THE EFFECTS OF OBSTETRIC FISTULA, IMPACT AND COPING STRATEGIES OF WOMEN IN KAPTEMBWA – NAKURU, KENYA

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A Thesis Submitted to the Graduate School in Partial fulfilment of the Requirement for the award of Master of Arts in Women, Gender and Development Studies of Egerton University.

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DECLARATION AND RECOMMENDATIONS

Declaration

This Thesis is my original work to the best of my knowledge it has never been presented for a degree in any other university.

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Recommendations

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DEDICATION

To my husband Newton Kimani who has valued my education, my daughters Yolanda &Jerusha, Sons Kevin and Kefa and my lovely granddaughters, Michelle and Renee and my grandson Kai Gacheru.

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ABSTRACT

Obstetric fistula is complication of pregnancy that affects women following prolonged obstructed labor. Most instructive in this respect, is the continuous leakage of urine as well as the far reaching effects on, physical, emotional, economic and social suffering associated with it, which has a profound impact on women and men's livelihoods. Therefore it was found imperative to evaluate the causes of obstetric fistula on affected women of Kaptembwa Nakuru, and appraise the impact on the well-being of women and how their experiences have shaped their identities and families. The study was conducted with qualitative and quantitative components to explore the causes, experiences and impact of obstetric fistula. Social, Psycho-Social, Medical and Demographic traditional theories were used to investigate and evaluate the root cause of the social problem that has affected women and their families, assisting in exploring the impact and coping strategies, hence explaining the relationship of the variables and other factors that moderate the same. The sample population was 74 confidently selected samples and 10 interviewed during pilot testing, inclusive of key informants and case studies of 3 women (depth interviews) as the rest of the women responded to the questionnaires. Focus group discussion was done with husbands who have experienced effects of obstetric fistula. The interview schedules and questionnaires were used in collection of data. Data was analyzed using content data analysis framework and Statistical package for the Social Science. (SPSS). Obstetric fistula prevails amongst women aged between 25 -39 years. The difficulty of assessing the exact numbers of women affected with obstetric fistula was attributed to it being an embarrassing and humiliating medical condition, leading to isolation. The foul odor emanating from affected women leads to humiliation; sever social-cultural stigmatization and thus, inability to perform their gender roles. Hindrance from participating in gainful income activities has led them into despair and begging. In order to combat this debilitating disease, community education that informs on the potential risks of obstetric fistula particularly amongst people residing in rural and informal settlements areas is a must. Essential information includes danger signs during delivery and rapid access to caesarean section delivery for cases of obstructed delivery. Access to affordable fistula repair must also be provided in the County Health facilities. The findings of this study may assist these women to seek better ways and means to address their problems. The knowledge will help them improve their self worth and maintain their identity as women, wives, friends, and community members. The findings will also assist medical practitioners and

community in making recommendation to policy makers, implementers, and relevant stakeholders in strategizing, planning and implementing appropriate ways to address the problem.

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LIST OF ABBREVIATIONS AND ACRONYMS

AMDDP	:	Averting Maternal & Disability Program.
AMREF	:	Africa Medical Relief Foundation.
ANC	:	Antenatal Care
CBO	:	Community Based Organization.
CEDAW	:	Convention of Elimination of all Discrimination against Women.
CMs	:	Community Midwives.
FGM/C	:	Female Genital Mutilation/Cutting.
FIGO	:	Federation of Gynecology.
KNH	:	Kenya National Hospital.
HRW	:	Human Rights Watch.
MDGs	:	Millennium Development Goals.
NGO	:	Non Governmental Organization.
OFWG	:	Obstetric Fistula Working Group.
TBA	:	Traditional Birth Attendants.
UN	:	United Nations.
USAID	:	United Nations Agency for International Development.
UNPFA	:	United Nations Population Fund.
WHO	:	World Health Organization

CHAPTER ONE
INTRODUCTION

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. (WHO, 2005). According to Turan, Johnson, &Polan (2007) obstetric fistula is a child birth injury caused by prolonged and obstructed labor. If untreated, a woman with Obstetric fistula will experience constant and uncontrollable leakage of urine and or/ faeces.Donnay& Ramsey, (2006) raises concerns about traumatic fistula can also be the result of direct gynecologic trauma associated with a violent sexual assault by an assailant(s), or by forced insertion of objects such as gun barrels or sticks into a woman's vagina. This kind of brutal aggression is unfortunately common in countries at war where such acts may occur with impunity.

Browning, (2004) says that Obstetric fistula can also be caused by poorly performed abortions; pelvic fracture, 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. Roush, (2009) says that other potential causes for the development of obstetric fistula are sexual abuse and rape, especially in conflict/post conflict areas and other surgical trauma. Data also suggest that fistula can be caused in hospital settings themselves, through improper caesarean section and negligence. In addition Ojanuga (1994) writes it devastates lives, causing women in most cases lose their babies and to live with the humiliation of leaking urine and/or faeces constantly. Fistula inhibits women's ability to work or interact with communities, driving them further into poverty and often exacerbating both their economic and their social vulnerability.

Without treatment, fistula often leads to social, physical, emotional and economic decline. Although some women with fistula display amazing courage and resilience, many others succumb to illness and despair. According to World Health Organization (WHO) the misery of fistula is relentless. In spite of one's best efforts to stay clean, the smell of leaking

urine or faeces is hard to eliminate and difficult to ignore. The dampness causes rashes and infections. The cleaning up is constant, and pain may be continuous as well. The grief of losing a child and becoming disabled exacerbates the pain states Wall, (2004). The courage many women show in the face of these challenges is extraordinary. The injury leaves women with few opportunities to earn a living, and many have to rely on others to survive, or turn to begging. In some communities, they are not allowed to have anything to do with food preparation and may be excluded from prayer or other religious observances. The shame and stigma attached to obstetric fistula causes disruptions in practices of religious observation, isolating women at their places of worship or preventing them from practicing their at all. (McKinney, (2008).

Both women with obstetric fistula and their family members interviewed in the Women's Dignity Project and Engender Health (2008) study reported being unable to attend church or mosque. Muleta, Hamlin, Fantahun, Kennedy, &Tafesse et al, (2008) notes that obstetric fistula is especially problematic for women of the Islamic faith, which emphasizes cleanliness. Although many women with fistula have supportive families, the smell can drive even loving husbands and friends away. For many women, the profound social isolation is worse than the physical torment.The pain and loneliness associated with fistula associated is often compounded by a sense of shame and humiliation.

In some communities, the condition is seen as a punishment or a curse for an assumed wrongdoing, rather than as a medical condition. (MichaelBrodman et al, (2011).The stigma associated with the condition keeps many women hidden away. Some go into deep physical and emotional decline and may resort to suicide. And because so many women with fistula remain marginalized and out of sight, many policy makers and even some health providers have failed to recognize the scope and severity of the tragedy. (Michael Brodman et al (2011).Although fistula presents itself as a medical condition, it is rooted in social, cultural and economic determinants that under lie vulnerability. (Semere&Nour, (2008). Fistula largely affects girls and women 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. Fistula affects young and old alike. Other effects of obstetric fistula include still born babies due to prolonged labor, which happens 85% to 100% of the time according to Semere&Nour (2008), sever ulcerations of

the vaginal tract, “foot drop”, which the paralysis of the lower limbs is caused by nerve damage, making it impossible for women to walk. (Arrowsmith et al (1996). Infection of the fistula forming an abscess is another symptom described by (Mayo clinic Foundation (2010) and up to two-thirds of the women become amenorrhea. (Browning, Andrew (2004).

An estimated 2 million women and girls in the developing world are living with obstetric fistula and more than 50,000- 100,000 new cases develops each year, surpassing the global capacity for treatment.(Murray & Lopez,1998). The latest data released in the Global Fistula Map shows the gap is widening for women suffering from obstetric fistula. According to Wall, (2006) the WHO estimates that approximately two million women have untreated obstetrics fistula with a worldwide incidence of 1-2 per 1000 deliveries; majority living in sub-Saharan Africa. In Kenya, it is estimated that annually there are 3,000 new fistulae cases but only 7.5% are reported and treated.(Ministry of Health & UNFPA Kenya (2004). According to Raassen, (2005) in Tanzania alone, approximately 2500-3000 new cases of fistula are estimated to occur each year.

In Addis Ababa Hamlin Hospital (Ethiopia) treats 1,200 women who have obstetric fistulas. Hospital records indicate that most patients come from the Amhara Region, which according to a survey by the National Committee on Traditional Practices of Ethiopia have the highest number of early marriages in the country. The 1997 National Baseline survey points out those girls in Amhara are promised for marriage in infancy, when they are 4 or 5 years old. The 2000 Demographic and Health Survey for Ethiopia shows that, among women from Amhara who were 20 to 49 years old at the time of the survey the median age at marriage was 14/5 years – the lowest regional median age in the country.

In Kenya it is estimated that there are 3,000 new cases per year, with approximately one to two fistula per 1000 deliveries. The backlog of cases is estimated at 300,000. Only 7.5% of women with fistula are able to access treatment according to (UNFPA, 2004). A hospital-based study conducted in the West Pokot region of Kenya (Mabeya, 2004); found the mean age of women with fistula was 20 - 25 years, ranging from 14 to 38 years. The main cause was obstructed labor.

From this study, there are quite a number of causes of obstetric fistula that were indicated by the affected women in Kaptembwa. Prolonged/ obstructed labor for two - three days was a major cause which was created by traditional birth attendants who had no knowledge of what to be done in the process of such a situation. Due to lack of funds they preferred the traditional birth attendants asthey were quite cheaper than the hospitals which involved extra expenses for travelling. Others citied delay to going to hospital also caused the occurrence of obstetric fistula. Others said that children born with big heads also contributed too to obstetric fistula. Women who had undergone Female Genital Mutilation acknowledged it being another cause. They suffered obstetric fistula because in the process of prolonged labor; the vaginal area is completely torn and damaged leading to the fistula.

The findings established that low levels of education of the affected women caused them to take too long before seeking information on their health status therefore thinking that incontinence is normal after delivery. The affected women in the survey were poor and were not engaged in any productive work and most of them depended on others for their survival. Being poor they could not access normal and emergency obstetric care because of the expensive procedures. The affected women expressed that early marriage and child birth was another contributing factor to obstetric fistula. Early Marriages lead to early childbirth which increased the risk of obstructed labor since young mothers who are poor and malnourished have under-developed pelvises which cannot handle any complications.

In this findings, affected women suffered physical, social, economic and physiological consequences which had very detrimental impact. Physical impact: constant leaking of urine and faeces had a very negative effect on their lives. Therefore smell caused a withdrawal aspect in their part. Pain in the vaginal and urinary infections caused them to be weak and unable to carry out their responsibilities**.** Social impact: This disease kept them away from their families and communities. They could not attend to meetings such as weddings, church and funerals. The offensive odor made their lives unbearable to others and they were pushed to isolation. They expressed intense loneliness and shame. Psychological impact**:** These affected women in Kaptembwa faced humiliation; they were marginalized, isolated and stigmatized. Most of them

abandoned and loneliness destroyed them leading to despair. Economic Impact: The women could not seek employment or engage in any business because of physical disorders and body weakness which brought inability to work. They were not favorable to credit either to start business or progression of business. Majority remained dependent on their families for support. They experienced extreme poverty and social isolation that results from obstetric fistula that eliminated all other income opportunities.

The surveyed women in Kaptembwa adapted a number of ways as coping strategies. They identified with other women with similar problem and began communal associations which they said drew them together. Another strategy they did engage in was to withdrawal by hiding away from the normal society due to humiliation. Others resulted to fight the disease than losing hope. While others turned to street begging and most of them sought spiritual interventions.

1.2 Problem Statement

Obstetric Fistula is a serious form of maternal morbidity and it leaves a woman physically, emotionally; financially, and socially traumatized. The affected women are often rejected by their traumatized husbands, and the society because of the accompanying offensive odor. And with no formal education, no vocational training, no gainful employment, no visible means of livelihood, most of the affected women join the group of destitute in the society. This has resulted in the need to assess, its causes, and impact investigated. The researcher seeks to establish the coping strategies implored by the affected women of Kaptembwa Ward. The effects have to be established and documented so that enduring solutions can be propounded for the total reduction of obstetric fistula in Kaptembwa Nakuru County, in Kenya and Africa.

1.3 Purpose of the Study

Examined the impact of psycho-social and medical consequences of obstetric fistula such as rejection by husband, friends, and other family members, divorce and loss of baby; stigmatization; social isolation; offensive odour; frustration; incontinence of urine and/or faeces, foot drop, chronic skin irritation, bladder stone, vaginal stenosis, secondary infertility;

experienced by women suffering from the condition; and identified and recommended strategies (locally suited) for obstetric fistula prevention and control in the study area.

1.4 Objective of the Study

The research study was guided by the following objectives.

(i) To establish the causes of obstetric fistula in Kaptembwa, Nakuru.

(ii) To determine the impact of obstetric fistula on the well being of women in Kaptembwa, Nakuru.

(iii) To explore the coping strategies of obstetric fistula among the women in Kaptembwa Nakuru.

1.5 Research Questions

(i) What are the causes of obstetric fistula among women in Kaptembwa Nakuru?

(ii) What are the effects of obstetric fistula on the well being of women in Kaptembwa Nakuru?

(iii) What are the coping strategies used by women in Kaptembwa Nakuru?

1.6 Significance of the Study

The results will inform the County Government and various stake holders on the causes and effects of obstetric fistula on women's wellbeing in Kaptembwa Ward of Nakuru.

It will provide possible solutions and coping strategies that will assist affected women with information about prenatal care.

Coping strategies will inform policy makers of the following:

a) Available preventive local strategies.

b) Provide quality and affordable health care.

c) Provide adequate appropriate information.

d) Provide surgical repair and plan for re-integration programmes.

1.7 Limitations of the Study

An establishment of facts is not solely on simple collection of data but a myriad of factors among which are:

i) Low levels of education among the affected women which could not allow them to seek for treatment and ignorant about their situation

ii) Secrecy and silence that surrounds the affected women and their families, making them an isolated clients.

ii) The issue of illiteracy complicated the sourcing of quality data, for some women because we had to look for interpreters which was costly and time consuming and lacked confidentiality.

1.8 Assumption of the Study

The study was conducted under the following assumption

i) Women were to co-operate in the provision of information.

ii) Information that was provided by the respondents in their respective structured interview schedule was genuine indicators of factors affecting their situations.

iii) Factors under study which are inter- related determined the findings after data analysis.

1.9 Scope of the Study

The study took place in Kaptembwa Ward in Nakuru West Constituency Nakuru Countyamongst womenaffected by obstetric fistula. It was not possible to determine all the causes of obstetric fistula because it is known to be a "silent disease" shrouded in secrecy within the affected family due to embarrassment and taboo sector it affects, namely sexual organs and sexuality between lovers or husband and wife.

The difficulty in accessing information limited the sampling method to non-probability (Snow balling) technique: Questionnaires open and closed ended, focus group discussions, Key informants interviews and Case studies.

1.10 Definition of Terms

For the purpose of this study the following operational terms will apply.

Obstetric Fistula is a devastating medical condition in which a fistula (hole) develops between the vagina and either the rectum (rectal vaginal fistula) or bladder (Vesical vaginal fistula) or both after severe long and obstructed labor and delivery, when adequate medical care is not available.

Causal Factors this is defined as things seen or unseen that causes the problem at hand. In this study there are Social, Political and Economic causes that indirectly lead to the development of obstetric fistula.

Coping Strategies described as some strong internal forces that protect the women in the study to be able to cope with their situations.

Foot drop is a weakness of the muscles that are involved in flexing the ankle and toes, which may be caused by the pressure of the baby's head on the nerves – common perinea nerve of a woman's leg during labor. As a result, the toes drop downward and impede the normal walking motion.

Wellbeing of women is defined by the World Health Organization (WHO) as a state of physical, mental, economic and social well-being in all matters relating to the reproductive system at all stages of life.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The review of the literature related to the study is done under the following topics: the causal factors of obstetric fistula and the impact, the coping strategies that Africa and Kenya have put in place; the consequences, Global efforts, what is happening in Kenya, consequences and challenges, the theoretical framework and lastly the conceptual framework.

During most of the 20th century obstetric fistula was largely missing from the international global health agenda because according to Wall L, Arrowsmith S.D & BriggsN.D. (2004) it was eradicated in the developed world. One hundred years ago, the last fistula hospital in the United States located in New-York closed its doors for ever. There was no longer any need for its services. It was a global problem; however it was eradicated in Europe and North America following improved obstetric care. (Ijaiya(2004). Yet in sub-Saharan Africa and other developing countries, women and girls continue to endure lives of shame and incredible suffering because of this preventable condition, and not enough hospitals exist for them to receive the surgery that can cure them as indicated by AbouZahr(2003). Miller (2005) states that there is no argument that the prevention of future cases is the primary goal, and that providing surgical repair for all existing cases is necessary, but until that can be achieved, attention must be given to improving the lives of the two million women living with obstetric fistula today.

Obstetric fistula is an abnormal communication created between the vaginal and the bladder and or the rectum. Some women with obstetric fistula can have near missed morbidity and World Health Organization (WHO) refers to fistulae as the single most devastating morbidity of neglected child birth. (AbouZahr (2003). Most of these women are also grieving the loss of their child, studies report infant mortality rates from 85% to 100% in cases of childbirth that result in an obstetric fistula. (Wall (2004)& Ahmed &Nafiou (2007).Describing it as the most devastating of all pregnancy-related disabilities, the United Nations Population Fund (UNPFA) says obstetric fistula affects an estimated 50,000 to 100,000 women around the world

every year and is particularly common in sub-Saharan Africa, where populations face challenges to obtaining quality health care. The World Health Organization (WHO) estimates that at least 8,000 Ethiopian women develop new fistulas every year. In Africa most studies on fistula are hospital based and report incidences ranging between 0.6 and 3.5/1000 deliveries. (Prual 2000 &Ijaiya(2004).

Despite the increased attention on maternal mortality during recent decades, which has resulted in maternal health being as a Millennium Development Goal (MDG), the disability and suffering from Obstetric fistula remains a neglected issue in Global health. 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. And since 2003, obstetric fistula has been gaining awareness amongst the general public and has received critical attention from UNPFA, who have organized a global "Campaign to End fistula." (UNPFA (2012).

New-York Times columnist Nicholas Kristof, a Pulitzer winning writer, wrote several columns in 2003, 2005 and 2006 (Kristof& Nicholas (2003) focusing on fistula and particularly treatment provided by Catherine Hamlin at the Fistula Hospital in Ethiopia. Increased public awareness and corresponding political pressure have helped fund the UNPFA'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 began adopting policies and creating task forces to address issues of maternal morbidity and infant mortality, including Tanzania, Democratic Republic of Congo, Sudan, Pakistan, Bangladesh, Burkina Faso, Chad, Mali Uganda, Eritrea, Niger, and 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 United Nations (UN) has developed "six process indicators", a bench mark tool with minimum acceptable levels that measures whether or not women receive the services they need. (Michael Brodman et al, (2011).

In an effort to prevent and treat the condition worldwide, UNPFA is spearheading a global campaign whose partners include governments, health care providers, and organizations such as the Addis Ababa Fistula Hospital, Engender Health, Columbia University Averting Maternal Death and Disability Program, the International Federation of Gynaecology and Obstetrics, and the World Health Organization (WHO).The UNPFA has set out several strategies to address fistula, including "postponing marriage and pregnancy for young girls, increase 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." (UNPFA (2012).One of the UNPFA'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. (Michael et al, (2011)

2.2 Causal Factors of Obstetric Fistula

According to Donnay& Ramsey, (2006), the obstetric fistula usually develops as a result of prolonged labor when a caesarean section cannot be accessed. Over the course of the three to five days of labor, the unborn child presses against the mother's birth canal very tightly, cutting off blood flow to the surrounding tissues between the vagina and the rectum and between the vagina and the bladder, causing the tissues to disintegrate and rot away. The acquire Project (2005) states that obstetric fistula can also be caused by poorly performed abortions, pelvic fractures; cancer or radiation therapy targeted at the pelvic area, inflammatory bowel disease or infected episiotomies after child birth. Other potential causes for the development of obstetric fistula are sexual abuse and rape, especially in conflict/post conflict areas and other surgical trauma.

2.2.1 Primary Factors

These risk factors include early or closely spaced pregnancies and lack of access to emergency obstetric care. For example, a 1983 study in Nigeria found that 54.8 per cent of the patients were less than 20 years of age and 64.4% gave birth at home or in poorly equipped local clinics acknowledges Journal of Obstetrics (1983). When available the caesarean sections and other medical interventions are usually not performed until after tissue damage has already been

done. Women affected with crohn's disease also have a higher risk of developing obstetric fistulas. (Women's Health (2012).

2.2.2 Indirect Causes

Social, Political, and Economic causes that indirectly, lead to the development of obstetric fistula concern issue of poverty, malnutrition, lack of education, early marriage and child birth, the role and status of women in developing countries, harmful traditions practices, sexual violence and lack of good quality or accessible maternal health care. (Zheng& Anderson (2009).For instance, Cook, Dickens, & Syed, (2004) affirms that one traditional practice in some regions is encouraging women to drink water to aid the baby's birth, but a full bladder during delivery actually increases the risks of fistula.

2.2.3 Poverty

Poverty is the number one indirect cause of obstetric fistulas around the world. As obstructed labor, and obstetric fistulas accounts for 8 per cent of maternal death worldwide **(**Hofmeyr**,** (2004) and " a 60-fold difference in Gross National Product per person shows up as a 120-fold difference in maternal mortality ratio", therefore it is clear that impoverished countries produce higher maternal mortality rates and thus higher obstetric fistula rates. (ChandiramaniPayal, 2012). He further says impoverished countries not only have low incomes but also lack adequate infrastructure, trained and educated professionals resources and a centralized government that exist in developed nations to effectively eradicate obstetric fistula.

Poverty hinders women from being able to access normal and emergency obstetric care because of long distances and expensive procedures. For some women, the closest maternal care facility can be more than 50 kilometers away. In Kenya, a study by the Ministry of Health found that the long distance to health facilities and societal preferences for delivery with a traditional birth attendant contributed to delays in accessing necessary obstetric care. (Kenya Ministry of Health & UNPFA, (2004). Emergency caesarean sections, which can help avoid vaginal delivery and consequent fistula, are very expensive. In Tanzania the average cost of an emergency caesarean section is 135USD, while the average annual income there is only 115USD. (Bangser, Mehta, Singer, et al (2011).

Extreme poverty reinforces cultural expectations that girls should work in the home and quickly marry rather than attend school. According to the International Agency, Action Aid 40 million girls go without primary education and almost two thirds of illiterate adults are women. UNICEF reports that over 40% of girls in Africa marry before the age of 18.

2.2.4 Malnutrition

One reason that poverty produces such high rates of fistula cases is the malnutrition that exists in such areas**.** (Michael Brodman, et al, (2011).Lack of money and access to proper nutrition as well as vulnerability to diseases; that exist in impoverished areas, and because of limited basic health care and disease prevention methods cause inhabitants of these regions to experience stunted growth. (Cook, Dickens& Syed (2004).

Sub-Saharan Africa is one such environment where the shortest women have average lighter babies and more difficulties during birth when compared with full grown women. This stunted growth causes expecting mothers to have skeletons unequipped for proper birth, such as an underdeveloped pelvis**,** according toMichael Brodman, et al (2011). This weak and under developed bone structure increases the chances that the baby will get stuck in the pelvis during birth, cutting off circulation and leading to a rotting away of tissue. Because of the correlation between nutrition, stunted growth and birthing difficulties, maternal height can at times be used as a measure for expected labor difficulties. (New Encyclopedia of Africa(2008).

2.2.5 Lack of Education

High levels of poverty also lead to low levels of education among impoverished women concerning maternal health. This lack of information in combination with obstacles preventing rural women to easily travel to and from hospitals lead many to arrive at the birthing process without prenatal care. This can cause a development of unplanned complications that may arise during home births, in which traditional techniques are used. These techniques often fail in the event of unplanned emergencies leading women to go to hospital for care too late, desperately ill and therefore vulnerable to the risks of anesthesia and surgery that must be used on them. (New Encyclopedia of Africa(2008).

In a study of women who had prenatal care and those that had unbooked emergency births, "the death rate in the booked-healthy group was as good as that in many developed countries, but the death rate in the unbooked emergencies was the same as the death rate in England in the sixteenth and seventeenth centuries". (Dickens & Syed, (2004).In addition studies find that education is associated with lower desired family size, greater use of contraceptives and increased use of professional medical services. Educated families are also more likely to be able to afford health care especially maternal health care according to (Kristof& Sheryl (2009).

Education is ultimately more effective than laws in empowering women to overcome the barriers to equal rights. Educated girls are more likely to resist pressures to marry too young to have too many children and to resign themselves to unpaid work. They have greater competence as mothers as active agents in their communities.

2.2.6 Early Marriages and Child Birth

In Sub-Saharan Africa, many girls enter into marriages soon after menarche usually between the ages of 9 and 15. Childhood and adolescence are usually the greatest years of one's life states (Cook, et al (2004). This period is cut short, when marriage and adult responsibilities come too early. There are many consequences of child marriages on young girls' sexual and reproductive health, and many of the meaningful life experiences of adolescence are lost forever. The decision for young girls to marry is most often made by her parents or the community. Social and gender norms, cultural beliefs and economic situations all contribute to the pressure put on girls to marry at a young age. They also believe that they are ensuring some kind of financial stability for both the daughter and the family. (Cook, Dickens, &Syned, (2004). McKinney, (2010) states no matter how good the intentions are this strips many young girls of their childhood, their dreams, their basic human rights and their health. Although obstructed labor and obstetric fistulas can occur at any age during the childbearing years, adolescent women are at aparticular risk, especially where early marriage is common. In Sub-Saharan Africa, for example many women become pregnant soon after menarche occurs, before a woman's pelvis is fully developed. Early marriages lead to early childbirth, which increases the risk of obstructed labor since young mothers who are poor and malnourished may have under-developed pelvises.

In fact, obstructed labor is responsible for 76% to 97% of obstetric fistulas in Sub-Saharan Africa. (Semere&Nour, (2008).

Studies in parts of Kenya and Zambia show that teenage brides are contracting HIV/AIDS at a faster rate than sexually active single girls in the same location. **(**McKinney et al (2010). Girls between the ages of 15 and 19 are more likely to experience complications during pregnancy and childbirth, including obstetric fistula and are likely to have children with low birth weight, inadequate nutrition and anemia. The health is further comprised as the girls are more likely to develop cervical cancer later in life. The unease surrounding sex education in Kenyan Schools is one of the reasons for early pregnancy due to a lack of accurate reproductive health knowledge, notes Human Rights Watch (HRW) in a July report 2013, entitled, Barriers to Prevention and Treatment in Kenya.

The lack of power associated with child marriage poses additional reproductive health risks. Young wives are unable to negotiate sexual relations, contraceptives use, child bearing and other aspects of domestic life. According to Semere&Nour (2008), unequal gender relations and the large age difference between husbands and young wives, the inability to negotiate put them in a vulnerable position and also increases the likelihood of domestic violence. According to Donnay& Ramsey, (2006) once married young girls are typically forced to leave behind their family, friends and community and move to their new home. Their ability to attend school is disrupted, eliminating another source of social support and interrupting their education. With limited freedom to leave the home and converse with others, girls are left in isolation with little or no means of receiving information on reproductive health issue. They are often powerless to access health care services, as they may need permission to receive such services; if refused they are typically unable to pay for health care.

Another challenge that stands between women and fistula treatment is information. Because this is a condition of shame and embarrassment, most women hide themselves and their condition thus suffering in silence. In addition, after receiving initial treatment, health education is important to prevent fistula in subsequent pregnancies. (Donnay& Ramsey, 2006). 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. Without health information or social services, married girls are unable to seek support. Their problems remain unknown or ignored by the community and they become invisible victims. Girls are inhibited from realizing their dreams and aspirations. Their rights are violated and they lose the ability to choose how their life is fulfilled. Their right to choose when they become pregnant and how many children they will have is no longer theirs.

2.2.7 Female Genital Mutilation/Cutting

In developing countries like Kenya, some harmful cultural practices as Female Genital Mutilation/ Cutting (FGM) which comes in various forms places women at the risk of obstetric fistula where it is practiced. Ajuwon, (1997) observes the gishiri cut which is popular in the North part of Nigeria; Ethiopia, among the Borans and Kisii communities in Kenya. The cut is made against the pubic bone endangering both the bladder and urethra. The cuts are often handled by traditional birth attendants to prevent or treat numerous conditions including prolonged labor and infertility.

Momoh& Comfort,(2005) indicates that in Africa, about three million girls are at risk for FGM/C annually and already about 92 million girls age 10 years and above are estimated to have undergone FGM/FGC. However in Kenya, the practice has remained highest among the Somalis 97%, Kisii 96%, Kuria 96% and the Masai 93%, relatively low among the Kikuyu, Kamba and Turkana, and rarely practiced among the Luo and Luhya**.**

FGM/C is usually carried out under unsanitary conditions, often removing large amounts of tissue and possibly causing the vaginal outlet and birth canal to become scarred and constricted. Its combination with early marriage can be more hazardous especially when the young woman becomes pregnant is about to go into labor. Female cutting and inserting of caustics into the postpartum vagina may lead to the damage of the birth canal which ultimately predisposes to prolonged labor and development of fistula (Moir, (1967).

In Rift Valley, FGM is a deep-rooted culture among most pastoral communities in Kenya, most of which have yet to embrace education for girls and the rights for women. Procedures are mostly carried out on young girls between infancy and age 15, and occasionally on adult women. As reported in other studies, there has been a marked trend towards girls undergoing FGM/C at a much younger age.

2.2.8 Lack of Quality Maternal Health Care

Countries that suffer from poverty, civil and political unrest or conflict and other dangerous public health issues such as malaria, HIV/AIDS, and tuberculosis often suffer from a severe burden and breakdown within the heath care system. Even women who do make it to the hospital may not get proper treatment. This breakdown puts many people at risk, specifically women. Many hospitals within these conditions suffer from shortages of staff, supplies and other forms of medical technology that would be necessary to perform reconstructive obstetric fistula repair. (Rai, Derkumari Shrestha (2011).

Kristof& Sheryl (2009) notes that there is a shortage of doctors in rural Africa, and studies find that the doctors and nurses who do exist in Rural Africa often to not show up for work. Inadequate hospitals that cannot handle caesarean births; and poor roads in rural areas among barriers to emergency obstetric care and referrals. Traditional birth attendants (TBA) attend up to 28 percent of all births in Kenya, the same as the number of births assisted by nurses and midwives, notes the Kenya Demographic and Health survey preliminary report for 2008-9. TBAs may not be sufficiently well trained to refer women to hospitals, yet obstructed labor occurs in 5 percent of live births and is one of the four major causes of maternal mortality and morbidity. Access to reproductive health services is a vital component of women's empowerment.

Another challenge is the lack of trained professionals to provide surgery for fistula patients. As a result, non physicians are sometimes trained to provide obstetric services. For example, the Addis Ababa Fistula Hospital has medical staff without formal degrees and one of its top surgeons was illiterate, but she had been trained over years and now regularly successfully performs fistula surgery. (Kristof& Sheryl (2009).

Trained surgeons and nurses are in short supply. Kenya has about 10 trained fistula surgeons, of whom only four, one retired are considered sufficiently expert to handle complicated cases and train others. Three of the experts are based in Nairobi which Human Rights Watch (HRW) deems unsustainable in the long term. While theatre equipment and supplies are not a major hindrance to fistula repair, routine repair remains rare and is mainly done only at Kenyatta National Hospital (KNH) and Jamaa Mission Hospital in Nairobi, and the Moi Referral and Teaching Hospital in Eldoret, Rift Valley.

2.2.9 Role and Status of Women

In developing countries, women who are affected by obstetric fistula do not necessarily have full agency over their bodies or their households. Rather, their husbands and other family members have control in determining the health care that the women receive**.** (Michael Brodman,et al (2011).Cook, Dickens, & Syed, (2004) gives an example, that a woman's family does not approve medical examinations for the patient by male doctors, but female doctors may be unavailable, thus barring women from prenatal care**.** Furthermore, many societies believe that women are supposed to suffer in child birth, thus are less inclined to support maternal health efforts. (Kristof& Sheryl (2009). Thus generally a female will not go for family planning without the permission of her husband and if done results in divorce.

Factors that hinder the rural and poor women includes the time and cost of travelling to often distant facilities, the cost of hospitalization and drug, poor quality of services provision and some instances preference for familiar traditional practitioners. Most fistulas occur among women living in poverty, in cultures were a woman's status and self-esteem may depend almost entirely on her marriage and ability to bear children, notes UNPFA. The reproductive health of women is compromised by women's lack of power and influence to make decisions related to marriage and childbirth as well as unequal access to health care, nutrition, education, employment and income.

2.3 The impact of Obstetric on the well-being of women

Obstetric fistula has far reaching physical, social, economic, and psychological consequences for the women afflicted.

2.3.1 Impact of Obstetric Fistula on Physical well-being of women

The most direct consequence of an obstetric fistula is the constant leaking of urine, faeces and blood as a result of a hole that forms between the vagina and bladder or rectum. According to The Fistula Foundation, (2010) this leaking has both physical and societal penalties. The acid in the urine, faeces and blood causes severe burnt wounds on the legs from the continuous dripping. Nerve damage that can result from the leaking can cause women to struggle with walking and eventually lose mobility. In an attempt to avoid the dripping, women limit their intake of water and liquid which can ultimately lead to dangerous case of dehydration. Ulceration and infections can persist as well as kidney failure and disease which can lead to death.

MichaelBrodman, et al, (2011) says further only a quarter of women who suffer a fistula in their first birth are able to have a living baby, and therefore have minuscule changes of conceiving a healthy baby later on. Some women, due to obstetric fistula and other complications from childbirth, do not survive. In the year of 2005, more than 500,000 women died as a result of complications from pregnancy and childbirth. For example, in Burkina Faso, most citizens do not believe obstetric fistula to be a medical condition but as divine punishment or a curse for disloyal or disrespectful behavior. (Burkina Faso: Ministry of Health & UNPFA, (2010).

Other sub-Saharan cultures view offspring as an indicator of a family's wealth. A woman who is unable to successfully produce children as assets for her family is believed to make her and her family socially and economically inferior. Lita, (2008) says a patient's incontinence and pain also render her unable to perform household chores and childrearing as a wife and as a mother, thus devaluing her worth. As a result as indicated by Roush, (2009), many girls are divorced by their husbands and partners, disowned by family, ridiculed by friends and even isolated by health workers. Divorce rates for women who suffer from obstetric fistula range from 50% to as high as 89%. Now marginalized members of society, girls are pushed to the brims of their villages and town, often to live in isolation in a hut they will likely die from starvation or an infection in the birth canal.

The unavoidable odor is viewed as offensive, thus their removal from society is seen as essential. Accounts of women who suffer obstetric fistula proclaim that their lives have been reduced to the leaking of urine, faeces and blood because they are no longer capable or allowed to participate in traditional activities, including the duties of wife and mother as indicated by Ampofo&Uchebo, (1990).

Because such consequences highly stigmatizes and marginalizes the woman, McKinney, (2008) confirms that the intense loneliness and shame can lead to clinical depression and suicidal thoughts. Moreover women are sometimes forced to run to commercial sex work as a means of survival because the extreme poverty and social isolation that result from obstetric fistula eliminates all other income opportunities. But only 7.5% of women with fistula are able to access treatment, the vast majority of women are forced to suffer the consequences of obstructed and prolonged labor simply because options and access to help is so incredibly limited. (UNPFA, (2008).

2.3.3 Impact of Obstetric fistula on Economic well-being of women

It appears that obstetric fistula has serious repercussions for affected women and their families. According to Women's Dignity and Engender Health, (2008) income is lost through different mechanisms including the direct cost of fistula related care, time taken away from the farm or income generating activities to seek care, the women's inability to work because of stigma, the health effects of the fistula, and the need to constantly wash themselves or change clothes. Both women and their families suffer economically as a result of fistula. Nearly all of the women said that fistula affected their ability to work.

Further the study reveals that of these women the majority could not work at all. Less than half could work, but they could not work as hard as they did before the fistula. Thus Ojanuga, (1994) mentions that a few of the women reported that physically they could not work, but they had to in order to meet their basic needs. Families were affected by the fistula because as a result one less person was working either in the home or on the farm or was bringing in income from other sources. As a result, remaining family members had to do the work that the woman was previously doing or forgo the income that the woman previously contributed.

According to Kabil et al (2004), another possible threat to eternal validity is the fact that Africa is comprised of diverse cultures, even within individual countries. However, there are certain cultural characteristics that appear to be consistent in areas where fistula is prevalent, most notably, the pertinent social norms regarding the low status of women and their designated roles as wife and mother.

2.3.4 Impact of Obstetric fistula on Psychological well-being of women

Although there are few sources of empirical data, studies show that some common psychological consequences that fistula patients face are despair from losing their child, the humiliation from their stench and inability to perform their family roles, and the fear of developing another fistula in future pregnancies. (Pope, Rachael, Bangser, &Requejo, (2011). Women and girls with fistula are often abused, beaten, abandoned, and isolated. Without repair, fistula may cause a fetid odor, frequent pelvic and urinary infections, painful genital ulcerations, infertility and nerve damage to the legs. Affected women may miss out on crucial information on treatment and support, due to a lack of social interaction.

2.4 Coping Strategies

In as much as women live with Obstetric fistula condition they are faced with problems of stigma in a society. From the Greek word stigma was observed as a bodily sign designed to expose something unusual and bad about the moral status of the signifier. (Goffman, (1963). Although stigmatized individuals do not live successful and happy life, they have developed different survival strategies in order to have a relative good life.

One important strategy adopted by victims is to associate more with people with similar stigma and situation. Having been ostracized by their families and society, many patients derive great satisfaction from being with others who share their disability. This kind of association is referred by UNFPA, (2005) as a “sisterhood suffering”. Their coming together forms the sisterhood spirit meaning they are together in their situation.

Another important method adopted by patients of Obstetric fistula is to manage their problems is to hide themselves away from the so called normal society because of humiliation. Some individuals who suffer from a particular stigma would rather be alone until they are able to

find treatment than to be around people that do not care about them. It is unfortunate that, while being alone, some might go into deep physical and emotional decline and may resort into suicide and eventually death. (UNPFA(2005).

The majority of women with fistula isolated themselves from other community members, remaining in their homes as much as possible and forgoing public activities such as funerals, celebrations, meetings and social visits. This isolation is caused by a strong sense of shame about their condition and by a strong desire not to soil themselves in front of anyone or to smell badly. Some girls and women living with fistula are very strong; they have resorted to fight the disease than losing hope. Some go into the forest to gather woods and fetch water for sell in order to survive. They may spend months or years of saving money in order to pay for medical care and transportation to a facility providing treatment.

A majority of indigenous patients in African societies usually have a way of explaining their distressing situations in order to reduce their psychological instability and pain suffered from their illness. Thus being a form of personal internal therapy. For instance some of the patients believed they are bewitched by some wicked or spiritual forces. They have turned to some spiritual divinity as a source of coping with their unfortunate conditions. (Balogun(1997). According to Ajuwon (1997) in the case of untreated diseases, some patients resort to the powers of fate, which controls their destiny. Those close to major cities have turned to religious organizations, like churches, which are sympathetic towards their condition. Some of these churches give them free accommodation,feeding andoffering prayer for miraculous healing.

Another strategy adopted by patients of Obstetric fistula is street begging. They rise in the morning and head for the market place to beg for alms. According to Girma, (2008) it is further revealed that some husbands remain supportive of their wives in spite of the extra demands put on them and their unpleasant experiences of sharing a household with women leaking urine and or faeces. Because of economical dependence the women are made to accept unkind conditions in order to be retained and to be able to continue living in the family household. Women had to accept their husbands having a concubine and extra marital relationships as a coping strategy.

2.5. Global efforts:

How Direct Relief is helping?Global Fistula Map: The largest source of information on fistula treatment capacity worldwide. Direct Relief with Partnership with the UNFPA and the fistula Foundation developed the Global Map – the first ever worldwide map for treatment for this devasting childbirth injury to help better understand the current fistula treatment capacity; more effectively target scarce resources to where they are needed most; and identify where gaps in service may exist. For Direct Relief, the global fistula map enables the organization to know that fistula surgery is available allowing us to increase our support of medical surgical supplies to those treatment facilities, a critical component in helping sustain and expand their ability to provide care to women in need.

The 2013 edition reports on 238 health facilities providing fistula repair in 42 countries across Africa, Southeast Asia and the Middle East. The latest data reveals that the number of women needing treatment of obstetric fistula is out spacing the number of surgical repairs. Sites responding to the survey reported that just over 15,000 women received fistula surgery in 2011, while estimated 50,000 – 100,000 women developed cases of fistula during the same period – widening the gap between capacity to treatment and number of women suffering from the condition.

While availability of surgical treatment is growing, the current capacity of most fistula treatment facilities remains limited. Less than 10 per cent of health facilities treat more than 200 women per year and nearly half of all facilities have only one or no surgeons parentally on site. New features of 2013 Global fistula map include: New facilities reporting data; data on rehabilitation and reintegration services, stories of women that have received such repairs and sources of financial support for fistula repair services.

In November, 2012 the Map was presented at the International Society of Obstetric fistula surgeons and UNPFA International Obstetric fistula working Group in Bangladesh to help health providers, public health professional and fistula advocates understand where current resources exist today in order to better plan for the future. This map was also recently cited in

the 2012 UN Secretary General Report "supporting efforts to end obstetric fistula" as the first of its kind to improve understanding of where critical fistula repair services exist. In 2002 Direct Relief delivered its first shipment of medical supplies to the flagship Addis Ababa Fistula Hospital in Ethiopia. Since that time, Direct Relief has grown its network of support to reach Surgeons and hospitals providing life restoring treatment and prevention in 11 countries in Africa and Asia, most recently to Niger, Somalia and Pakistan.

Direct Relief works closely with our local health care partners, to help them initiate or expand fistula repair services, so that more women have access to this life restoring care. In addition to delivering the medical and surgical supplies essential to fistula treatment. Direct Relief has worked closely with trusted partners such as the Fistula Foundation to provide cash grants support to help local partners do even more.

In Somali land, Direct Relief helped facilitate the construction of a surgical theatre at the Edna Hospital in Hargesia. In Nyanza Province (Kenya) has helped train health provides to ensure women with fistula are properly identified and receive appropriate care as well as increase community outreach to provide treatment for more girls and women. Midwives located in the local communities where fistula is prevalent can contribute to promoting health practices that help prevent future development of obstetric fistulas. NGOs should also work with local governments, like the government of Niger to offer, free caesarean sections further preventing the onset of obstetric fistulas. (Michael Brodman, et al (2011).

Promoting education for girls is also a key factor to preventing fistula in the long term. Former fistula patients often act as "Community Fistula Advocates" or Ambassadors of Hope" an UNFPA sponsored initiative to educate the community. (UNPFA, (2012).These survivors help current patients, educate pregnant mothers and dispel cultural myths that obstetric fistula is caused by adultery or evil spirits. Successful Ambassador Programs are in place in Kenya, Bangladesh, Nigeria, Ghana, Cote D'Ivoire and Liberia. (Michael Brodman et al (2011).

Direct Relief has helped Gynocarecentre in Eldoret Kenya open its doors in 2009. Stories of women that has benefitted from this life restoring care through Direct Relief partner

hospital in Tanzania. Most recently formed a partnership to bring fistula care and treatment to remote corners of Pakistan. There are currently several organizations that have developed effective fistula prevention strategies. One of them is the Tanzanian Midwives Association, which works to prevent fistula by improving clinical health care for women, encouraging the delay of early marriages and child bearing years and helping the local communities to advocate for women's rights. (Miller, Lester, Webster & Crown, (2005).

In Uganda, Dr Fred Kirya a fistula surgeon in Soroti is committed in providing fistula repair surgery for women in need, as well as working to improve emergency obstetric care services so that fistula can be prevented. Part of successful treatment is ensuring women are able to return home to lead healthy and productive lives. In many cases this means ensuring women have income generating skills that can help them earn enough to sustain their needs and that of their families. In Monrovia, Liberia, as part of the reintegration and rehabilitation program, women who have had surgical fistula treatment later receive intensive training on skills such as tailoring, baking and beauty therapy before they return home to their communities.

2.5.1 What is happening in Kenya?

Until recently there were few gynecologists in Kenya who had expertise in obstetric fistula repair in the country and patients treated were not effectively rehabilitated. Although the potential for repair of fistula exists at district hospitals, obstetric fistula is not done routinely. However UNFPA has been supporting the scale up of addressing obstetric fistula. This includes renovations of operating theatres, providing surgical repair equipment and the training of health care providers in the management of obstetric fistula in Machakos District Hospital, Nyanza and Coast Provincial General Hospitals and Moi Teaching Hospital in Eldoret. Plans are underway to support an additional four provincial hospitals to ensure countrywide coverage and institutionalization of the said services in the public sector.

Only during the last decade has there been hope and innovation for women living with Obstetric Fistula. For example, to address the issue of referral of women experiencing obstetric complications during labor and childbirth, UNPFA installed radios in Mwingi and Kwale

districts to improve communication between facilities and also facilitated the request for ambulances for referral. In collaboration with Kenyatta National Hospital (KNH), Africa Medical Relief Foundation (AMREF) holds an annual free medical camp for women with fistula.

In the past AMREF has also facilitated repair activities in Garissa, Mutomo, Mumias, Ortum, and Nyanza. Jamaa Hospital in Nairobi provides treatment and care for Obstetric Fistula with funding from the Safaricom Telephone Network, MSF – Spain and other smaller donations. Kenyatta National Hospital in Nairobi, Moi Teaching Hospital in Eldoret and Machakos Hospital in Eastern Province serve as centers of excellence and provide training for fistula repair teams. (A team of doctors: nurses and other medical support staff).

The Kenya National Obstetric Fistulae Training Curriculum for Health Care Workers was developed in 2006, with funding and technical support from UNFPA, to train service providers using a multi-disciplinary approach for effective management of obstetric fistula. The approach entails training core teams, which include a doctor, two nurses (one from the theatre and one from the ward), anesthetists, physiotherapists, and social workers.

Challenges in regard to treatment include the very high number of women needing reconstructive surgery, access to facilities and trained surgeons and the cost of treatment. For many women 300USD is an impossible price and they cannot afford the surgery. Access and availability of treatment also vary widely across Sub-Saharan countries. Certain regions also do not have enough maternal care clinics that are equipped, willing to treat fistula patients and adequately staffed. (UNPFA & Engender Health (2003).

At the Evangelical Hospital of Bembereke in Benin there is only one expatriate Volunteer Obstetrics and gynecology doctor available, a couple of months per year, one certified nurse, seven informal hospital works. (UNPFA & Engender Health (2003).In Niger there are to medical centers that treat fistula patients. (Timothy McKinney et al (2010).In Nigeria there are more dedicated health professionals who operate up to 1600 women with fistula per year. (UNPFA (2002).

The world is currently severely under capacity for treating the problem; it would take up to 400 years to treat the backlog of patients according to Browning (2004). In order to prevent any new cases of obstetric fistula, Waaldjik, (1998) states approximately 75,000 new emergency obstetric care facilities would have to be built on the continent of Africa alone, plus an increase in financial support and an even higher number of certified doctors, midwives and nurses needed.

In Kenya, fistula corrective repair surgery, when heavily subsidized costs about Kshs. 30,000 (about US$ 375) at the main referral hospital, Kenyatta National Hospital (KNH) in Nairobi, which is prohibitive for many of those affected. In Private hospitals the cost is at least five times as much; only 7.5 per cent of women in Kenya are able to access treatment, according to UNPFA (2002).Besides treatment, there are other costs – pads, ointments, stretching resources for women who often cannot even afford to travel to towns in search of treatment. Furthermore, affected women are often incapacitated meaning they cannot earn money.

In 2004 the Ministry of Health and UNPFA commissioned a needs assessment of obstetric fistula in selected districts (Kwale District in Coast Province, Mwingi in Eastern Province, West Pokot in Rift Valley Province, and Homa Bay in Nyanza Province) in Kenya where fistula was suspected to be most prevalent. The assessment set out to establish the magnitude and contextual factors related to Obstetric fistula. Six hospitals, two health centers and one dispensary were visited.

In 2004, it was established traditional birth attendants (TBAs) conducted over 70% of the totals deliveries in the study districts and many of the cases of prolonged labor and subsequent Obstetric Fistula are attributed to their patronage. In an effort to reduce the high number of births attended by unskilled assistants, Ministry of Health/DRH and Population Council and Nursing Council of Kenya developed and piloted the community midwifery approach in Western Province in 2005. Building on the emerging evidence and as part of the UNPFA Global campaigns to End Obstetric Fistula, UNPFA/MOH developed the community midwifery intervention strategy that would increase skilled attendance at birth and reduce the number of obstetric complications.

In addition to the 96 Community Midwives trained in Western Province (2005-2007) the Direct Relief Help, with technical and financial support from UNPFA, scaled up the comprehensive community midwifery initiative in Nyandarua and Mwingi districts and subsequently in Taita-Taveta and Kilifi districts thus making 24 districts in Kenya with Community Midwives on the ground. Under the UNPFA programme, 116 Midwives (33 in Nyandarua, 40 in Kilifi, 34 in Taita-Taveta and 12 in Mwingi) have been trained from the four UNPFA supported district.

2.6 Theoretical Framework

A number of sociological, psychological, medical and demographic frameworks are looked at under this study in an attempt to provide explanations on the relationship between individual patient behavior and her immediate environment or society. Attempt has been made to classify these theories into two broadcategories. (a) Sociological and psycho-social traditions: and (b) medical and demographic traditions.The Sociological and psycho-social traditions analyze social phenomena at different levels and from different perspectives, from specific interpretations to generalizations of society and social behavior. For instance, how people view illness and how this affects their behavior or the behavior of others or their behavior towards others. Thus their analysis encompasses micro levels of analysis of small social patterns to macrolevel of analysis of large social patterns.

These schools of thoughts employ theoretical perspectives such as the symbolic interactions perspective, the health belief model, the medical model, the sick role model, the social role valorization theory. Each perspective uniquely conceptualizes society, social forces, and human behavior within the domains of the sociology of health and illness. The symbolic interactionism and the social construction of illness school such Mead (1964), Cooley, (1987)assert that individuals act according to their interpretation of the meaning of their world. They attach meanings to symbols, and act according to their subjective interpretation of these symbols.

For them identity is created through interaction with others. These theories show that image building is a direction reflection of the impressions people gain from others or ascribe meaning to what others think, do say, in terms of appearance, speech, actions, mannerism, hence project the interpretations of such meanings unto themselves. Thus the thing that moves us to pride or shame is not the mere mechanical reflection of ourselves, but an imputed sentiment, the imagined effect of this reflection upon another's mind. These theories are manifestations of the ostracizing, stigmatization, social isolation of fistula patients even among their families, friends, neighbors and community people. The illness, in this case fistula, to which the label is attached, may even be interpreted as a sign of personal weakness or culpability of the patient. The general perception is that urine leaking is a shameful act with its cornucopia, offensive odor. The fistula patients feel degraded, rejected and dehumanized. This has negative social and psychological impact on them.

Social role valorization (Wolfensberger, (1972), is the application of the enablement, establishment, enhancement, maintenance, and/or defense of valued social roles for people. The theory holds that only people with valued social roles in society are respected and have the best things in life. According to this theory, there are only two persons in society; those who are already societal devalued, and those who are at heightened risk of becoming devalued. That those devalued in society are far more likely to be treated badly and to be subjected to negative experiences. The good things in life include; home and family; friendship; being accorded dignity, respect, acceptance, a sense of belonging; an education, and the development and exercise of one's capacities; a voice in the affairs of one's community and society; opportunities to participate; a decent material standard of living, and at least normative place to live, and opportunities for work and self-support. This theory directly depicts the psychological and social consequences associated with obstetric fistula.

It describes some of the dehumanizing experiences women subjected to the condition of fistula face within their communities, among families, friends, and immediate neighborhood. Unfortunately, the good things in life are usually not being accorded to them because they are devalued in society. For them, the good things of life are beyond their reach, are being denied

them, are withheld, and are hard to obtain; consequently they resort to begging and isolation. This is the typical life of a fistula patient in the area under this study.

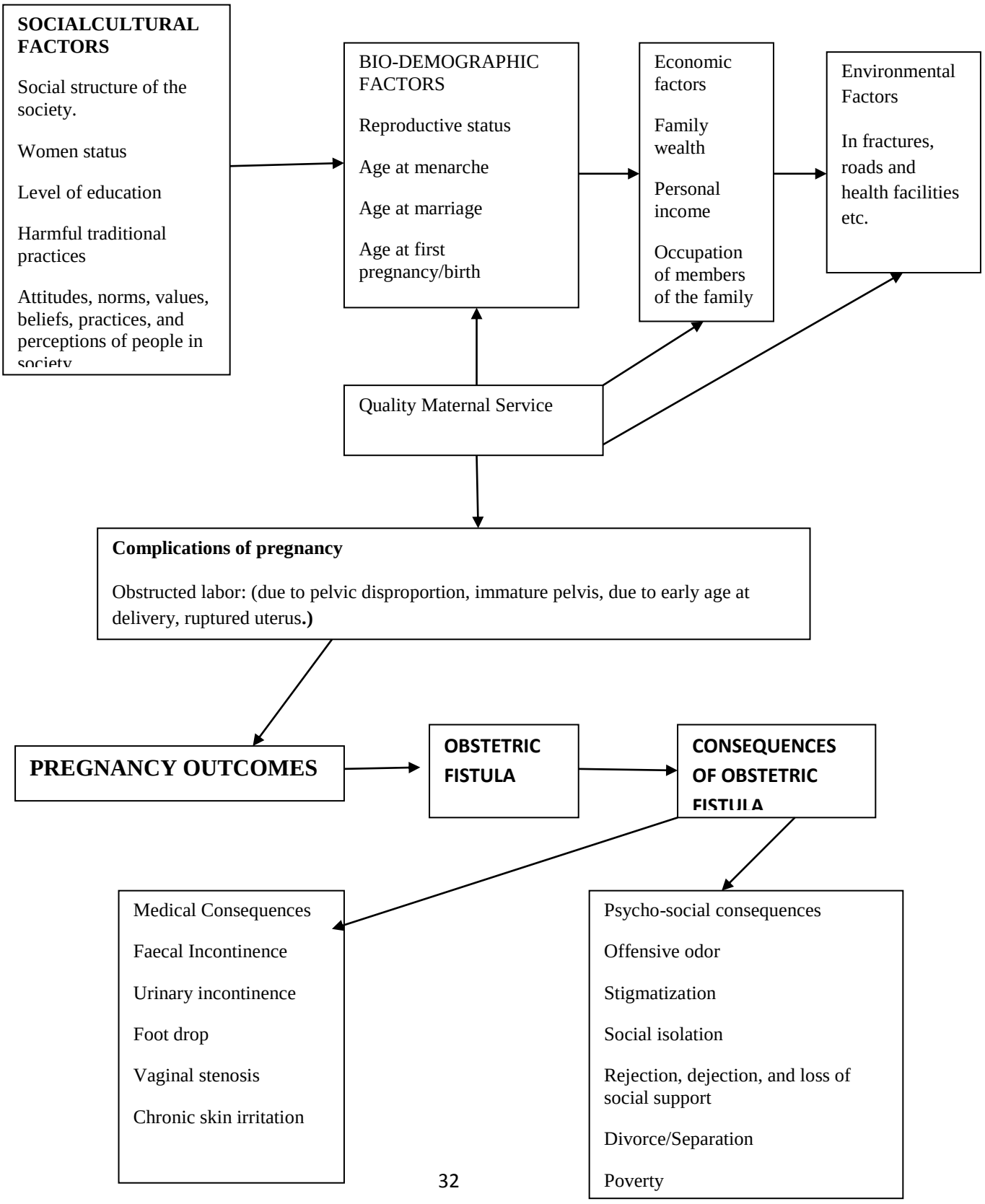
The Medical Perspective model holds the belief that health and illness are biological descriptions of the state of our bodies. According to this model, illness is something external and independent of human behavior, asSenior (1998) puts it that it is not the result of an evil spirit or curse(as people in many of our communities have this perception about the cause of obstetric fistula) but by bacteria, virus, congenital malformation, or accident. The belief that certain disease are caused by evil spirits or witchcraft such as obstetric fistula no longer hold to be true as traditional medicine do not have cure for such illness. Most fistula patients undergo clinical surgeries for treatment or at best, early catheter treatment. The Demographic - Health Models looks at the preventive aspect of health in terms of individual health seeking and those factors governing his behavior. According to these theories, if a woman is not exposed to the risk of pregnancy and does not become pregnant, the consequences of pregnancy outcomes or delivery would not arise. Thus, all efforts should be made to avert conception that leads to chronic morbidity hence maternal mortality.

Maine (1992) in the conceptual framework for analyzing the cultural, social, economic, behavioral, and biological factors that influence maternal mortality and chronic morbidity concluded that determinants of maternal mortality and all efforts directed a reducing such morality must operate through a sequence of only three intermediate outcomes. Either effort should be directed to: (i) reduce the likelihood that a woman becomes pregnant; (ii) reduce the likelihood that a pregnant woman will experience a serious complication of pregnancy or childbirth; or (iii) improve the outcomes for women with complications. They suggested the following three possible areas of intervention; viz; (a) family planning to prevent the occurrence of pregnancies; (b) safe abortion services to reduce the incidence of complications; and (c) improvement in labor and delivery services to increase the survival of women who experience complications**.** Maine (1992) asserted that chronic morbidity "include chronic urinary tract infection, uterine prolapsed and vaginal fistula" each of which is a serious, chronic condition that can have a considerable impact on the physical and social well-being of women.

2.7 Conceptual Framework

In this study, the affecting factors dependent and independent variables were measured using descriptive and deduced statistics. The causal factors and impact; remains the key barriers to the well being of women affected by obstetric fistula. It is however noted that the physical, social, political, economical, environmental and psychological impact may affect the dependent and independent variables, are therefore included as intervening variables. From the title, objectives and theoretical framework, the study has been conceptualized in Figure 1. It is in this view that the studysought to establish the, causal factors and impact of obstetric fistula and coping strategies of women in Kaptembwa in Nakuru County.

Figure 1: Conceptual framework on the causal factors and impact of obstetric fistula on the well- being of women.



CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter provides a description of how the research was carried out to meet the objectives and answer the research questions of the study. The chapter therefore presents the study location, research design target population sampling procedure, research instruments, data collection and analysis technique.

3.2 Study Location

The study conducted in Kaptembwa which is located south East of Nakuru approximately 2.5. Kilo meters from the centre. In the administrative cluster, Kaptembwa location consisting of three sub locations Githima, Kaptembwa and Mwariki holding a population of 122,604 people. (Kenya National Bureau of Statistics, 2010). Kaptembwa is predominately inhabited by all communities with Kisiis being the dominant community. The area has a geological fault line running across the estates causing soil subsidence in the rainy season resulting in deep gullies. The overwhelming majority of women living in this location majority have low education and others no education beyond secondary, which makes the researcher understand the ignorance about their state of health. People who live here are low incomes earners and none employed persons this been one of the largest informal settlements in Nakuru County.

3.3 Target Population

The study population consisted of women that have being living with obstetric fistula, and their families, in Kaptembwa.

3.4 Research Design

The study adopted a cross sectional survey using qualitative and quantitative methods, collecting data through interviews and questionnaires. One Focus Group Discussion (FGD) was conducted with the husbands of the women and key informants were involved in the survey.Fraenkel&Wallen (2000) explain that a cross-sectional design involves collection of data from a sample that has been drawn from a predetermined and specific population and allows the

researcher to collect data in just one point in time. Although the duration it takes to collect all the data may range from one day to a few weeks. In addition, surveys are important in research and have been found to be useful in describing the characteristics of a population under research since they allow the researcher to ask individuals to describe the existing phenomena. (Fraenkel&Wallen, (2000); Kathuri& Pals, (1993).

3.5 Sampling Procedure

This is the process of selecting relevant subjects to represent a population for purposes of generalization. Samples are thought to offer more detailed information and a high degree of accuracy because they deal with relatively small number of units. It is less demanding in terms of labor requirements, since it requires a small proportion of the target population. It is also thought to be more economical, since it contains fewer people, require less time and produces quick answers.

Snow-balling a non-probability sampling technique was used to get the respondents. For example, some populations of interest in the study are hard to be reached or hidden, because they exhibit some kind of social stigma or other trait that makes them socially marginalized. Snowballing was used to gain access to such cases. Majority of the respondents have been identified through an NGO under the leadership of Dr. Wambui Virginia Gachiri of the Loreto Sisters and the Catholic Diocese of Nakuru – Social Welfare Department that deals with campaigns against Female Genital Cutting, providing life skills and issues related to reproductive health.

3.6. Selection of respondent sample size

A sample of 74 respondents was deemed appropriate for this study. Given target populations shared similar characteristics – they all were women affected by Obstetric Fistula. A sample of 74 (in addition to an extra 10 surveyed during the testing of research instruments) is considerably adequate representation of women affected by obstetric fistula. The responses gathered, when complemented with key expert/informants interviews and ideas gathered during focus group discussions form a strong ground for conclusions that the study seeks to advance.

3.7 Research Instruments

Two research instruments were used in this study. Structured interviews schedule collected the information from the 120 respondents inclusive of key informants. Mugenda&Mugenda (1999) noted that when using an interview schedule, the interviewer has some control over the interview situation and can probe for clarity, explain unclear questions and follow up vague or incomplete responses. In addition, a structured interview schedule makes it possible to obtain data required to meet specific objectives of the study. (Fraenkel&Wallen, (2000).

However, the researcher combined self-administered questionnaires with interview schedule. The questionnaires included both open and closed type of questions. The open-ended questionnaire allows the respondents to express themselves with clarity and helps them to deal with complex issues for which categories were identified.

On the other hand, closed types of questions are suitable because the researcher has control of answers given. The answers are standard and easily comparable from one respondent to another, they are easy to code and analyze for giving suitable answers since alternatives are already given. However, the researcher combined the self-administered questionnaires with interview schedules. In cases where the respondents were not being able to fill the questionnaires, they were interviewed and answers recorded.

3.8 Validity

Mugenda and Mugenda, (1999) defines validity as an instrument that measures how well an instrument measures what it is supposed to measure. According to Gall, Borg & Gall, (1996) validity of an instrument is improved through expert judgments. The instruments were validated through discussions with the two supervisors, statisticians and colleagues. The focus was on face, construct and content validity. Appropriate adjustments were done to improve quality and relevance of the data generated.

3.8.2 Reliability

Reliability refers to a measure of degree to which a research instrument yields consistent results or data after repeat trails (Mugenda&Mugenda, (1999). Before the interview schedule is

used in the actual study, it was piloted to determine its reliability. The researcher carried out pre-test of the instrument using 10 women from Kaptembwa Location.

During the pre-test study, a reliability test was run on the pilot questionnaires to obtain Cronbach's alpha. It determines the internal consistency or average correlation of items in a survey instrument to gauge its reliability. Twelve questions were used and the value of the Cronbach's alpha was obtained as 0.77 which is good considering that .70 is the cutoff value for the study to be considered acceptable. Nunnaly,(1978) has indicated 0.7 to be acceptable reliability coefficient but lower thresholds are sometimes used in the literature. Based on this reliability coefficient (alpha = 0.77). The study proceeded to conduct the actual study.

3.9 Data Collection Procedure

The researcher obtained a letter of approval from Graduate school, a research ethical permit and another letter from the National Commission of Science and Technology Nairobi. A structured interview schedule was used to obtain information from the sample of women Additional information was obtained from the husbands of the women during the focus group discussion. Each woman in the sample given a structured interview schedule to fill with the help of the interviewer/enumerator and the researcher lead the focus group discussion with the aim of gathering in-depth information and experiences by families of the patients. Training of enumerators for pre-testing of survey instruments were done prior to main data survey collection period. 10 women interviewed during the pilot testing, 74 women respondents were interviewed which brought the number to 84 women, 3 in-depth interviews as 3 case studies and 8 men in FCG discussions and lastly 4 key informants on face to face interviews.

3.10 Data Analysis

The researcher used descriptive statistics in the analysis. The raw data was pre-coded before filling it into statistical package for social scientists. This enabled reducing and organizing data for effective analysis. The frequency distribution needed to examine the pattern of response to each independent and dependent variable under study. Three research questions have been posited in this study were measured in multiple ways, the use of tables, bars, and pie

charts, including gender, age, marital status, religion affiliations, and levels of education and sources of support for women.

3.11 Ethical Consideration

Ethical approval to undertake the study was obtained from Egerton University. Informants gave their informed consents to take part in the study after receiving detailed information regarding the voluntary nature of participants and about confidentiality. Ethics are norms of standards of behavior that guides moral choices about behavior and our relationship with others.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

This chapter provides the results and discussions that bring light the range of effects of obstetric fistula on the social vulnerability of women, men and their families in Kaptembwa, Nakuru County. The chapter begins with a presentation of the general characteristic of the study area and social economic characteristics of the respondents. A brief summary of the findingsis also presented in the light of the objectives of the study.

4.1 Characteristics of the respondents

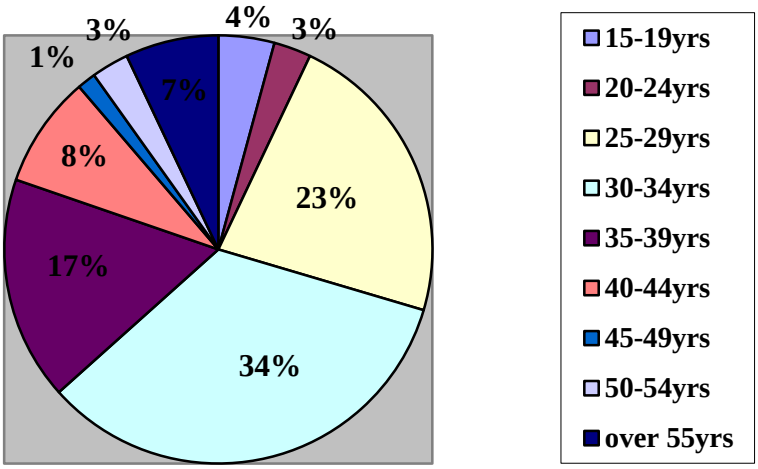


Figure 1: Age of the respondents

From Fig 1, it is evident that most women in the age group 30-34 years are mostly affected with Obstetric fistula with the percentage of those affected in this age group standing at 35.29% followed by those in the age group 25-29 years at 23.53 percent.

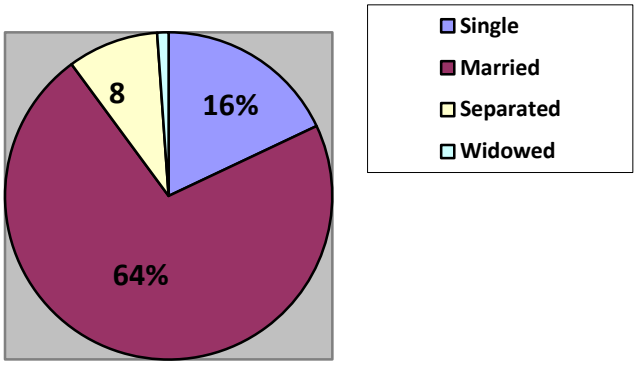


Figure 2: Marital status of the respondents

Women affected with obstetric fistula who are married recorded a 64.8% and with those who are single affected with obstetric fistula recording a 16.5%. Those separated or chased away by their husbands were rated at 8.3%.

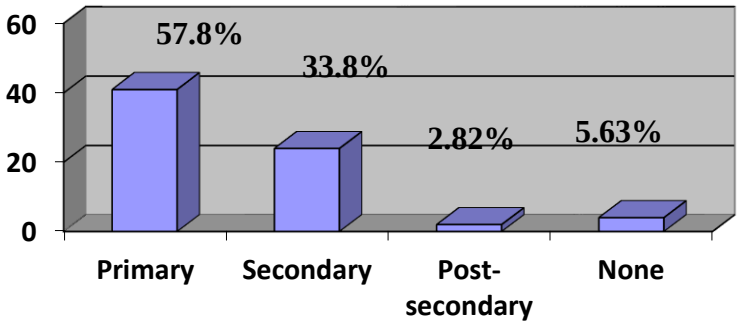


Figure 3: Level of education of the women living with OBF

Most of the respondents 57.8%, only reached primary school level. Those who went up to secondary school level are 33.8% with only 2.82% having post-secondary school and 5.63% of the respondents having no education at all. The low level of education amongst women is largely due to poverty in their homesteads' which leads to a high dropout rate, particularly of the girl child. They inadvertently get married at an early age of 15 to 25 years of age (Fig.7).

Number of children	Frequency	Percent
1-3	26	36.6
4-6	23	32.4
7-9	12	16.9
10 & over	9	12.7
None	1	1.4
Total	**71**	**100.0**

Table 1: shows that most of the affected women 36.6 % have 1-3 children. Those who have children 4-6 following with a 32.4% and women with children 7-9 with a 16.9%, and more than ten children at 12.7 percent respectively.

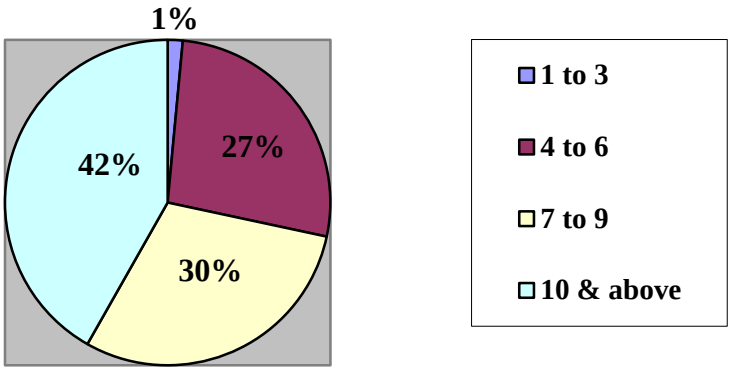


Figure 4: Ages of the respondent's Children

It is evident that 42% of the respondents have children aged ten years and above. Those who have children aged 7-9 years are at 30%. Only one respondent has children aged 1-3 years. Out of the 84 women sampled to be living with obstetric fistula in Kaptembwa, 41% were of 30-50 years of age and the majority (57%), of the women had completed primary education only (Fig.3). It was evident that most of the affected women, i.e., 35.3%, are in the age group of 30-34 years, followed by those in the age group 25-29 years at 23.5%. Up to 65% of the affected women were aged between 35 and 39 years, while only 8.8% were between 40 and 44 years old. The age group of 30 to 39 years is apparently that of women who came to realize that they had OBF.

This finding signifies the critical time when most of the affected women of Kaptembwa became aware that OBF is a chronic problem which they either have to live with or seek medical redress. This however does not discount that other younger and older women suffered from OBF in ignorance, but believed that it will somehow go off, according to local folklore. Traditional remedies to cope with OBF and that enhanced ignorance included better feeding habits, use of traditional herbal medicines and faith in God. The critical question that arises is as to when OBF first occurred?

The time when affected women respondents came to first learn of their OBF condition is depicted in Fig. 5 below. Approximately 71.5% of affected women came to understand of their condition after they made visits to the hospital while only 7.1% learnt from unskilled birth attendants. Only 14.3% of them knew their condition through local community program. The avenues of information associated with the Government such as Chief Barazas were not considered to be good sources of knowledge on OBF because they were perceived by most women to lack confidentiality**.**

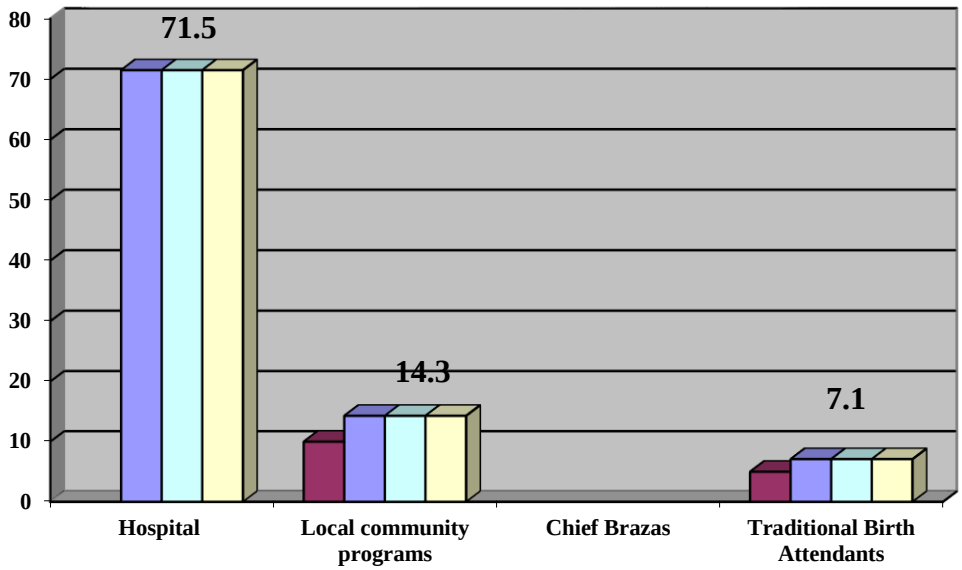


Figure 5: How the respondents came to know about their condition.

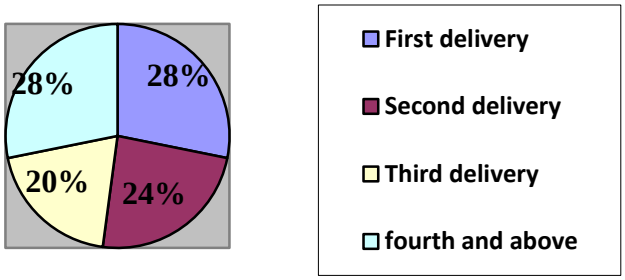


Figure 6: Stage when the respondent experienced obstetric Fistula.

The stage at which women considered to have their first experienced OBF is given in Fig. 6 above. Of the affected women, 28.2% experienced OBF during their first and fourth delivery. The respondents that experienced the disease during their second and third deliveries were at 23.9% and 19.7% respectively. This value of 28.2% of affected women were at their 1st birth was attributed to early pregnancies occasioned by early marriages, associated with other reasons such as unskilled birth attendants (Table 8); obstructed labor (prolonged)labor (Fig.12)and lack of immediate access to medical services (Table 16), etc.

According to Cook, Dickens, &Syned, (2004), many women interviewed married early because of poverty and traditional (forced) marriages. Therefore women should not marry early and should also space children to avoid occurrence of OBF at the second, third and fourth deliveries.

Table 2: Perception of the Critical age a woman at 1stchild birth likely to cause OBF

Perception of critical age of woman at 1st birth likely to cause OBF	Frequency	Percent
14-16 years	3	4.2
17-20 years	68	95.8
Total	**71**	**100.0**

According to Semere&Nour, (2008), a girl's body below 20 years is not fully developed to bear the burden of child bearing. The critical age of a woman at 1st birth that is likely to incur OBF was perceived to between 14 and 20 years (Table 3) by women in Kaptembwa, Nakuru.Over 70% of the respondents had their first child when they were 20-25 years old. While 22.54% had their first child when aged between 15-19 years old. Only 2.04% of the respondents had their first delivery when they were 26-30 years old (Fig. 7). It can be concluded from this study that most of the affected women got their first child between the age of 15 and 25 years.

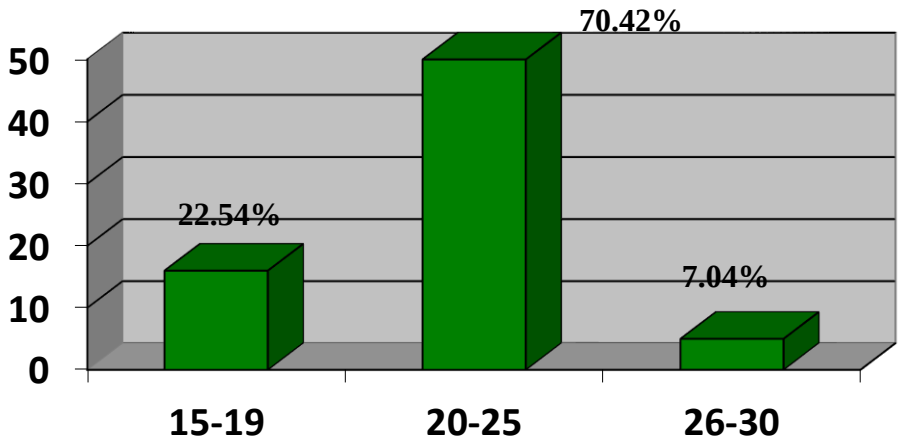


Figure 7: Age when the respondents had the first child

The critical stage of marriage perceived to be 14-19 years by 92.96% of affected women does not correspond to this findings where only over 28% of this age –group go their first child. However on considering the (70%) 20-25 age-group, it was observed that over 92% of the women had their first child. Further observations through discussion revealed that the affected women would have experienced uncontrolled urination which became acute after the second and third delivery accompanied by uncontrolled defecation. The age-group of (14-25 years) of affected women had their subsequent children without adequate spacing. Adequate spacing is considered to be 2-3 years by family planning officers, which allows the preceding child to grow and the women's young body to be rejuvenated. Poor knowledge of adequate spacing of child births is enhanced by the low (57%) primary education prevalent amongst the women; and lack of family planning advice to this community. This situation amongst the poor women and men

in our society endears them to live in ignorance of their condition despite availability of knowledge and skills to manage OBF. For this reason, teaching on sexuality (child bearing, etc) should either be incorporated in the primary curriculum or free secondary education is extended to all Kenyans so that all become informed.

Further analysis/profiling of affected women's; livelihoods informed that 95.8% had normal birth (Fig.8) for all their births (within the ten year span between 14-25 years), with only 2.82 % of the respondents delivering through caesarean section.

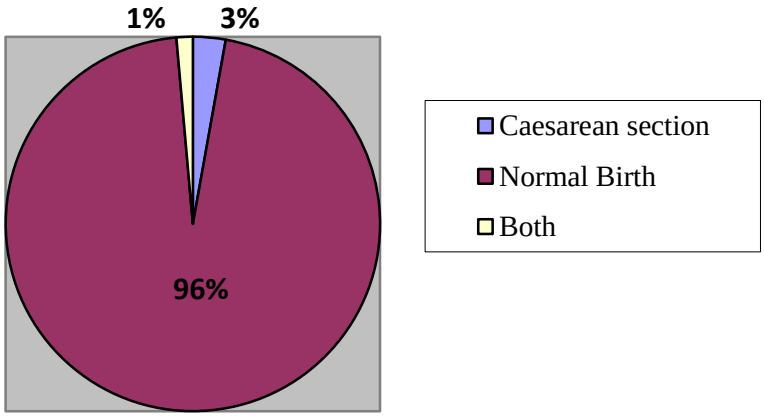


Figure 8: Type of delivery

Up to 65% of the women respondents delivered at home and 35.2% delivering in a local hospital (Fig.11).Lack of funds to meet their hospital bills that range between 4,000 – 10,000 for normal births currently has led to the dependence & preference of traditional birth attendants (TBA) whose services are provided in homes and thus, cheaper at KES 500 – 1000/- only, than hospital/clinic deliveries.

The ushering in of the free maternity services by the Jubilee Government led by His Excellency President UhuruKenyatta is envisaged to address this problem of inaccessibility of maternal health services.

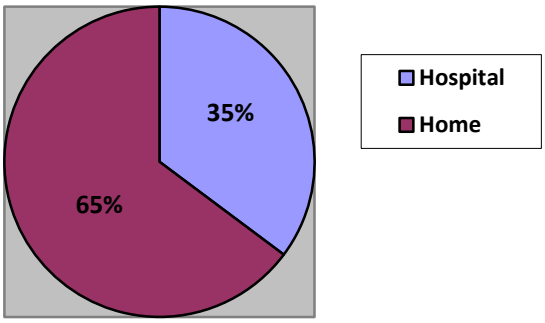


Figure 9: Place of delivery

From the Table 3 below: 38% of the respondents have been living with the disease for 3-5 years. Women living with the experience more than 10 years stands at 33.8%. The latter group of women that lived with the disease for over 10 years was attributed to ignorance of their condition. Secondly, medical redress of the OBF has been expensive @ KES 30,000/- in Kenyatta National as of (2012). Women living with the disease for 6-9 years were at 26.8%. Only one respondent has been living with the condition for less than a year as indicated in Table 4 below.

Table 3: Living with Obstetric Fistula

	Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Less than 1 year	1	1.4	1.4	1.4
3-5 years	27	38.0	38.0	39.4
6-9 years	19	26.8	26.8	66.2
10 years and above	24	33.8	33.8	100.0
Not sure of their years	3	2.22	2.22	2.22
Total	**74**	**100.0**	**100.0**	**100.0**

4.2 Actual Medical Causes of Obstetric Fistula

Obstructed Labor

It was established in this study that over 97.2% of the respondents interviewed experienced more than two days labor duration (Fig.12). Only 2% of the respondents had on-day labor duration. According to Semere&Nour, (2008) early marriages lead to early childbirth, this increases the risk of obstructed labor since young mothers who are poor and malnourished may have under-developed pelvises. They further reported that 76% to 97% of obstetric fistula affected women was caused by obstructed labor. According to Donnay and Ramsey, (2006) reports that OBF usually develops as a result of prolonged labor when a caesarean section cannot be accessed. But only 7.5% of women with obstetric fistula are able to access treatment, the vast majorities are forced to suffer the consequences of obstructed and prolonged labor simply because options and access is incredibly limited. (UNPFA(2008).

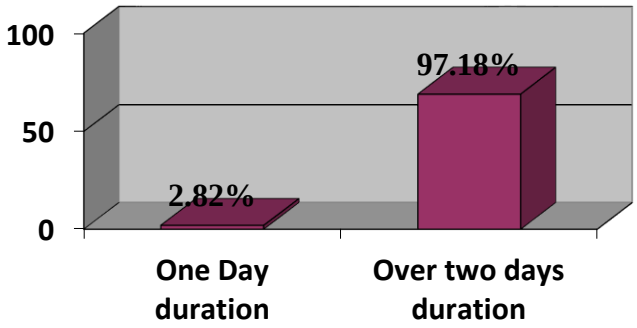


Figure 10: Duration of Obstructed labor.

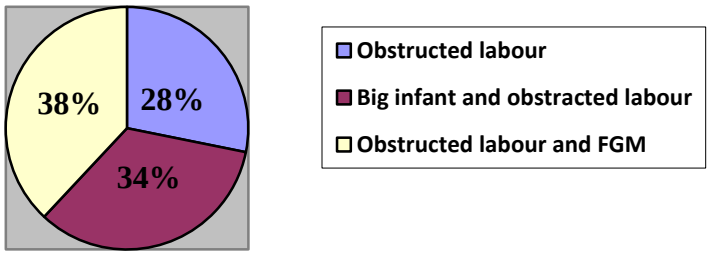


Figure 11: Possible cause of the respondent's condition

However on evaluating affected women in Kaptembwa, only 28.2% of women considered obstructed labor as a cause of OBF. Those women who considered a combination of obstructed labor and female genital mutilation (FGM) or cutting (FGC) were at 38.0%. Women considered FGM to have contributed to OBF by the damage of their vagina. Combinations of obstructed labor caused by having big infants were perceived to be cause of OBF by 33.8% of the affected women.

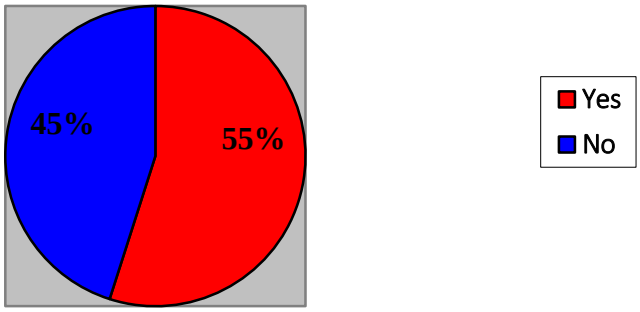


Figure 12: First delivery as a cause of Obstetric Fistula

Up to 54.93% of women affected by obstetric fistula considered their first delivery to be the cause of their suffering, while 45.07% though otherwise. They considered lack of sufficient information and accessibility to health facilities as cause to their suffering withOBF.

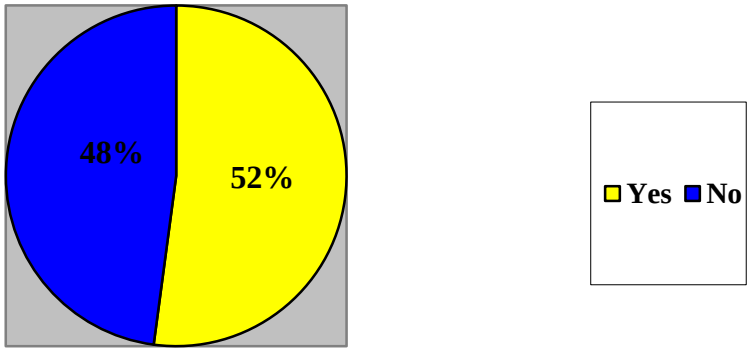


Figure 13: Type of FGM/Cutting.

Women (37) who have under gone FGM interviewed stood at 52.11% and 47.9% of the respondents having not participated in the same (Table 4below). Out of those who have undergone FGM 76.32% underwent Type II while 23.68 % underwent Type I of FGM. These figures are show in Table 4 below.

Infibulations, practiced in some communities, which involves the cutting and sewing up of a girl's genitalia leaving a match stick size hole for the passage of menstrual blood is especially harmful. This hole is then crudely cut open during childbirth, something which could end up severing the bladder.

Table 4: Type of FGM undergone

FGM Experience	**Frequency**	**Percentage within women undergone FGM**	**Valid percent (of affected women**
Type I	9	24.3	12.68
Type II	28	75.68	39.43
Sub-Total	37	52.11	52.11
Non FGM			47.9
Total			**100**

12.68% (Nine) out of the 74affected women respondents had undergone Type I which is the removal of the clitoral hood and 39.4% had under gone Type II FGM which is the removal of the clitoris with complete removal of the labia minora. This accounted for 75.68% of the women who had undergone Type II FGM. The Type II FGM was most prevalent amongst the Kalenjin (all), Kisii (all) and Borana (all) women. While the few kikuyu (> 55 years old) and Kamba women underwent type I FGM.

Table 5: Do you consider FGM to have been the cause of your Obstetric Fistula

	Do you consider FGM to have been the cause of your Obstetric Fistula		**Total**
	Yes	**No**	
Yes	35	2	37
No	1	32	33
Total	**36**	**34**	**70**

Out of those who have undergone FGM 35 out of 37 respondents consider FGM to be the cause of their Obstetric Fistula with only 2 respondents thinking otherwise. This is shown in Table 6 above. This is an indicator that FGM is a contributor of obstetric fistula since most of those women who are affected have undergone FGM.

4.2.1 Medical Causes

Female Genital Mutilation FGM/Cutting is a dangerous practice considering the unhygienic condition and the dangerous instruments used to carry out the operation, its combination with early marriage can be more hazardous especially when the young women pregnant is about to get into labor.Female Genital Mutilation is the customary practice that endangers the life of girls and women. It comprises all procedures that involve partial or total removal of the external female genitalia, or other injury to the female genital organs for non medical reasons as defined by (WHO 2008 & 2011).

It is a dangerous practice considering the unhygienic conditions and the instruments used to carry out the operation. Therefore the respond of the women affected rated FGM at 53.5% rating it as serious. Lack of quality maternal healthcare was rated at 94.4% by the affected women as most serious as many hospitals within these conditions suffer from shortages of staff, supplies and other forms of medical technology that would be necessary to perform reconstructive obstetric fistula. (Rai, Derkumari Shrestha (2011).

Table 6: Rating of Medical Causes

Rating of medical causes	Least serious	Serious	Most serious
Obstructed labor			96%
Untrained birth attendants			97%
Female Genital Mutilation	31%	54.%	
Lack of quality healthcare		94.%	94.%

Women affected rated obstructed labor 96 % as another most serious cause of obstetric fistula. The prolonged labor sometimes under the care of TBAs and village women is a major cause of OBF. Untrained Birth Attendants as most serious too was cited at 97.% as women affected explained their condition deteriorated as the TBAs failed to recognize the problem.

Generally the women lack full agency of their bodies, their husbands or other members of the family have control in determining the health care the women receive. Delay may therefore be caused by such scenario. The proportions do not add to 100% due to the fact that others never responded on this question.

4.3 Social Causes of Obstetric Fistula

According to UNFPA, 2012, poverty being one of the causes of obstetric fistula hinders women from being able to access normal and emergency obstetric care because of the expensive procedures. Extreme poverty reinforces cultural expectations that girls should work in the home and quickly marry rather than attended school.

Social Causes	Most serious	Least serious
Poverty	97.%	
Lack of academic education	94.3%	
Lack of awareness	98.6%	
Early marriages and child birth	98.6%	
Malnutrition		25.8%
Rape		7.8%
Curse		33.3%

Therefore from the study (Table 7) poverty and lack of academic education were cited by the affected women at 97% as serious and 94.3% respectively.The women felt their lives would have being more comfortable, if they were not poor and had academic education, they felt they would have sought for redress of their condition much earlier. Since the women affected came from poor homesteads they lacked awareness even when it concerned their own personal issues such as early marriage and early childbirth and its consequences,which they perceived to be a better option that might lighten their burdens only to realize the situation was no better;they rated lack of awareness and early marriages and with a high 98.6% respectively as the most serious.

Therefore, these being a social cause, young girls marry and their childhood and adolescence period is cut short, thus young life cannot handle marriage and adult responsibilities when they come too early. The women rated malnutrition at 25.8% as least serious while 33.3% rated curse as least serious issue.

Table 8: Beliefs on causes of obstetric fistula

Beliefs	Yes	No
Parental curse		93%
Generation (family) curse		93%
Social curse (witch craft)	84.5%	
Divine punishment from God (sin)		88.7%

Curses as a Cause of OBF

When asked whether they considered the beliefs shown in Table 8above as a cause of obstetric fistula, 84.5% of the respondents agreed that social curses (emanating from jealousness, conflicts between Kisii and Borana men) is a cause of the disease. If they abuse each other by word of mouth, they have a perception that this abuses can also lead to obstetric fistula. A high percentage of 93% of the respondents denies that parental curse is a cause of fistula. The same percentage of respondents also denied generation (family) curse is a cause. Up to 88.7% of the respondents disagreed that divine punishment from God (sin) is a cause of OBF. It was observed that many of the affected women have faith in God through Jesus Christ. This is probable reason that only a few of them (<11%) believed in divine and parental punishment as a curse. This finding implies that a lot of the affected families have a guilty conscience of having offended a neighbor at one time or another. Neighborly conflicts and offences are much more likely to occur in poor social neighborhoods than in well-off middle to upper middle class families.

For this reason alleviating poverty is likely to address the high rate of offences prevalent in poor neighborhoods. Increased income that leads to high access to social services i.e. Access to social justice, education, health care, a clean environment (water,sanitation and lighting), food and physical security, are paramount to circumventing these beliefs that are retrogressive.

4.4 The Impact of Obstetric Fistula on the Wellbeing of Women

Obstetric fistula has far reaching physical, social, economic and psychological consequences on the affected women, their husbands, children and extended family.

4.4.1 The Impact on the Physical Well Being

The most direct consequence of obstetric fistula is constant leaking of urine, faeces and blood as a result of the hole that forms between the vagina and bladder or rectum. According to the Fistula Foundation, (2010), the leaking has both physical and societal penalties. When the respondents were asked whether they faced urinary or fecal incontinence, 95.8% affirmed it (Fig. 16). The women also experienced foul smell, repeated vaginal or urinary tract infections and irritation or pain in the vagina or surrounding areas which they rated at 95.8% too. Only 36.6% percent of the respondents are facing pain during sexual activity, expressing personal lack of sexual desire; furthermore, their husbands could not touch them because of the seriousness of their condition.

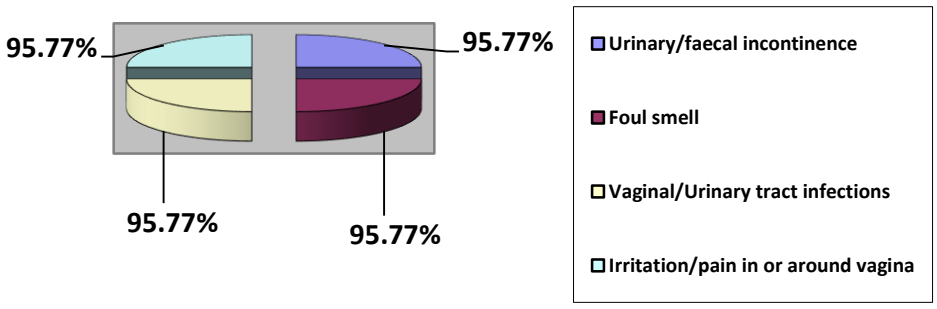


Figure 14: Experiencing Physical problems

When the respondents were asked to rate the psychical problems, urinary or fecal incontinence and foul smell was cited the most serious with a 94.4%; while 92.96 percent of the respondents rated repeated vaginal or urinary tract infections as most serious (Table 9). The affected women rated irritation or pain in the vagina/surrounding areas as also most serious scoring a 91.5%. None of the respondents thought that pain during sexual activity is a most serious problem. They rated pain during sex at 87.3% as least serious. (Table 9).This low rating was because the affected women never engaged in sex.

Table 9: Rating of Physical problems

Rating of Physical problems	Least serious	Most serious
Urinary/faecal incontinence		94.37%
Foul smell		94.37%
Vaginal/urinary tract infections		92.96%
Irritation/ pain in or around vagina		91.55%
Pain during sex	87.32%	

4.4.2 The Impact on the Psychological Well-Being of the Women

Women and girls face many psychological problems such as humiliation and being marginalized by the society due to their condition,and thus, being pushed to live in isolation as the unavoidable odor is viewed as offensive; and therefore removal from the social activities is seen as essential.

Humiliation was rated by 97.2% of the affected women, while abandonment, stigmatization and loneliness experience was cited by 95.8%. Up to 8.5% of the affected women had experienced separation from their husbands, while 95.4% reported they experienced despair which they termed as the most difficult situation to bear, as indicated in Table 10 below.

Table 10: Psychological causes

	Humiliation	Abandonment	Stigmatization	Loneliness	Separation	Divorce	Despair
Yes	97.2	95.8	95.8	95.8	8.5	1.4	94.4
No	0	0	0	0	91.5	53.5	2.8

4.4.3 Impact on the Economic Well-being of Women

Women affected by OBF said that the disease left them helpless as they could not seek employment or engage in any business, because of physical disorders i.e., foul odors, that came

along with the disease (Table 11). Ninety seven (97.2) % of women affected agreed with the fact that Obstetric Fistula economically impairedthem (Table11). The respondents who did not respond to this question were only 2.8 %.

Table 11: Women affected with OBF were impaired economically.

	Frequency	Percent	Valid percent	Cumulative percent
Yes	69	97.2	100.0	100.0
Missing system	2	2.8		
Total	**71**	**100**		

As a result, the respondents experienced the following economic hardships.97.2%, of women affected agreed that they had to discontinue from gainful employment because of their weakened physical nature and lack of ability to work. Women affected could not engage in business activities because they were not considered favorably for credit, because of doubts that they were able to pay back. They cited the lack of credit with a 77.5% either to help begin business.

Up to 99.4%of the women faced difficulty in business progression due to many issues such as physical inability and the effects that comes with the disease.Women affected (84.5%) faced unemployment since they were easily detected by their potential employers and those already employed could not retain employment.This resulted into despair whichleadsinto isolation and withdrawal from social activities (Fig. 15 below).

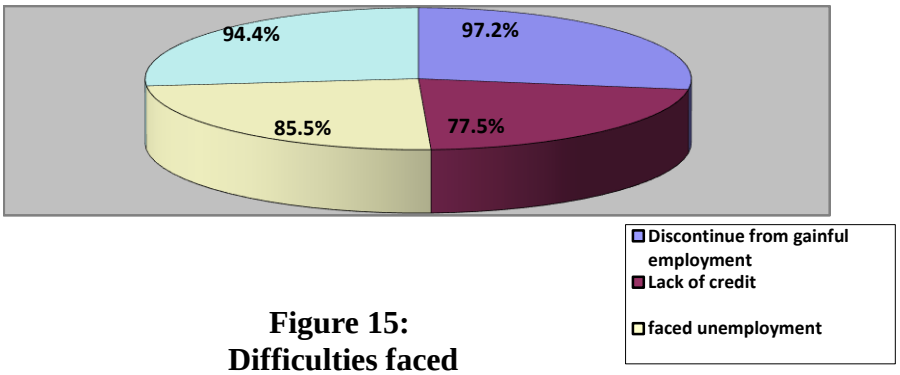


Figure 15:
Difficulties faced

4.4.4 Effects on Children of Affected Women

Women (60.6%) affected by obstetric fistula said their children aged below 8 years – which consisted of 54.9% - had not taken up their role as care providers within the family circle, they had no issues with the social stigmatization and uncertainty of life associated with the problem(Table 12). Because of lack of awareness that the disease can be treated, 38%, of the affected families;(livedwith Obstetric fistula for over ten years), reported that their children experienced effects ofseparation and thus;uncertainty of life.43.7% agreed that children faced social stigmatization.

Table 12: Effects of parent's condition on their children

Effects	**Yes**	**No**
Taking up mothers role	38%	60.6%
Social stigmatization	43.7%	54.9%
Separation of parents	38%	60.6%
Uncertainty of life	38%	60.6%

Table 13 below: shows the rating of the major losses that the women respondents have experienced due to their fistula condition. The percentages were calculated out of 74 respondents.It is evident that a higher percentage of 97.2% of the respondents consider loss of social life as a woman, loss of body control, loss of integration in social life, loss of dignity and self-worth and loss of ability to work as most serious since acquiring the obstetric fistula (OBF) status.

Table 13: Major losses experienced

	Loss of social life as a woman and wife	Loss of body control	Loss of integration in social life	Loss of dignity and self-worth	Loss of ability to work
Leas Important	0	0	0	0	0
Important	0	0	2.8	0	0
Most important	97.2	97.2	94.4	97.2	97.2

4.5. Coping Strategies

Women living with obstetric fistula condition have adapted a number of ways as coping strategies. This includes having social / communal associations with other womenhaving OBF. This brought great satisfaction because of being accepted.Another coping strategy they had adopted is to hide away from the so called normal society because of humiliation. Others have resorted to fight the disease than losing hope. Others have also turned to street begging, while others seeking spiritual interventions.

4.5.1 Access to Funds for Treatment

This study found thatapproximately 27% of women affected with OBF had already received surgical repair from the Kenyatta Hospital, Jamaa Hospital in Nairobi and others in Moi referral Hospital, Eldoret - through the help of Charity organizations, i.e., the Loreto Sisters Mosongari Nairobi. The women interviewed (98.6%)had accessed treatment with a big percentage of their funding provided by donations from charity organizations (e.g., church/NGO/Government/individuals).

The 30,000/- Kshs cost of treatment atKenyatta National Hospital, Nairobi, is prohibitive for many women. According to UNFPA (2002), theprivate hospital cost is at least five times as much, therefore only 7.5% of women in Kenya are able to access treatment.

From Table 14, it is evident that 95.8% of the respondents are only able to use 1-20% of their personal funds for treatment. 64.8% of the women affected get 1-20% of medical donations from friends or family members. 59.2% of respondents stated that they were able to access 61-80% their OBF medical donations from NGOs, church or government. These women were able to get assistance from the NGOs, church or government because over the years they had sought for help from these avenues, with 23.9% accessing 81-100% funding from NGOs.

Table 14: Percentage access to funds for treatment

	Personal funds	**Donations (Harambee) friends/family/both**	**Donations by charity organizations e.g. NGOs**
1-20 percent	95.8%	64.8%	95.8%
21-41 percent	0	26.8 %	0
41-60 percent	2.8 %	2.8 %	15.5 %
61-80 percent	0	2.8 %	59.2 %
81-100 percent	0	1.4 %	23.9 %

Strategies adopted by affected women to cope with OBF are given in Table 15**.** Up to94.4 % Kaptembwa Women considered professional counseling as a least important coping strategy. However, this was a term they had never heard before, and therefore considered it as of little value. It was observed that awareness of Obstetric fistula by the general Kaptembwa community was very low and misunderstood and therefore, given no attention at all. The support from parents/family was rated by 94.4 % of the women as most important. They affirmed that family members cannot ignore their own. The women stated that their parents and siblings gave them support according their resources and ability. The same trend is seen when it comes to support from spiritual prayers where, 87.3% of the women respondents perceived that spiritual prayers was the most important. Having faith in God for healing and provisions towards their needs, such as, access to treatment has greatly contributed to their well-being. Support from spouses was not critical as only 19.7% of the women rated it as most important, and 40.8% rated it as least important. Two of the women (personalized interviews) were deserted by their husbands. Furthermore, women reported that their husbands engaged in other relationships which

contributed to them not fully able to support their wives. Girma, (2008) from another study notes that affected women had to accept their husbands having extra marital affair so that they can be supported by their husbands. Respondents at 87.3% perceived that use of modern technology e.g. use of diapers, was not applicable to them due to ignorance of their use (Table 15).

Table 15: Coping Strategies

	Counseling	Support from parents/family	Support from community	Support from spouse	Support from spiritual prayers	Use of modern technology (e.g. diapers)
Least important	94.4	0	94.4	40.8	1.4	0
Important	0	5.6	0	16.9	5.6	0
Most important	0	94.4	0	19.7	87.3	0
Not applicable	0	0	0	0	0	87.3

4.5.2 Preventive Strategies against Obstetric Fistula Disorder

A quick look at the Table 16 reveals that awareness on the causes of obstetric fistula; access to information about preventive measures, access to maternal health care (pre-natal and post-natal), access to informed traditional birth attendant and access to affordable hospital services and funds for treatment are very critical to prevention of OBF. These were rated by 95.8% of the respondents to be amongst the most important preventive strategies. Access to informed traditional birth attendants was considered to be the most important preventive strategy by 97 % of the women affected. They indicated that they preferred traditional birth attendants (TBA) or health workers, because they are familiar with them, their charges were cheaper. They stated that the TBA should be empowered with necessary skills and equipment.

Table 16: Rating of preventive coping strategies

	Awarenes s on the cause of obstetric fistula	Access to information about preventive measures	Access to maternal healthcar e (pre-natal)	Post-natal	Access to informed Traditiona l Birth Attendants	Low affordabl e hospital funds
Least important	0	0	0	0	0	0
Important	0	0	0	0	0	0
Most important	95.8	95.8	95.8	95.8	97.2	95.8

4.5.3 Rating of Different Methods of Treatment

Table 17 indicates that the 94% of the women stated that access to appropriate information and medical (surgical) repair was the most important. They said that if they had the information about their condition, they would have coped better. They reiterated that no woman should suffer from OBF if the government had provided access to the surgical repair. The government's prime responsibility is to provide a health care that is accessible and affordable.

Spiritual counseling was considered as most important; it comes second with 91.5% as the respondents said that their help has come from powers beyond their knowledge. Others studies, Ajuwon, (1997) and Balogun, (1997) reports that affected women have turned to the powers of fate and spiritual divinity as source of coping with their unfortunate conditions i.e. churches offering prayers for miraculous healing. The social support system is also critical as 94.4% of the respondents rated it as an important form of treatment.

Psychological counseling and psychiatry were new terms to them and they said since their disability occurred, no one ever offered them this kind of help or even mentioned it. As can be seen from Table 17, access to psychological counseling and psychiatry are not important forms of treatment and therefore rated by a high percentage (91.5% and 95.8%)of women, respectively, being indicated as least important.

Table 17: Rating of treatment

	Access to appropriate information	Access to medical (surgical) repair	Access to psychological counseling	Spiritual counseling	Social support system	Psychiatry
Least important	0	0	91.5	0	0	95.8
Important	0	0	0	4.2	94.4	0
Most important	94.4	94.4	2.8	91.5	1.4	0

4.5.4 Rating of Government Policies

Table 18 indicates women who suffer from obstetric fistula in Kaptembwa location rated government policies should be put in order to curb the menace. Majority of the respondents 95.8% rate provision of necessary maternal health care for women, education on sex and reproductive health, provision of more informed traditional birth attendants and more trained community health workers by the government as most important. According to Kristof& Sheryl Wudunn, (2009) notes that access to reproductive health services is a vital component of women's empowerment.

Provision of funds to meet costs of treatment is also necessary as 94.4% of the respondents rate it as most important. It is also clear from this table that none of the respondents are interested in provision of mobile clinics to the rural areas. The women interviewed felt it is quite difficult and uncomfortable to discuss their condition and were afraid to open up to strangers. They preferred that the government trains more TBAs and community health workers since they reside within their locations and they are familiar with them and they have appreciated their work before. If properly trained with the skills needed they will perform their duties effectively and efficiently.

In Kenya, a study by the Ministry of Health found that the long distance to health facilities and the societal preferences for delivery with a traditional birth attendant contributed to delay in accessing necessary obstetric care. (Kenya Ministry of Health &UNFPA (2004).

Table 18: Rating of Government policy

	Providing necessary maternal health care for women	Education on sex and reproductive health	Provision of funds to meet costs	Provision of mobile clinics to the rural areas	More informed traditional birth attendants	More trained health community workers
Least Important	0	0	1.4	93	0	0
Important	0	0	0	2.8	0	0
Most important	95.8	95.8	94.4	0	95.8	95.8

4.6 CASE STUDIES OF OBSTETRIC FISTULA AFECTED WOMEN: OBSERVATION ON THE CAUSES IMPACT & COPING STRATEGIES

4.6.1 CASE STUDY 1: Delayed decision in seeking treatment - 30 years' experience

A 56 years old married grandmother but now widowed and mother of five, Rael developed fistula in 1975 after the first delivery of her child. The client has both vesico vaginal fistula (VVF) and Rectum vaginal fistula (RVF). She never attended any antenatal clinic (ANC) but her first four (amongst five) pregnancies progressed well without any complications. Since the **first child was so big**, (approximately 4.5kg) the women and the traditional birth attendant put their hands in her vagina to create space for the baby to get out. She had earlier experienced FGM, which was so stressful and painful. After this delivery she would find herself wet but thought it would be over. Lack of family planning and no spacing of children deteriorated the problem and when she delivered her fifth born, she was completely injured. After the fifth delivery, she realized she could not hold stool or urine.

Rael stated that she suffered silently, the leaking and foul smelling. She would work in the farms with others women with a lot of pain, but soon realized they despised her because of

her dilemma and suffered humiliation. Rael moved from the rural area in Olenguruoni to Kaptembwa to join her husband who worked in a factory in Nakuru in order to seek for help.

Rael could not associate herself with other women or attend church because of her condition. She remained lonely and isolated herself from social life. She decided to try selling vegetables, in the nearby market, but after few months could not progress because of inability to handle the business because of her OBF status.

She received full support from her husband and started seeking for help together. In one of the visit, she learnt that her complication is so costly to repair. Her eldest son and daughters took over the responsibilities of the mother. They worked in farms as laborers to earn the resources to support their family. It was such a burden for the children to cope but they had no choice. The family was very disturbed by her ailment that made their little rented house to become an unbearable place.

The most painful experience is when her mother-in-law was persistently telling her son to remarry in order to have a normal wife. She will forever be grateful to her husband who became a pillar of strength and resisted the appeals of marrying a second wife.

Prayer became their investment and all the family depended on God for their mother's healing. Her own parents and siblings gave her moral and financial support towards her children's education. It is unfortunate that after 30 years of living with Obstetric Fistula and after one year after surgical repair done, her husband died. Her only wish was to have served the husband as he had served her during the years of her injury. After many years of waiting, she got financial support for the surgical repair in Jamaa Hospital Nairobi. She says, "She has a new lease of life and would help any woman, who suffers under obstetric fistula, because no woman deserves to suffer this reproductive injury."

4.6.2 CASE STUDY 2: Delayed Transport to Health Facility and Lack of Skilled Attendant

Grace, a 48 years old mother of three living children, left school in standard six to a forced marriage to a truck driver at the age of 17 years. She lived in absolute poverty in Muranga

County. After about 6 years in marriage, she was chased back to her parents because of the child birth injury. The delay in reaching hospital and being attended by unskilled birth attendant who took days to deliver her third child, caused her to go through prolonged labor for about three days; that left her injured.

Grace narrates that, her constant leaking of urine, faeces and odor; drew her to helplessness and hopelessness. Her condition became the story in their Muranga village, and would not permit her to work anywhere; hence no woman wanted here association; leaving her with no choice but to isolate herself. Her situation drove her away from home and sought help from her cousin who lived in Kaptembwa Nakuru.

After many consultative visits to the Nakuru Provincial general hospital, she learnt that her third child birth injury was known as obstetric fistula (OBF) and that it required surgical repair. It was however, impossible to get immediate attention because the cost of surgery was very expensive to her. She was placed in the waiting list, until funds were available. Grace suffered separation from her children. She became lonely, desperate and unable to do any manner of work. She depended on the cousin and well wishers who understood her situation.

Grace testifies about her faith in God which gave her strength to provide for her daily needs. In 2010,after prayer and waiting on God, she received surgical treatment from Jamaa Hospital in Nairobi. At the time, of interview, she had gone for further reviews and was recuperating well. She states that today her life is worth living and she can smile again. Her reunion to family members and children who are now adults gives her much joy. Her only regret is that her children never attained education beyond primary level, but they are all engaged in small businesses. She is very optimistic that her children will be better and productive citizens on this nation.

4.6.3 CASE STUDY 3: First Time Delivery

Monicaa 25 year old mother who was married to a casual laborer, but later deserted her after occurrence child birth injury. She worked as a house help until she was due for delivery. She had seen the traditional birth attendance (TBA) twice before delivery and assured of safe

delivery. She labored for four (4) days in the hands of the TBA, before the husband took her to hospital. She delivered **a big infant** (of approximately 5 kg) that died immediately after birth. This outcome disturbed her so much and sorrow engulfed her. After discharge, she experienced leakage of stool and urine uncontrollably. The so called "come we stay husband" observed there was foul smell coming from her but kept silent; afterwards however, deserting her and left for another town. She now understands that he has remarried. Friends also deserted her which left her very hurt and feeling undesirable. She got concerned about her issue because as days went by the leakage became so uncontrollable. This led her into isolation and henceforth she decided to seek for help, no matter what it took. Her neighbors avoided her because the odor was intolerable. Whenever she went to fetch for water from the common tap, all the women would leave.

She sought for employment again, but after few days of working she got relieved from the employment, without any substantive explanation. These experiences forced her into becoming a beggar. Her parents gave her much support after learning of her condition. She felt very disappointed that the hospital never disclosed anything about the child birth injury during the times of discharge. She states she is very fortunate to date that she underwent the surgical repair at Jamaa Hospital and at the time of interview she was yet to go for a second review. She is trying to adjust and integrate; it feels her with joy to be able to attend church and other social activities. She now feels confident and alive again.

4.7 Emerging Issues From Focus Discussion Group and interview with key informants:

Findings from the husband FGDs were used to enhance and broaden our understanding of how women experienced living with obstetric fistula. One focus group discussion was held with husbands of the clients, which gave a clear indication of the suffering of the family as a whole. The discussions describe the experiences in the following ways: loss of body control, loss of social roles as a woman and wife, loss of integration in social life and loss of dignity and self-worth. The discussions were held together with every individual expressing their experiences as indicated below.

4.7.1 Loss of body control: Husbands expressed that their wives experienced pain, smell, wounds and discomfort which brought continuous leaking of urine and faeces was a very extremely trying experience. To some the pains from the sores were so severe that it hindered their daily activities and movements. The smell of urine was intolerable and a constant source of embarrassment causing women to withdraw from social life.

4.7.2 Loss of the Social Life as a Woman and Wife: Husbands stated that living with fistula for years affected women's sex life. Only in rare cases could a woman with fistula continue having sex with her partner. Sexual abstinence was common and was experienced as a major loss. **The husbands** presented the problem more as one of lack of sexual interest on the part of their wives. The pain of being seen as unclean and sexually undesirable was a shared experience by most women However, they also reported lack of desire to have sex with their affected wives. Husbands' experience of living in the same room with a woman with an untreated fistula was very unpleasant and trying, and as a result, many could not cope with the situation. One husband said frankly for those of us who lived with those women, it is very tough. "You cannot sleep until morning; you will be forced to wake up at night to change beddings or leave the bed."

4.7.3 Inability to Attend to Daily Commitments: Husbands reported that their wives experienced general body weakness which reduced their capacity to carry out their daily responsibilities. Some women were not allowed to cook for the family as they were judged as dirty or unclean. However, from the discussion with the husbands it was noted that a woman with this problem, especially those that had children before they got obstetric fistula were relatively better than those who did not have children. At least their husbands will let them stay, cook and assist in raising their children even if the husband opted to have another woman. The loss of ability to work was seen as a great obstacle to progress. The feeling of being dirty due to leaking urine and the smell contributed to the women's failure to continue working.

4.7.4 Loss of Integration in Social Life: Husbands stated that they separated themselves from these affected women, because of their limited ability to fulfil their marital roles.They said it is impossible to remain intimate and bonding when there is no sexual activity. One husband said "I cannot tolerate and wait for my wife to be healed; I had to have a mistress outside for sexual satisfaction which also comes with other responsibilities".Husbands emotionally said before their

wives had been treated most of them were living with them as brothers and sisters, i.e., without having any intimacy**.** There was a consensus among the husbands in the Men's Focus Group Discussion that a man who continued living with his wife after developing fistula had to have another woman, and that the wife should understand and accept this. Some women were forced to go back to their parents, and for those who were not divorced, some lived in different houses or rooms.

Stigma surrounding the problem of fistula contributed to the husband's decision to abandon their wives. Husband's explained thatwomen also experienced loss of contact with their friends, parents, and relatives – women reported stopping going to social gatherings such as funerals, church, mosque, parties, and visiting friends and families. Others studies (UNFPA, (2005) reveals that the majority of women hide themselves away from the societal activities because of humiliation. They miss out of crucial information on treatment and support due to a lack of social interaction.

4.7.5 Loss of Dignity and Self Worth: Since the women living with obstetric fistula could not get involved in any economic activities, they became more dependent on others. Women who used to earn money on their own felt particularly bad about being dependent on their husbands. The husbands however talked about this state of dependency as marginal.But losing the status of an adult person and being relegated to the status of a childwas more devastating. Many women hence were concerned that they had no role to play in family or community life. The feeling of being useless seemed to be pervasive and many struggled with self contempt. The husbands furthersaid that the uselessness of the woman with fistula came out strongly, because, healthy sexual life is the source of children and family bonding. The lack of it contributes to women's loss of self-esteem and confidence in their womanhood.

4.7.6 Spoilt Identity: The failures of the women to control urine and/ or faeces, maintain their marriages, bear children, or participate in social economic activities made them loose their identity as women, wives, friends, and community members. Therefore the women tend to see themselves as worthless, incomplete and compared themselves with children. One husband contributed that "adulthood is marked largely by not only managing one's emotions but also

through being able to control body functions". Therefore losing control of bodily functions is embarrassing as an adult. Another husband expressedthat "the cultural expectation of womanhood is embodied in the experience of the individual woman and produces shame and feelings of guilt."

In Kenya, as in many parts of the world, a woman's beauty is associated with not only cleanliness, neatness, and sweet smell, but also with the capacity to assume domestic, marital and social roles. Women living with obstetric fistula are deprived of all these attributes.

4.7.7 Equity: The physical impairment and the social exclusion experienced by women living with OBF have a profound impact on their quality of life. According to Mabeya (2004) the disability adjusted life years evaluation of the health burden associated with maternal ill health including obstetric fistula shows that the years of life lost due to disability is huge considering that the majority of women affected by obstetric fistula are still early in their reproductive phase of life. The women affected by Obstetric Fistula in this study constituted a socially weak group even before their birth injury. They are poor, uneducated, and mostly women in their middle years, married early and lived in remote and poor resource areas with little or no access to emergency obstetric care. Obstetric fistula is a major equity issue both in the way it targets the poor and how it reduces quality of life. Further study; by Ojanuga (1994) reports that families forgo the income previously attributed by the woman, thus reducing the family income.

4.8 Contributions from Key informants Interviews

4.8.1 Community Health worker and leader: The community health worker was quite aware of about 80-100 cases of affected women in Kaptembwa area. She stated that lack of information among women caused them not to seek for treatment in the right time to avoid further complications. But believes there could be a higher number yet to be identified. The silence and shame surrounding the child birth injury locks out the women from seeking treatment. In her community programs she intends to include Reproductive health issues, though the NGO she works for has already funded about 20 women for surgical repair in the hospitals providing the services.

4.8.2. Traditional Birth Attendant: She had the following to contribute. She knows of about 150 cases of women affected by obstetric fistula. She citied social causes: poverty, early marriages and child birth, lack of spacing children and Female Genital Mutilation/Cutting. Lack of training on their part in the past delayed quick referrals to Hospitals and women suffered due to their lack of knowledge. She hopes to include reproductive health programs among the many that are carried out in this area such as HIV/AIDS, Public Health and FGM.

4.8.3 Consultant from Kenyatta Hospital: From an experience of many referred cases. It is a debilitating problem with very significant psychological impact. Most affected cases I have dealt with are women who were not attended by skilled attendants. A number of cases she assisted are from communities that practice early marriages and F.G.M. Causes of fistula the consultant mentioned were: delay in reaching hospital, obstructed labor/prolonged labor, unskilled labor, trauma and accident, surgical injuries, radio therapy, neglection and even cancer.

Obstetric fistula can be prevented by good antenatal and delivery in health institutions. For purpose of reducing occurrence of Obstetric Fistula, the consultant stated health education and advocacy and skilled attendant delivery and stop FGM/Cutting should be addressed. Surgical repair is quite expensive especially to poor women of Kenya. Therefore should be provided at no costs in Government Hospitals and trained specialists available in the same Hospitals. The issue of women waiting for so long should be addressed without any further delay.

4.8.4 Religious Leader Remarks: The causes of this devastating injury that he was aware of are; FGM/Cutting which he is aware is practiced in Kaptembwa, early marriages and child birth, lack of spacing children, obstructed labor, delay in reaching hospital and unskilled birth attendants. As a religious leader he came across few cases as he carried out his pastoral obligations in this area. I referred the cases for assistance in their mission hospitals. The families of the affected women, being members of our churches we were obligated to assist the families in one way or the other. The family members, (children) receive tuition for their education and food allotments. He affirmed just as the women respondents had said of the causes of Obstetric fistula as FGM/Cutting, delay in seeking hospital treatment, lack of information, poverty, early marriages and child birth, lack of family planning, and unskilled birth attendants.

CHAPTER 5

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Occurrence of Obstetric Fistula

1. The awareness of obstetric fistula, particularly amongst the poor women, is neither well quantified nor documented from the medical point of view. This needs to be done.
2. Obstetric fistula prevails amongst women aged between 25 -39 years. The injury may occur at either the first (28%), second (23.9%), third (19.7%) or fourth (28 %) pregnancies. The difficulty of assessing the exact numbers of women affected with obstetric fistula was attributed to it being an embarrassing and humiliating medical condition in our communities, which leads the affected women into silent isolation. Due to this "silence", there is lack of openness &understanding of its prevalence in Kaptembwa, Nakuru. For this reason, the affected women have become invisible clients (or victims).

5.2 Causes of Obstetric Fistula

It was noted that social, medical and economic causes indirectly lead to the development of obstetric fistula: These are elaborated further here below.

Social Economic Causes:

- Up to 95% of affected women stated that **poverty** was a major cause obstetric fistula.
- High levels of poverty also lead to **low levels of education** made impoverished women ignorant about maternal health. This is mainly on pre and post natal care.
- The **lack of pre-natal preparedness** particularly with regard to consequences of delivering large babies; obstructed labor and delays in reaching medical care, increases risks of obstetric fistula.
- Traditions i.e., early marriage and lack of spacing children contributes to development of obstetric fistula. Powerless to access health care services without permission of family members.

Medical Causes:

- Obstructed labor is a major cause of obstetric fistula. Over97% of the affected women experienced more than two days labor duration.
- Up to 52.11 % of affected women had undergone FGM / Female Genital Mutilation/Cutting, while only 47.9% of affected women had not been circumcised (FGM). However, 52 % perceived that FGM contributed to their condition. Only 39 % had undergone type II FGM, which is considered to be severe mutilation, while 12.7 % had undergone type I FGM. This means that contrary to perceptions, FGM may not be a major cause of obstetric fistula.
- Delay by unskilled traditional birth attendant (where over 90 % of women were delivered by them) took too long to make an appropriate decision over the labor situation.

5.3 Impact of Obstetric Fistula

- Obstetric fistula has far reaching effects on physical, social, economic and psychological impact on affected women, their husbands, children and friends. This impact is accentuated by the constant leaking of urine, faeces and blood as a result of a hole that forms between the vagina and the bladder and or rectum.
- Physical consequences lead to sever social cultural stigmatization for various reasons, i.e., foul odor; inability to work, that led them to become beggars.
- Family and women's income was lost through medical care, time taken away from the farm, or stoppage of gainful income.
- The affected women faced despair and humiliation from the stench and inability to perform their family roles.

5.4 Impact of Obstetric Fistula on Economic and Psychological Wellbeing of Affected Families:

- Less than one third of the women who were married when they sustained fistula were separated and divorced as a result of the fistula.
- Affected women isolated themselves from their community due to shame. The women suffered stress and worry, over their families suffering due to their condition.

- The cost and inaccessibility of high quality fistula repair services represented a barrier to care for women.

5.5 Coping Strategies

- Women affected derived their support from parents/family citing it as most important by 94.4%. of them.
- Spiritual prayers were so crucial to the affected women contributing with 87.3% of them stating so. They found solace as they had faith in God sustaining and providing strength day by day.
- The support from spouse was not rated highly, at 19.4% only, because many had opted to remain single.
- Social support was rated by 94.4% as being very crucial. However psychological counseling and physiatrist was not accepted coping strategies.

5.6 Preventive Strategies:

- Access to information about preventative measures was rated by 95.8% by the affected women. They would have coped better with their situation if they were well informed.
- The affected women said if they had access maternal health care, their lives could be healthy and would have sought for treatment much earlier.
- The affected women preferred informed traditional birth attendants and trained health workers and said their charges are cheaper, they are familiar with them and they reside within their homesteads.
- Access to affordable hospital services was very crucial to the affected women; because they considered that they came from poor homesteads that they could not afford to meet the cost of surgical repair.

5.7 Recommendations

The researcher's recommendations according to the results &discussions in chapter four is given below. The condition of fistula is complex and only a combination of approaches and policies would end the phenomenon. This requires well-coordinated, comprehensive, and responsive approaches involving the Government, non-governmental organizations (NGOs), Community Service Organizations (CSOs), the communities and the private sector to embark on the following drives.

1. Our results from stratifying for education suggest that schooling; even basis primary education can reduce the gap in knowledge related to obstetric fistula, and ultimately contribute to prevention of its occurrence. The education gradient has long been known to be associated with better health behaviours and improved health status. Our analysis suggests that keeping girls in schools, especially ensuring that they complete at least primary education contributes to women empowerment, curtails harmful traditional practices such as child marriage, promotes gender equality and reduces incidences of maternal morbidity and mortality including obstetric fistula.

2. Massive awareness campaigns at different levels must address the full reproductive life cycle for girls and women. In addition of this based on our findings from the research, there is need to include discussions on the myriad of complications during early marriage and early pregnancy including obstetric fistula. This will ensure that young women are already empowered with critical information to aid their decision-making when they get pregnant.

3. Strong calls for strengthening inter-sectoral collaboration and linkages between ministries of health, education and social protection, should be deployed, while harnessing the respective contributions of all stakeholders. And a need to revamp sex education as a whole in the curriculum.

4. Health care providers, women and their families need comprehensive information on causes of OBF so that they can be better prepared to help in times of injury during birth.

This includes information on childbirth, the 'danger signs' that indicate obstetric complications, the imperative to take quick action when signs and symptoms of obstetric complications occur. Special priority needs to be given to information channels that reach rural areas and informal settlements areas for example radio broadcasts and informational outreach through Faith Based Institutions.

5. Emergency obstetric services should be provided. The incidence of fistula and impact on maternal mortality could be reduced by expanding the availability of caesarean sections and by ensuring that high quality services are affordable and accessible Opportunities to engage young women should be optimally utilized to enable mainstreaming of obstetric fistula messages into routine services such as antenatal and postnatal care services. Family planning messages should also be integrated during such services.

6. Needs should be determined and embark on massive surgical reconstruction is a must to all affected women. This should be done at no costs in all government hospitals. Just recently in the Month of July, 2014 - free repair was done at Kenyatta National Hospital as African Medical Relief Foundation (AMREF) and other partners gave women a smile again.

7. Re-integration programs for successful re-entry of affected women into social life after repair are recommended. Psychological counselling should be introduced without further delay in all levels.

8. Strong political will and commitment at all levels.

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APPENDICES

Appendix 1: Respondents Research Questionnaire

Instructions:

The interview aims at getting your opinions pertaining to Obstetric fistula in Kaptembwa Ward – Nakuru County. The information you give **IS FOR RESEARCH PURPOSE ONLY.** Be honest as much as possible.

==========

A. SOCIO-DEMOGRAPIC INFORMATION

1. Location …….
2. GenderMaleFemale 3. Age of respondent…….years.
4. Marital Status (a) Single (b) Married (c) Separated (d) Divorced (e) Widowed(f) Others (specify) ……..
5. What is your highest level of Education? a) Primary b) Secondary c) Post-secondary
6. How many children do you have?(a) 1-3 (b) 4-6 (c) 7-9 (d) 10 & over
   (e) None

B. CHARACTERICTICS OF RESPONDENTS.

7. Do you know what obstetric fistula is?
   (a) Yes (b) No
8. How did you get to know about Obstetric Fistula?
   (a)Hospital (b)Local community programs (c)Chief Barazas (d) Traditional Birth Attendants
9. What are the ages of your children?
   (a) 1-3(b) 4-6 (c) 7-9(d) 10 & above.
10. At what age did you have your 1st Child?
    (a) 15-19 (b) 20-25 (c) 26-30 (d) 31-35(e) 36-40 (f) 41-45 (g) 45-50
11. Do you consider your first delivery to be a cause of Obstetric fistula?
    (a) Yes (b) No
12. Which age do you consider of having a first child critical in causing obstetric fistula?
    (a) 10-13 (b) 14-16 (c) 17-20

13. What type of delivery did you undergo? How many times did you undergone and Number of deliveries.

(a) Caesarean Section YES/NO(a) 1-3

b) Normal birth YES/NO (a) 3-4 (b) 4-6 (c) 7-8

c) Both YES/NO All (a) 6-8 (b) 7-10

14. Where did you deliver your child? a) Hospital b) Home c) Others (specify)

15. At what stage did you experience obstetric fistula? (a) First Delivery (b) second delivery (c) Third delivery (d) others

16. What was the duration of your obstructed labor that prompted obstetric fistula?

(a) Two – four hours (b) One day duration (c) over two day's duration.

17. What do you consider to be the possible cause of your condition?

(a) Obstructed labor (b)Big infant (c) FGM/Cutting

18. For how long have you being living with obstetric fistula?

(a) Less than 1 year (b) 1 year to 2 years (c) 3 years to 5 years (d) 6 years to 8 years (e) 10 years and above.

19. Which age group of women in Kaptembwa do you consider to mostly affected by Obstetric fistula?(a) 10-20 (b) 31-40(c) 41-50

20. Have you undergone FGM/C?(a) Yes (b) No

21. If yes, in the above question please explain which type

(a) Type I: Removal of the clitoral hood. (b) Type II: removal of the clitoris with complete removal of the labia minora. (c) Type III: removal of all part of the vagina and stitching of the vagina leaving a small opening for the passage of urine and menstrual blood. (d) Type IV: Other miscellaneous acts, cauterization of the clitoris, cutting of the vagina and introducing corrosive substances into the vagina to tighten it.

22. Would you consider FGM to have been the cause of your Obstetric fistula?

(a) Yes (b) No

C. CAUSAL FACTORS AND IMPACT OF OBSTETRIC FISTULA

23. In a scale of 1 (least serious) to 5 (most serious) rate the following social and medical causes of obstetric fistula.

A) Social Causes - Score (on scale of 1-5)

(1) Poverty (2) Lack of academic education (3) Lack of awareness (4) Early marriages and childbirth (5) Malnutrition (6) Rape (7) Curse (8) All the above

B) Medical Causes – Score (on scale of 1-5)

(1) Obstructed labor. (2) Untrained Traditional Birth Attendants. (3) FGM/Cutting.

(4) Lack of quality maternal health care.

24. Do you face the following physical and psychological problems? How do you rate? them in a scale of 1(least serious) to 5 (most serious)?

A)Physical Impact YES/NO - Score (on scale of 1-5)

(1) Urinary or faecal incontinence. (2) Foul smelling. (3) Repeated vaginal or urinary tract infections. (4) Irritation or pain in the vagina or surrounding areas (5) Pain during sexual activity.(6) All the above.

B) Psychological Causes YES/NO Score (on scale of 1-5)

(1) Humiliation. (2) Abandonment (3) Stigmatization (4) Loneliness (5) Separation (6) Divorce. (7) Despair.

25. What are some of the perceptions of women on causes of Obstetric fistula? In a scale of 1-5 (I – least serious and 5 most serious)

Perceptions - Score (in a scale of 1-5)

(1) Use of instruments during delivery. (2) Care provider's fault. (3) Woman afraid of pushing (4) Insertion of hands in the vagina. (5) Operation during child birth (Caesarean). (6) Operation during FGM/Cutting. (7) Delayed/Prolonged delivery. (8) Delay in reaching hospital. (9) Bewitched.

26. Do you consider the following beliefs are a cause of obstetric fistula?

Beliefs - Yes/NO

(1) Parental Curse. (2) Generation (family) curse. (3) Social curse (witch craft). (4) Divine Punishment form God (sin).

27. How well can you describe your accessibility to treatment of obstetric fistula? Explain Briefly:

Level of access to Obstetric fistula	How or through which means	% means of dependency
Yes	Personal Fund Donations(Harambee) friends/family/both Donations by charity organizations (church/NGO/Government/individuals/all	
None at all		

28. Have your children undergone the following difficulties? In a scale of 1(least serious to 5 (most serious) what negative impact have the difficulties been to your children.

Negative impacts on children	Yes	No
Taking up their mother's position as the care giver		
Social stigmatization that leads to i) ridicule ii)Marginalization iii) sorrow of children iv) lack of affection (care)		
Separation of parents that lead to economical disenfranchisement – i) Inadequate feeding ii) lack of social security iii) lack of proper schooling(missing class).		
The uncertainty of life due to –i) lack of household income and ii) lack of funds to support academic education and social activity.		

29. In your opinion can this disease economically impair someone?

(a) Yes. (b) No

30. If yes - which economic hardship have you experienced?

What Type of economical hardship? Explain

(1) Unemployment. (2) Difficulty in Business Progression. (3) Lack of credit (4) Discontinuation from gainful employment (self).

31. In your view, do you agree with the statement that the majority of the womenthat suffer obstetric fistula are poor?

Statement - Score (in a scale of 1-5)

(1) Strongly disagree. (2) Disagree. (3) Agree. (4) Strongly agree.

32. In a scale of (1 least important) to (5 most important). What are the major losses have you experienced?

Major Losses - Score (in a scale of 1-5)

(1) Loss of social life as a woman and wife due to being unclean and undesirable.

(2) Loss of body control. 3) Loss of integration in social life. 4) Loss of dignity and self worth.(5) loss of ability to work.

D. COPING STRATEGIES

33. In a scale of (1) least important) to 5 (most important). What is the survival or coping strategies you did develop to manage your condition?

Coping strategies - Score (in a scale of 1-5).

(1) Counselling. (2) Support from parent/family. (3) Support from community. (4) Support from spouse. (5) Support from spiritual prayers. (6) Use of modern technology (e.g. diapers). 7) Others.

34. In a scale of 1(least important) to 5 (most important). Which strategies would you propose? At the three levels of prevention, treatment and policy.

A) Preventive Coping Strategies - Score (in a scale of 1-5).

(1) Awareness on the causes of Obstetric fistula. (2) Access to information about preventive measures. (3) Access to maternal health care (pre-natal). (4) Post-natal. (5) Access to inform Traditional Birth Attendants. (6) Low affordable hospital funds.

B) Treatment – Score(in a scale of 1-5).

(1) Access to appropriate information on self- care. (2) Access to medical (surgical) repair. (3) Accessing to Counselling – (i) psychological (ii) Spiritual. (iii) Social support system. (iv) Psychiatric treatment.

c) **Government Interventions (Policy) & NGOs/CBO – Score (in a scale of 1-5).**

(1) Providing necessary availability of maternal health care for women. (2) Education on Sex and Reproductive health. (3) Enabling women have access to appropriate, affordable and quality health care through: (i) Provision of funds to meet costs. (ii) Provision of mobile clinics to the rural areas. iii) More informed traditional birth attendants. (iv) More trained health community workers.