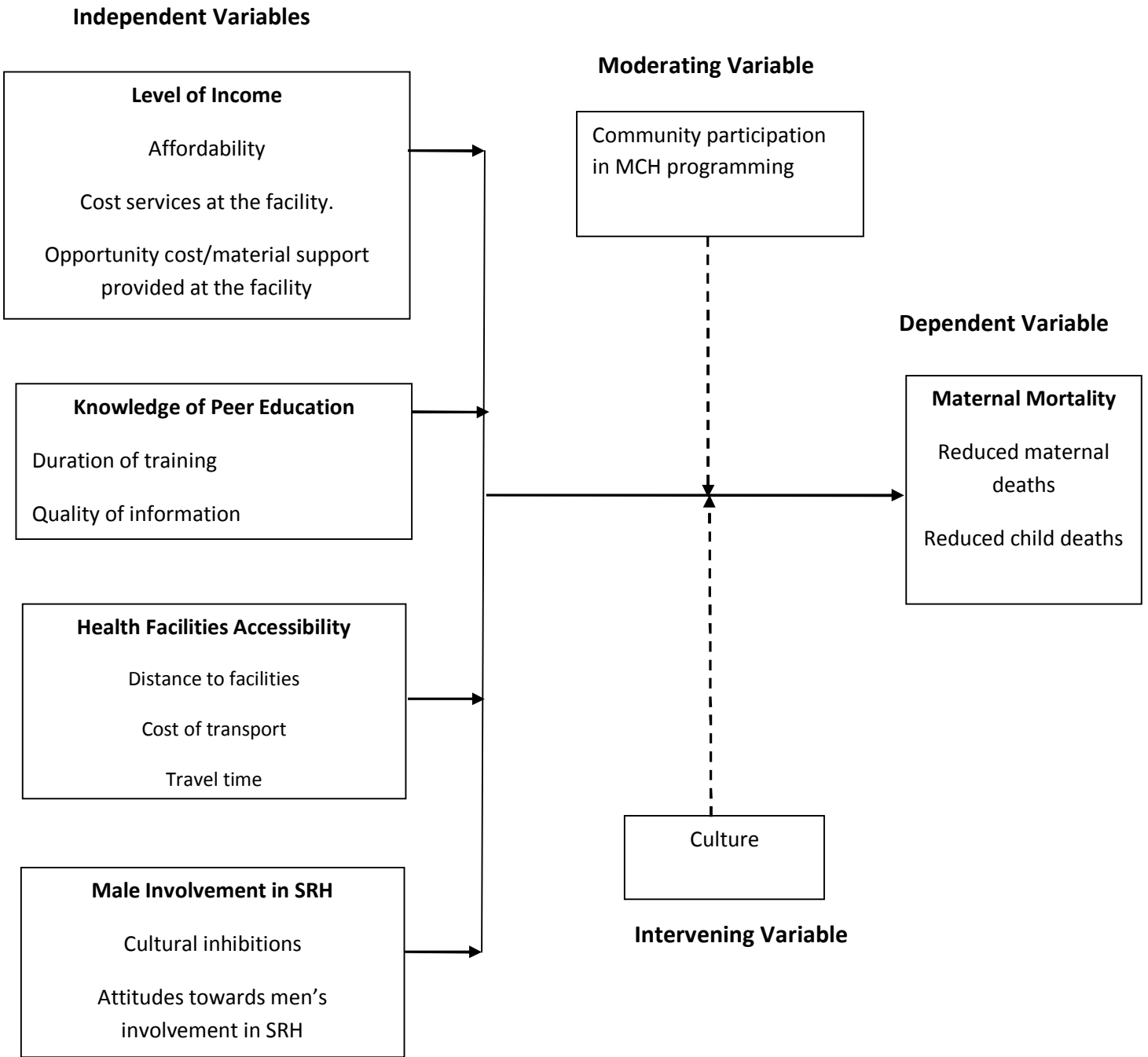


Figure 1: Conceptual Framework

The above conceptual framework for this study illustrates the mitigation strategies by community empowerment programs to reduce maternal mortality in the county. The framework shows that there are several mitigation interventions that can be employed so as to reduce maternal mortality. These include, economic empowerment of the communities, peer education training and sensitization, health facilities strengthening and Male involvement in sexual reproductive health and family planning in their families. Once these interventions are put in place, it is expected that the mortality rate will reduce and better livelihoods of the communities can be guaranteed

## **2.8 Summary of the literature review**

Previous studies indicate that, despite great efforts to reduce, maternal mortality in different regions, very little has been achieved in this pursuit in some regions, while other regions has marked tremendous growth on the same. Globally, the world recorded a reduction of approximated 50% reduction in maternal deaths since 1990 as compared to 75% reduction that intends to be achieved by the end of 2015.

Kenya is one of the countries where mortality rate remains high  $>300/100,000$ . According to survey conducted by University of Nairobi in 2014, Isiolo is listed as one of the top 15 counties with biggest burden of maternal and child health.

This study therefore intends to identify challenges encountered in implementation of MCH projects and recommend improved, systematic strategies to address this situation

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter presents a description of how the study will be carried out. It discusses the design, procedure, sampling techniques, instrumentation, data collection and analysis techniques and ethical considerations to be applied in the study.

#### 3.2 Research Design

The study employed descriptive survey design using both qualitative and quantitative approaches. Using this design, the researcher did not control any variables but only described the situation as it was in a particular point in time. This design therefore enabled the researcher to explore the intervention strategies for mitigating maternal mortality in Kenya's pastoral livelihood, case of Isiolo County by administering questionnaire to program service providers and the community members who are the program's beneficiaries. (Bickman and Rog, 1998) suggest that descriptive studies can answer questions such as "what is" or "what was."

Descriptive research involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data collection (Glass & Hopkins, 1984) Descriptive research is unique in the number of variables employed. Like other types of research, descriptive research can include multiple variables for analysis, yet unlike other methods, it requires only one variable (Borg & Gall, 1989)

#### 3.3 Target Population

Mugenda and Mugenda, (1999) define population as an entire group of individuals, events or objects having common observable characteristics. Ngaremara ward has a total population of 5,862. Out of this population, 70 % (4,003) are aged between 13-49 years. Therefore this study focused on 3,403 persons of reproductive age seeking service at the two health facilities within Ngaremara ward. 10% (5) of the trained peer educators were targeted for in depth interview. A

representative sample of 34 stakeholders of the C.E.P was chosen consisting, 20 men and women of reproductive age, 10 government officials, 10 NGO officials and 6 health service providers.

### **3.4 Sampling Procedure**

Sampling procedure is the process of selecting a portion of the population to represent the entire population; it is then a subset of the population (Denise, F.P., Cheryl, T.B and Hungler, B.P. (Eds), 2001). Bless C. And Higson-Smith, C. (1993) state that sampling should be done because it is less time consuming and less costly for the researcher to work on a subset of the population. The study employed cluster sampling. Cluster sampling is a sampling technique in which the entire population of interest is divided into sub groups otherwise called clusters from which random sampling is done in each sub group.

#### **3.4.1 Sample size**

In this research, through purposive sampling, the clusters were selected representative units within the clusters were sampled from clusters with large population that cannot be exhaustively involved in the process through simple random sampling. In this study the researcher selected four clusters which included 10 government officials from relevant departments including gender and sports, ministry of health, ministry of education, finance department and county legislation. 10 NGO officials who have worked in the region in the last more than two years including, Family Health International, CARE, AMREF, LVCT among others, 6 health service providers in MCH clinics and 20 (10% of community members visiting the health centers ) men and women of reproductive age visiting the health centers.

### **3.5 Research Instruments**

The study used questionnaires. Questionnaires containing both structured and unstructured questions were used for the study to collect primary data. This targeted health service providers, government officials, community members and CEP officials. The researcher preferred the use of questionnaires because of the simplicity in their administration, scoring of items and analysis (Mugenda and Mugenda, 2003). The questionnaires were divided into sections and developed based on the research objectives in order to capture relevant information. The questionnaires



included both open and close ended questions as well as rating questions to allow respondents to give more insight on the research problem and also facilitate consistency of responses among the respondents.

### **3.5.1 Pilot study**

Prior to the main research, the researcher pre-tested the instruments to enhance its validity and reliability. A relatively small sample was chosen from the population. In this research, 2 government official, 2 CEP officials, 1 health service provider and 4 beneficiaries were chosen to participate and were not included in the sample chosen for the study. This would increase the reliability and validity of the instruments where necessary corrections of the instruments were made before the actual research.

### **3.5.2 Validity of instruments**

Validity is defined as the accuracy and meaningfulness of inferences, which are based on the research result. (Mugenda and Mugenda, 1999). The questionnaires combined both open-ended and closed questions. This allowed respondents to have an opportunity to give more insight of the research problem while forced responses type facilitated consistency of responses among the respondents. The questionnaires were clear for everybody to interpret and respond to. Developing the questionnaire from questions previously used in the study research and based on literature analysis under the supervision of the university supervisor enhanced construct validity of the instruments. In addition to increase face validity, major terms such as maternal mortality rate, community empowerment programs and maternal morbidity were accompanied by definitions in the study.

### **3.5.3 Reliability of instruments**

(Mugenda and Mugenda, 1999) states that an instrument is "reliable" when it yields consistent results or data after repeated trials. To enhance reliability of the instruments, the researcher conducted test retest in a pre-identified location where the tools were administered to 5 same category respondents in an interval of a week. The results obtained were compared by calculating the correlation coefficient. According to (Mugenda and Mugenda, 1999), a correlation coefficient of 0.8 is reliable. The researcher then made necessary corrections before administering the tools for data collection.

### **3.6 Data Collection Procedure**

After gaining permission to conduct research from the National council for Science and Technology (NCST), the researcher then booked appointments with the relevant authorities and administer questionnaires to them. The researcher then made arrangements with the leaders of the facilities administrative offices for administering the questionnaire to the agreed time..

### **3.7 Data Analysis Techniques**

Before analysis, the collected data was checked for completeness and consistency. Coding was done to translate responses into specific categories. SPSS (Statistical Package for Social Sciences) was used to analyze the data. This is a statistical technique used to compare the differences between categorical frequencies drawn from a population in which all the alternatives are equally likely. SPSS was used because the data that the researcher collected is of the type "one-variable-many-levels" and are basically categorical frequencies of the descriptions of views, opinions, perceptions, feelings and attitudes of the respondents on the influence of community empowerment programs on maternal health.

Data was then analyzed qualitatively and quantitatively. Quantitative data was analyzed by use of descriptive statistics such as frequency distribution (f) and percentages (%) while qualitative data was analyzed by the use of content analysis which is the categorizing and indexing of

responses and other field notes into common themes. Conclusions on specific research questions were done based on the responses from the quantitative and qualitative data.

### 3.8 Ethical Considerations

The researcher informed the respondents of the purpose of the research, procedure to be followed, privacy and confidentiality of the information provided. Prior to data collection, permission was obtained from relevant authorities. Potential participants were given oral explanations of the study in understandable language and those willing to participate were given oral consent. The participants were assured of anonymity, confidentiality and informed of their ability to withdraw from the study at any time. There were no direct benefits for participating in the study.

### 3.9 Operational Definition of variables

The table below indicates the various variables and their levels of measurement with relation to the objectives of the study.

**Table3.1: Operational definitions of variable**

<b>Objective</b>	<b>Variable</b>	<b>Indicators</b>	<b>Data Collection Method</b>	<b>Scale of Measurement</b>	<b>Tool of analysis</b>
To determine to what extent economic empowerment influence the rate of maternal deaths in Isiolo county.	<b>Independent variable</b>  Level of income	Amount Provided  Monthly earning	Questionnaire	ratio	Descriptive

To assess the extent to which peer education influence the rate of maternal deaths in Isiolo county	<b>Independent variable</b>  Education level and knowledge on MCH  Where and how to get support	Duration of training  Knowledge of SRH and other support systems	Questionnaire and interviews	ratio	Co relational and Descriptive analysis
To determine to what extent health facilities strengthening influences the rate of maternal deaths in Isiolo county	<b>Independent Variable</b>  Accessibility to health services	Number of kilometers to health facility  Amount paid to health facility	Questionnaire	Ratio  ordinal	Descriptive analysis  Correlational analysis
To determine to what extent male involvement influences the rate of maternal deaths in Isiolo county	<b>Independent Variable</b>  Supportive spouses	Number of men supporting their wives in SRH and MCH issues	Questionnaire and interviews	ordinal	Descriptive analysis
Determine Maternal Mortality rate	<b>Dependent variable</b>  Maternal Mortality rate	No of women dying due to pregnancy related causes	Questionnaire	Ordinal	Descriptive

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.1 Introduction

This chapter addresses the results and findings of the study. The findings are outlined according to specific objectives of the study and are based on the responses from the questionnaires filled and information gathered on the research questions.

#### 4.2 Questionnaire response rate

Completion rate refers to the proportion of the sample that participated as intended in all the research procedures. In this study, out of the 10 government officials issued with questionnaires, 7 (70.0%) returned their questionnaires. out of the 10 NGO officials issued with questionnaires, 8 (80.0%) returned their questionnaires. All the 60 (100%) health service providers returned their questionnaires. Also out of the 20 community members issued with questionnaires, 18 (80.0%) returned their questionnaires. These response rates were therefore deemed adequate for the study.

**Table 4.1: Questionnaire on response rate**

Type of Respondents	Total	Frequency (f)	Percentage (%)
Government Officials	10	7	70
NGO officials	10	8	80
Health Service Providers	6	6	100
Community Members	20	18	90

#### 4.3.1 Demographic information of the NGO officers

The demographic information of the NGO officers was based on gender, age, position in the organization and duration in the organization

**Table 4.2: Distribution of the NGO officers according to gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Male	5	62.5
Female	3	37.5
Total	8	100.0

Table 4.2 shows that majority of the NGO officers 5(62.5%) were male while 3(37.5%) of the officers were female. The data implies that there was male dominance in the NGO management. Data on the age distribution of the NGO is presented in table: 4.3

**Table 4.3: Age distribution of the NGO officers**

<b>Age</b>	<b>Frequency</b>	<b>Percentage (%)</b>
20 ó 29	5	62.5
30 ó 39	2	25.0
40+	1	12.5
Total	8	100.0

Data shows that majority of the NGO officers 5(62.5%) were aged between 20 and 29 years while 2 (25%) were aged between 30 and 39 years and only 1 (12.5%) was above 40 years of age. The data shows that most of the NGO officers were relatively young. Distribution of the NGO officers according to the positions they hold is tabulated in table: 4.4

**Table 4.4: Position held by the NGO officers in the organization**

<b>Position</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Project Manager	3	37.5
Associate project manager	1	12.5
Monitoring and evaluation officers	2	25.0
Community mobilization officer	2	25.0
Total	8	100.0

The findings shows that 3 (37.5%) of the officers were project managers, while 1 (12.5%) were associate project managers. Two 2 (25%) of the NGO officers were monitoring and evaluation officers while a similar number were of those represented were community mobilization officers.

The data shows that the respondents were drawn from various departments which will present varied information on community empowerment programs influence on maternal health in the region. The study further sought to establish the duration that the officers had served in their respective organizations. Findings shows that majority of the officers 4 (75%) had been in the organization for less than two years while 2(25%) of the officers said they had been there for between 1 and 5 years. Most of the projects are said to have a lifetime of 3 - 5 years.

#### **4.3.2 Demographic information of the Government officers**

Similar to that of the NGO officers, the demographic information of the government officers was based on gender, age, position in the organization and duration in their respective departments.

**Table 4.5: Distribution of the government officers according to gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Male	5	71.4
Female	2	28.6
<b>Total</b>	<b>7</b>	<b>100.0</b>

Data in the above table indicates that there is no gender balance in the government line offices. The government officers were asked to indicate the department or the ministry they worked for. Data categorized by name of department or ministry the officers worked for is tabulated in table 4.6 below

**Table4.6: Categorization by Department**

<b>Office</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Ministry of Health	3	42.8
Ministry of Education	2	28.6
Ministry of gender, youths and sports	1	14.3
Ministry of finance	1	14.3
<b>Total</b>	<b>7</b>	<b>100.0</b>

Data in the table 4.6 above shows that 3 (42.8%) of the officers worked for ministry of health, while 2 (28.6%) worked for ministry of education. 1 (14.3%) of the government officers worked for the ministry of gender, youths and sports in the county and a similar percentage of those represented worked for ministry of finance.



The data shows that the government officers were drawn from various departments which gives value to their responses since information is drawn from various government departments.

The government officers were asked to indicate their age. Their responses were presented in table 4.7 below.

**Table4.7: Distribution of the Government officers according to age**

<b>Age</b>	<b>Frequency</b>	<b>Percentage (%)</b>
20 ó 29	2	28.6
30 ó 39	3	42.8
40+	2	28.6
Total	7	100.0

Data from table 4.7 shows that majority of the government officers 3 (42.8%) are aged between 30-39 years while 2(28.6%) of the government officers were aged between 20 and 29 years. A similar number were aged above 40 years

When the government officers were asked to indicate their position in the department, they responded as indicated in table 4.8.

**Table 4.8: Categorization of officers based on their positions**

<b>Position</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Public health Officer	1	14.3
Clinical Officer	1	14.3
Nutrition Coordinator	1	14.3
Sub county educational officer	1	14.3
headmaster	1	14.3
County Youth coordinator	1	14.3
CEC Finance	1	14.3
<b>Total</b>	<b>7</b>	<b>100.0</b>

Data shows that 1(14.3%) worked as public health officer, clinical officer, nutrition coordinator, sub county education officer, headmaster, youth coordinator and CEC finance. The data shows that there was equal distribution of the respondents from various government departments. This provides a wide range of information hence enriching the study.

#### **4.3.3 Demographic information of the Health service providers**

The demographic information of the health service providers was based on gender, age and level of education and position held.

**Table 4.9: Distribution of the health service providers according to gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Male	4	66.7
Female	2	33.3
Total	6	100.0

Data in table 4.9 above indicates that health service provision is dominated by male 4 (66.7) while female service providers were 2 (33.3%). This was said to be mainly because the culture of the communities in the region discourages women from pursuing formal education.

It shows that there lacks gender balance among health service providers in the health facilities. The table below provides categorization of health service providers data based on their age.

**Table 4.10: Distribution of health service providers based on age**

<b>Age</b>	<b>Frequency</b>	<b>Percentage (%)</b>
20 - 29	3	50.0
30 - 39	2	33.3
40+	1	16.7
Total	6	100.0

Data from table 4.10 above shows that most health service providers are young 3 (50.0 %) aged between 20 and 29 years, while 2 (33.3%) were aged between 30 and 39 years and 1 (16.7%) were above 40 years of age. Health service providers were asked to indicate their highest level of education attained and the results were tabulated as below

**Table 4.11: Distribution of health service providers based on level of education**

<b>Age</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Secondary	1	16.7
College	4	66.6
University	1	16.7
<b>Total</b>	<b>6</b>	<b>100.0</b>

From table 4.11 above data indicates that most health service providers have attained college level education 4 (66.6%), while 1(16.7 %) had attained university level education. There were also 1 (16.7%), whose highest level of education attained was secondary/High school. The categorization of health service providers based on educational qualifications would help the study determine if any capacity building was required to strengthen the health facilities. The health service providers indicated their positions as follows.

**Table 4.12: Distribution of health service providers based on position**

<b>Position</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Nursing officers	2	33.3
Clinical Officers	2	33.3
Pharmacist	1	16.7
Community Health volunteer(CHV)	1	16.7
<b>Total</b>	<b>6</b>	<b>100.0</b>

This data shows that information was drawn from various health service providers thereby strengthening the study.

#### 4.3.4 Demographic information of the community Members

To determine the demographic information of the community members, the respondents were asked to indicate their age, gender, highest level of education and type of employment which will be necessary for indication of the economic status of the residents. Table 4.12 below shows description of community members represented by gender.

**Table 4.13: Distribution of the community members according to gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Male	3	16.7
Female	15	83.3
Total	18	100.0

Data in the table above indicates that majority of persons seeking services at the health facilities are women 15 (83.3%) while only 3 (16.7%) were men seeking health services at the hospital.

From the age gaps indicated by respondents in the questionnaires, the respondents' age was distributed as indicated in table 4.13 below

**Table 4.14: Distribution of the community members according to age**

<b>Age</b>	<b>Frequency</b>	<b>Percentage (%)</b>
13 - 22	5	27.8
23 - 32	7	38.8
33 - 42	3	16.7
43+	3	16.7

Total	18	100.0
-------	----	-------

Data shows that most people 7 (38.8%) seeking health services from the health facilities are aged between 23 and 32 years while 5 (27.8%) were aged between 13 and 22 years. Only 3 (16.7%) were aged between 33 and 42 while a similar number was aged 43 years and above.

Table 4.15 below shows the distribution of community residents according to their highest level of schooling.

**Table 4.15: Distribution of community residents according to their highest level of schooling.**

Age	Frequency	Percentage (%)
No school at all	8	44.4
Primary	6	33.3
Secondary	3	16.7
Tertiary(College and/or University)	1	5.6
<b>Total</b>	<b>18</b>	<b>100.0</b>

Data in the above table shows that, most people 8 (44.4%) seeking service at the health facilities are uneducated while 6 (33.3%) have gone up to primary school level. Those who have attained education up to secondary/high school level were 3 (16.7%) and only 1(5.6%) had obtained education up to tertiary level.

Table 4.16 below shows the distribution of community residents based on whether they are employed or not.

**Table 4.16: Distribution of community residents based on their employment type**

<b>Age</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Employed	3	16.7
Unemployed	13	72.2
Self employed	2	11.1
Total	18	100.0

Data in table 4.15 above shows that most people 13 (72.2%) seeking services at the health facilities are unemployed while 3 (16.7%) of the community residents were not employed. However 2 (11.1%) indicated that they were self-employed and they were practicing farming and other small family businesses.

#### **4.4 Analysis of responses on influence of community empowerment programs on maternal mortality rate**

Community empowerment programs influence on maternal mortality rate in Isiolo County was investigated based on four main approaches including; economic empowerment of community residents, health facilities conditions in the region, peer education among community residents and male involvement in sexual reproductive health in their families.

##### **4.4.1 Influence of economic empowerment on reducing maternal mortality in Isiolo County**

To establish how economic empowerment of community members influenced maternal mortality rate in Isiolo county, community members were asked to indicate how effective they thought, the C.E.Ps were in supporting maternal health.

**Table 4.17: Responses on how effective are economic empowerment initiatives by C.E.P in improving maternal health**

<b>Effectiveness</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Effective	8	44.4
Ineffective	7	38.9
Not sure	3	16.7
<b>Total</b>	<b>18</b>	<b>100.0</b>

Table 4.17 shows that majority 8 (44.4%) of the community members said that the initiative was effective while 7 (38.9%) of the community residents indicated that more needs to be done. Three 3 (16.7) of the community residents indicated that they were not sure whether the initiatives were effective or not.

When the same question was posed for the health providers, majority 4 (50%) indicated that the initiative was effective while 1 (25%) thought that the programs initiative was ineffective and a similar number of the health service providers indicated that they were not sure whether the programs initiative was effective or not.

**Table 4.18: C.E.P officials rating on effectiveness of economic empowerment initiatives**

<b>Effectiveness</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Effective	11	73.3
Ineffective	3	20.0
Not sure	1	6.7
<b>Total</b>	<b>15</b>	<b>100.0</b>

Data from table 4.17 above indicates that majority 11 (73.3%) of the community empowerment programs including government and NGO officials indicated that the programs initiative was effective while 3 (20.0%), indicated that the initiative was ineffective while 1(6.7%) said that



they were not sure whether the initiative was effective or not. The initiative involved providing incentives to women seeking services at health facilities as well as peer educators who refer a certain number of clients to the health facilities for services. Women are also trained on how to form SILC (Savings and internal lending communities) groups to improve their economic well-being.

#### 4.4.2 Influence of peer education on reducing maternal mortality in Isiolo County

To establish how peer education facilitated by C.E.Ps among community members influenced maternal mortality rate in Isiolo county, health service providers were asked to indicate whether they agreed or not that peer education is a an effective way of encouraging people to visit health facilities and consequently educing maternal mortality in Isiolo county.

The results were tabulated as below:

**Table 4.19: Health service providers rating on effectiveness of peer education as an initiative to improve maternal health**

<b>Response</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Agree	3	50.0
Strongly Agree	3	50.0
<b>Total</b>	<b>6</b>	<b>100.0</b>

Out of the 18 community residents who were interviewed, 13(72.2 %) were referred to the hospital by a friend or a peer educator while 5 (27.8%) heard about the health facilities from the media and other sources. This shows that peers have great influence on decisions made by their colleagues including health matters.

The table below shows the responses given by C.E.P officials regarding the effectiveness of peer education as an initiative to improve maternal health in Isiolo County. The respondents were

asked to indicate how effective or not they thought peer education is as an initiative by C.E.Ps to improve maternal health in Isiolo County.

**Table 4.20: C.E.P officials rating on effectiveness of peer education as an initiative to improve maternal health**

<b>Response</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Very Effective	12	80.0
Effective	3	20.0
<b>Total</b>	<b>15</b>	<b>100.0</b>

Data in table 4.20 above shows that majority 12 (80.0%) of both government and NGO officials indicated that peer education is a very effective method of reducing maternal mortality. Most argued that it is the easiest and cost effective means to reach to community members regarding health information. 35 peer educators have been trained in Ngaremara ward to promote and increase access and uptake of health services among community members. The peer educators are also tasked with making referrals to the nearest health facility where people can either access services or more information regarding maternal health. Most health service providers attest that there has been increased number of patients seeking health services from the health facilities since the establishment of peer education programs within the region. Continuity of peer education programs as an initiative to improve maternal health is encouraged with caution on need to adopt best strategies to ensure sustainability of such courses in the region.

Mothers within the same age groups are recruited in groups of between 10 and 15 women to discuss sexual reproductive health and family planning issues under the guidance of a program official. Beyond these groups members are required to reach out to their fellow women in the villages with the information provided hence the concept of peer education. These groups are commonly known as sister to sister groups among programs and communities within the county.

#### 4.4.3 Influence of Health Facilities strengthening on maternal mortality rate in Isiolo County

In trying to assess the effectiveness of strengthening health facilities as a mitigating strategy to reduce maternal mortality in Isiolo County, health workers, community members and C.E.P officials were asked questions that related to their level of operation in the programs.

Health service providers were asked to indicate what was most lacking in their facilities to facilitate delivery of services efficiently and effectively and their responses were distributed as indicated in the following table 4.21

**Table 4.21: Responses on effectiveness of health strengthening initiative in reducing maternal mortality by health service providers**

<b>Capability</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Capable	3	50.0%
Incapable	2	33.3
Not sure	1	16.7
<b>Total</b>	<b>6</b>	<b>100.0</b>

Most health service providers indicated that their health facilities did not have enough medical supplies, obstetric equipment and enough structures to support the rising demand for services in the health facilities. Health service providers were also asked to indicate whether there were any community empowerment programs supporting the health facility where they were working in which case all of them 100.0% were able to relate with a program that was supporting them. Government initiated projects being the most common in their responses.

When asked to indicate what was the most common contribution offered by the programs, the results were tabulated as follows:

**Table4.22: Responses on what is lacking in facilities as indicated by health service provider**

<b>Capability</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Obstetric equipment	1	16.7
Medicine and medical supplies	4	66.6
renovations	1	16.7
<b>Total</b>	<b>6</b>	<b>100.0</b>

The main question posed to the NGO and government officials was whether the government allocates enough funds to facilitate health facility strengthening. The responses provided were distributed as follows.

**Table 4.23: Responses on whether the government allocates enough funds for health facility strengthening**

<b>Allocation of funds</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Yes	1	6.7
No	12	80.0
Not sure	2	13.3
<b>Total</b>	<b>15</b>	<b>100.0</b>

C.E.P officials were also asked to rate the most common sponsors of the community empowerment programs in Isiolo County. Their responses were recorded and distributed as shown in the table 4.24 below

**Table4.24: Distribution of responses based on common financiers of the C.E.Ps**

<b>sponsors</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Government	5	33.3
NGOs	6	40.0
CBOs	2	13.3
Multinational agencies	2	13.3
<b>Total</b>	<b>15</b>	<b>100.0</b>

Table 4.24 shows that NGOs contributes the most 6 (40.0%) towards supporting community empowerment programs while 5(33.3%) indicated that the government is the major financier to the programs. Also 2 (13.3%) of the respondents indicated that CBOs are the most common financiers of the program and a similar number indicated that multinational agencies are the major sponsors of such projects.

#### **4.4.4 Influence of male involvement on reducing maternal mortality in Isiolo County**

In an attempt to assess the influence of male involvement in improving maternal health, various questions were asked for respondents to indicate their opinion, thoughts and rating on the same. Questions were structured differently depending on the targeted respondent. The male involvement concept was described to respondents.

Community residents were asked to indicate if they had ever attended clinic accompanied by their spouses. The following were the responses provided as shown in table 4.25 below.

**Table 4.25: Responses on whether spouses attended clinic together with their partners**

<b>sponsors</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Yes	3	16.7
No	15	83.3
<b>Total</b>	<b>18</b>	<b>100.0</b>

Data in the table above shows that majority of the people 15 (83.3%) in the communities living within Ngaremara ward, Isiolo county would not accompany their spouses to the clinics while only 3 (16.7%) have done so in the past. This data indicates the low level of engagement for men in these communities to their families regarding their support for maternal and child health improvement considering that it is mostly women and children who are recorded to be visiting the health facilities. When asked to indicate why men do not accompany their wives to the health facilities, their responses were distributed as provided in the table 4.26 below;

**Table 4.26: Distribution of responses based on reasons why men do not accompany their wives to the health facilities**

<b>sponsors</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Women don't like it	3	16.7
The culture does not allow	6	33.3
Lack of love and trust	2	11.1
Men don't like it	7	38.9
<b>Total</b>	<b>18</b>	<b>100.0</b>

Data shows that majority of the people 7 (38.9%) believes that men fail to accompany their spouses to the clinic because men do not like to do it. A significant section 6 (33.3%), believed that men fail to accompany their wives to the clinic because the culture prohibits them from doing so while 3 (16.7%) indicated that the reason was mainly because women preferred attending clinic on their own and their fellow women. Also 2 (11.1%) indicated that the main reason was because spouses lacked to love and trust each other.

When C.E.P officials were asked to indicate whether the community was receptive to the concept of male involvement, majority 10 (66.7%), indicated that the community were responding positively to the male involvement campaign approach aimed at improving maternal health.

5 (33.3%) indicated that there were challenges in implementing this strategy and did not think that the community would easily agree to it. This data shows that if the correct strategies are applied in mobilizing men to support their women, the uptake of these services would increase and thereby reducing maternal mortality rate in the region. When asked to make proposal on best approaches to convince men on this, most people indicated that using local leaders to mobilize and sensitize the men on this issue would significantly improve the results.

C.E.P officials were also asked to indicate whose responsibility they thought it is to sensitize men on SRH issues and the need for their contribution to the same in supporting women to reduce maternal mortality. On this 11 (73.3%) indicated that it is the responsibility of all stakeholders 2 (13.3%) indicated that it is the role of the government to do so. Responding to a similar question 2 (13.3%) indicated that NGOs should take lead in sensitizing men about their need to get involved.

In conclusion majority of the respondents agreed that male involvement as an approach to reduce maternal mortality rate is very effective but with caution to apply the correct strategies in mobilizing men to get involved.

## 4.5.0 Correlation Analysis

To investigate the research question, a Pearson product-moment  $r$  correlation was conducted to assess the relationship between MMR and C.E.P initiatives. Pearson  $r$  correlation is a bi variate measure of association (strength) of the relationship between two variables. Given that all variables are continuous (interval/ratio data) and the hypotheses seek to assess the relationships, or how the distribution of the z scores vary, Pearson  $r$  correlations are the appropriate bi variate statistic.

**Table 4.27: scoring coefficients of program's indicators**

<b>Economic situation</b>	<b>Coefficients of C.E.Ps indicators index</b>
Employed	0.249
Unemployed	-0.290
<b>Education</b>	
Illiterate	-0.272
Primary	0.342
Secondary	0.309
Tertiary	0.282
<b>Health Facilities Strengthening</b>	
Needs strengthening	-0.8
Don't need strengthening	0.233
<b>Male Involvement</b>	
Men participate in FP and SRH issues in their families	0.243
Men don't participate in FP and SRH issues	-0.180



## CHAPTER FIVE

### SUMMARY OF FINDINGS, DISCUSSIONS CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter summarizes the study, discusses the findings of the study and presents conclusions, recommendations and suggestions for further research.

#### 5.2 Summary of the Findings

The study found out that community empowerment includes identification of stakeholders, establishing systems that allow for engagement with stakeholders by public officials and development of a wide range of participatory mechanisms. Stakeholders are individuals who belong to various identified communities and whose lives are affected by specific policies and programs and/or those who have basic rights as citizens to express their views on public issues and actions.

From the study, all the respondents overwhelmingly indicated that they were aware of community empowerment projects within Ngaremara ward. Majority of the respondents indicated that the community empowerment programs they knew were initiated by NGOs and the government while others were initiated by community members, area leaders and faith based organizations. Community members contribute to program's identification and prioritization. Majority of the respondents reiterated that there were needy or deserving cases that have been left out in identification due to lack of funds, lack of community involvement, favoritism and other reasons.

This study aimed to investigate the dimensions of women's empowerment which are associated with an increased utilization of maternal health services in a ward in Isiolo County. The researcher found that there was a significant association between the dimension 'support by family and freedom from domination' and the utilization of maternal health services in the ward studied. Family support has been regarded as one of the factors that had an influence on ANC visits or the attendance of skilled health personnel at delivery. Family support can encourage

women to attend ANC, not only by providing the means of physical take-over of the household chores, but also through understanding and sympathy by using good communication among family members. In our questionnaire, we did not ask whether physical abuse had been experienced during pregnancy specifically, but the finding of a positive association between freedom from domination and the utilization of maternal health services suggests that efforts to reduce levels of domestic violence by different channels would reduce risks of negative reproductive health outcomes.

The researcher did not find an association between the economic stability of the participants and maternal health service utilization, although it has frequently been observed that those with a cash income have improved access to health services during pregnancy and delivery. A possible explanation of the finding is that financial burden in consultation or treatment was not a major barrier to accessing of health services in the county, as the treatment cost of primary health service was relatively low (mostly free) and patients generally feel that these it was affordable. The researcher's observation that those of younger age showed greater use of maternal health services can be explained by the fact that younger women have improved access to information and education and hence greater awareness of their health compared to their older counterparts.

The question on who should be involved in community based health program to reduce maternal mortality merits consideration. Should only women of reproductive age be involved or other family members or even other community members? The growing evidence shows that involving men (husbands/partners) in community participation in reducing maternal mortality will improve the effectiveness of the program. In many cultures, a husband decides care for his wife during pregnancy and delivery (Midhet, 2010). By actively being involved in community participation in health program, husbands can reduce delay of decision to seek medical care, and arrange transportation and finance in case of obstetric emergency. A husband can also encourage and facilitate his wife to attend antenatal care, ensure a healthy diet during pregnancy and postpartum period as well as arrange a health facility birth. Thus, it is essential to involve husbands in the efforts to reduce maternal mortality. However, it might be a challenge to encourage men from low economic status and rural area to involve in maternal health program, as they may have other priority such as livelihood activities to generate incomes or are reluctant to involve in the program due to cultural or social barriers.

Peer education interventions educate, motivate, and empower mothers and families to practice preventive care and to seek care for complications, and those with high stakeholder participation and ownership have resulted in significant positive effects on health outcomes. There is promising evidence that peer education, when successfully implemented, increases institutional births. In addition, behavior change interventions may reduce the risk of maternal infections during pregnancy. Peer education should be prioritized as a key strategy to link women in poor, rural communities with skilled obstetric care.

The ultimate success of demand-based strategies requires parallel supply-side efforts to reduce intrapartum-related mortality. Health system strengthening and improving the quality and quantity of obstetric care must accompany or even precede demand-side strategies.

### **5.3 Discussion**

The study focused on influence of community empowerment programs on maternal mortality rate, a case of Ngaremara ward, Isiolo County, Kenya. The objectives of the research included;

To determine the extent to which economic empowerment provided by community empowerment programs influence the rate of maternal mortality, To assess the extent to which peer education provided by community empowerment programs influence the rate of maternal mortality , to determine the extent to which health facilities strengthening supported by community empowerment programs influences the rate of maternal mortality and to establish the extent to which male involvement sensitization created by community empowerment programs influences the rate of maternal mortality in Ngaremara ward, Isiolo sub county.

To carry out the aforementioned study, the researcher had to originate general information from the respondents profile in terms of gender, level of education and the period which they had stayed at their current position. The study indicated the majority of the respondents had been holding their positions for almost 3 years in the current programs. The results also showed that most community members who seek access to health facilities services were female.

According to (PPD, 2013), Women's economic situation and utilization of child delivery care services is a salient problem that has received less attention. In regard to this objective, 11 (73.3%) of the C.E.P officials including government and NGO officials indicated that the

programs initiative was effective while 3 (20.0%), indicated that the initiative was ineffective. Data shows that a lot more requires to be done to strengthen this initiative by providing relevant resources to beneficiaries in an equitable manner and sustainable strategies put in place to ensure that the communities are able to support themselves even after the programs are terminated.

In regard to the second objective 12 (80.%) of rated peer education is a very effective method of reducing maternal mortality while the remaining 3(20%) rated it as ineffective showing consensus that if the strategy is applied correctly, it would significantly aid in reducing maternal mortality rate in Isiolo county. This study agrees with (Klein, N., Sondag, K., & Drolet, J, (1994) in that Peer education makes use of peer influence in a positive way. However, the quality of peer education training being offered by the programs requires more scrutiny and continued support for trained peer educators observed

Most health service providers 3 (50.0%) indicated that their health facilities lacked enough medical supplies, obstetric equipment and enough structures to support the rising demand for services in the health facilities. Health service providers were also asked to indicate whether they were familiar with any community empowerment programs supporting the health facility where they were working in which case all of them 6 (100.0%) said they did.

The study agrees with (TRLT, 2012) who indicates that, limited attempts have been made to explore the role and impact of men's involvement in Women's uptake of SRH services in Kenya more so in pastoralist communities such as Isiolo.

On the need for male involvement in reducing maternal mortality rate, 15 (83.3%) in the communities living within Ngaremara ward, Isiolo county would not accompany their spouses to the clinics while only 3 (16.7%) have done so in the past. This shows low level of engagement for men considering that women are the ones who mostly frequent the health facilities

## 5.4 conclusion

Maternal deaths are the consequence of a long and complex chain of events. Prevention of maternal deaths therefore requires far-reaching social and economic changes beyond the premises of the health care delivery system. However, for a significant reduction in maternal mortality to be realized the health care system in the Isiolo county must assume its responsibilities to institute essential changes in both the structure and process of health care delivery services particularly maternal health care. The researcher makes conclusions based on aforementioned objectives as follows

This dissertation shows that while traditional empowerment variables, such as wealth and education, are related to maternal mortality, few other empowerment variables can also provide explanatory power. The majority of empowerment variables, both life-events and attitudinal, do not relate to maternal mortality.

While traditional education measures, including grade-level and graduation, may indicate a level of empowerment for a woman based on increased knowledge, informal education can also increase access to and power over resources. This can be in the form of peer groups, organizations, or other mechanisms that encourage transferring knowledge.

There is increasing evidence that strategies to link mothers to skilled facility-based obstetric care may reduce maternal mortality. Increasing investment in the supply side of obstetric care should be partnered with investment and more rigorous evaluation of demand-side strategies to ensure mothers and newborns can and do link with the care they need, especially at the time of birth.

The findings show that there is limited couple communication on family planning and reproductive health issues which hampers male participation. There is need therefore for reproductive health programs to target couples in order to enhance spousal communication on reproductive health issues. The findings indicate that majority of men in most communities are uncomfortable accompanying their spouses for family planning and maternal and child health services because of cultural and gender norms. Further research is therefore necessary to provide a basis for the design of innovative strategies to address community specific barriers to male involvement.

## 5.4 Recommendations

This study makes the following recommendations that will enhance effectiveness of communities' empowerment programs thereby increasing uptake of health services by community residents and consequently reducing maternal mortality rate in Isiolo County.

1. Domestication of national FP and RH policies and strategies at the county level
2. Address systems-level change early and often To address the larger drivers of poor Maternal health outcomes, projects must address the larger political, religious, gender, and cultural contexts in which communities and health workers live and work. Projects must include systems-level change strategies, informed by analysis of existing community systems, health systems, and the functional relationships between the two. Inventories of community relationships, popular opinion leaders and other influential persons, existing community organizations and their activities, and detailed histories of service provision and acceptance in the community can provide a basis for alternative community action when a given health or community actor is unable to fulfill its obligations, as will inevitably occur. Having such analyses and inventories on hand will enable effective troubleshooting to navigate around problems, potentially through parallel organizations or systems.
3. Advocacy for the inclusion of male involvement strategies in the County Strategic Plans. These strategies should encompass a multi-sectorial approach.
4. Regular updates and refresher training on FP/RH for more health workers especially in the lower level health facilities. This should be done alongside the recruitment of more health workers to alleviate the existing shortages.
5. Sensitization of health workers on the existing health policies and strategies including those on FP and RH.

## **5.5 Suggestions for further research**

While the results show that several empowerment indicators are related to maternal health, there are numerous measures of empowerment that have been omitted with the social institutional and network empowerment framework described above. Across all social institutions, the process of empowerment, community organization, and shared power may better measure women's empowerment. Within each social institution, there may be other measures that capture empowerment, including inheritance and marriage decisions (kinship), leadership within religious communities (religion), political involvement (politics), informal work (economy) and non-traditional measures of education (education).

Another important area for research is the application of the United Nations guidelines on obstetric care to assess the availability, utilization and quality of care for women with obstetric complications.

Improving the road conditions and putting in place an effective and sustainable public transport system in the rural areas is needed. Inter-sectorial collaboration and action will be needed if any meaningful success is to be realized in maternal mortality reduction.

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## **Appendix 1: Letter of Transmittal**

Anthony Wainaina Ndungu

University of Nairobi.

P. O. Box 10498, Nairobi.

Tel: 0725623761

13<sup>th</sup> April 2015

Dear Sir/ Madam,

### **RE: REQUEST FOR RESEARCH PARTICIPATION**

I am a Master of Arts (M.A) student at University of Nairobi carrying out research on "Influence of Community Empowerment Programs Initiatives on Maternal Mortality rate in Kenya, (case of Ngaremara ward, Isiolo County, Kenya)".

This study is being carried out as part of the requirements of obtaining the degree. In order to carry out the research effectively, you have been selected to form part of the study which is entirely for academic purposes. I am therefore kindly requesting you to participate by responding to the questionnaire as truthfully and honestly as you can, and the information you give will be treated with utmost confidentiality. You will not be required to fill in your name, unless you voluntarily want to, in which case the name will not appear in the final report that will be submitted to the university.

Your cooperation and assistance in this research is highly appreciated.

Yours Sincerely

Anthony Wainaina Ndungu

## Appendix 2: Letter of Approval



**UNIVERSITY OF NAIROBI**  
COLLEGE OF EDUCATION AND EXTERNAL STUDIES  
SCHOOL OF CONTINUING AND DISTANCE EDUCATION  
DEPARTMENT OF EXTRA-MURAL STUDIES  
NAIROBI EXTRA-MURAL CENTRE

Your Ref:

Our Ref:

Telephone: 318262 Ext. 120

Main Campus  
Gandhi Wing, Ground Floor  
P.O. Box 30197  
N A I R O B I

6<sup>th</sup> May, 2015

REF: UON/CEES//NEMC/21/104

### TO WHOM IT MAY CONCERN

RE: ANTHONY WAINAINA NDUNGU - REG NO - L50/68840/2013

This is to confirm that the above named is a student at the University of Nairobi, College of Education and External Studies, School of Continuing and Distance Education, Department of Extra- Mural Studies pursuing Master of Arts in Project Planning and Management.

He is proceeding for a research project entitled "influence of community empowerment programs on maternal mortality" The case of Ngaremara ward, Isiolo county, Kenya.

Any assistance given to him will be appreciated.

*Caren Awilly*

**CAREN AWILLY**  
CENTRE ORGANIZER  
NAIROBI EXTRA MURAL CENTRE



### Appendix 3: Research Instrument for Men and Women Of Child Bearing Age

Please put a tick (ç) in the box next to the correct response

#### A. PERSONAL PROFILE

1. Indicate your Age bracket

20-29

30-39

40 and above

2. Gender      Male                   Female

3. Marital status

Single

Married

Divorced

Widowed

Separated

4. Religion      Catholic                   Protestant

                    Muslim                   Others (specify)

5. Where do you live/stay? \_\_\_\_\_

6. What type of house do you live in?

Permanent house

Semi-permanent house

Mud-walled

#### B. EDUCATION

7. (i) What is your highest level of education?

Primary school                   College

Secondary / high school                   University

Any other (specify) \_\_\_\_\_

(ii) What is the highest level of education of your spouse?

Primary school                   College

Secondary / high school  University   
Any other (specify) \_\_\_\_\_

**C. SOCIO-ECONOMIC BACKGROUND**

8. What is your occupation/profession? \_\_\_\_\_

9. (i) Which of the following employment cadres do you belong?

Employed

Self-employed

Casual worker/ Jua kali

(ii) Which of the following employment cadres does your spouse belong?

Employed

Self-employed

Casual worker/ Jua kali

10. (i) From the information provided above, what is your monthly income?

Less than Kshs 3000

Kshs 3000 ó 10,000

Kshs 10,000 ó 30,000

More than Kshs 30,000

(ii) What is your spouse monthly income?

Less than Kshs 3000

Kshs 3000 ó 10,000

Kshs 10,000 ó 30,000

More than Kshs 30,000

Don't Know

11. Does your spouse allow you to make decisions? Yes  No

12. Have you ever lost a family member due to pregnancy related cause

**D. INFLUENCE OF COMMUNITY EMPOWERMENT PROGRAMS ON MATERNAL MORTALITY**

**Influence of Economic Empowerment On Maternal Mortality**

13. Do you know of any community empowerment programs in your location that promote maternal health improvement? Yes / No (Tick appropriately)

If yes, how many?

14. Have you heard or attended any economic empowerment session hosted by a C.E.P in your location?

Yes  No

If Yes, How has the information obtained benefited you?\_\_\_\_\_

15. How effective are financial literacy training conducted by the C.E.P?

Effective  Ineffective  Not sure

16. Does the community appreciate the economic education and support provided by the C.E.Ps?

Yes  No

### **Influence of Peer Education on Maternal Mortality**

17. Are there trained peer educators in your home region?

Yes / No (Tick appropriately)

18. How effective would you say is peer education in reducing maternal mortality

Effective  Ineffective

Very Effective  Very Ineffective

Not Decided

19. Peer educators give referral to hospitals and other facilities for further help.

Agree  Strongly Disagree

Agree  Not sure

Disagree

20. The peer educators are well equipped with information on maternal health than community members.

Agree	<input type="checkbox"/>	Strongly Disagree	<input type="checkbox"/>
Agree	<input type="checkbox"/>	Not sure	<input type="checkbox"/>
Disagree	<input type="checkbox"/>		

**Influence Of health facilities strengthening on Maternal Mortality**

21. Is your local health facility well equipped to address maternal health issues?

Yes / No (Tick appropriately)

22. If Not what would you say is lacking?

Obstetric equipment	<input type="checkbox"/>
Medicine	<input type="checkbox"/>
Qualified health service providers	<input type="checkbox"/>

23. How would you rate the effectiveness of the facilities in attending their patients?

80-100%	<input type="checkbox"/>	59-50%	<input type="checkbox"/>
60-79%	<input type="checkbox"/>	Below 50%	<input type="checkbox"/>

24. Do you think there are enough health facilities to cater for the population within your region?

Yes / No (Tick appropriately)

**Influence of Male Involvement on Maternal Mortality**

25. Are men involved in sexual reproductive health matters for their families within your community?

Yes / No (Tick appropriately)

26. Do you think men should accompany their spouses to the clinic while their wives are pregnant?



Yes / No (Tick appropriately)

27. Do men in your community accompany their expectant wives to the clinic?

Yes / No (Tick appropriately)

Reason?

Not interested

Health center doesn't allow

Women don't like it

Lack of love and trust

28. How would you feel if your husband accompanied you to the clinic always?

Happy

Disappointed

Confused

I don't know

## Appendix 4: Research Instrument for Health Care Providers

Please put a tick (ç) in the box next to the correct response

### Questionnaire to health care providers

#### A. PERSONAL PROFILE

1. Indicate your Age bracket

20-29

30-39

40 and above

2. Gender      Male                   Female

3. Marital status

Single

Married

Divorced

Widowed

Separated

4. Religion      Catholic                   Protestant

                    Muslim                   Others (specify)

5. What is your highest level of education?

Primary school                   College

Secondary / High school                   University

Any other (specify) \_\_\_\_\_

#### B. INFLUENCE OF COMMUNITY EMPOWERMENT PROGRAMS ON MATERNAL MORTALITY

##### Maternal Mortality

6. With reference to your reports, has the Mortality rate in the region increased or decreased in the past 2 years?

Increased                   Not sure

Decreased

**Influence of Economic Empowerment on Maternal Mortality**

7. Do you know of any community empowerment programs in your work area that aims at improving maternal health? Yes / No (Tick appropriately)  
If yes, how many?
8. Do you think economic well-being has a role to play in improving maternal health situation in the community  
Yes / No (Tick appropriately)
9. How effective are the C.E.Ps you mentioned in economically empowering the communities through education, resource support or otherwise?   
Effective  Ineffective  Not sure
10. Do you think economically empowering the community, would reduce maternal mortality rate in the region?  
Yes / No (Tick appropriately)

**Influence of Peer Education on Maternal Mortality**

11. Are the health educators trained on health communications in your facility?  
Yes / No (Tick appropriately)
12. How effective are the peer educators in referring patients for services at the facility?  
Effective  Ineffective  Not sure
13. Has peer education improved the maternal and child health care practices of mothers?  
Very Much  Somehow   
Not at all
14. Peer education is a strategy that would revolutionize sensitization on maternal health if well adopted.

Strongly Agree

Strongly Disagree

Agree

It's of no use

Disagree

**Influence of Health Facilities Strengthening on Maternal Mortality**

15. How would you rate the capability of your clinic to deliver comprehensive MCH services?

Capable

Incapable

Strongly Capable

Strongly Incapable

Not Able

16. If incapable, what would you say is lacking?

Obstetric equipment

Medicine

Enough health service providers

17. Are there any C.E.P supporting your facility?

Yes / No (Tick appropriately)

18. If yes. What kind of support have you obtained from the C.E.P

- Obstetric equipment
- Medical facilities
- Renovations
- Structure construction
- Others specify.....

**Influence of Male Involvement on Maternal Mortality**

19. It is necessary for both male and female partners to attend clinic together when the woman is expectant

Strongly Agree	<input type="checkbox"/>	Strongly Disagree	<input type="checkbox"/>
Agree	<input type="checkbox"/>	It's of no use	<input type="checkbox"/>
Disagree	<input type="checkbox"/>		

20. During ANC/ PMTCT/ PNC, are there some mothers who have complained about negative behaviour of their spouses, after inviting them to accompany them to the clinic for ANC/PNC? Yes/ No

If yes, how would you rate the complaints?

100%	<input type="checkbox"/>	50%	<input type="checkbox"/>
75%	<input type="checkbox"/>	Below 50%	<input type="checkbox"/>

21. Maternal mortality rate would drastically reduce if men supported women in their families in sexual reproductive health matters.

Strongly Agree	<input type="checkbox"/>	Strongly Disagree	<input type="checkbox"/>
Agree	<input type="checkbox"/>	It's of no use	<input type="checkbox"/>
Disagree	<input type="checkbox"/>		

22. Men never agree to accompany their spouses to the clinic

Strongly Agree	<input type="checkbox"/>	Strongly Disagree	<input type="checkbox"/>
Agree	<input type="checkbox"/>	It's of no use	<input type="checkbox"/>

THANK YOU.

## Appendix 5: Research Instrument for C.E.P Officials

Please put a tick (ç) in the box next to the correct response

### Questionnaire to health care providers

#### A. PERSONAL PROFILE

1. Indicate your Age bracket

20-29

30-39

40 and above

2. Indicate your Gender

Male

Female

3. Marital status

Single

Married

Divorced

Widowed

Separated

4. Religion Catholic

Protestant

Muslim

Others (specify)

5. What is your highest level of education?

Primary school

College

Secondary / High school

University

Any other (specify) \_\_\_\_\_

6. What is your position in your department? \_\_\_\_\_

7. How long have you been working in this organization?

Below 1 yr.

1-5 years

6-10 years

11-15 years

16-20 yrs.

Over 20 yrs.

**B. INFLUENCE OF COMMUNITY EMPOWERMENT PROGRAMS ON MATERNAL MORTALITY**

**Influence of Economic Empowerment on Maternal Mortality**

8. What maternal mortality mitigation strategy is your department mainly involved?

Economic empowerment

peer education

Health facility strengthening

male involvement

9. Are the above strategies the most effective?

Yes / No (Tick appropriately)

10. How necessary is economic empowerment to the communities in reducing maternal mortality rate?

Necessary  Very Necessary

Unnecessary  Very unnecessary

**Influence of Peer Education on Maternal Mortality**

11. Is peer education a necessary tool to reduce maternal mortality rate?

Yes / No (Tick appropriately)

12. How would you rate the C.E.Ps efforts in promoting peer education in the region?

Good

Satisfactory

Unsatisfactory

13. Are there peer educators supported under the government program?

Yes / No (Tick appropriately)

14. In your opinion, what suggestion would you provide to reduce maternal mortality through peer education

### **Influence of Health Facilities Strengthening on Maternal Mortality**

15. In who are the key partners in strengthening health facilities in the region?

N.G.Os [ ]

Religious organizations [ ]

Donor agencies [ ]

Any other (Please specify).....

16. What are some of the challenges faced in provision of these services?

Adequate resources [ ]

Unwillingness of the communities to participate [ ]

Migration of populations [ ]

Any other (Please specify).....

17. How effective are the C.E.Ps in supporting health facilities strengthening?

Effective [ ] Ineffective [ ]

Highly Effective [ ] Highly Ineffective [ ]

Undecided [ ]

18. Does the government allocate enough funds for health facilities strengthening?

Yes / No (Tick appropriately)



## **Influence of Male Involvement on Maternal Mortality**

19. Do you think it is necessary for men to get involved in SRH matters of their families?

Yes / No (Tick appropriately)

20. Whose role is it to sensitize men on the need to support women in their families during pregnancy

Government [ ]

N.G.Os [ ]

Religious organizations [ ]

All stakeholders [ ]

No one [ ]

21. What suggestion would you give to ensure men are adequately involved in SRH matters of their families?

22. Is the male involvement campaign getting enough support from relevant stakeholders?

Yes / No (Tick appropriately)

23. Is the community receptive to Male involvement as a way of reducing maternal mortality rate in the region?

Yes / No (Tick appropriately)

## **Appendix 6: Focus Group Discussion Guide for Women and Men Aged 13- 49 Years**

### **Introduction to FGD Sessions**

We would like to thank you all for coming today. My name is Anthony Ndungu. We are from the University of Nairobi. I am conducting a study on Influence of community empowerment programs on maternal mortality rate. Some of the topics we are going to discuss level of education, economic status, I am particularly interested in how people perceive community empowerment programs in this region. I feel by talking to people like you we can best find out about practices, opinions and feelings about these issues in order to help us improve on health information and health services in our country. There are no wrong or right answers. We are interested in your views, so please feel comfortable to say what you honestly feel. I have a list of topics I would like us to talk about but please feel free to bring up any other issues you feel are relevant.

During the discussion, my colleague will be taking notes to keep track of what has been covered, and to remind me if I forget to ask certain things. However, so that s/he does not have to worry about getting every word down on paper, we will also record the discussions on tape. Please, do not let that worry you. The tapes and written material will be kept safe and not shared outside the research team. After writing our report, all the tapes and written notes will be erased, so no one will know who said what. Regarding the language, we want you to feel comfortable throughout the talk, so please just use the language that you use when you chat with friends. Finally, please try to let everyone have a turn at saying something, since all your views are important, and please try to keep the talk within the group.

The discussion is confidential. Are there any questions? Please may we begin.

The participants were asked to introduce themselves (first names only), their level of education and what they do.

1. Are there community empowerment programs targeting maternal health in Kenya?
2. How maternal health is handled in the health centers?

3. What are your feelings ,views and opinions about C.E.P and MCH?
4. How many have utilized health center services? Was it voluntary or a routine practice?
5. What new interventions have the MCH clinics put in place to serve women and children better?
6. How do the health workers handle clients who visit the clinics?
7. Are the health centers capable of serving the whole population?
8. What are the main sources of information on MCH?
9. What are the main challenges faced with the provision of MCH services at the clinics?
10. What is MCH? And how many have heard and know about it? And where did you get the information?
11. How many accompany/get accompanied by spouses while visiting clinic? Share the experience.

Thank you for your participation in this exercise.

## Isiolo County Map



Figure 2: Isiolo County Map