

**COMMUNICATION AND MITIGATION OF OBSTETRIC FISTULA
IN KENYA**

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
A MASTER OF ARTS DEGREE IN COMMUNICATION STUDIES,
SCHOOL OF JOURNALISM AND MASS COMMUNICATION,
UNIVERSITY OF NAIROBI**

2015

DECLARATION

I do hereby declare that this research project is my original work and has never been submitted for any award or examination in any other university.

SIGNATURE..... DATE.....

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This research project has been submitted for the purpose of examination with my approval as the university supervisor.

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DR. HEZRON MOGAMBI

ACKNOWLEDGEMENTS

I would like to acknowledge the full support of Dr. Hezron Mogambi who singly provided the guidance and directions coupled with helpful suggestions which made this research study a success, and also for his scrutiny and criticism, as well as his encouragement throughout the duration of the study.

I am sincerely thankful to staff of Kenyatta National Hospital for their support and generosity by proving and availing valuable information and documents from their journals and written records during our the study. I would also like to acknowledge the immense cooperation we received from the Ministry of Health staff. I would also like to acknowledge our esteemed respondents who took their time to answer the questionnaires and our colleagues who gave us the necessary support throughout the research study.

DEDICATION

I dedicate this project to our families for their endless love, support, patience and prayers throughout the project period and the entire degree program. I also dedicate this project to all the women suffering from Obstetric Fistula in Kenya.

ABSTRACT

The main goal of this project was to establish the effectiveness of health communication in mitigating Obstetric Fistula(OF) among women in Kenya. This research concentrated on how communication can be used to improve ways of addressing OF in Kenya. The study was conducted in Matungu division of Matungu district, Kakamega County with the help of Matungu district Hospital staff: doctors, nurses and care givers, elders and members of the community, pregnant women, victims of OF and their families. The study relied mainly on primary data sources to collect information gathered through IDIs and FGDS using semi-structured interview guides. Stratified sampling technique was used to come up with sample respondents. The study also employed qualitative research methods to explore the perspectives of the respondents on their experiences and beliefs about the impact of Communication OF. This data was coded and entered into Statistical Packages for Social Scientists (SPSS Version 17.0) and analyzed using descriptive statistics. The findings demonstrated that maternal health is very fundamental and must be considered to effectively address OF. Other factors that need to be considered when addressing OF include culture – both religious and traditional, socio-economic status, access to information and health care facilities, political goodwill and relevant infrastructure: transport and communication. The study also established that there was insufficient information about OF among the respondents and that there was need for improved access to information and education on OF and the related surrounding issues. The study also revealed that Mass Media and Group Communication were the most preferred channels of communication for IEC materials and activities. The study concluded that Communication can be effective in mitigating OF among the women and girls in Kenya. It is however very crucial to educate and fully inform members of the public about OF to increase individual learning and empowerment, capacity building, critical consciousness and support. Health service providers should also be trained to properly handle cases of OF and to inform pregnant women during ANC visits to avert OF. The Government and other development partners should also organize media campaigns and group communication to sensitize, educate and sensitize the public about OF.

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LIST OF ABBREVIATIONS

EmOC	-	Emergency Obstetric Fistula
FGDs	-	Focus Group Discussions
IDIs	-	In-Depth Interviews
Communication-		Development Communication
SPSS	-	Statistical Packages for Social Sciences
IEC	-	Information, Education and Communication
ANC	-	Ante-Natal Care/Clinic
WHO	-	World Health Organization
USA	-	United States of America
UNGA	-	United Nations
UNFPA	-	United Nations Population Fund
RVF	-	Recto-viginal Fistula
VVF	-	Vesico-Viginal Fistula
FGM	-	Female Genital Mutilation
KDHS	-	Kenya Demographic and Health Survey
CPD	-	Cephalo Pelvic Disproportion
TBAs	-	Traditional Birth Attendants
NGOs	-	Non-Governmental Organizations
AMREF	-	African Medical and Research Foundation
KNH	-	Kenyatta National Hospital
WADADIA	-	Women and Development Against Distress in Africa
HRWR	-	Human Rights Watch Report
ICPD	-	International Conference on Population and Development
MDGs	-	Millennium Development Goals
USAID	-	United States Agency for International Development
AMDD	-	Averting Maternal Death and Disability Program
FIGO	-	Federation of Gynecology and Obstetrics
OFWG	-	Obstetric Fistula Working Group
HBM	-	Health Belief Model
BCC	-	Behavior Change Communication

CHAPTER ONE: INTRODUCTION

1.0 Introduction

In this chapter, the background of fistula globally and in Kenya is explained. We also explain communication and the dynamics of health communication. The statement problem, objectives, purpose and significance of the study is given. Limitations and basic assumption regarding the study are also made.

1.1 Background of the study

Obstetric fistula is one of the most neglected issues in the field of women's health and rights. Despite more than a decade of work on "safe motherhood" internationally, millions of girls and women still die in childbirth or live with maternal morbidities such as fistula. The World Health Organization (WHO) estimates that approximately two million girls and women live with fistula worldwide and that an additional 50,000-100,000 girls and women are affected each year (Murray & Lopez, 1998). Experts on fistula working in the field report that this is likely to be a serious underestimate of the problem considering the fact that this is only based on the women who actually have access to health facilities.

According to Dr. Ananya Mandal, fistula is an abnormal connection that forms between two organs or vessels that are lined with epithelial cells. The American heritage dictionary, defines fistula as an abnormal duct or passage resulting from an injury, disease, congenital disorder connecting abscess, cavity or hollow organ to either the body surface or to another hollow organ. Sometimes medical or surgical procedures can result in fistulae. The constant pressure of the fetal skull against the soft tissue around the vagina and the bladder and/or the rectum cuts off the blood supply to these tissues, causing them to disintegrate (ischemic necrosis). A hole is then left, and urine and/or feces leak continuously and uncontrollably from the vagina. In nearly all cases of obstetric fistula, the baby dies.

Obstetric fistulae are common in developing countries due to poverty, poor access to maternal health services and absence of EmOC (Emergency Obstetric Care) services, in rural health facilities. Although fistula presents itself as a medical condition, it is

rooted in social, cultural, and economic determinants that underlie vulnerability. Fistula largely affects girls and women living in poverty and those living in rural areas. They often lack access to adequate health care services and information, cannot pay for medical treatment, and are poorly educated. Data also suggest that fistula can be caused in hospital settings themselves, through improper caesarean section (surgical trauma) and negligence, poorly performed abortions, pelvic fractures, cancer or radiation therapy targeted at the pelvic area, inflammatory bowel disease such as Crohn's Disease and ulcerative colitis, or infected episiotomies after childbirth (Nicol, 2005). This raises serious questions about the provision of quality health care within facilities and the need for rigorous attention to improving the skills, working conditions, and attitudes of health care providers. Other potential causes for the development of obstetric fistula are sexual abuse and rape, especially in conflict/post-conflict areas.

The history of obstructed labor and vesico-vaginal fistula according to Julia Cron dates back in 2050 BC found in the remains of queen Henhenit, the wife of Egypt's ruler. The anatomical review found a defect in the bladder communicating directly with the vagina. In 1963, the first book of operative gynecology was published and a Dutch physician Hendrik Van Roonhuyse gave a clear description of vesico-vaginal fistula and proposed a proper method of repair using stitching needles made out of stiff swansquills. However, with the advancement in medicine, the first vesico-vaginal fistula was closed in USA after 200 years by Dr. James Marion Sims. This cases of fistula have reduced in the developed nations but most prevalent to developing countries.

Obstetric fistula is still very prevalent in the developing world, especially in sub-Saharan Africa (Kenya, Mali, Niger, Nigeria, Rwanda, Sierra Leone, South Africa, Benin, Chad, Malawi, Mali, Mozambique, Niger, Nigeria, Uganda, and Zambia) and most of South Asia (Afghanistan, Bangladesh, India, Pakistan, and Nepal). This is due to the increased rate of poverty and limited resources in these regions. Between 50% and 80% of women under the age of 20 in poor countries develop obstetric fistulas (the youngest patients are 12–13 years old). Other estimates indicate that there are approximately 73,000 new cases per year.

In Kenya there are estimated 3000 cases each year with approximately one to two fistulacases per 1,000 deliveries and only 7.5% of womenwith fistula are able to access treatment (UNFPA 2004). According to the UN General Assembly (UNGA) Aug, 2012, obstetric fistula (OF) is a devastating childbirth injury that leaves women incontinent. A lot of women in Kenya suffer from this condition which exposes them to isolation, skin infections and even kidney disorders.This health problem may be in existence due to lack of education, poor health practices especially during birth and also lack of awareness among the vulnerable group being women. The condition also affects the people close to these women including children relatives and their spouses.Most cases of fistula in Kenya are caused by rugged, long distances to health facilities, harmful cultural practices, poverty and lack of education on the complications of childbirth. In addition there are less skilled personnel to deal with this condition.

According to WHO (2003) ninety percent (90%) of obstetric fistulas in developing countries are caused by obstructed labor which is one of the major causes of maternal mortality. During prolonged/obstructed labor, the soft tissue of the vagina is trapped between the foetal head and the bony pelvis. If the compression is not relieved, the tissue will eventually die. Usually between 3 to 10 days postpartum, this dead tissue falls off and a fistula develops between the bladder and the vagina (vesico-vaginal) or the rectum and the vagina (recto-vaginal) (WHO, 2005). More often than not this results in the death of both the mother and the baby. In cases where the mother survives, it is likely that her baby will be still born. Access to skilled maternal care can help predict, identify and treat such labor (WHO, 2005). Recto-vaginal fistulas (RVF) occur far less frequently, comprising 10% of fistulas, (Mabeya 2003).

1.2 Communication

Communication refers to the imparting or exchanging of information from a sender to a receiver by speaking, writing, or using some other medium. Communication can be in many forms; inter-personal communication which is communication between two or more people more like one on one, Intra –personal communication which is communication with self and Mass communication which is communication to a large number of people, like global, national, regional who make probably not be in one sitting hence, mass communication. Communication cannot be possible without a

channel. Generally, a communication channel is the medium that is used in the transmission of a message from one party to another; for example the print media or the broadcast media. In electronic media, channels of communications refer to the physical medium such as a wire used to convey information signals from one point to the other. Appropriate information dissemination (communication) can bridge gaps because if people are informed, then they have better opportunities to develop themselves (Bekenstein, 2013). Without appropriate and adequate information, individuals and communities will not be able to make informed decisions concerning their lives.

1.2.1 Development communication

Development communication refers to a type of marketing and public opinion research, or the use of communication to facilitate social development. Nora C Quebral defined development communication as the art and science of human communication linked to society's planned transformation from a state of poverty to one dynamic-socio economic growth that makes for greater equality and the larger unfolding of individual potentials this pays attention to human behavioral factors in the design of development projects and their objectives. It engages stakeholders, establishes conducive environments, assesses risks and opportunities and promotes information exchanges to bring about positive social change via sustainable development.

Development communication has been labeled the Fifth Theory of the Press, with "social transformation and development," and "the fulfillment of basic needs" as its primary purposes (Flor, 1995). Jamias articulated the philosophy of development communication which is anchored on three main ideas, namely: purposive, value-laden and pragmatic. Development communication is essentially participatory because participation translates into individuals being active in development programmes and processes; they contribute ideas, take initiative and articulate their needs and problems while asserting their autonomy. This can be done through techniques like information dissemination and education, behavior change, social marketing, social mobilization, media advocacy, communication for social change and community participation. Development communication covers formal and informal processes where interests are defined, expressed and negotiated by actors with different levels of power and

with the goal of influencing policy decisions. Some of the documentations that have development goals are like the constitution and Vision 2030.

Development Communication can also be seen as a way to amplify voice, facilitate meaningful participation and foster change. This encompasses access to and exchange of information, dialogue, creation of knowledge and open access to knowledge, communication for development, strategic communication, participatory communication, expressive culture, media, information and communications infrastructure and technologies.

1.2.2 Health Communication

Health Communication is a trans-disciplinary field that is integral to a variety of other fields, including public health, healthcare, global health, and community development. Health communication is the field of theory, research, and practice which studies and uses communication strategies, methods, programs, and interventions as a means to inform and influence individual decisions that enhance health. It is a common area of study within the larger Communication discipline (Stacks & Salween, page 489).

Effective and successful uses of health communication utilize multifaceted approaches in order to best reach intended audiences. These include comprehensive interventions and messages that will ultimately protect public health outcomes. Intended outcomes of health communication can include: increasing audience knowledge and awareness of a health issue; influencing behaviors and attitudes towards a health issue; demonstrating healthy practices; showing benefits of behavior changes to public health outcomes; advocating a position on a health issue or policy; increasing demand or support of health services; and arguing myths and misconceptions related to health.

Examples of Health Communication in History include multiple times that health communication has been effective in society. As early as 1721, health communication was used to reduce the smallpox epidemic in Boston. Cotton Mather, a political leader, used pamphlets and speeches to promote inoculation of smallpox. Alcohol abuse has been a problem within society for about as long as alcohol has been around.

In the 19th century, the Women's Christian Temperance Union led a movement against alcohol abuse. They utilized mass communication to communicate the desired message. Newspapers and magazines allowed for the promotion of the anti-alcohol movement. More recently, a way to communicate health messages are through health campaigning. The campaigning is accomplished through media channels. Paid messages about drug use, smoking, AIDS, and alcohol use are the most common. Since the 1980s the amount of health campaigns has increased.

1.3 Problem statement

It is conservatively estimated that more than two million women are currently living with obstetric fistula, almost all of whom reside exclusively in Africa, Southeast Asia, and the Arab region (WHO 2006). Although obstetric fistula is a principle cause of maternal morbidity and is considered the most debilitating and devastating birth-related condition, it received comparatively little attention so far because it is a condition suffered by the most marginalized women with the least visibility and voice.

The range of physical and psychological problems associated with obstetric fistula adversely affects the quality of women's lives in numerous ways. The constant leakage of urine and offensive smells can make it impossible for them to fulfill their familial roles as wife and mother. As a consequence, they are frequently abandoned by their husbands and progressively ostracized by their communities. Social stigma adds additional suffering for women with fistula. Details about the complex and interrelated social, economic, and emotional consequences women experience following fistula development is still scarce. Likewise, information about the impact of treatment and re-integration services on affected women's health, quality of life, and social status is urgently needed.

Despite these devastating consequences obstetric fistula has for many years not received its fair share of resources and attention as a priority maternal health agenda. In the developing world the problem is further compounded by general poverty, poor access to health services, inadequate knowledge of cause, unawareness of repair services and social stigma.

In view of these noted research gaps and the lack of information about Obstetric Fistula as a whole - especially among the communities where Obstetric Fistula is rampant due to illiteracy, poverty, ignorance, inadequate reproductive health care facilities, inadequate infrastructure such as transportation and communication, retrogressive and repugnant traditional and cultural practices such as Female Genital Mutilation (FGM)-this study endeavors to demonstrate the significance of communication in trying to eradicate obstetric fistula and by extension reducing maternal death and morbidity.

1.4 General objective

The overarching goal of this project is to establish the effectiveness of health communication in mitigating obstetric fistula among women and girls in Kenya.

1.4.1 Specific objectives

- i. To determine the extent of health communication in inducing behavior change and personal learning amongst obstetric fistula patients in Kenya.
- ii. To ascertain the effectiveness of communication for development in capacity building and reducing levels of stigmatization regarding obstetric fistula in the community.
- iii. To establish the impact of communication strategies on increasing the knowledge levels and understanding on the causes and effects of obstetric fistula.

1.5 Research Questions

- i. What is the extent of health communication use in inducing behavior change and personal learning amongst the obstetric fistula patients in Kenya?
- ii. How effective is communication for development in capacity building and reducing levels of stigmatization regarding obstetric fistula in a community?
- iii. What is the impact of communication strategies on increasing the knowledge levels and understanding on the causes and effects of obstetric fistula?

1.6 Rationale and Justification of the study

The study is aimed at identifying the means and approaches to reduce fistula cases in Kenya and its findings will be critical in guiding the current and future decisions on mitigating obstetric fistula in Kenya. The study will also help in guiding the dissemination of information through media advocacy, campaigns and interventions of every nature on obstetric fistula. The findings and recommendations will also hopefully inform various stakeholders on how to handle any form of communication to obstetric fistula patients and the communities they live in.

Through this research we expect that the negative perspectives about fistula will be demystified and stigmatization reduced through better understanding of obstetric fistula and the women suffering from it. We also hope that this study will guide the government in developing appropriate infra-structures such as communication and transport systems, health facilities, services and personnel in a bid to eradicate this health problem in Kenya.

1.7 Scope and limitation of the study

The study sought to establish the effectiveness of communication strategies use in mitigation of obstetric fistula in Kenya and determining communication approaches in increasing knowledge levels and understanding amongst victims of obstetric fistula, family and the community at large. The geographical scope of the study was Matungu division, Kakamega County, where the collection of data was carried out.

CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.0 Introduction

This chapter examines the relevant previous scholars contributions to the area under study. The researchers review various existing publications including books, journals, past research, case studies and pamphlets.

2.1 Reproductive Health and Fistula

Maternal mortality and morbidity remain a conspicuous and stark challenge to public health in developing countries. Each year, pregnancy- related complications claim the lives of 500,000 women worldwide, with around 99% of these deaths occurring in developing countries (WHO 2005). Current best estimates indicate that for each woman who dies from pregnancy- related complications, 15 to 30 women are seriously impaired and disabled from childbirth related complications in less developed countries. In sub-Saharan Africa alone, between 30,000 and 130,000 of women giving birth develop fistula each year (UNFPA, 2008).

Kenya's maternal mortality ratio, according to the 2008-09 Kenya Demographic and Health (KDHS) Survey, is 488 maternal deaths per 100,000 live births. Maternal deaths represent 15 percent of all deaths to women of reproductive age (15-49 years). Between 294,000 and 441,000 Kenyan women and girls suffer from maternal morbidities. The majority of deaths are due to direct obstetric complications, including hemorrhage, sepsis, eclampsia, obstructed labor, or unsafe abortion. Unsafe abortion alone is thought to cause at least a third of all maternal deaths. The government had set targets of having the Maternal Mortality Ratio at 230 by 2005, and 170 by the end of 2010.

Kenya has made great progress in addressing maternal health and with the inauguration of Safe Motherhood Initiative in Nairobi in 1987. Specific programmes to reduce maternal mortality and improve maternal health were established. These developments have been made against a backdrop of demographic milestones such as

the increase in population from 9 million in 1969 to 31.5 million in 2002. Of significance is the fact that 43% of this population is below 15 years of age. Equally a significant number of young women enter childbearing and this is evidenced by the data from the KDHS 1993 and 1998 where 44% and 55% of girls aged 19 years respectively had already begun childbearing. Maternal mortality ratio has increased from 365/100,000 live births in 1993 to 590/100,000 in 1998.

Globally, an estimated 600,000 women die every year due to pregnancy related complications, 99% of them in the developing countries and for every maternal death, 30% or more women suffer disabling and humiliating injuries including obstetric fistulae. While it is a global problem, it appears to be particularly common in Africa - a low resource setting. Unrelieved obstructed labour, which has social, nutritional and health care dimensions, is the main cause of obstetric fistula. Studies in Africa have shown that 58-80% of women with obstetric fistulae are under the age of 20, with the youngest patient only 12 or 13 years of age. The vulnerability of young girls to the development of Obstetric Fistula is closely related to their physical immaturity and the less developed pelvis. In this context, the need to raise the age of marriage and avoid teenage pregnancy is key in preventing development of Obstetric Fistula.

Obstetric fistula is one of the most serious and disabling complications of childbirth which has virtually been eliminated in developed countries but still prevalent in the developing world. While 92.2% of VVFs in Kenya are due to obstetric trauma, only 12.3% of such fistulas in the UK are due to this cause compared to 70% from surgery (Mbanji, 1996). Obstetric fistula usually follows prolonged obstructed labour – commonly arising from Cephalo Pelvic Disproportion (CPD) and poor obstetric care. Specifically it is due to necrosis of the anterior and sometimes posterior vaginal wall, bladder, urethra and rectum which has been compressed between the foetal head and the maternal pubis. Incontinence arises when the dead tissue sloughs off, usually between the 4th and 14th day post-partum.

The very young and the very poor are disproportionately affected. Most women are either unaware that treatment is available or cannot afford it. Conversely, Fistulae have been eradicated in areas such as Europe and North America through improved

obstetric care: It is acknowledged that most pregnancy related deaths occur around the time of delivery or at postpartum, presenting themselves as emergencies. In the KDHS 1993 and 1998 it was observed that although 90% of pregnant women had been seen by a professional provider at least once, a low proportion 45% and 44% respectively were attended at birth by a professional provider. Poor access and referral systems due to long distances are some of the reasons why women deliver at home under unprofessional care. Obstructed labour is a common outcome of home deliveries.

It is an established fact that about 15% of all pregnancies result in complications that require emergency obstetric care. Fistula occurs as a result of the three classic delays in getting the appropriate Emergency Obstetric Care (EmOC): delay in deciding to seek medical attention, delay in reaching a health care facility, and delay in receiving EmOC at the facility.

There are several women suffering from this condition without knowing what to do or where to get help. In some remote parts of the world, women suffer in silence for fear of humiliation, and excommunication from the society. The affected women are scared of coming forward because of stigmatization related to this condition and lack of access and finances to seek treatment. Fistulas are preventable and treatable, but estimates suggest that millions of women in developing countries are affected by this dreadful condition. Despite these devastating consequences VVF has for many years not received its fair share of resources and attention as a priority maternal health agenda

In a study undertaken in nine African countries (UNFPA/Engender Health, 2003) it was noted that obstetric fistula is a pregnancy related disability affecting an estimated 50,000-100,000 women each year. The contributing factors that precipitate this are crosscutting and include: poverty, lack of skilled attendance at birth, Lack of emergency obstetric care, malnutrition, preference to deliver at home with TBAs (often unskilled attendance); and poorly managed C-Sections at health facilities Lack of transportation, a shortage of trained providers for fistula repair, limited awareness about repair possibilities, poor integration of services, marginalization of women with

fistula; their poor status in society and lack of education are some of the contributing factors to high-prevalence rates of obstetric fistula in the region.

In spite of these, it was observed that: fistula is not acknowledged as a critical issue, there are inadequate facilities and a poor referral system, skilled staff to handle fistula are few, awareness of the problem at community level is low and cultural practices such as early marriage and female genital mutilation are rampant. In the developing world the problem is further compounded by general poverty, poor access to health services, inadequate knowledge of cause, unawareness of repair services and social stigma. Obstetric Fistula often results into devastating consequences such as friction in marital relations leading to separation or divorce, infertility, stigma, shame, reduced sense of worth and esteem due to fecal matter leaking into the urinary system, psychological trauma, misperceptions of others, persistent urinary infections, unemployment, Isolation and social rejection because of the foul smell.

2.2 Contributing factors to Obstetric Fistula

Arrowsmith and colleagues coined the phrase "obstructed labor injury complex" to encompass the extent of physical and social injury caused by fistulas. Almost 80% of women develop chronic excoriation of the skin from the direct irritation caused by urine; in addition, they may develop amenorrhea, vaginal stenosis, infertility, bladder calculi, infection, and foot drop (due to neurological injury). Fistula is considered a "social calamity" and women with OFs are often ostracized by their husbands, families, and communities. The condition is often considered a sexually transmitted disease and viewed as a punishment from God. Most women with fistulas report disturbed socio-psychosexual lives and are usually deserted by their husbands. Often, until they are cured, married women with fistulas are sent back to their parents' home where they are not allowed to cook food, participate in social events, or to perform religious rituals. Women with fistulas perceive the societal reaction toward them consider themselves rejected. The presence of living children may reduce the risk of separation or divorce unless the mother has long been affected with a fistula. Fistula has a huge psychological impact on women and girls, sometimes leading to depression and suicide. Most women have feelings of hopelessness, self-hatred, guilt, and sadness, especially because they are stigmatized and think their condition is untreatable.

Very few studies have examined the women's emotional and psychological status. Not only that mourning a dead child is almost inevitable for a woman with a fistula from obstructed labor, but she soon finds herself fighting for her own survival, social position, and value in society.. Evidence from Johnson (2007) and on information from the medical literature, obstetric fistula appears to be linked to the biologic characteristics of women, the social factors and the cultural context in the developing world. A certain number of biological factors have been identified as covariates of obstetric fistula. In this regard, height, weight, and small pelvic size have been cited to be linked to the risk of obstetric fistula (Arrowsmith, Hamlin et al. 1996; Creanga, Ahmed et al. 2007; Moodley 2007). The authors reported that women with a height less than 146cm and a weight of 50kg or less are more likely to experience fistula. Similar evidence were reported by Wall et al. (2004) based on a retrospective study using medical records of all women who had obstetric fistula at the local hospital in Jos (Nigeria) between January 1992 and June 1999. Wall and colleagues found that of 899 fistula cases, 75 percent had a height less than 150cm and a weight less than 50kg. The body of literature suggests that malnutrition in childhood and adolescence might interfere with growth, leading to stunted stature and underdevelopment of the pelvis, which in turn can impede pregnancy outcomes (Lawson 1989; Arrowsmith, Hamlin et al. 1996; Wall, Karshima et al. 2004; Creanga, Ahmed et al. 2007).

Studies also show that socio-economic characteristics of women such as maternal education, socio-economic status, and place of residence have an impact on the risk of fistula. Maternal education has been found to be a protective factor against the risk of obstetric fistula (Donnay and Weil 2004; Johnson 2007; Muleta, Fantahun et al. 2007). The reasons underlying this association include the fact that education may directly improve an individual's knowledge, as well as ability to process information, regarding healthy pregnancy behaviors. Another important determinant of fistula in sub-Saharan Africa is the socio-economic status of the woman (Bangser 2006; Johnson 2007; Meyer, Ascher-Walsh et al. 2007; Norman, Breen et al. 2007). Research has shown that obstetric fistula predominately occurs among women with low economic status compared to their better-off peers (Bangser 2006; Johnson 2007; Meyer, Ascher-Walsh et al. 2007; Norman, Breen et al. 2007). Moreover, living in rural areas put women more at risk of developing fistula, because not only are they marginalized in terms of health infrastructures but also because they often live in

remote areas, too far from clinics to receive timely care (Cook, Dickens et al. 2004; Wall 2006 Johnson, 2007).

The cultural context appears also to play a role in the risk of obstetric fistula. With respect to cultural factors, early marriage and early childbearing are often cited as predisposing factors of obstetric fistula (Meyer, Ascher-Walsh et al. 2007; Muleta, Fantahun et al. 2007; Sombie, Kambou et al. 2007; Tsui, Creanga et al. 2007). In many African societies, early marriage is the cultural norm. Parents seek to marry daughters early to protect them against premarital sexual activity and unintended pregnancy. Since early marriage and early childbearing are strongly correlated in developing countries, young girls become pregnant right after marriage, potentially without full development of their pelvis, which may increase the risk of developing fistula (Kurz 1997). Women's autonomy is another determinant of obstetric fistula (Cook, Dickens et al. 2004; Wall 2006). In patriarchal societies like in sub-Saharan Africa, the male is habitually the one who decides important family matters; women do not take part in any household decisions, even when it is related to their own health. The lack of autonomy has an impact on the time frame to seek care, because women need permission from their spouse, or even their in-laws to go to a hospital, which can delay emergency care. Besides, the literature argues that female genital mutilation –a harmful traditional practice –increases the risk of fistula. (Mahran 1981; Davis, Ellis et al.1999). In its different forms, female genital mutilation results in impaired female genital tract which ultimately endanger the health of the mother.

2.3 Fistula in Kenya

Reviews of existing literature indicate that in Kenya, Obstetric Fistula is a big problem even though the actual prevalence and incidence remain unknown. From documented reports (UNFPA,2005), it had been noted that there is an annual incidence of about 3000 fistula cases in Kenya; with an estimated repair rate of less than 500 cases per year, the backlog could be growing. According to the report on the Kenya Country Situation (presented at the 2nd Meeting of the Working Group of the Prevention and treatment of Obstetric fistula in Addis Ababa, Ethiopia (October-November., 2002), the number of VVF operations done annually during the ten years between 1992 and the year 2001 increased steadily from a low of 36 cases in 1992 to a high of 479 cases in 2001. AMREF conducts outreach fistula surgery in five site in

Kenya namely KNH, Mutomo, Garissa, Ortum, and Mumias hospitals. The Amref fistula surgeon noted that there are areas in the country where the problem of obstetric fistula is 14% more pronounced particularly the pastoral regions of West Pokot, Turkana, Garissa and in South Nyanza.

Few studies on obstetric fistula have been done in Kenya. Between 1965 and 2003 only four studies have been conducted nationally. These include Mati (1968), Orwenyo(1984), Amoth (2001) and Mabeya (2003). Orwenyo (1984) found that in KNH 36.6% of the patients were primigravidas (women who are pregnant for the first time) and they constituted the single largest group of patients who developed obstetric fistula. In the West Pokot study (Mabeya, 2003), primigravidas constituted 62.7%. These studies underscored the need to address thecausative factors of OF such as malnutrition, low literacy levels, early sexual debuts (marriages) andaccess to EmOC while improving access to repair services.

The most current study in Kenya is that by Mabeya (2003) in West Pokot. The findingsindicate that obstetric fistula is a common problem. All the 66 women studied weremarried and a majority (66.4%) was below 20 years and also primigravida. The youngest patient was 14 years and the ages ranged from 14 to 38 years with a mean of 20.5 years. Amoth (2001) in his study at KNH found that 26.6% of the cases were 20 years and below and 81.3% were 30 years and below. According to Mabeya's (2003) study the main cause of fistula was obstructed labour. All the cases delivered at the health facility and the outcome in 67.7% of the cases was stillbirths. The duration of labour lasted four days in 81.8% of the patients and only one patient had elective caesarean section with subsequent development of VVF.

It is important to recognize that these studies are largely hospital based and thereforecannot be fully indicative of the magnitude of the problem. Current cases are a tip of an iceberg due to inadequate data and the fact that this problem has not been given due attention, making it difficult to come up with an accurate figure. AMREF suspects that there are many women with OF spread out in the country. Incidence is estimated at 3000 new cases every year (calculated at the rate of 1-2 cases per 1000 deliveries) with only 7.5% receiving treatment. At the time of this study there were 20 cases on the waiting list at KNH where an additional theatre day (a Friday once in a

month) has been added to cope with the demand for repair. The incidence is however a gross underestimation of the magnitude of the problem because the statistical data on the full magnitude of the problem is very scanty.

The World Health Organization estimates that over two million women are currently living with obstetric fistula. Estimates are based on the number of people who seek treatment in hospitals and clinics and therefore it is reasonable to assume that they provide a very incomplete picture of the real situation, as many women never seek care.

Kenya has put forth efforts to eliminate vesico-virginal or obstetric fistula through the introduction of The Kenya National Obstetric Fistula Training Curriculum for Health Care Workers which was developed in 2006, with funding and technical support from UNFPA. This was founded so as to train service providers using a multi-disciplinary approach for effective management of obstetric fistula. This approach entails training of medical personnel, which include a doctor, nurse, anesthetists, physiotherapists, and social workers. There are various centers in Kenya where one can access this service. They include Cherangany Nursing Home in Kitale, Women and Development Against Distress in Africa (WADADIA) in the regions of West Pokot, Mt. Elgon and Siaya, Jaramogi Oginga Odinga Teaching and Referral Hospital (formerly known as Nyanza Provincial General Hospital), Kisumu, Gynocare Fistula Centre, Eldoret, Jomaa Mission Hospital, Nairobi and Kenyatta national Hospital

The Kenya government has taken some positive steps in improving women's and girls' reproductive and maternal health. These initiatives include eliminating charges for public family planning services, antenatal and postnatal care, and prevention of mother-to-child HIV transmission. The government has also eliminated charges for delivery in dispensaries and health centers to encourage women to deliver in medical facilities with a skilled birth attendant. In addition, by introducing a system of full or partial fee waiver for access to government hospitals, the government has taken steps to increase access to health care for indigent patients. However, through the voices of fistula survivors, many women and girls, particularly the poor, illiterate, and rural, are not fully enjoying the benefit of these policies, and there is urgent need to reevaluate and scale up many of the responses.

In 2004, the government conducted a fistula needs assessment that showed lack of awareness about fistula in communities as a barrier to its prevention and treatment. Six years later, the government has not taken adequate steps to educate the population, nor to correct the myths that exist about fistula in many communities. The Kenya government's efforts to ensure affordable maternity care for poor rural women and girls have fallen far short of even its own goals. Upwards of three quarters of the women and girls interviewed by Human Rights Watch described economic constraints as a barrier to accessing maternal health services and fistula repair surgery. Almost all women and girls interviewed for the Human Rights Watch report told them how difficult it was to raise the money needed for fistula surgery. To its credit, the government supports donor-funded fistula repair “camps”—consisting of short-term mobilization of women and girls, screening for obstetric fistula, and providing surgery for those affected—in district and provincial hospitals around the country several times a year. These camps offer free repair surgeries, but do not cover all associated costs. In addition, government hospitals offer exemptions and waivers for indigent patients, but these policies have been problematic in practice.

The health user fee waiver policy does not work for several reasons: lack of awareness of the policy among patients and some health providers, some facilities' reluctance to publicize the waivers and deliberate withholding of information when requested by patients, and vague implementation guidelines, including the criteria for determining the financial needs of a patient. The Kenyan government statistics have shown that capacity to manage complications during childbirth is weak in many health facilities, including referral facilities such as hospitals. Currently available statistics show that less than 10 percent of all medical facilities in the country are able to offer basic emergency obstetric care, and only 6 percent offer comprehensive emergency obstetric care. Moreover, health facilities, especially in rural areas, are perpetually understaffed, further limiting timely assistance and referral when women develop obstetric complications (Human Rights Watch Report)

2.4 Campaign to End Fistula

During most of the 20th century obstetric fistula was largely missing from the international global health agenda. This is reflected by the fact that obstetric fistula was not included as a topic at the landmark United Nations 1994 International

Conference on Population and Development (ICPD). The 194 page report from the ICPD does not include any reference to obstetric fistula.

Reproductive and maternal health care are considered top development and human rights priorities. The UN Committee on Economic, Social and Cultural rights has identified the lowering of maternal mortality, and morbidity such as obstetric fistula, as a “major goal” for governments in meeting their human rights obligations. In 2000, eight Millennium Development Goals (MDGs) were adopted after the United Nations Millennium Summit to be achieved by 2015. The fifth goal of improving maternal health is directly related to obstetric fistula. Since 2003, obstetric fistula has been gaining awareness amongst the general public and has received critical attention from UNFPA, who has organized a global "Campaign to End Fistula." In 2007, Fistula Foundation, Engel Entertainment and a number of other organizations including PBS NOVA released the documentary film, "A Walk to Beautiful," which traced the journey of five women from Ethiopia who sought treatment for their obstetric fistulas at the Addis Ababa Fistula Hospital in Ethiopia. The film is credited for increasing awareness of obstetric fistula greatly. Increased public awareness and corresponding political pressure have helped fund the UNFPA's Campaign to End Fistula, and helped motivate the United States Agency for International Development (USAID) to dramatically increase funding for the prevention and treatment of obstetric fistula.

Countries who signed the United Nations Millennium Declaration have begun adopting policies and creating task forces to address issues of maternal morbidity and infant mortality, including Kenya. Laws to increase the minimum age for marriage have also been enacted in Bangladesh, Nigeria, and Kenya. To monitor these countries and hold them accountable, the UN has developed six "process indicators," a benchmark tool with minimum acceptable levels that measures whether or not women receive the services they need. The UNFPA also set out several strategies to address fistula, including "postponing marriage and pregnancy for young girls, increasing access to education and family planning services for women and men, provide access to adequate medical care for all pregnant women and emergency obstetric care for all who develop complications, and repairing physical damage through medical intervention and emotional damage through counseling." One of the UNFPA's initiatives to reduce the cost of transportation in accessing medical care;

provided ambulances and motorcycles for women in Benin, Chad, Guinea, Guinea-Bissau, Kenya, Rwanda, Senegal, Tanzania, Uganda, and Zambia.

The UNFPA gathered partners in London in 2001, and officially launched an international initiative to address obstetric fistula later in 2003. Partners in this initiative include Columbia University's Averting Maternal Death and Disability Program (AMDD), the International Federation of Gynecology and Obstetrics (FIGO), and the World Health Organization (WHO). The official international partnership formed by the Campaign to End Fistula is named the Obstetric Fistula Working Group (OFWG) and its purpose is to coordinate and collaborate global efforts to eliminate obstetric fistula. The first thing that the initiative did was to quantitatively assess the issue in countries where there are suspected high prevalence, including nine countries in Sub-Saharan Africa. The OFWG improves awareness for prenatal and neonatal care and develops strategies for clinically managing obstetric fistula cases.

The national strategies that the Campaign helps each nation to develop are three-fold: prevention of new cases, treatment for patients, and support for reintegration into society post-operation. Prevention efforts include access to maternal health services and mobilizing communities and legislators to increase awareness of maternal health problems. Training health providers and ensuring affordable treatment services as well as providing social services such as health education and mental health services help treat and reintegrate women into their communities. Other tasks undertaken by the Campaign include fundraising and introducing new donors and gathering new partners of all perspectives, such as faith-based organizations, NGOs, and private-sector companies.

Johns Hopkins University, in collaboration with medical and national institutions in selected high fistula-prevalent countries, proposed to undertake a study to examine access to care, post-operative prognosis, and improvements in quality of life, social integration, and rehabilitation of fistula patients, but hugely forgetting the importance of adequate information provision about all factors related to Obstetric Fistula such as safe motherhood, emergency obstetric care, including community understanding of the problem in terms of causes, prevention and treatment, availability of services and

care seeking behavior. Lack of reproductive health education means there is widespread ignorance of the basic facts about fistula. Many affected women are not aware that fistula can be repaired. Misinformation about fistula leads to delays in seeking treatment. Some women think incontinence is normal after delivery. Lack of fistula awareness, even among medical personnel, also hinders timely referrals. The limited number of health personnel also sometimes means that nurses, for instance, can only provide new mothers with the most basic information, and do not integrate fistula in health chats. The government has also not taken any steps to enable illiterate patients to understand their rights and to lodge grievances. Women continue to be stigmatized even after successful repair due to lack of fistula awareness in communities.

2.5 Health Belief Model (HBM)

The Health Belief Model (HBM) was one of the first theories of health behavior, and remains one of the most widely recognized in the field. It was developed in the 1950s by a group of U.S. Public Health Service social psychologists who wanted to explain why so few people were participating in programs to prevent and detect disease. The Health Belief Model (HBM) addresses the individual's perceptions of the threat posed by a health problem (susceptibility, severity), the benefits of avoiding the threat, and factors influencing the decision to act (barriers, cues to action, and self-efficacy).

To find an answer, the social psychologists examined what was encouraging or discouraging people from participating in the programs. They theorized that people's beliefs about whether or not they were susceptible to disease, and their perceptions of the benefits of trying to avoid it, influenced their readiness to act. In ensuing years, researchers expanded upon this theory, eventually concluding that six main constructs influence people's decisions about whether to take action to prevent, screen for, and control illness. They argued that people are ready to act if they: believe they are susceptible to the condition (perceived susceptibility); believe the condition has serious consequences (perceived severity); believe taking action would reduce their susceptibility to the condition or its severity (perceived benefits); believe costs of taking action are outweighed by the benefits (perceived barriers); are exposed to factors that prompt action e.g., a television ad or a reminder to seek health care (cue to action); are confident in their ability to successfully perform an action (self-efficacy).

Health motivation is the central focus of the HBM in addressing problem behaviors that evoke health concerns. Together, the six constructs of the HBM provide a useful framework for designing both short-term and long-term behavior change strategies at the individual level.

2.6 The Ecological Perspective

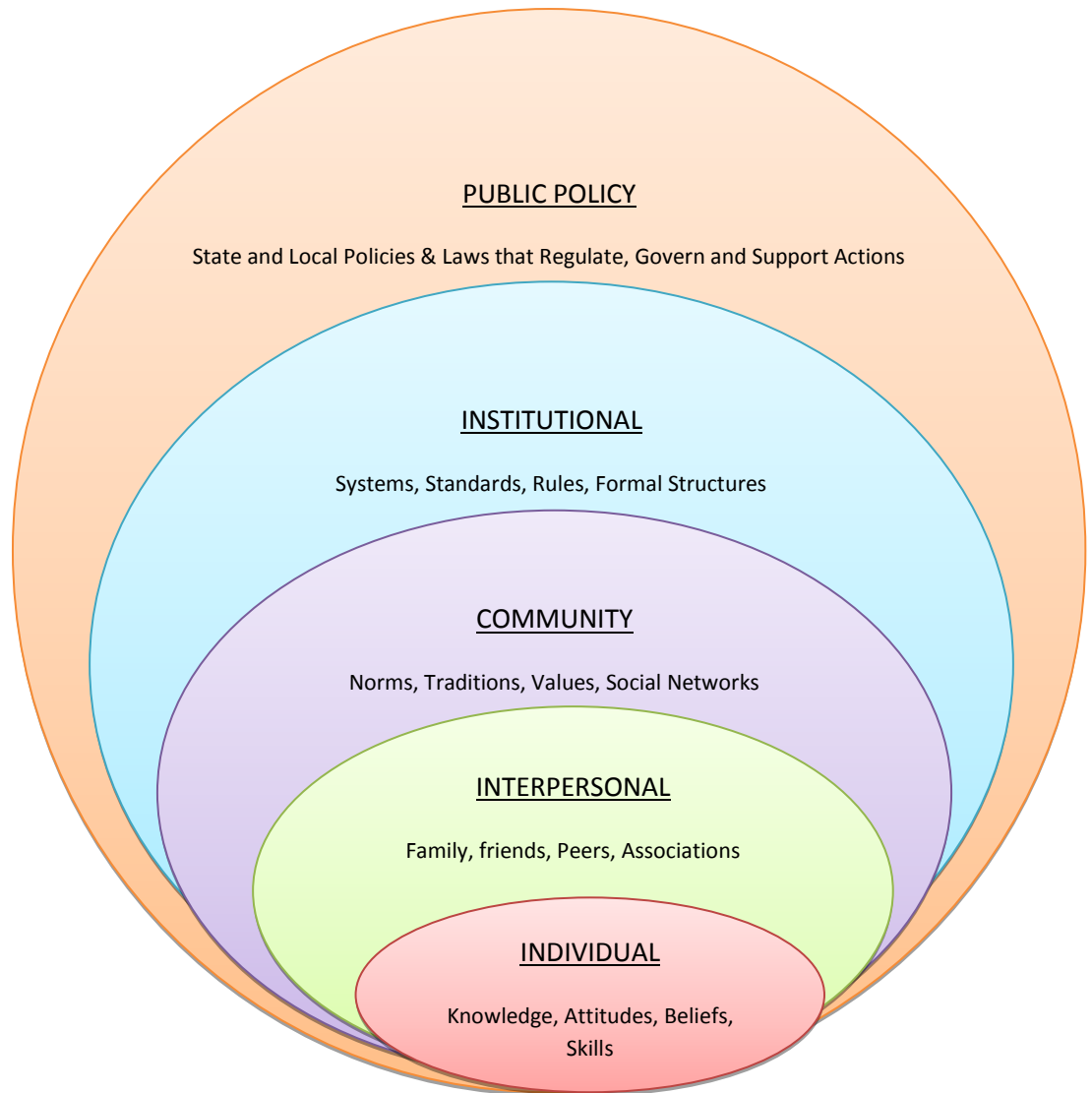
Contemporary health promotion involves more than simply educating individuals about healthy practices. The Ecological perspective or the Multi-level Interactive Approach includes efforts to change behavior, as well as the physical and social environment of communities. It is also about developing and advocating for policies that support health, such as economic incentives. Health promotion programs that seek to address health problems across this spectrum employ a range of strategies, and operate on multiple levels. The ecological perspective emphasizes the interaction between, and interdependence of, factors within and across all levels of a health problem. It highlights people's interactions with their physical and socio-cultural environments.

Two key concepts of the ecological perspective help to identify intervention points for promoting health: first, behavior both affects, and is affected by, multiple levels of influence; second, individual behavior both shapes, and is shaped by, the social environment (reciprocal causation).

McLeroy and colleagues (1988) explained the key concept of the ecological perspective, multiple levels of influence by identifying five levels of influence for health related behaviors and conditions. These levels include; intrapersonal or individual factors; interpersonal factors; institutional or organizational factors; community factors; and public policy factors.

Intrapersonal Level - Individual characteristics that influence behavior, such as knowledge, attitudes, beliefs, and personality traits; Interpersonal Level - processes and primary groups, including family, friends, and peers that provide social identity, support, and role definition; Institutional Level - Factors include rules, regulations, policies, and informal structures, which may constrain or promote recommended behaviors; Community Level - Factors, social networks and norms, or standards,

which exist as formal or informal among individuals, groups, and organizations. Public Policy - Local or state policies and laws that regulate or support healthy actions and practices for disease prevention, early detection, control, and management.



In practice, addressing the community level require taking into consideration institutional and public policy factors, as well as social networks and norms. Each level of influence can affect health behavior. For example, suppose a woman delays or do not go for the recommended ante-natal care visits. At the individual level, her inaction may be due to lack of financial implication of the visit to the doctor or fear that she will be denied permission by the spouse or in-laws. At the interpersonal level, the health care providers may neglect to give full information on pregnancy and related issues or the patient may have a spouse who does not believe on the significance of ante-natal visits.

At the organizational level, it may be hard to schedule an appointment, because the only clinic or health facility is kilometers away. At the policy level, she may lack insurance coverage, and thus be unable to afford the fee. Thus, the outcome, the woman's failure to go for ante-natal care may result from multiple factors.

The second key concept of an ecological perspective, reciprocal causation, suggests that people both influence, and are influenced by, those around them. An ecological perspective shows the advantages of multilevel interventions that combine behavioral and environmental components. Health promotion programs are more effective when planners consider multiple levels of influence on health problems.

At the individual and interpersonal levels, contemporary theories of health behavior can be broadly categorized as "Cognitive-Behavioral." Three key concepts cut across these theories: behavior is mediated by cognitions, that is what people know and think affects how they act; knowledge is necessary for, but not sufficient to produce, most behavior changes; perceptions, motivations, skills, and the social environment are key influences on behavior. Community-level models offer frameworks for implementing multi-dimensional approaches to promote healthy behaviors. They supplement educational approaches with efforts to change the social and physical environment to support positive behavior change.

2.7 Community Organization and Other Participatory Models

These models emphasize community-driven approaches to assessing and solving health and social problems. Community organizing is a process through which community groups are helped to identify common problems, mobilize resources, and develop and implement strategies to reach collective goals. Strict definitions of community organizing assume that the community itself identifies the problems to address (not an outside change agent). Public health professionals often adapt the methods of community organizing to launch programs that reflect the priorities of community members, but may not be initiated by them.

Community organizing projects that start with the community's priorities, rather than an externally imposed agenda, are more likely to succeed. Community organizing is consistent with an ecological perspective in that it recognizes multiple levels of a

health problem. It can be integrated with SCT-based strategies that take into account the dynamic between personal factors, environmental factors, and human behavior. Theories of social networks and social support (exploring the influence of social relationships on health decision making and behavior) can be used to adapt community organizing strategies to health education goals. Social systems theory (exploring how organizations in a community interact with each other and the outside world) is also useful for this purpose. Community organizing is not a single mode of practice; it can involve different approaches to effecting change.

Jack Rothman produced the best-known classification of these change models, describing community organizing according to three general types: locality development, social planning, and social action. These models sometimes overlap and can be combined. Locality development (or community development) is process oriented. With the aim of developing group identity and cohesion, it focuses on building consensus and capacity. Social planning is task oriented. It stresses problem solving and usually relies heavily on expert practitioners. Social action is both process and task oriented. Its goals are to increase the community's capacity to solve problems and to achieve concrete changes that redress social injustices.

The different approaches broadly classified as community organizing share in common several concepts that are key to achieving and measuring change. Empowerment describes a social action process through which individuals, organizations, or communities' gain confidence and skills to improve their quality of life. Community capacity refers to characteristics of a community that allow it to identify social problems and address them (e.g., trusting relationships between neighbors, civic engagement). Participation in the organizing process helps community members to gain leadership and problem solving skills. Relevance involves activating participants to address issues that are important to them. Issue selection entails pulling apart a web of interrelated problems into distinct, immediate, solvable pieces. Critical consciousness emphasizes helping community members to identify the root causes of social problems.

The social action model differs from other forms of community intervention in that it is grassroots based, conflict oriented, and geared to mobilizing disadvantaged

people to act on their own behalf. Goals vary, but typically include policy and other significant changes that participants have identified as important. Largely based on the organizing work of Saul Alinsky and the Industrial Areas Foundation, this approach employs direct action strategies as the primary means of fostering change. It focuses on building power and encouraging community members to develop their capacities as active citizens. In a social action approach to community organizing, self-interest is seen as the motivation for action: community members become involved when they see that it will benefit them to take action, and targeted institutions are willing to make changes when they believe it is in their self-interest to do so. Community organizing seeks to expand participants' sense of self-interest to an ever-wider sphere, from the individual or family level to their block, neighborhood, city, state, and so on. Participants grow through this process, learning to take an active role in shaping the future of their communities.

Media Advocacy is also an essential tactic in community organizing. It involves using the mass media strategically to advance public policies. Because the media bring attention to specific issues, they set the agenda for the public and policy makers. The media often present health information in medical terms, focusing on technological breakthroughs and personal health habits. Media advocacy assumes the root of most health problems is not that people lack information, but that they lack the power to change social and economic conditions. It seeks to balance news coverage by framing issues to emphasize social, economic, and political—rather than personal and behavioral—influences on health.

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

This chapter gives a detailed description of the methods which will be used to collect data from the Area of study. The researchers examine the research design, target population, and explain the sample and sampling techniques, procedures and data collection instruments.

3.1 Area of Study

The researchers' location of the study was Matungu division which is located in western Kenya, Kakamega County. It is situated in western Kenya and has a population of around 108,314 people. Most of the residents of Matungu are the Luhya. The residents are predominantly Christian with pockets of Muslims.

The majority of Matungu residents are very poor. There is no major economical venture that brings in income to better the living standards of the people. They mainly depend on raising money through small scale farming. Many of the women in Matungu division are illiterate, hence do not have jobs or well managed businesses to bring home income to help take care of their families. Most of them deal in small trade businesses such as kiosks, to make ends meet.

Some of the women and young girls are forced by their husbands to engage in prostitution to earn money and live comfortably or to contribute to the family income. The rugged physical and expansive landscape, harmful cultural practices, illiteracy and poverty in this community interact synergistically to precipitate the occurrence of obstetric fistula.

3.2 Research Design

The research problem having been formulated in clear-cut terms, the researchers will employ qualitative methods in this study such as In-Depth Interviews (IDIs) and Focus Group Discussions (FGDs) to collect information and assess attitudes and perceptions about fistula, and in order to establish the impact and effectiveness of

development communication, specifically health communication in mitigating obstetric fistula among the women and girls in Kenya. Qualitative research methods were used because they majorly focus or explore behavior, perspectives, experiences and feelings of people, they also emphasize on the understanding of these elements (Holloway and Wheeler; 2002: 30).

3.3 Sample and Sampling Procedure

The actual sample to be studied will be drawn from the women and girls suffering from fistula, medical and care providers, local leaders, pregnant women and the residents of Matungu Division. The study will use a stratified sampling technique to come up with a sample of 100 respondents. The target population will be put into sub-groups, namely: patients, general residents, pregnant women, leaders and health providers.

Random sampling will then be used in choosing respondents from the sub-groups in the target population. From a target population of 500, we will choose 50 respondents from the general residents, 20 patients, 10 pregnant women, 10 leaders and 10 health providers. The goal of the stratified random sampling is to achieve the desired representation from various sub-groups in the population. In stratified random sampling subjects are selected in such a way that the existing sub-groups in the population are more or less represented in the sample (Mugenda and Mugenda)

The choice of stratified sampling technique would exude the advantages of focusing on important sub-populations and improve the accuracy of estimation. However the technique has the setback of requiring accurate information about the population, or introduction of bias. According to Mugenda and Mugenda (2003), stratified random sampling ensures the inclusion in the sample the sub-groups that would otherwise be omitted if other sampling methods are used owing to the relatively small numbers in the population.

3.4 Research Instrument

Data was majorly gathered through interview schedules for the IDIs and FGDs. Interviews permit the interviewer to ask the respondent direct questions, and allow further probing and clarification as the interview proceeds. This flexibility is

invaluable for gaining private views and feelings about the phenomenon and exploring new issues that emerge during the interview. Interviews are usually conducted one-to-one but can be carried out in a group, which can save time and allow people to build on other's responses. Group interviews (FGDs) may, however, inhibit respondent's answers if trust is an issue. The richness and validity of information from FGDs or IDIs usually depend on the extent that trust exists.

Interviews or Focus Group Discussions can however consume a great deal of time if interviewers take full advantage of the opportunity to hear respondents out and change their questions accordingly. The nature of the question and the interactions between the interviewer and the respondent may also discourage or encourage certain kinds of responses.

3.5 Data Collection Procedure

This study will rely mostly on primary data sources to collect data. The data will be gathered using semi-structured interview guides. Other data will be collected from records at the Ministry of Health, Kenyatta National Hospital and Msambweni District Hospital. In-Depth Interviews and Focus Group Discussions (FGD's) will be employed because they are cheaper and we can obtain, valuable data on feelings, perceptions and attitudes. It also enhances dynamism in information which leads to stimulation of thoughts and keeps them in focus to the research topic.

A Focus Group Discussions (FGD's) is a form of a qualitative research in which a group of people are asked about their opinions, perceptions, beliefs, and attitudes towards an issue or concept that may be representative of the general population. The questions are asked in an interactive group setting where participants are free to talk with other group members. In-Depth Interviews on the other hand is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular issue or idea.

3.6 Data Analysis

Before processing the responses, the completed questionnaires will be edited for completeness and consistency. The data will then be coded to enable the responses to be grouped into categories. Descriptive statistics will be mainly be used to summarize the data. This will include percentages and frequencies. We shall employ the use of Lickert scale and Statistical Package for Social Sciences (SPSS version 18.0). Tables, Pie charts and other graphs will be used appropriately to present the data collected for ease of understanding and analysis.

CHAPTER FOUR: DATA ANALYSIS AND INTRPRETATION

4.0 Introduction

This chapter presents research findings and discussions, starting with the response rate, through the demographic information of the respondents and then gives details on the findings and discussions based on the specific objectives of the study. The data collected through the aforementioned method was examined and analyzed to establish its authenticity. Qualitative method of data analysis was employed to help in analyzing the unquantifiable data. This method of data collection and presentation helped come up with comprehensive information on the effectiveness of health communication on the mitigation of OF among women and girls in Kenya.

4.1 Analysis and presentation

This study targeted 100 respondents in collecting data in regards to the effectiveness of health communication on the mitigation of OF among women and girls in Kenya. From the study, a total of 82 respondents out of the 100 sample respondents participated in the interviews making a response rate of 82%. According to Mugenda, Mugenda (2003) a response rate of above 60% is considered appropriate for credible results.

4.2 Demographic Information

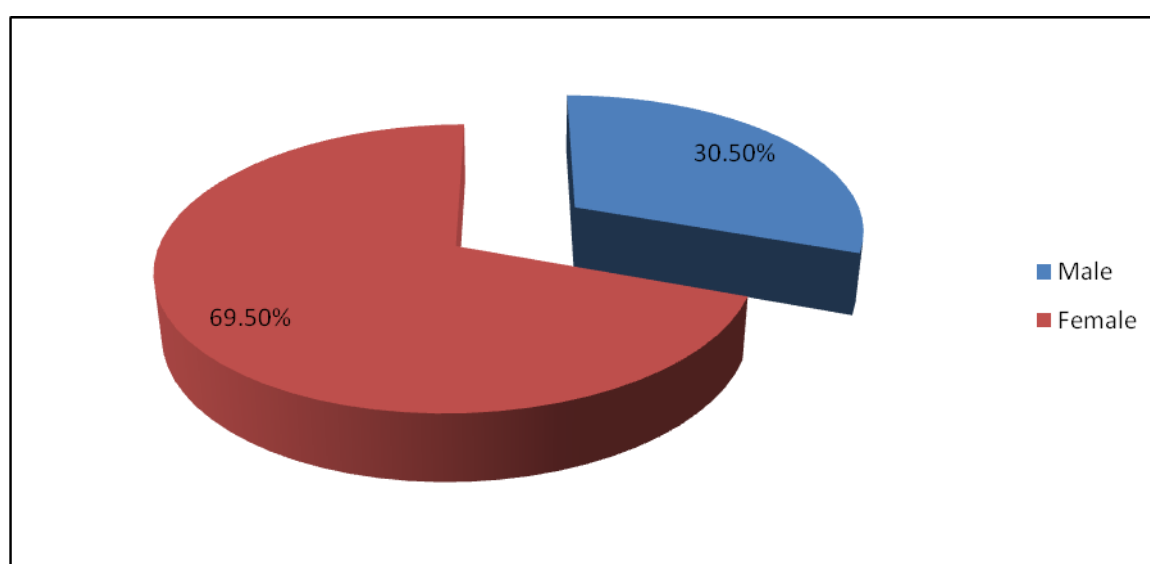
These are the information on the characteristics of the respondents. They included age, gender, marital status, level of education, average income and other occupation.

4.2.1 Gender distribution of the respondents

The study sought to find out the gender of the respondents. According to the finding, 69.5 of the respondents were female, while 30.5% were male. This implies that the majority of respondents were female being that they were largely affected by the subject of the study and therefore a high interest to participate in the study. Table 1.1 and Figure 1.1 below show the distribution of respondents by gender.

Table 1.1: Gender distribution of respondents

Gender	No. of respondents	Percentage
Male	25	30.5%
Female	57	69.5%
Total	82	100%

Figure 1.1: Pie chart of respondents by Gender

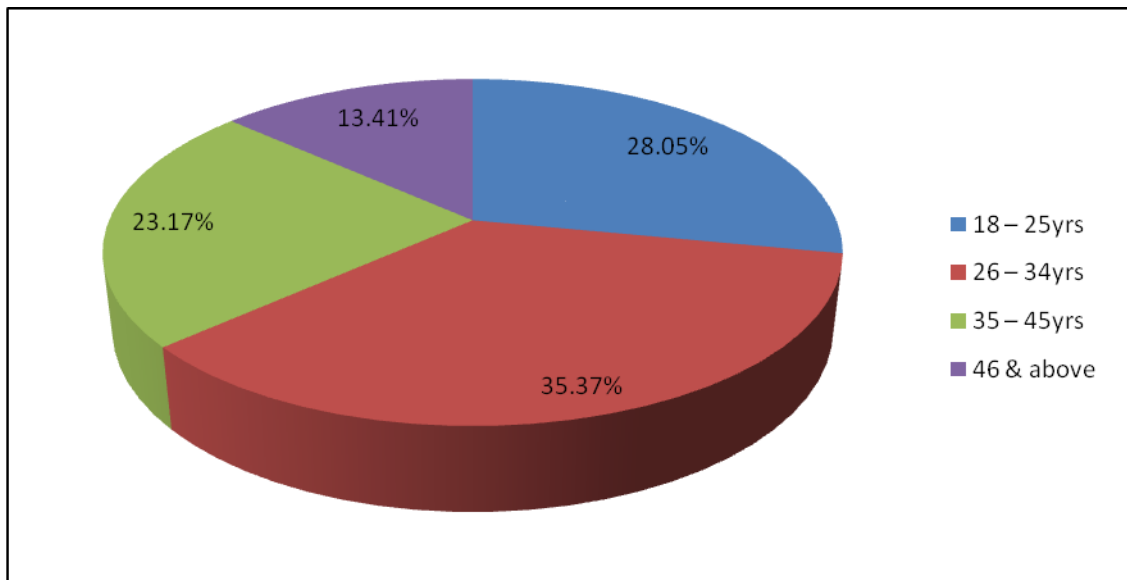
4.2.2 Age distribution of the respondents

The study sought to find the age of the respondents. From the findings 86.59% of the respondents were aged between 18 years and 45 years. It can be depicted from this finding that these are the highly reproductive age groups in Matungu Division and would be expected to have a higher level of sexual and reproductive health concern. Table 1.2 and Figure 1.2 below illustrate the distribution of Age of the respondents.

Table 1.2: Distribution of age of respondents

Age	18 – 25yrs	26 – 34yrs	35 – 45yrs	46and above	Total
Frequency	23	29	19	11	82
Percentage	28.05%	35.37%	23.17%	13.41%	100%

Figure 1.2: Pie chart of respondents Age



4.2.3 Marital status of the respondents

The study sought to find out the Marital status of the respondents. According to the findings, 43.90% of the respondents were married, 21.95% were single, 17.07% were widowed, 10.98% were divorced, while 6.10% were separated. From the finding it can be drawn that most of the respondents were in stable marriages. The study also found out that 21.95% of the respondents were single depicting that a lot of very young people were engaging in sexual activities at a very early age. (Refer to Table 1.3: Marital status of respondents)

Table 1.3: Distribution of the Marital status of respondents

Marital Status	Frequency	Percentage
Single	18	21.95%
Married	36	43.90%
Separated	5	6.10%
Divorced	9	10.98%
Widow/er	14	17.07%
Total	82	100.00%

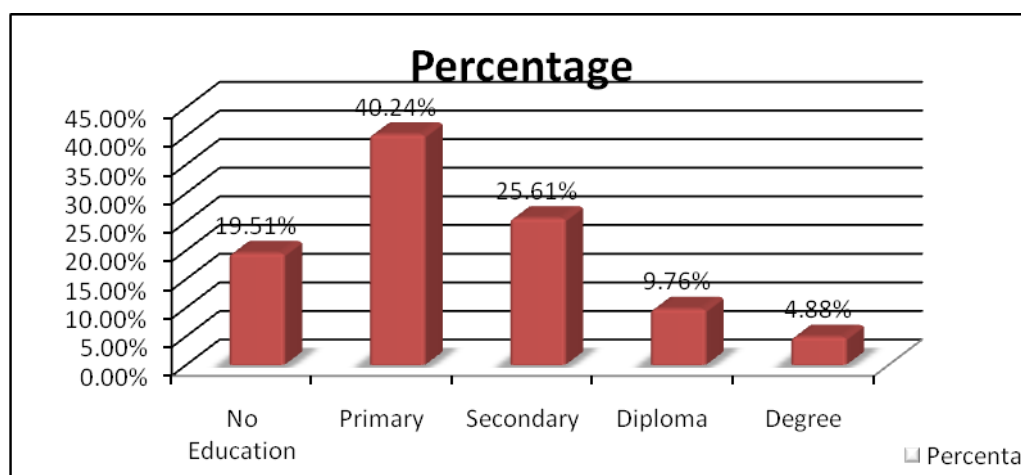
4.2.4 Level of Education of the respondents

The study sought to find out the Level of Education of respondents. According to the study the highest percentage of respondents at 40.24% had primary level of education, while 19.51% had no formal education. This depicted lack of awareness and information on OF. From the findings 40.35% of the respondents had at least a secondary or a higher education portraying an improvement on their socio-economic status, awareness level and access to information. The study illustrates that there is a correlation between the Level of Education and socio-economic status. (Refer to Table 1.4 and Figure 1.3: Distribution of respondents Level of Education)

Table 1.4: Distribution of respondents Level of Education

Level of Education	Frequency	Percentage
None	16	19.51%
Primary	33	40.24%
Secondary	21	25.61%
Diploma	8	9.76%
Degree	4	4.88%
Total	82	100.00%

Figure 1.3: Graph of respondents Level of Education

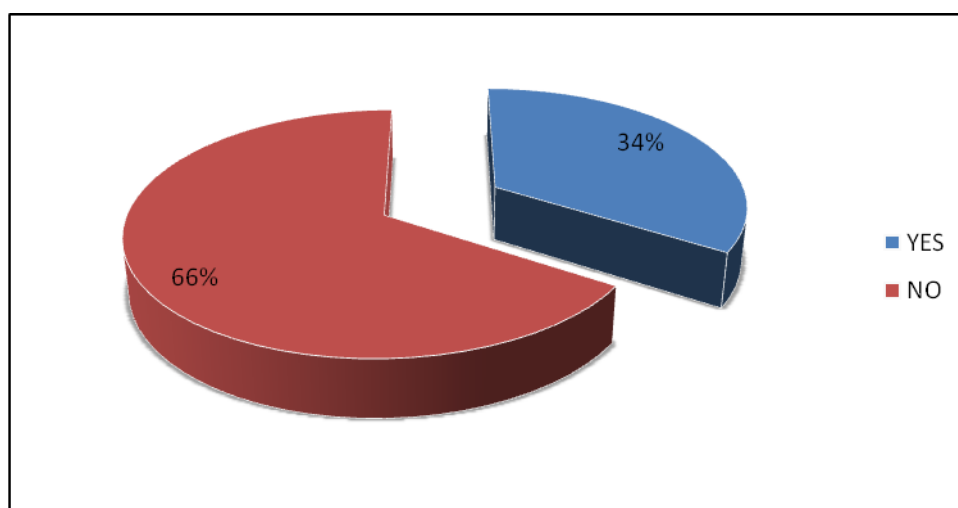


4.2.5 Respondents Knowledge about OF

The study also sought to determine the respondents knowledge and awareness about obstetric fistula. From the findings 34% of the respondents reported that they know or

have heard about obstetric fistula, while the majority of the respondents at 66% had no knowledge of OF. According to the findings, 60% of the respondents who had some knowledge about OF know of or have seen someone who suffers fistula.

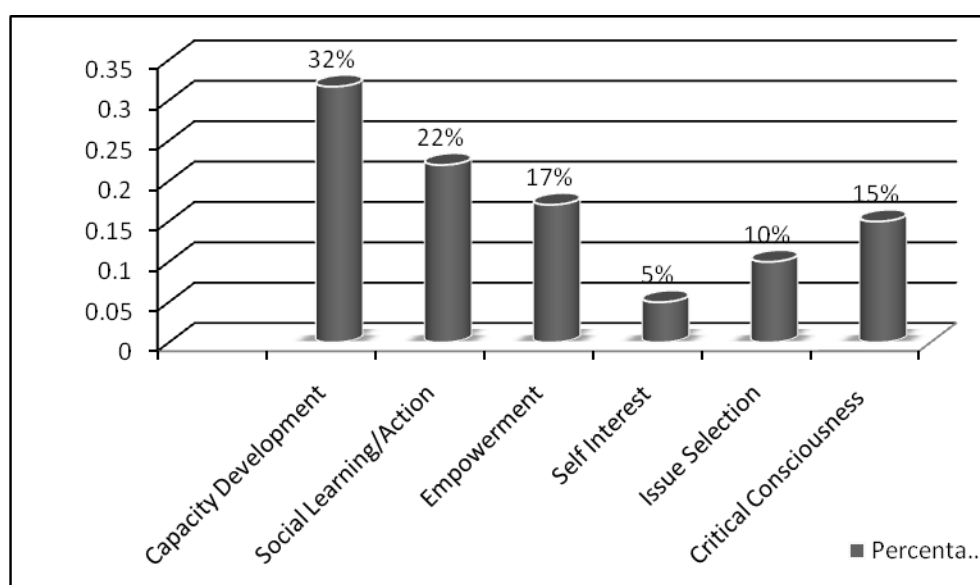
Figure 1.4: Pie chart of respondents knowledge of OF



4.3 Extent of Development Communication

This study intended to inquire from the respondents the extent and effectiveness of development communication's contribution towards the mitigation of OF, from the findings, the majority of the respondents at 32% agreed that capacity development contributed to a large extent towards mitigation of OF. Other components of communication such as social learning, empowerment and critical consciousness were also quoted to greatly contribute to the mitigation of OF. However some respondents at 5% also indicated that self-interest did not contribute as much to the mitigation of obstetric fistula.

Figure 1.5: Graph of respondents view on the extent of Communication on OF



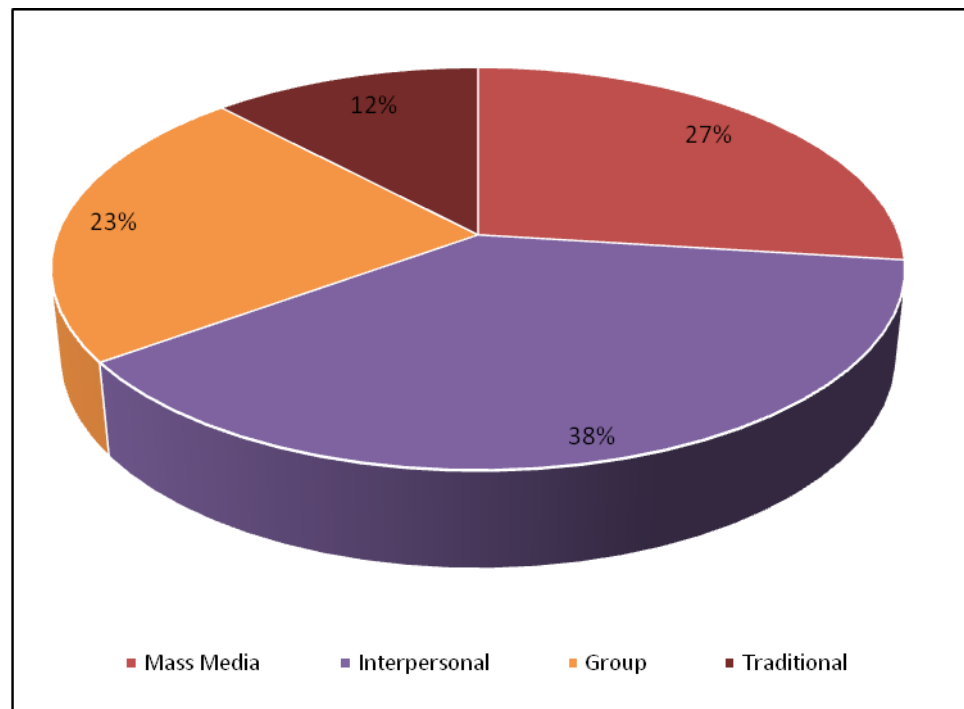
4.3.1 Preferred channel of communication

The study also sought to examine the respondents preferred channel of communication. The majority of the respondents at 38% preferred interpersonal communication, especially counseling by the health service providers. These were mainly the victims of OF and the pregnant women. They reported that this was the most private way to discuss and share their health secrets without feeling judged. 27% of the respondents preferred mass media, citing that it was impersonal and was able to reach most of the community members. The other respondents preferred group and traditional means of communication as illustrated in (Table 1.5. and figure 1.6)

Table 1.5: Distribution of respondents preferred channel of communication

Channel of communication	Percentage
Mass Media - TV, Radio, Newspaper	27%
Interpersonal - counseling, gossips, discussions	38%
Group - Barazas, audio visuals, social gatherings	23%
Traditional - folklore, songs, plays, testimonies	12%

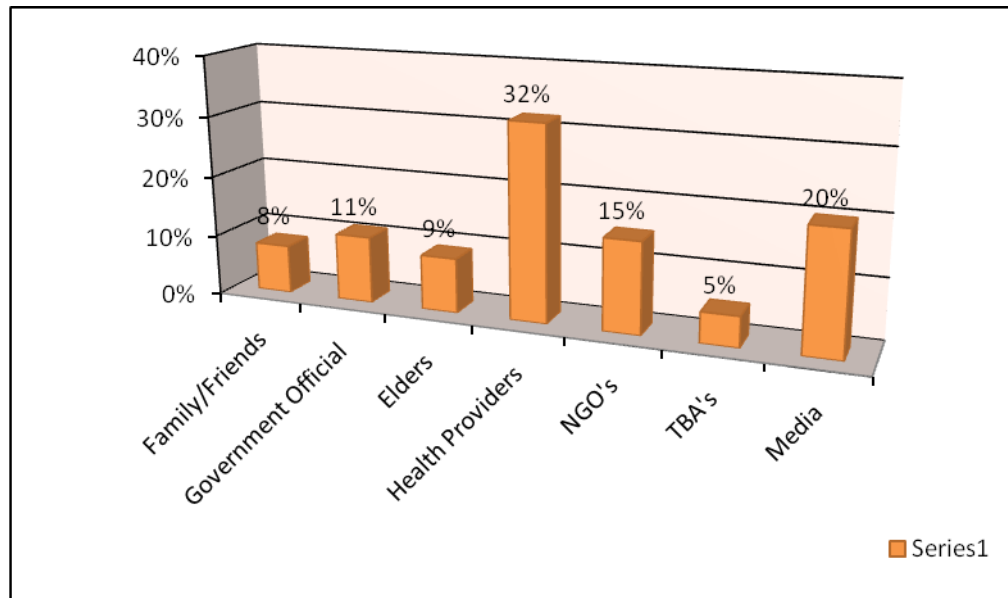
Figure 1.6: Pie Chart of respondents preferred channel of communication



4.3.2 Trusted sources of information

This study purposed to find out the respondents trusted source of information. From the findings, majority of the respondents at 32% trusted the healthcare providers to share their health issues and to seek opinion and advice on health, especially maternal health. 20% of the respondents trusted the Media to give them credible information on OF and health matters. The NGO's and Government were also fairly trustworthy sources of information (Refer to figure 1.7).

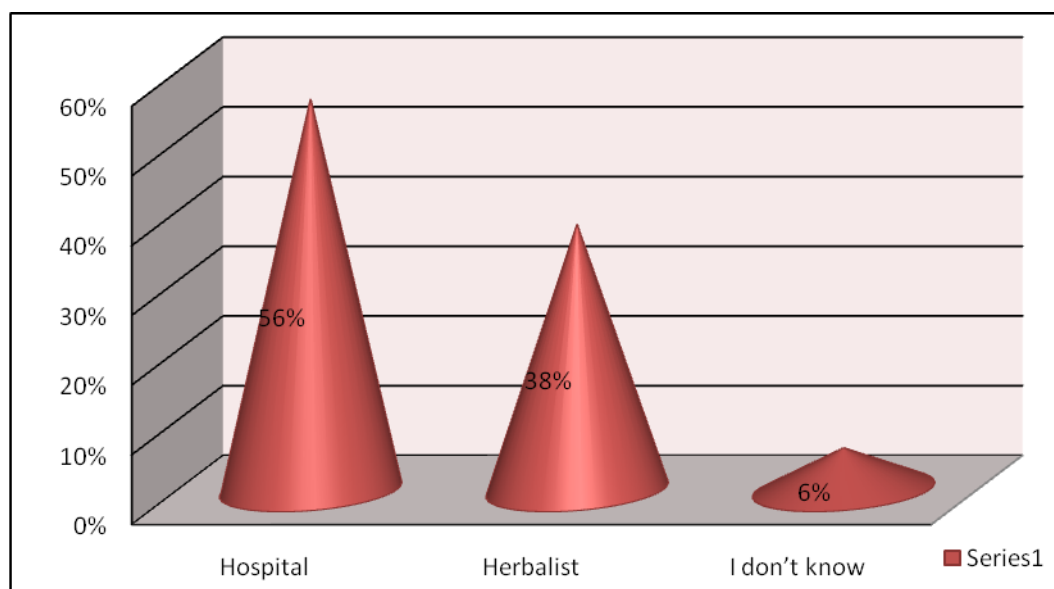
Figure 1.7: Graph of respondents trusted source of information



4.3.3 Respondents view on OF treatment

The study also intended to examine the respondents view on the treatment of obstetric fistula. According to the findings, 56% of the respondents believed that OF is treatable in hospital. The majority of the respondents who held this view were the victims of fistula and some pregnant women who were educated about fistula at the health facility when they sought treatment. 38% of the respondents however believed that OF could be treated by the traditional herbalist because fistula was caused by sorcery or witchcraft. Majority of the respondents who held this view were the elderly and traditional leaders. Some of the respondents however agreed that they did not know whether OF is treatable or not. (Refer to Figure 1.8).

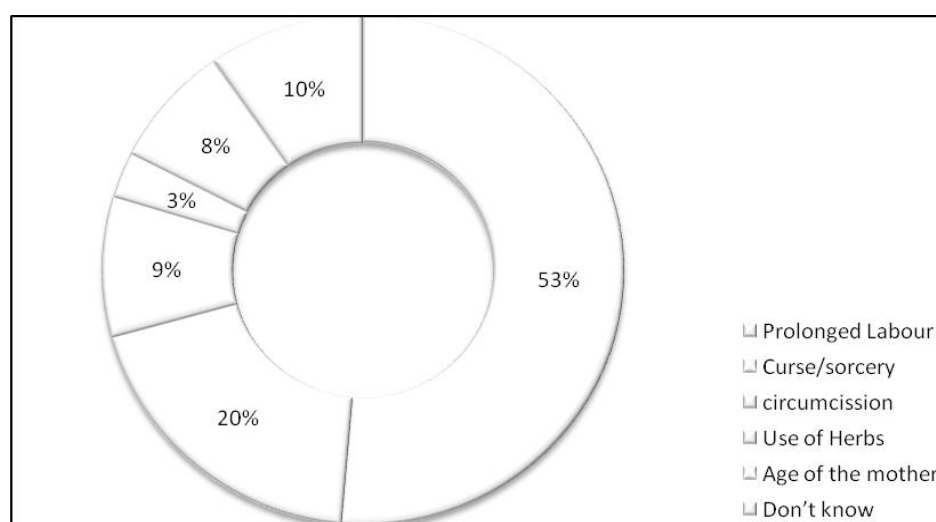
Figure 1.8: Graph of respondents view on OF treatment



4.3.4 Respondents view on the causes of OF

The study also sought to find out the respondents view on the causes of obstetric fistula. Majority of the respondents at 53% agreed that OF was caused by pregnancy related complications, mainly prolonged labour. 20% of the respondents especially the elderly respondents trusted that OF is caused by sorcery or a curse. Other respondents believed that OF is caused by either circumcision, age of the mother or prolonged use of herbs. 10% of the respondents did not know about OF or what causes it. (Refer to Figure 1.9 below).

Figure 1.9: Pie chart of the respondents view on the causes of OF



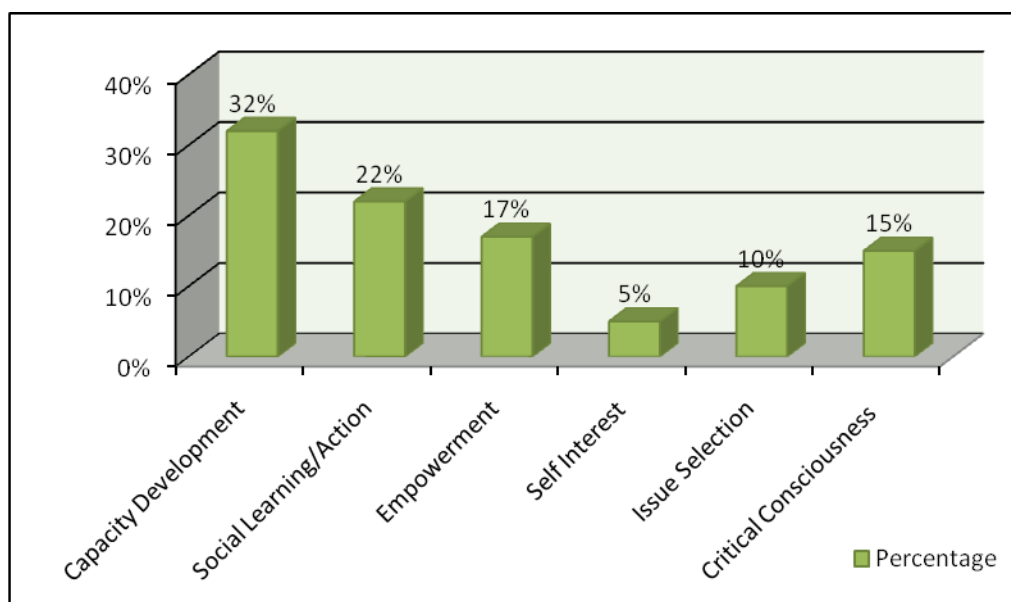
4.3.5 Effectiveness of BCC in addressing OF

This study set out to determine the effectiveness of elements of behavior change communication employed in addressing obstetric fistula. (Referring to Table 1.6), it was determined from the respondents that capacity development is the most effective element of BCC when addressing OF at 32%. This depicted that to be able to effectively and efficiently address OF, it was critical to build capacities of all stakeholders, from the victims, spouses, family and friends, the healthcare providers and the community at large. Social learning and empowerment were also highly rated at 39% to be effective elements of BCC in addressing OF. Self-interest was determined to be less effective at 4% in addressing by the respondents (Refer to Table 1.6 and Figure 1.10).

Table 1.6: Elements of BCC in addressing OF

Behavior Change Communication (BCC)	Frequency	Percentage
Capacity Development	26	32%
Social Learning/Action	18	22%
Empowerment	14	17%
Self Interest	4	5%
Issue Selection	8	10%
Critical Consciousness	12	15%

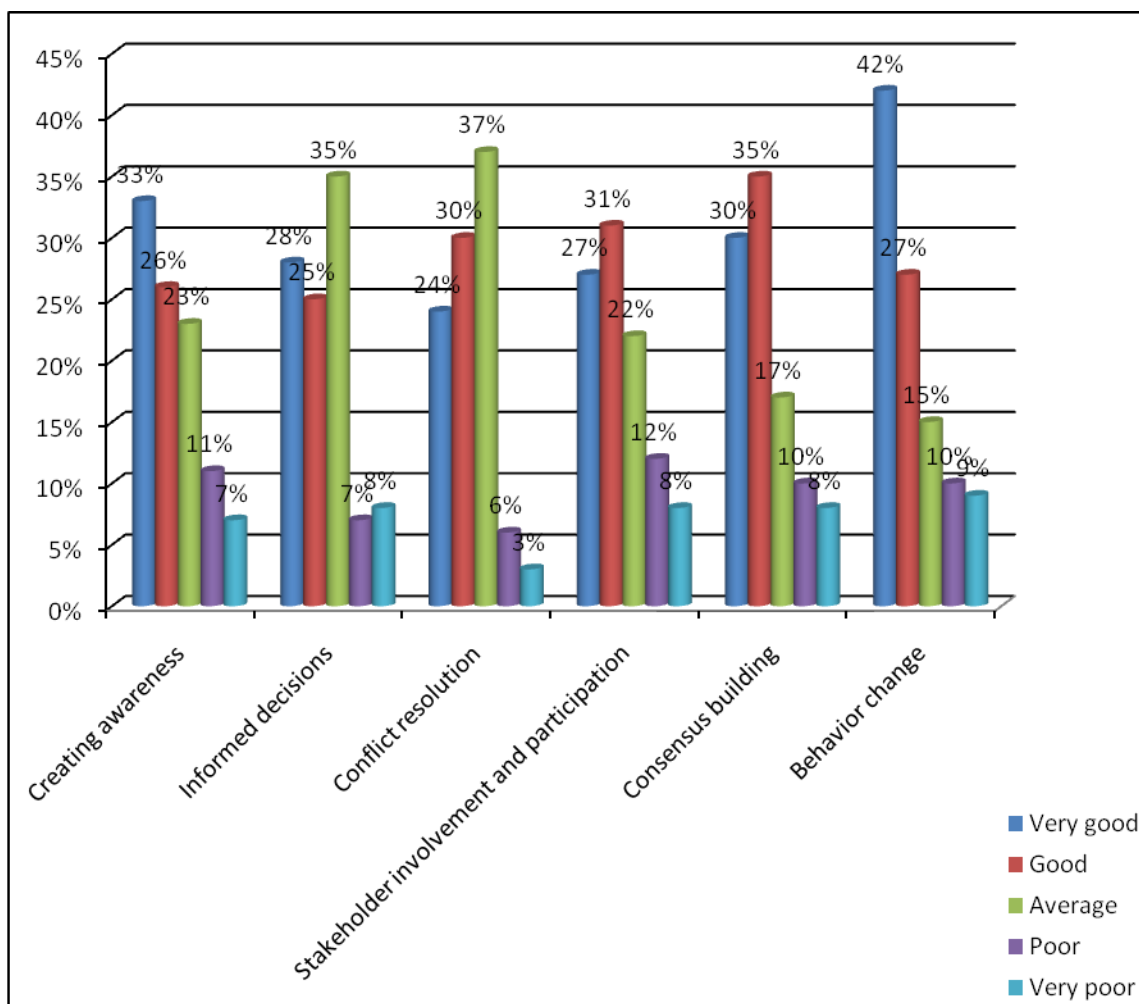
Figure 1.10: Graph of the elements of BCC in addressing OF



4.3.6 Indicators of effective Communication Strategies

This study also intended to find out the indicators of effective development communication strategies. According to the findings, the respondents reported that increased awareness about OF was a very good indicator that communication strategies are effective. The respondents also agreed that positive behavior change and making informed decisions especially to seek skilled maternal care and attending ante-natal clinics were good indicators of effective communication strategies. Stakeholder participation and involvement, consensus building and conflict resolution, especially among spouses were also viewed by the respondents to be good indicators of effective communication strategies. (Refer to Figure 1.11 below)

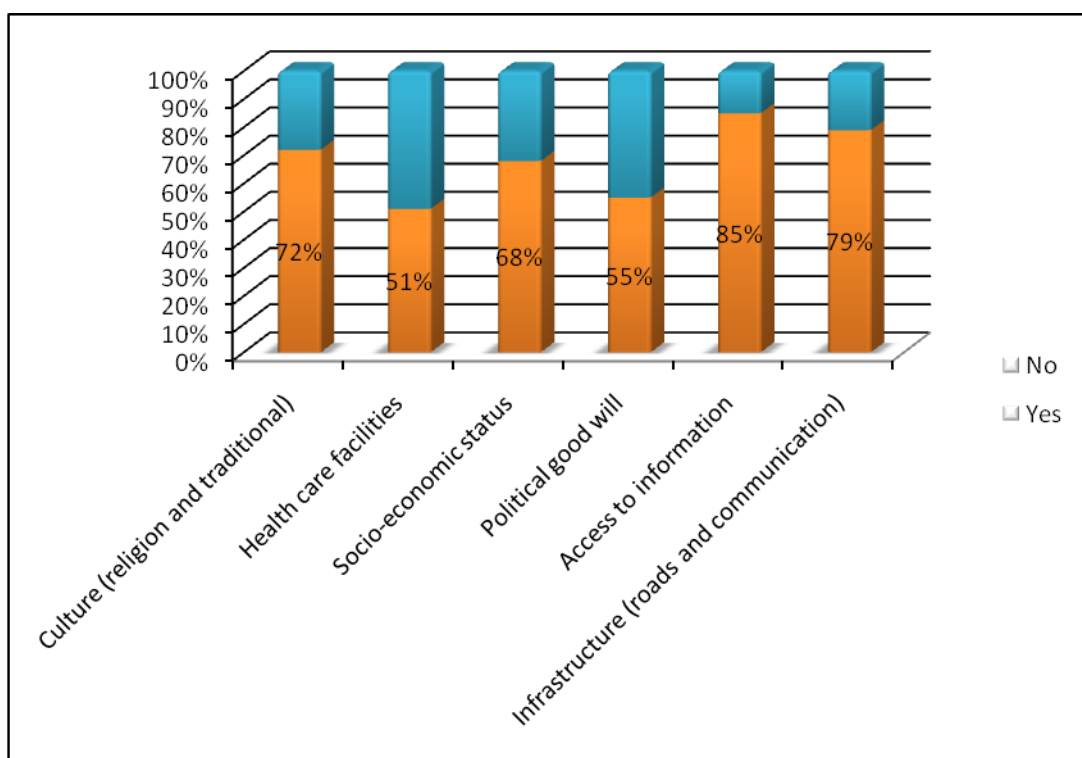
Figure 1.11: Graph of respondents view on the indicators of effective communication



4.3.7 Factors that affect OF management

The study also sought to find out factors that affect and should be considered in managing obstetric fistula. From the findings, the respondents agree at over 50% that the following factors greatly influence the effective management and mitigation of OF and should be highly considered when addressing OF. Culture both religious and traditional should be highly respected when addressing OF because of their delicate and sensitive nature. Access to information, policy and infrastructural development should be critically considered if OF management were to be successful. (Refer to Figure. 1.12 below)

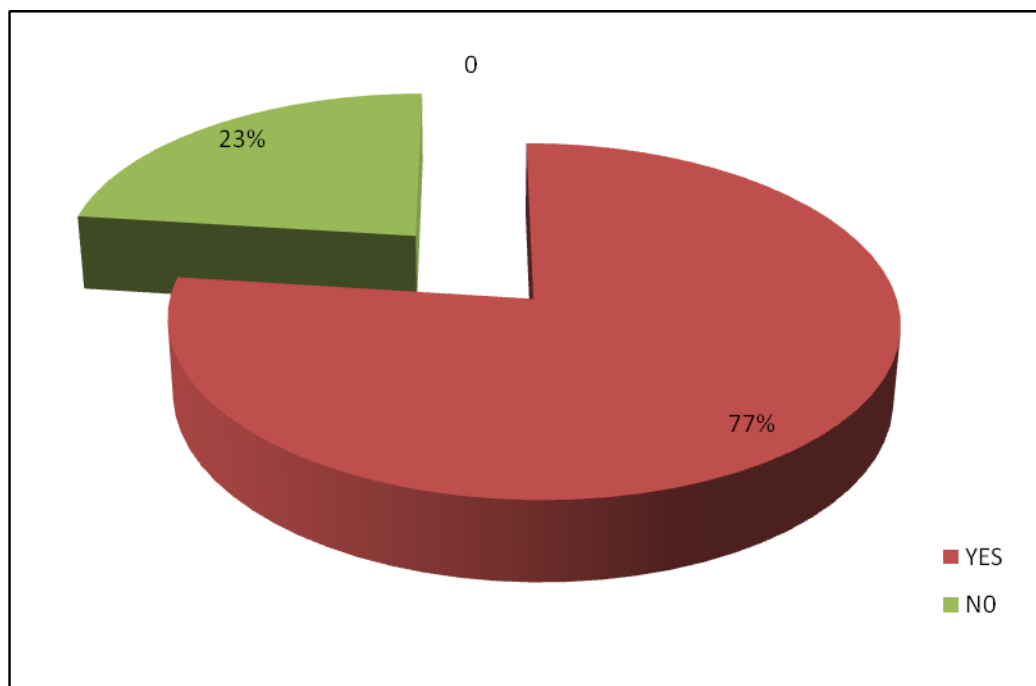
Figure 1.12: Graph of respondents view on factors that affect OF management



4.3.8 Effectiveness of C4D strategies in addressing OF

The study also sought to find out in general what the respondents views were on the communication for development strategies in addressing obstetric fistula. From the findings an overwhelming 77% of the respondents believed that communication for development strategies would be very effective in addressing OF. This study determined that strategic communication was the missing link in the quest to effectively mitigate obstetric fistula among the girls and women in Kenya. Lack of information and the low level of awareness (ignorance) on what OF was, causes, where to seek help and lack of proper infrastructural systems were the major contributions to the increase of fistula cases and maternal deaths. (Refer to Figure 1.13)

Figure 1.13: Pie chart of the effectiveness of C4D in addressing OF



CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter provides the summary of findings from chapter four, conclusions and the recommendations made based on the objectives of the study. The objectives of this study were to determine the extent of health communication in inducing behavior change and personal learning amongst obstetric fistula patients in Kenya, to ascertain the effectiveness of communication for development in capacity building and reducing levels of stigmatization regarding obstetric fistula in the community and to establish the impact of communication strategies on increasing the knowledge levels and understanding on the causes and effects of obstetric fistula.

5.1 Summary of findings

The principal objective of this study was to determine the effectiveness of health communication in mitigating obstetric fistula among women and girls in Kenya. The findings were aimed at determining the extent of health communication in inducing behavior change and personal learning amongst obstetric fistula patients in Kenya. The findings were also aimed at ascertaining the effectiveness of communication for development in capacity building and reducing levels of stigmatization regarding obstetric fistula in the community. The study was also intended to establish the impact of communication strategies on increasing the knowledge levels and understanding on the causes and effects of obstetric fistula.

The study revealed that maternal health practice remains a very critical factor to be considered when addressing obstetric fistula. These practices include ante-natal care visits during pregnancy and the making the decision to seek skilled care during child birth as a precursor to prevent obstetric fistula. The study also established that the knowledge about OF among the community members of Matungu was very inadequate. Only 34% out of the 82 respondents indicated that they have heard about obstetric fistula. However all the health service providers interviewed indicated that they were aware of obstetric fistula.

This study also found out that the 53% of the respondents believed that OF was majorly caused by pregnancy and childbirth related complications such as prolonged labour, caesarian section or age of the mother. Other respondents however believed that obstetric fistula was caused by sorcery or a curse. These superstitions and cultural practices were determined to be further endangering the ability and right of a pregnant woman to seek skilled delivery services and expose them to risk of obstetric fistula.

According to the findings, majority of the respondents mentioned that the health care providers made efforts to educate and inform their clients on challenges related to maternal health and the four delays that causes maternal morbidities including OF. However, it was established that these information were skewed towards the pregnant women – meaning the other community and family members, such as the spouses who played critical roles in decision making were left out.

The study also revealed that none of the health facilities had any IEC materials on OF and that accounted for the inability of the health service providers to effectively educate the community members about obstetric fistula, further compounding the poor levels of OF in the community. The study also established that mass media and group communication were the major channels of communication at 50% suggested by the respondents to be the most appropriate to disseminate IEC messages and activities on obstetric fistula. From the findings, 38% of the respondents, majority being women preferred the interpersonal communication to share, discuss and seek advice concerning maternal health, citing that it was more private as obstetric fistula was a taboo topic in that community.

This study also established the importance of factoring in culture, both religious and traditional, family and community members, political good will and the necessary infrastructural policies when attempting to address obstetric fistula. This is because all these factors affect and influence one way or the other the efficiency and effectiveness of a successful management and mitigation of obstetric fistula.

On determining the extent of development communication usage on OF related issues, the study revealed that capacity development contributes to a very large extent towards the sensitization of OF among the community members, especially the

women. interpersonal communication and individual learning also contribute a lot towards the development of OF among the women. Lack of information about OF causes and effects, need for personal learning, and collective social processes have to some extent been the major components of BCC focused on towards addressing OF among Kenyan women.

This study established that communication for development strategies are very fundamental and effective in increasing access to information through creating awareness, personal learning, behavior change, consensus building, stakeholders involvement and support, and making informed decisions in the process of addressing obstetric fistula

5.2 Conclusions

The Ministry of Health in Kenya needs to map out the extent of Obstetric Fistula in Kenya. Majority of the health services visited did not have statistics on women suffering from obstetric fistula. This is crucial because without these numbers, the government or other interested organizations cannot do a comprehensive job in addressing this health problem.

According to the findings, the knowledge levels of the respondents about OF is very low, begging the need to do an extensive campaign to the raise awareness and sensitize Kenyans about obstetric fistula. This will go a long way in mitigating and managing obstetric fistula.

5.3 Recommendations of the Study

The government should take the initiative to adequately inform and train the health service providers and the TBAs since they are the first in contact with the pregnant women before referrals are necessary.

The government and other relevant stakeholders should organize advocacy and media campaigns to sensitize and raise awareness of the public on obstetric fistula, and educate fully on the causes, effects to avoid stigmatization of the victims, and support the reintegration of survivors in the community. The government should also ensure

that the necessary infrastructural facilities are in place to reduce the risk of maternal morbidities such as obstetric fistula.

5.4 Suggestions for Further Research

This study was limited to establishing the effectiveness of communication in the mitigation of obstetric fistula among women and girls in Kenya. An issue that came out was the right of a woman to determine certain maternal health rights, such as obtaining consent from husband or mother-in-law before attending ante-natal care or seeking skilled delivery services or where to deliver.

A study on how the human rights of women can help promote maternal health in the rural communities in Kenya reduces birth complications, thereby reducing maternal morbidities like obstetric fistula.

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APPENDICES

Appendix I : Question for the general population

Kindly follow the instructions carefully. Information provided will be purposely used for academic endeavor.

A. Demographic Information

i. Gender

Male () Female ()

ii. Age

18 – 25 years ()

26 – 34 years ()

35 – 45 years ()

46 years and above ()

iii. Marital Status

Single () Married () Divorced () Widow/er ()

iv. Level of Education

Primary () Secondary () Tertiary () Graduate ()

v. What is your understanding of obstetric fistula?

vi. What is your preferred channel of communication?

CHANNEL OF COMMUNICATION	FREQUENCY
Mass Media - TV, Radio, Newspaper	
Interpersonal - counseling, gossips, discussions	
Group - Barazas, audio visuals, social gatherings	
Traditional - folklore, songs, plays, testimonies	

vii. Who is your trusted source of information on health matters?

SOURCE OF INFORMATION	FREQUENCY
Family/Friends	
Government official	
Elders	
Health Providers	
NGO's	
TBA'S	
Media	

viii. What do you believe causes obstetric fistula

- a. Prolonged labour b. Sorcery/Curse c. Circumcision
d. Use of herbs e. Age of the mother f. Don't know

ix. Is obstetric fistula treatable? If yes, where can it be treated?

- a. Hospital b. Herbalist c. I don't know

B. Extent of Development Communication

1. Is there access to healthcare facilities?? Availability of information on OF??
2. What is the extent of communication in inducing behavior change (BC) and personal learning
3. To what extent to you believe the following aspects of communication contribute towards the mitigation of OF

Aspects of Communication	Very Large	Large Extent	Moderate Extent	Low Extent	Very low Extent
Individual learning					
Health Communication					
Capacity Development					
Social Interaction					

4. Using a scale of 1 – 5, how do you rate the following components employed by behavior change communication (BCC) in addressing OF
(1 = Strongly agree, 2 = Agree, 3 = Not sure, 4 = Disagree and 5 = Strongly disagree)

Behavior Change Communication (BCC)	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
Capacity Development					
Social Learning/Action					
Empowerment					
Self Interest					
Issue Selection					
Critical Consciousness					

5. Health communication strategies contribute to a great extent in the mitigation of OF. Give reasons for your argument

I. Agree ()

II. Disagree ()

6. The following are indicators of effective communication; indicate the development status of each in your community as concerns OF management

Communication Indicators	Very good	Good	Average	Poor	Very poor
Creating awareness					
Informed decisions					
Conflict resolution					
Stakeholder involvement and participation					
Consensus building					
Behavior change					

7. The following are critical when addressing any development concerning OF. Kindly point out the ones that you are aware of by using (yes) or (no) for the ones you do not know about

Aspects to consider when addressing OF issues and concerns	Yes	No
Culture (religion and traditional)	72%	28%
Health care facilities	51%	49%
Socio-economic status	68%	32%
Political good will	55%	45%
Access to information	85%	15%
Infrastructure (roads and communication)	79%	21%

8. In your opinion, can communication for development strategies be effective in addressing OF and related issues and concerns

Yes () or No () support your arguments

9. The following statements are some of the indicators of impacts of development communication on OF

Use a scale of 1 – 5 to rate them, where (1 = Strongly agree, 2 = Agree, 2 = Not sure, 4 = Disagree and 5 = Strongly disagree)

IMPACTS OF COMMUNICATION	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
Local programming on social issues has disappeared from the media, leaving room for western and foreign culture					
Communication serves to actively meaning and demystify issues rather than merely convey it					
Communication calls for the restructuring of political and socio-economic systems for more equitable distribution of benefits, personal and communal freedom from oppression and retrogressive culture, and empowerment					
Human involvement and participation in development communication interventions provides a continuous opportunity for any combination of struggle, negotiation, accommodation and agreement					
Health communication strategies supports the development of personal learning, behavior change and critical consciousness					

Appendix II: Certificate of Field Work



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REF: CERTIFICATE OF FIELD WORK

This is to certify that all corrections proposed at the Board of Examiners' meeting held on 10/04/15 in respect of M.A./Ph.D final Project/Thesis defence have been effected to my/our satisfaction and the student can be allowed to proceed for field work.

Reg. No: K50/79000/09

Name: WERE F.W

Title: COMMUNICATION & THE MITIGATION OF OBSTETRIC FISTULA IN KENYA

DR HMOGAMBI
SUPERVISOR

Dr Samuel Simgi
PROGRAMME COORDINATOR

Dr Samuel Simgi
DIRECTOR

SIGNATURE

SIGNATURE

SIGNATURE/STAMP

DATE

DATE

DATE

12/10/15

15/11/2015

15/11/2015

Appendix III: Certificate of Corrections



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REF: CERTIFICATE OF CORRECTIONS

This is to certify that all corrections proposed at the Board of Examiners meeting held on 22/09/15 in respect of M.A/PhD. Project/Thesis Proposal defence have been effected to my/our satisfaction and the project can now be prepared for binding.

Reg. No: K50/79000/09

Name: WERE F. W

Title: COMMUNICATION & THE MITIGATION OF OBSTETRIC
FISTULA IN KENYA

DR HMOGAMBI
SUPERVISOR

[Signature]
SIGNATURE

10/11/15
DATE

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M.A. COORDINATOR

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15/11/2015
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