# The Prevalence and Impact of Obstetric Fistula on Women of Kaptembwa – Nakuru, Kenya

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# Abstract

Despite of increased attention on maternal health in recent decades, the disability and suffering of obstetric fistula patients remains a neglected issue in global health. Most instructive in this respect, is the continuous leakage of urine as well as the physical, emotional and social suffering associated with it, which has a profound impact on women and men's livelihoods. Considering the suffering of families associated with this disease, it was found imperative to evaluate the prevalence of obstetric fistula on 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 using cross sectional study with qualitative and quantitative components to explore the prevalence, experiences and impact of obstetric fistula. Grounded Theory was used to investigate the prevalence of obstetric fistula in kaptembwa and explore how the condition has impacted on the affected women and their families. 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. Obstetric fistula has far reaching effects on physical, social, economic and psychological impact on affected women, their husbands, children and friends. 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 potentially risks of obstetric fistula particularly amongst people residing in rural areas 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 centers.

Keywords: Obstetric fistula, prevalence, impact, Women, Nakuru

# Introduction

During most of the 20<sup>th</sup> century obstetric fistula was largely missing from the international global health agenda because according to Wall et al, (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 Abou Zahr, (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) referred to fistulae as the single most devastating morbidity of neglected child birth. (Abou Zahr, (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 (UNFPA) 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. 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.

# The Prevalence of Obstetric Fistula

The prevalence rate is quite high that every year in Addis Ababa Hamlin Hospital 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 2000, eight Millennium Development Goals (MDGs) were adopted after the United Nations Millennium Summit to be achieved by 2015. The fifth goal of improving maternal health is directly related to obstetric fistula. Since 2003, obstetric fistula has been gaining awareness amongst the general public and has received critical attention from UNFPA, who have organized a global "Campaign to End fistula." (UNFPA, (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 UNFPA'S Campaign to End Fistula, and helped motivate the United States Agency for International Development (USAID) to dramatically increase funding for the prevention and treatment of obstetric fistula.

Countries who signed the United Nations Millennium Declaration have 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, UNFPA 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 UNFPA 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." (UNFPA (2012).

One of the UNFPA's initiatives to reduce the cost of transportation in accessing medical care provided ambulances and motorcycles for women in Benin, Chad, Guinea, Guinea-Bissau, Kenya, Rwanda, Senegal, Tanzania, Uganda, and Zambia. (Michael et al, (2011)

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

# Impact of Obstetric Fistula on Physical Wellbeing 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.

Michael, (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.

# Impact of Obstetric Fistula on Social Wellbeing of Women

Physical consequences of obstetric fistula lead to sever socio cultural stigmatization for various reasons. 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 & UNFPA, (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. (UNFPA, (2008).

# Impact of Obstetric Fistula on Economical Wellbeing 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 studies reveal 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, 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.

#### Impact of Obstetric fistula on Psychological Wellbeing 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).

# Materials and Methods

#### **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.

#### **Target Population**

The study population consisted of women that have being living with obstetric fistula, and their families. Key informants were interviewed and gave information on the prevalence, causes and impact. In addition to what is being done to mitigate this problem.

#### **Research Design**

The study adopted a cross sectional survey using qualitative 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).

# Sampling Procedure and Sample Size

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.

Snowballing 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. A sample of 120 respondents was appropriate for this study. This is in accordance with Kathuri & Pals (1993) who recommended 100 subjects as ideal for a survey research in social sciences. The extra 20 is necessary to take care of non response and drop outs.

# **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 and answers recorded.

# 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.

# 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 this trial run, a preliminary study was carried out and the information obtained was used to evaluate the following.

a)Informants reactions to the research procedures: a) Availability of eligible informant's day of the week, time of the day, and meeting place; acceptability of questions asked; and willingness of informants to participate in the study. b) Quality of data tools, whether with the available tools the data could be adequately collected, recorded and filed as planned? Whether or not the data collected was of acceptable standard in terms of relevance, validity and reliability.

#### **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. The researcher carried out an in-depth interview with the 3 women as case studies from the three areas in the location. Training of enumerators for pretesting of survey instruments were done prior to main data survey collection period.

#### 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.

#### **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.

# **Results and Discussion**

#### Prevalence of OBF in Women of Kaptembwa Nakuru Kenya

Kaptembwa location has three administrative clusters namely Kaptembwa, Mwariki and Githima, in Nakuru County which is densely populated with approximately 122,604 people, with infrastructure that is mostly informal (Kenya National Bureau of Statistics, 2010). Kaptembwa is predominately inhabited by all communities with Kisiis being the dominant community. The overwhelming majority of women living in this location have primary education and few have secondary education. People who live here are low income earners and non employed persons, engaged in small businesses. All the communities living here are namely Kisii, Kikuyu, and Kamba, Borana, Kalenjin and others practice early marriages and female genital mutilation/Cutting.

From amongst the 74 affected women evaluated in this study, 78.9% of them perceived that the disease affected 40-60% of the women in Kaptembwa, while 21.1% believed that Obstetric Fistula was very prevalent at over 80% (Fig.5). However, women in churches posed with the similar question were totally ignorant of obstetric fistula prevalence. The lack of concurrence in perception on prevalence of OBF between affected and church going women can only be attributed to the secrecy amongst those affected; due to the stigmatization associated with OBF. The offal smell emitted by affected women, causes most of them to prefer to avoid social/communal gatherings such as churches, weddings, etc. For this reason, they are also less likely to disclose their OBF status to church authorities and members.

It is apparent from this study that the real status of affected women is not well known in the church, even though some attend. The study therefore concurs with the study of Semere& Nour, (2008) that indicates obstetric fistula is a prevalent disease with most of those who are suffering from it being silent about it because of the stigmatization and humiliation that comes with the disease. There is a need to bring awareness of this condition to church going members who can help them to cope and guide them to professional treatment.

It is noted from this study that OBF being a silent condition, its prevalence is not well quantified from medical point of view, particularly amongst the poor women. In Africa, most studies on fistula are hospital based and report incidences ranging between 0-6 and 3.5/100 deliveries. (Prual, (2000) & Ijaiya, (2004). It is recommended that further investigations be conducted in future to ascertain the medical condition of OBF in Kaptembwa. This can be achieved through concerted efforts on advocacy on the importance of all pregnant women going for prenatal clinics and others women, (especially the teenage girls) going for periodic gynecological checkups.

Local county governments should provide supportive structures, i.e., counseling clinics to enable affected women to gain confidence in the established structures to enable them share/consult about their condition confidentially and or openly, as in the case of handling HIV/AIDS. Most of the respondents 78.9% think that obstetric fistula is averagely prevalent with 21.1% thinking that the disease is very prevalent. The study therefore establishes that obstetric fistula is a prevalent disease with most of those who are suffering from it being silent about it because of the stigmatization and humiliation that comes with the disease.



Figure 1: Perception of prevalence of OBF in women of Kaptembwa Nakuru Kenya.

Out of the 74 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 35.65% 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?

# Table 1: Women who had the Knowledge of Obstetric Fistula

	Frequency	Percent
Yes	69	97.2
No	0	
Missing	2	2.8
Total	71	100

According to table 2 above, 97.2% of those who were interviewed are aware (have knowledge of what Obstetric fistula is), while 2.8% of the respondents did not respond to the question. When the women were asked about how they came to learn about obstetric fistula, the response is as shown in Fig.8 below.



The time when affected women respondents came to first learn of their OBF condition is depicted in Fig. 7 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 3: Stage when the respondent experienced obstetric Fistula.

The stage at which women considered to have their first experienced OBF is given in Fig. 8 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 1<sup>st</sup> birth was attributed to early pregnancies occasioned by early marriages, associated with other reasons such as unskilled birth attendants (Table 7); 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.

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Perception of critical	age of woman at 1st birt	h likely to		
cause OBF		Frequency	Percent	
14-16 years		3	4.2	
14-20 years		68	95.8	

Table 2: Perception of the Critical Age a Woman at 1<sup>st</sup> Child Birth Likely to Cause OBF

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 1<sup>st</sup> birth that is likely to incur OBF was perceived to between 14 and 20 years (Table 3) by women in Kaptembwa, Nakuru.

71

100.0

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. 9). 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.

Total



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.

# 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.

#### 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 5: 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 10). 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 10) .This low rating was because the affected women never engaged in sex.

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%

<b>Table 3: Rating of Physical Problem</b>	ns
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#### 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 11 below.

#### **Table 4: 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

#### Impact on the Economical Wellbeing 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 12). Ninety seven (97.2) % of women affected agreed with the fact that Obstetric Fistula economically impaired them (Table 12). The respondents who did not respond to this question were only 2.8 %.

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

Table 5: Women Affected with OBF were Impaired Economically

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 which leads into isolation and withdrawal from social activities (Fig. 17 below).

# 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 13).

Because of lack of awareness that the disease can be treated, 38%, of the affected families; (lived with Obstetric fistula for over ten years), reported that their children experienced effects of separation and thus; uncertainty of life. 43.7% agreed that children faced social stigmatization.

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 6: Effects of Parent's Condition on their Children

# Emerging issues from Case Studies and Focus Discussion Group

Table 19 shows the rating of the major losses that the 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.

	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	0	0	0	0	0
Important					
Important	0	0	2.8	0	0
Most	]				
important	97.2	97.2	94.4	97.2	97.2

# Table 7: Major Losses Experienced Loss of Body Control

Smell, wounds, pain and discomfort which brings continuous leaking or urine and or faeces was an extremely trying experience. Rael states "When you sleep and wake up all your clothes are wet, when you work it flows on its own, the skin becomes so sore, that at times I could not even walk."

The smell, rashes, itching, peeling of the skin and sores were common experiences and part of everyday life. To some the pains were so severe that it hindered their daily activities and movements. For all the women, the smell of urine was intolerable and a constant source of embarrassment causing women to withdraw from social life. Grace explains how she tried to contain the smell and in so doing causing more harm: "I tried using water mixed with dettol to clean the vagina, but eventually I ended up developing bruises and sores, I could not even walk".

# Loss of the Social Life as a Woman and Wife

Living with fistula for years, and hence continuous leaking of urine and symptoms associated with it, obviously 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 pain of being seen as unclean and sexually undesirable was a shared experience. The husbands presented the problem more as one of lack of sexual interest on the part of their wives. However, they also reported lack of desire to have sex with their affected wives. The women reported that their husbands sometimes had sex with them out of pity, and other husbands were worried about their wives becoming pregnant again and therefore decided to abstain totally.

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."

# **Inability to Attend to Daily Commitments**

Women reported to experience general body weakness, which reduced their capacity to carry out their day to day responsibilities. Because of this experience, some women did not have the courage to go back to their homes after they developed acute fistula symptoms (i.e., scratching, foul odor; leakages of urine and feaces).

One woman observed that, she could not return to her husband because "I am unable to carry out my daily duties"..... "I have just been staying at my mother's house, I only clean my toilet rags and my sister's daughter washes my clothes".

Most of the women spoke of their inability to carry out domestic chores or earn a living through farming, business or employment. 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 commonly 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 for almost all of them. One woman who had fistula for 8 years had this to say "....Before, I was able to earn a living on my own. I was working in other people's houses as a maid. For now I cannot work for anybody because I am afraid of staying in people's houses... I am just afraid.... of soaking other people's beds". Consequently, because she could not farm, the work force of the household was reduced. 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. Further study; by Ojanuga (1994) reports that families forgo the income previously attributed by the woman, thus reducing the family income.

# Loss of Integration in Social Life

Women living with obstetric fistula frequently described rejection by their husbands and family members. Women explained that the problem of fistula had separated them from their husbands because it limited their ability to fulfill their marital roles. In this study, women had strong negative feelings over their inability to have sex with their husbands and partners, largely because of their need to have children, as well as their need to reaffirm intimacy and bonding. Lita, (2008) states a patient's inconsistence and pain also render her unable to perform household chores and child bearing as a wife and as a mother, thus devaluing her. Grace recalls her husband telling her: 'I cannot tolerate and wait for you to be healed" ... I feel that the inside of me is rotten".

Husbands on the other hand, explained that their wife's status has changed because of the inability to have sex with them. During the discussion, husbands emotionally said before their wives had been treated most of them were living with their wives as brothers and sisters, i.e., without having any intimacy.

Some women were forced to go back to their parents, and for those who were not divorced, some lived in different houses or rooms. 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. Stigma surrounding the problem of fistula contributed to the husband's decision to abandon their wives.

Women 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. One woman said that, "she longed to go to her children's homes to hold and get close to her grandchildren, but she could not do so which left her very lonely." The experiences of women keeping a distance from others were not only linked to being devalued and excluded by other people. Affected women had turned to hiding and running away from others, by sitting at one end of the house. 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.

# 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.

They explained that it was like losing the status of an adult person and being relegated to the status of a child, which is 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.

Discussions with the husbands, said 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.

The women were also deeply concerned with their inability to keep clean and look neat. They always had to wrap themselves in old kitenges avoid ruining their clothes. For some the feeling of being insignificant was so intense that they did not feel complete as women. Low self-esteem, firstly as a woman and secondly as a human being, was the outcome of living with obstetric fistula.

# **Spoilt Identity**

The individual, family, and social-cultural experiences women living with obstetric fistula go through fundamentally destroy the women's identity. The failures of the women to control urine and/ or faeces, maintain their marriages, bear children, or participate in social economic activities make them loose their identity as women, wives, friends, and community members. Therefore the women respondents tended to see themselves as worthless, incomplete and compared themselves with children. Adulthood is marked largely by not only managing one's emotions but also through being able to control body functions.

Losing control of bodily functions is embarrassing as an adult. The cultural expectation of woman hood 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.

#### 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 OBF. 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.

# **Conclusions and Recommendations**

#### **Prevalence of Obstetric Fistula**

- 1. The prevalence 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. However, in the current study, 78.9 % of the affected women surveyed, perceived that OBF was prevalent in more than 50 % of all women in general.
- 3. 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).

#### **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.

# 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.

#### Recommendations

The researcher recommendations according to the results & discussions in chapter four is given below.

- 1. Public education and interventions to mitigate the risks of fistula must address the full reproductive life cycle of girls and women. For this reason, community education efforts must inform people that all women are potentially at risk of obstetric fistula. Information is essential regarding the danger signs during delivery as well as the importance of having a plan to get rapid access to a facility that can perform caesarean section. Information on where and when fistula repair are available needs to be widely disseminated. 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 such as churches and mosques. Key stakeholders in communities as well as health care workers at peripheral facilities who can facilitate referrals should also receive this potentially lifesaving information. We see a reduction of maternal injury and mortality when women have access to education and when they are better able to make choices about their bodies and reproduction.
- 2. Further studies to ascertain the prevalence of OBF is necessary. This can be done at the pre and post natal clinical stages by TBA and conventional clinics / hospitals.
- 3. 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,
- 4. Provision through adequate planning, of provision of resources and emergency transport plans to hospitals. Delivery kits should be made available at health care facilities for all expectant mothers; training health care workers to perform caesarean sections; and providing consistently the supplies and equipment needed for emergency obstetric care (EMOC) services. Enabling women to access family planning services can greatly reduce their chances of developing obstetric fistula.
- 5. 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. This includes ideally funds for transport to the facility, the cost of treatment, and the cost of transport home. Fistula programs have an ethical obligation to develop mechanisms to such support, so that advocacy on fistula does not raise women's expectations for treatment when treatment is beyond the reach of those living with fistula. Sources of financial support might include, for example allocations from District Health budgets, donor findings as part of a County fistula program or special project, and in kind and financial support from Faith Based Institutions and nongovernmental organizations. The financial and logistical barriers to services must be eliminated.

- 6. Advocacy, support and reintegration efforts should be instituted to reduce the emotional and economic impacts of fistula. The findings of the study suggest that positive illustrations of support from family, friends and communities can be enhanced by use in public education and advocacy efforts to break the stigma around fistula. Promoting sexual and reproductive rights should be promoted by the county governments. This will contribute to improved maternal health, which is the fifth Millennium Development Goals.
- 7. Re-integration programs for successful re-entry of affected women into social life after repair are recommended. However, further research is needed in this area. Re-integration efforts should be mindful of differing needs of women who have had fistula for a long time vis-à-vis those living with fistula for shorter periods.

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