DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK

DYNAMICS OF SOCIAL REINTEGRATION OF WOMEN AFTER OBSTETRIC FISTULA REPAIR IN KENYATTA NATIONAL HOSPITAL, NAIROBI

BY: PAULINE BUY0KI NYAKUNDI

C50/81842/2015

A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS IN SOCIOLOGY (MEDICAL SOCIOLOGY), UNIVERSITY OF NAIROBI.

2018

DECLARATION

This research report is my original work and has not been presented for a degree award either in part or wholly in any other institution for any purpose.

Signature: ……. Date: ……

PAULINE BUYAKI NYAKUNDI

C50/81842/2015

This research report has been submitted for examination with my approval as the University Supervisor.

Signature: ……. Date: ……

Dr. MUMBI MACHERA

University supervisor

DEDICATION

To my late dad Peter Nyakundi, my mum Eucabeth, my siblings Millie, Dun, and Hellen and the Oguye family for their constant assistance, love, encouragement and support to this study emotionally and financially.

ACKNOWLEDGEMENTS

I thank God the Almighty for life, a chance to study, the provisions, strength and good health. My sincere gratitude goes to Dr. Mumbi Machera for her guidance and constant support in the entire process of this study that has enabled me to gain knowledge that makes me a better researcher beyond this degree. My sincere gratitude to all respondents of this study for cooperating and providing valuable information that made this study possible.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

Obstetric fistula refers to an injury to a woman's pelvic tissue caused by obstructed, prolonged and unrelieved labour which can last up to several days. It is characterized by the presence of a hole between the vagina and bladder or vagina and rectum or both. This condition leads to total incontinence resulting in the passage of urine and/or faeces from the vaginal opening. Thus, it is a life changing condition and women suffering from the condition are likely to be stigmatized. Fistula is also associated with social problems such as stigma, isolation divorce among others as well as psychosocial problems such as depression, anxiety, sexual, fertility, and future childbearing challenges like inability to give birth and regulated birth interval. The above factors further contribute to survivors' failure to seek treatment. This study was conducted to assess the dynamics of social reintegration of obstetric fistula survivors after repair in Kenyatta National Hospital, Nairobi, Kenya. The general objective was to establish the reintegration strategies employed to restore social functioning of fistula survivors. The study also sought to determine the effects of fistula on the survivor's social life and how they cope, to establish the needs of fistula survivors and how they define their reintegration process and to assess the challenges encountered in the process of reintegration. During the study, a descriptive research design was adopted. Questionnaires and interviews were used to collect both qualitative and quantitative data. The study population comprised of 36 survivors and 20 key professionals and community informants. Stratified random sampling and purposive sampling techniques were used to acquire the sample of the survivors and key informants respectively. The results showed existence of reintegration efforts through post-operative services that are offered in the facility although their implementation is constrained by inadequate specialised personnel which in turn limits the survivors' knowledge of the existence of such services. The study discovered various coping strategies that are utilized by the survivors such as self acceptance, high level of hygiene, religion, financial assistance, and food avoidance to cope with social, psychological and economic effects of obstetric fistula. In conclusion, the study established that for successful social reintegration of fistula survivors, different players who include the survivor, professionals, family members, and community members have different roles to play to help the survivor regain their social functioning. The study recommends an introduction of a comprehensive program that will engage the stakeholders to aid the survivors to actively participate in the community and undertake their social roles after the repair. Health policy and particularly the reproductive health policy should be reformulated to deliberately disseminate information on fistula in the existing safe motherhood initiatives to increase awareness.

.

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

The United Nations Population Fund (UNFPA) (2002) describes obstetric fistula as,

> "A childbirth injury that has a distressing effect on women and girls who are affected. It is typically caused by obstructed labour, that is prolonged, devoid of suitable medical intervention—usually an emergency Caesarean section. For the duration of prolonged, unassisted, obstructed labour, the continuous force of the baby's head on the mother's pelvic bone injure the soft tissues, forming a hole, or fistula, between the vagina and the bladder and/or rectum. Blood flow to the tissues around the pelvic bone is limited due to the continuous pressure, leading to necrosis. The dead tissue ultimately comes away, leaving a fistula, which results to a continuous seep out of urine and/or faeces through the vagina."

Obstetric fistula is a hurt to the pelvic tissue resulting from obstructed, extended and unmitigated labour that can last for several days. Basically, it is an opening between the vagina and bladder or rectum or both that leads to incontinence of urine and/or faeces from the vagina and this alters the life of women in the third world countries due to stigma that is attached to this condition – a problem that has not existed in the developed world the last century (Roush *et al.*, 2009).

Besides incontinence of urine and/or faeces fistula can be directly linked to other lifetime psychological and social problems related to isolation and shame (Yeakey *et al*., 2009). Women may perhaps be cut off from their family and community, separated, unable to find an occupation or join in community dealings due to their state. Women living with fistula receive condemnation from the community members for their condition which is interpreted as a venereal disease or punishment for sin or a curse. Moreover, fistula is connected to psychosocial problems such as anxiety and, depression which may additionally contribute to failure to search for treatment. Other challenges related to Fistula include sexual problems, fertility challenges, and subsequent childbearing concerns such as period before birth, reoccurrence of the injury, capability to conceive, among others (Arrowsmith *et al*. 1996, Wall *et al*. 2005, Yeakey *et al*. 2009).

Living with obstetric fistula is fraught with challenges. First, women must be willing and ready to undergo corrective surgery within an environment whose support is not always guaranteed. Thus healthcare seeking among these women is likely to be negatively influenced and causes delays in seeking care. In a recent study that was conducted at a hospital in western Kenya, 35% of respondents reported experiencing incontinence for a period of one to five years and a further 19% reporting suffering from incontinence for more than five years (McFadden *et al*., 2011).

In poor countries, Obstetric fistula is largely caused by a very long or obstructed labour to limited access to adequate obstetric care. Continuous force of the baby's head upon the pelvis significantly reduces the blood flow to the soft tissues adjacent to the bladder, vagina and rectum. Upon the endurance of this sort of labour by the mother, the fetus dies and progressively rots to sufficiently come out through the vagina. The injured pelvic tissue also decays away, resulting to hole, or a fistula, between bordering organs. Timely obstetric care of such a situation entails a caesarean section which allows both the mother and the baby to survive. Besides obstructed labour, fistula may be caused by the complications of unsafe abortions, sexual abuse and rape, harmful traditional practices and surgical trauma that mostly injure the bladder during caesarean section. In developing countries, gynecological cancers and related radiotherapy treatment are a rare cause of this condition (WHO, 2004).

Globally, it is estimated that more than two (2) million women are living with obstetric fistula with an additional 50,000 - 100,000 new cases each year (WHO, 2005, 2010). This estimation is among women in poor countries in sub-Saharan Africa, Asia, the Arab region, and Latin America and the Caribbean. Furthermore, there are an estimated 50,000 to 100,000 new fistula cases each year. Kenya is estimated to have 3000 women and girls who develop fistula every year where the accumulation of those living with fistula that is untreated is estimated to range between 30,000 to 300,000 cases. Only 7.5% of women with fistula are able to access treatment (UNFPA, 2004). In the developed countries, women with obstetric fistula suffer majorly from rectovaginal fistula (RVF). This injury is related to episiotomy and forceps or vacuum extraction of the baby from the vagina. Over 80% of rectovaginal fistulas in the United States of America are obstetric and preventable or treatable (Wall, 2006).

Many studies on obstetric fistula at the global level have focused on the surgical approaches with concentration on the period between surgical repair and healing (Ministry of Health Kenya, UNFPA, 2004). In Kenya, studies regarding fistula include; "Factors Associated with Obstetric Fistula Repair Failures" (Ruiru, 2017), "Social Reintegration Of Women Undergoing Fistula Repair in AMREF Sentinels in Kenya" (Kimani, 2013), which focused on the knowledge, attitude, and behavior of women undergoing fistula repair to provide an estimate of successful reintegration level, "Depression among Women with Obstetric Fistula in Kenya" (Khisa et al., 2011), "Characteristics of Women with Obstetric Fistula in The Rural Hospitals in West Pokot" (Mabeya, 2004) which highlighted the need to address the factors that cause obstetric fistula such as early sexual debuts (marriages), low literacy levels, malnutrition ,and poor access to Emergency Obstetric Care (EmOC). Orwenyo (1984) found that in Kenyatta National Hospital (KNH), 36.6% of the fistula survivors were women who are pregnant for the first time (primigravidas) and they made up the bigger group of patients who developed obstetric fistula. This study will complement the above studies in Kenya by documenting the effect of fistula on the quality of life of the survivor before, during, and after repair, alongside the coping strategies used to address challenges of fistula and the survivors' perception on social reintegration after the repair.

1.2 Problem Statement

Women in low-income countries, have little access to proper surgical care for repair owing to the few health facilities available with repair services and absence of surgical training for fistula repair. Besides these barriers to repair, multiple other factors affect women's care seeking for fistula repair such as great distances to health facilities, high cost of travel to facilities, and high costs of services. Additionally, awareness among women on the availability of treatment may be lacking coupled with lack of power to make decisions and negative attitudes to care seeking constitute to the barriers. Moreover the large buildup of women requiring repair along with limited existing surgeons and personnel, women may experience lengthy waits awaiting repair (Wall *et al*., 2005; Ramsey *et al*., 2007).

Generally, it is reported that surgical treatment of fistula is successful, although there is some degree of long-standing evaluation that is required to ascertain urinary continence (Creanga *et al*., 2007). In Kenya, surgical treatment as an intervention for fistula patients is currently ongoing with great success (UNFPA, 2013). After surgery and discharge from hospital, the women often return

to the community in which the social setting had created conditions of stigma and discrimination. Thus, the women have to navigate this social environment in order to gain social acceptance which is not easy. Coping strategies to be utilized within the family and community in supporting fistula patients are yet to be investigated comprehensively (Khisa, 2016). Kenyatta National hospital as an institution serves a large number of fistula survivors from its routine repairs. This gives this study a foundation in which to seek and find out existing strategies in place that help the survivors deal with the consequences of fistula after the repair upon discharge, the survivors' reintegration needs, and opinion on successful reintegration strategies to be utilized in the individual, family, institution, and community level.

1.3 Research Questions

1. What are the effects of fistula on individual lives of the survivors repaired in Kenyatta National Hospital?
2. What are the coping strategies employed by fistula survivors in Kenyatta National Hospital?
3. What are the needs of fistula survivors in Kenyatta National Hospital?
4. What is the perception of social reintegration process in Kenyatta National Hospital from the fistula survivor's point of view?
5. What are challenges experienced in the reintegration process of fistula survivors in Kenyatta National Hospital?

1.4 Objectives of the Study

General objective

To establish reintegration strategies employed to socially reintegrate fistula survivors after repair in Kenyatta national Hospital.

Specific objectives

i. To determine the effects of fistula on individuals social life.
ii. To find out the coping strategies employed by the survivors attending Kenyatta national Hospital.
iii. To establish the needs of women suffering from fistula and how they define their reintegration process.

iv. To assess the challenges encountered in the process of reintegration of fistula survivors in Kenyatta national Hospital.

1.5 Justification of the study

In 2004, the government of Kenya in collaboration with UNFPA conducted a fistula needs assessment and provided recommendations for short, medium, and long term interventions. Much effort has been put on the short term interventions which include offering subsidies and provision of supplies, lifesaving skills, and supervision system of behavior change. Some facilities have reached a capacity of 500 repairs annually. Nonetheless, there are still few trained specialist and still prevention gaps exist. After the medical rehabilitation of fistula patients through corrective surgery, the women are discharged from the hospital and go back home to the community. In many occasions, the women experience stigma due to the foul smell that make them uncomfortable around people leading to seclusion from the public, thus leading to loss of social ties with other members of the community. Social reintegration of the survivors is therefore very important to enable them regain social functioning by enhancing their participation in social and development activities in the family and community at large. This study sought to establish the reintegration strategies beyond the medical repair, the challenges experienced in the reintegration process, as well as seek the opinion of the women on how they wish to be supported as they embark on their roles as expected by the society.

This study is beneficial in enhancing the understanding of challenges caused by fistula and the coping strategies employed in response to these challenges as opined by the fistula survivors. The report provides useful information in provision of guidance on the development of an intervention program that is tailor made to the needs of fistula survivors within the facility. This report further proposes suggestions on reevaluation of fistula policies in Kenya. The study benefits the Ministry of Health in Kenya since it guides the development of a definite structure of rehabilitation and reintegration of the survivor leading to improvement on the existing safe motherhood programs as well as improved maternal health. The society at large benefits from this study through acquiring knowledge on how to handle fistula survivors and include them in the social activities leading to strong ties among its members.

1.6 Scope and limitation of the study

The study only included women in Kenyatta National Hospital who have undergone fistula repair and thus exclude those who have not undergone the procedure. It involved only the professionals and community members who have directly interacted with the survivors. The limitations of the study were a small number of respondents who were able to honor their appointments to revisit the facility were considered and those who did not return were left out. The study only sought to establish the dynamics of social reintegration of obstetric fistula survivors in Kenyatta National Hospital and thus information yielded may not be used for generalization.

1.7 Operational Definition of Terms

Obstetric Fistula - A fistula resulting from the process of childbirth or its management which includes the following types:

- Vesicovaginal (VVF) fistula occurs between the bladder and vagina,
- Rectovaginal fistula (RVF) occurs between the rectum and vagina,
- Urethrovaginal fistula occurs between the urethra and the vagina,
- Ureterovaginal fistula occurs between the distal ureter and vagina
- Vesicouterine fistula which occurs between the uterus and the bladder

Reintegration - The restoration of an individual from a dysfunctional to a functional state so as to fit in the society

Social reintegration - This is the process of applying interventions so as assist fistula survivors to actively participate in community activities

Survivor - A woman who has had a near death experience of obstructed labour

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter contains the review of existing literature on social reintegration of fistula. The areas of review included: history of fistula, the global view of obstetric fistula, the current situation of fistula, fistula in the developing world, causes of fistula in the developing world, consequences of fistula necessitating social reintegration after repair, and fistula situation in Kenya. It also provides a theoretical framework utilized by the study which is the social ecological model that explains the individuals' transactions with the physical and socio-cultural surrounding.

2.2 History of Fistula

Evidence to the oldest and earliest case of obstructed labor was found in Queen Henhenit remains. She was King Mentuhotep II's wife, the Egyptian queen at around 2050 BC. The discovery took place in New York in 1907 when the Queen's mummy was discovered and set to the Metropolitan Museum of Art. A keen observation of the Queen's mummy revealed that despite having a normal vaginal, there was a mass tissue of about 10 cm long, signifying the possibility of the intestine sticking out from the anus. Further clinical examinations of the mummy in Cairo in 1923 revealed a tear in the bladder that connected to the vagina. Detailed examination revealed abnormality of the pelvic bone, which approximated the ones of apes. Taking into account the pelvis width, the examiner arrived at a conclusion that it was very shallow and thus incapable of allowing the passage of fetal head and that severe damage to the vagina and the bladder could have led to Queen Henhenit death (Zacharin, 1988).

According to Zacharin (1988), before the discussed discovery, Avicenna, an Arabo-Persian doctor who died in 1037 AD became the first person to fistula following obstructed labor may be the cause of urinary inconsistence in women. When connecting difficult labor to fistula, Avicenna gave advice on pregnancy prevention particularly among young women. However, the end of 1600 AD was a remarkable era as there were various clearer descriptions of fistula that were revealed. Felix Platter in 1957described fistula as result of first labor after discovering a young country girl with an opening to the bladder rent to level that a long gapping furrow made it possible to view the open bladder leading to involuntary urine discharge (Zacharin, 1988).

The beginning of the 19th century saw major development in repairing and treating vesico-vaginal fistula. From 1845 through 1859, Doctor Marion Sims gained recognition for his significant

discoveries of materials and instruments required in closing enormous fistula. According to Medscape (2003), even in the modern era, Sims still gains recognition for his discoveries in addressing the urgent medical as well as surgical attention for women.

2.3 Global View of Obstetric Fistula

From a historical overview of obstetric fistula, the condition is not new as it has affected women populations globally. However, places like North America and Europe have benefited from improved as well as advanced obstetric care, which is uncommon in other regions across the world. According to Metro (2006), in countries where there is universal health, fistula is almost non-existent. The situation is however different in third world economies obstetric difficulties are still evidenced where 90% cases are as a result of advent bladder trauma while undergoing surgery with hysterectomy.

In a report presented by Wall et al. (2003), as a result of surgery or radiation therapy, developed economies still experience cases of vesico-vaginal fistula that is primarily as a result of neglect of obstetric complications that happen under various different circumstances. In the country like the U.S, Villey (2006) claims that cases of obstetric fistula is still debatable with a lot of authors quoting rate of vesico-vaginal fistula following Total Abdominal Hysterectomy (TAH) of 0.5-2%. Others claim that there is an incidence rate of 0.05%, with others giving approximations of 10%.

Vast focus is directed at Africa, which is misleading in that other regions across the globe equally experience the problem. In the report by Wall et al. (2003), the authors reveals that there lacks up to date studies globally that can help in determining the extent as well as the places where the disorder is experienced. According to the researchers, issues regarding the incidence as well as prevalence of obstetric fistulas have never had answers based on the standardized demographic as well as health surveys that evaluate populations together with the general health status in developing economies.

There lacks accurate statistics on obstetric fistula problem despite the incident being continually reported in Africa together with the Indian subcontinent. However, a report from WHO reveals an estimated 2 million young women to be victims of untreated obstetric fistula with new cases estimated to be between 50,000 and 100,000 are reported on an annual basis (WHO, 2006). The figures are considered highly underrepresented due to the stigma associated with the disorder, thus

leading to a number of unreported cases (Kabir et al., 2003). Isolated studies have focused primarily on specific parts of Africa and this undermines the actual situation in the third world economies in particular and around the globe in general. According to Wall et al. (2003), a closer realization of the true incidence and prevalence of the disorder around the globe encourages the need to mapping the overall world to survey fistula where virtually all Africa , South Asia, Middle East, Latin America, parts of Oceania, and other remote regions in Asia. There is however findings that high maternal mortality rate is directly associated with the incidence of fistula. WHO (2006) claims that poor nations record high maternal mortality and thus are associated with high prevalence of obstetric fistula.

2.4 Current Situation

The accurate occurrence and prevalence of fistula is difficult to ascertain since fistula is largely stigmatized in many populations. In spite of this, fistula is widespread in a good number of sub Saharan and south Asian countries where an estimated two million women are living with vesico vaginal fistula, while 50,000 to 100,000 new cases are recorded annually as at 2008 with sub Saharan Africa region and West African region accounting for 30,000-130,000 cases and 33,000 cases respectively (UNFPA, 2003). From a systematic review by Biadgilign *et al* (2013), the worldwide prevalence in different regions was collectively stated as 0.29 per 1000 women of reproductive age bracket globally, 1.60 for sub Saharan Africa and 1.20 for South Asia (Alder *et al* , 2013). According to Gron *et al* (2003) the universal global collective incidence was 0.09 per 1000 women who were in recent times expectant. The incidence level in West Africa is stated at 3-4/1000 deliveries. Biadigolign *et al* concludes that in sub Saharan Africa, no individual country is free from from this blight (Biadgilign *et al* 2013). Uganda in East Africa has a prevalence level of between 2.6% and 2.8% of women in the reproductive age. In West Africa, Nigeria is documented to have an incidence of 2-5/1000 deliveries where roughly 40% of women having unrepaired obstetric fistula are housed (UNFPA 2003).

2.5 Fistula in Developing World

The most common etiological factor in obstetric fistula in developing countries remains to be lengthened obstructed labour. Other factors include obstetric/gynaecological operations, injurious traditional practices, and sexual violence and poverty (Browning, Allworth, & Wall, 2010). The influence of the latter reasons contributes to a lesser amount of in implication in comparison to prolonged obstructed labour. Obstructed labour that is prolonged indicate inefficient obstetric care

which is predominant in areas where health facilities are nonexistent or bare and the supply of skilled personnel short. This situation is very rampant with rural women, poor, ignorant, the powerless and neglected in the society. These factors furthermore account for reappearance of Vesico Vaginal Fistula in the same population. The reappearance is propelled by the fact that these women remain chiefly unaware of the actual causes of fistula and hold various misunderstanding, false notion and traditions as exclusively accountable of the situation (Kasamba, Kaye, Mbalinda, 2013). Even though young women giving birth to their first babies are frequently involved, women at their subsequent pregnancies are not immune to the scourge (Biadgilign *et al* 2013).

2.5.1 Causes of obstetric fistula in developing countries

Inability to Access Maternity Care

In economies with inadequate resources, a quantifiable number of females die or suffer from fistula during birth. This is primarily associated with inaccessibility of basic healthcare and failure to access local healthcare services. According to Zahar (2003), skilled care both during and after birth is essential in protecting the lives of babies and mothers and also in preventing development of obstetric fistula (OF).

Availability of Facilities

It is usually challenging to access adequately equipped facilities for antenatal care as well as safe childbirth specifically in rural areas making it hard to provide emergency obstetric care. According to UNFPA/AMDD (2005), this problem is captured in a study conducted by UNICEF that revealed that in Francophone and Anglophone African nations, every nation had a single comprehensive emergency obstetric facility for every 500,000 residents, yet none had the necessary number of facilities required for primary emergency obstetric care.

Lack of Awareness of the Presence of Facilities for Fistula Repair

Surgical repair is required once obstetric fistulas occur as it is not possible to heal by themselves. Although some developing economies like Pakistan, Nigeria, and Ethiopia provide fistula services, most physicians lack training on how to repair or treat fistula effectively (Ampofo, 1990).

Poverty

Despite lack of emergency obstetric care and obstructed labor being the immediate causes of the disorder, pervasive poverty equally serves as a critical factor. In an epidemiologic study conducted by Tahzob (1993), the researcher revealed that 99 per cent of women going through fistula repair were illiterate.

Early Marriage and Childbirth

Early marriages serve as a major contributor to the risks of fistula and obstructed labor. In most countries in South Asia and sub-Saharan Africa, which record higher cases of obstetric fistula, there are higher cases of early marriages among women that happen during adolescence. For instance, in the case example of Nigeria and Ethiopia, more than 25% of patients suffering from fistula became pregnant before reaching the age of 15 years and more than 50% of their counterparts became pregnant before attaining the age of 18 years (Ampofo, 1990).

The Role and Status of Women

Women generally have a low social status especially immediately after marriage and this plays a critical role in the development of fistula. This mostly leads to denial of access to care for some women or even being subjected to harm as a result of traditions and cultural beliefs. According to Wall (1995), failure of these women in their perceived roles of bearing and child rearing often leads to divorce.

Harmful Traditional Practices

The risk of developing obstetric fistula is further developed by harmful traditional practices like female genital mutilation. This practice is often conducted in unsanitary conditions and involves removal of significant amounts of vaginal tissue leading to constriction of the birth canal and the vaginal outlet. These practices are directly associated with increased risk of obstetric and gynecological complications, which comprise of fistula and labor. According to Bangser (2003); Faces of Dignity (2003), it is for such practices 15% cases of fistula are recorded in some regions in Africa.

Sexual Violence

Despite obstetric causes leading to most OF cases, direct tearing associated with vaginal trauma or rape contributes to the disorder. According to Muleta and Williams (1995), a case example of the magnitude of sexual violence in causing OF is evidenced in a study in a hospital in Ethiopia where out of 1,200 fistula cases, 91 were as a result of sexual violence. Wax (2003) notes that the problem is even worse in wartime conditions as sexual violence is normal because it is applied as a means of intimidating and controlling the population.

2.5.2 Consequence of Fistula necessitating reintegration

For the vast part of the 20th century, OF was significantly absent from the worldwide global health agenda due to its eradication in the developed economies (Wang et al., 2004). However, in the developing economies, the problem despite being preventable continues to affect women and girls. According to Lita (2008), the associated pain together with incontinence among victims renders them impossible to attend to their respective chores thus devaluing their importance.

In Roush's (2009) findings, the researcher claims that most women suffering from obstetric fistula tend to experience divorce, ridicule, isolation, and even being disowned. Furthermore, the rate of divorce among women suffering from obstetric fistula ranges from 50% to 89%. Due to the unavoidable odor due to fistula, it is perceived as offensive leading to eventual removal of victims from the general society. Ampofo and Uchebo (1990) note that there are cases where women suffering from the health problem have continually experienced cases of leaking blood, urine, and faeces thus limiting them from engaging in their traditional roles like being a mother or a wife. UNFPA (2008) reveals that only 7.5% of victims suffering from fistula manage to access treatment with the vast majority of their counterparts subjected to effects of obstructed as well as prolonged labor due to limited options in accessing health.

According to Pope et al. (2011), although OF is devastating, it is equally preventable by addressing the primary factors that limit accessibility of quality maternal care. Due to the wetness that emanates from fistula, victims are constantly wet mostly leading to genital infections, ulceration, as humiliating odor. Kertmen *et al.* (2015) note that close to 20% of victims suffering from fistula tend to develop bilateral or unilateral foot drop that is regarded to as a weakness on ether one or two lower limbs.

2.6 Situation in Kenya

The 2008-2009 Kenya Democratic and Health Survey (KDHS) puts maternal deaths at 488 maternal deaths in every 100,000 live births. Cases of maternal deaths amount to 15% of all women in the reproductive age (15-49). A review of the existing findings demonstrate that in Kenya, OF is a major problem despite unknown information about its prevalence and incidence (UNFPA, 2005). Documented reports reveal there are about 3,000 fistula cases on an annual basis with an estimated repair rate of below 500 cases in each year. The establishment of the Kenya National Obstetric Fistula Training Curriculum for Healthcare Workers back in 2006 is considered crucial in the quest to eliminate obstetric fistula.

2.7 Theoretical Framework

The social Ecological Model guided the study, which is based on an assumption that health and well-being patterns are impacted by a dynamic interplay among environmental, behavioral, and biological patterns (Smedley & Syme, 2000). This model is imperative in explaining human health behavior as it focuses on the nature of human's transactions with their socio cultural and physical environments (Glanz et al., 2000). The model has four assumptions; first, health is affected by various components within the social and physical environment. Secondly, the environment is multidimensional. Thirdly, it is possible to explain human interactions with their environment in various aggression levels and lastly, various environmental levels and groups of people have feedback (Sallis & Owen, 2000). Dahlberg and Krug (2002) assert that the Social Ecological Model comprise of five nested hierarchical levels; interpersonal, intrapersonal organizational, community, and policy environment.

Intrapersonal level is composed of the characteristics of an individual such as knowledge. Attitudes, skills and self concept that influence behavior change. It includes the risk factors (biological, socio-demographic, and physical factors), gender, age, religious identity, marital status, sex, economic status, values, life goals and expectations, stigma, and coping. These factors influence seeking and access of health services.

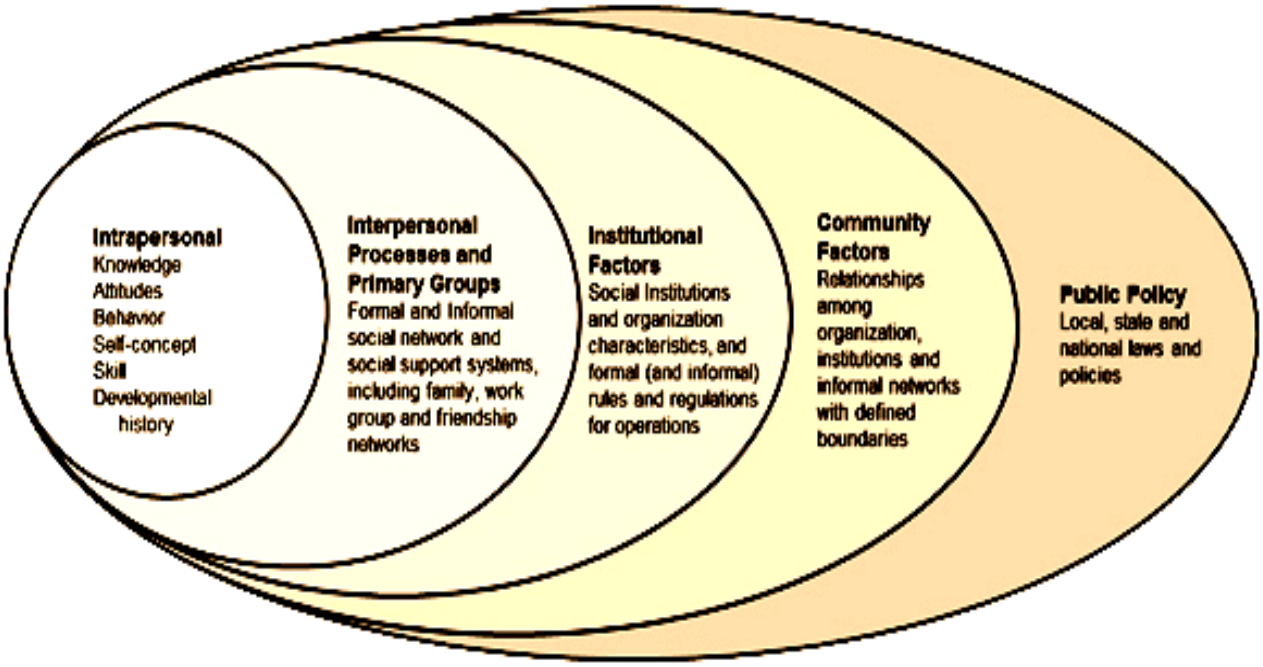
Interpersonal level encompasses the formal and informal social networks and social support systems such as, family, partner, associates, peers, religious networks, and traditions that can influence the relational experience of individuals. This level expands to sustain, communication, resources, and stigma influence among the parties engaged.

Institutional level comprises of organizations or social institutions with rules and regulations for operations that affect how, or how well, health services are provided to an individual or group. This also includes hospital climate, review schedules, availability of space for admission and competence level of the staff.

Community level includes the relationships and informal networks within defined boundaries such as built environment such as wards, clinics, laboratory, community associations, community leaders, businesses, and transportation.

Policy Environment includes the local, national and global laws and guidelines. This includes resource allocation policies, health system issues, training, and knowledge and skills gap.

Figure 1: The Social Ecological Model: Adapted from McLeroy, K. R., Steckler, A. and Bibeau, D. (Eds.) (1988).



The application of this model in the study lies in the aspect where it provides explanation on the intrapersonal level on the needs of the challenges experienced by individuals with fistula or recovering after fistula repair. Further, the model explains the coping strategies employed in the context of interpersonal level in relation to support systems that influence their experiences. It also seeks to help explain the organizational aspect of the availability of strategies to reintegrate the patients, after their corrective surgery back to the community to fully undertake their social roles. The theory also explains influence of the policy environment on the local and national policies that address fistula such as training of specialized fistula surgeons.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methods that were employed in this enquiry in order to achieve its objectives. It particularly contains the study site, the study design, study population, sample, size and sampling procedures, data collection methods, data analysis and presentation. It also describes the ethical considerations employed in this study.

3.2 Study Site

In Kenya, a good number of the fistula repair surgeries are done during yearly surgical camps in selected hospital countrywide. In Kenyatta National Hospital the screening and surgery are however done on routine bases. Kenyatta National Hospital is the oldest hospital and the largest in Kenya. It is located in Nairobi Upper Hill about 3.5 kilometers west of the city's central business district. It is a public, tertiary, referral hospital for the ministry of health. It serves as the referral point for fistula management particularly for complex fistulae and thus offers a national representation of Kenya. Kenyatta National Hospital fistula clinic is located at clinic 66 has been providing fistula services since 1994. Fistula surgeries since 2009 have been subsidized courtesy to collaboration with partners such as Freedom from Fistula Foundation, Africa Medical Research Foundation (AMREF) among others.

3.3 Study Design

The study adopted a descriptive study design. It concerns itself with the current phenomena in terms of conditions, practices, beliefs, processes, relationships or trends, Best and Kahn, (2007). It is not only concerned with the individual characteristics but as well include the characteristics of the whole sample leading to provision of information that yields useful solutions to local issues. The study sought to describe the reintegration experiences of women after repair and their perception on how best they can be reintegrated to the community. Interviewer administered questionnaires were administered to the survivors coming to the facility for check up after the surgical repair whereas the interviews were administered to the key informants who constituted of two sets: the professionals who directly handle the fistula survivors and members of the community who have interacted with the survivors before the development and after correction of fistula.

3.4 Units of Analysis and Units of Observation

The units of analysis in this study were women survivors of obstetric fistula receiving medical and psychological services at Kenyatta national hospital whereas the units of observation were the fistula survivors who had undergone obstetric fistula repair in Kenyatta National hospital.

3.5 Study Population

The study targeted all obstetric fistula survivors attending routine review sessions in Kenyatta National Hospital clinic 66.the inclusion criteria was all women who have undergone both successful and unsuccessful fistula repair in the facility and gave consent to participation in the research whereas the exclusion criteria was the women who have not undergone repair and those who did not give consent in participation.

3.6 Sources of Data

Key informants such as the nurses, Obstetric Fistula surgeons, nurse aids and social workers and community members who interact directly with the fistula survivors provided primary data that complemented the information gathered from the obstetric fistula survivors in Kenyatta National Hospital.

3.7 Sample Size and Sampling Procedures

Sample size

The number of fistula survivors attending reviews is averagely estimated to be 10 to 15 per week according to the hospital records at clinic 66. The reviews are undertaken only once a week, usually Mondays. This therefore makes the target population during the study period to be 120 (10 x 4 x 3). According to Mugenda and Mugenda (2003), 10-30% of the total population forms a representative sample. The study used 30% of the population which consists of 36 fistula survivors as calculated below

$$30/100 \text{ x}120 = 36$$

The basic rule of thumb based on the data collection method estimates 5 to 25 people to be used in key informants interviews and according to the guidelines on the length of an interview 20 people should be interviewed if the period ranges from 30 minutes to 1hour, (Creswell 1998). Following these directives, 20 key informants were interviewed where the split between the professionals and the community informants was in the ratio of 1:1 thus 10 professional informants

directly working with the survivors in the facility such as the fistula surgeons, specialized fistula nurses, social workers among others and 10 community informants constituting of close family members such as spouses or parents, care givers, neighbors and friends who have known the patient before the development end treatment of fistula. This therefore gives a total of 56 respondents as shown below.

Respondent category	**Number**
Fistula survivors	30%of 120 =36
Professional key informants	10
Community key informants	10
Total	**56**

Sampling procedure

Systematic random sampling was used to obtain the sample of the fistula survivors. In this technique, the sampling frame is structured according to some criterion and elements are chosen at regular intervals through that structured list. This procedure involves a random start and then progress with the selection of every *k* element from that point onwards, where $k = N/n$, where *k* is the ratio of sampling frame size *N* and the desired sample size *n*, and is formally called the *sampling ratio* (Ken Black 2004).

The starting point was randomly chosen from within the first *k* elements on the list. The sample frame was the appointment register in the hospital. The interval provided with this method is allows ample time for the researcher to administer the questionnaire to a participant without inconveniencing other participants to queue as they wait to participate and see the doctor.

Purposive sampling was used to sample the key informants. The professional informants with an experience of handling fistula survivors were sought within the facility by seeking their consent to take part in the study upon their consent and convenience. Community informants were obtained by a referral by the survivor upon a key figure in the society who has interacted well with the survivor. The informant was requested to take part in the study upon consenting to informed consent. This ensured that the sample selected had vital information that relates to the study.

3.8 Data Collection Tools and Methods

Data collection took place within the hospital where the tools included the questionnaires and interviews guides. Data collection was undertaken in a consultation room in the facility to ensure privacy. The door of the room did not have labels that cause the respondents to be embarrassed upon their entry. The **tools** used included a questionnaire that was administered to the survivors and an interview schedule that was administered to the key informants.

Primary data was collected from the corresponding respondents using the following **methods**:

Researcher administered questionnaires

Researcher administered questionnaires were used to obtain data from fistula survivors. The questionnaire was divided into thematic sections in line with the objectives of the study which include socio demographic information, fistula experience, health seeking experience and social reintegration experience thus enhancing content validity. Both open and closed ended questions were used to obtain relevant information for the study.

Interviews (key informants)

Professional informants such as the fistula surgeons, nurses, theatre attendants among others were interviewed using an Interview guide containing questions that focus on the services available, challenges in provision of the services and strategies used to reintegrate fistula survivors among others.

Community informants constituted close family members such as the parents, siblings or spouse, the care givers who have interacted with the survivor prior and after the development and correction of fistula were interviewed on issues pertaining interaction of the community members with the survivors, their inclusion in social activities as well as the assistance and support they give to the survivors to aid their reintegration. Note taking and tape recording was used to record data from the interviews.

3.9 Test of validity and reliability

The tools were first be subjected to scrutiny of peer review and the supervisors to ascertain the relevance of the questions and their ability to yield the correct data in relation to the research objectives, followed by filling of the questionnaires by a small sample of eight (8) survivors, 1 professional informant and one (1) community informant with similar characteristics as the research population who were excluded from the real study. This enabled corrections and adjustments such as spelling mistakes, incomplete sentences and helped the researcher to know if respondents understood the questions given in the tools.

3.10 Data Processing and Analysis

Data Processing

Data collected from the field was subjected to: editing so as to ensure completeness and correctness of data collected, coding the instruments -done prior to data collection to save time, classification of data into categories of similar characteristics, and tabulation of data to enable interpretation and summary.

Data Analysis

Descriptive statistics was used in the analysis of quantitative data collected from the field using SPSS software and presented using prose narration and tables. Qualitative data obtained from the interviews and questionnaires was summarized along major themes of the study and the findings reported in form of descriptions and quotes from the participants.

3.11 Ethical considerations

Privacy and Confidentiality

The questionnaires and interviews were filled and conducted in a private room within the hospital premise where the room was kept under lock and key to avoid disturbance by other people who may intrude. The door of the room did not have any labels that subjected the respondent to embarrassment when they walked in. The tone that was used in the exchange of information process was quiet but audible to avoid overhearing of the information by other people outside the room. Only one respondent at a time was allowed to the room to ensure privacy and confidentiality.

Confidentiality of participants' data and anonymity was maintained by having no names or unique numbers on the questionnaires that could directly link the document to the respondent. Data and other research materials were stored under a unique identifying code only known by the researcher in protected files and a locked briefcase. Only the researcher accessed the information collected. All information collected was only used for academic purpose and thus no discussions were shared. No filled questionnaires, interview notes or any other record was on the table at any point in time to avoid the leak of information to outside parties.

Informed Consent

Informed consent was sought, where a consent explanation form was used to explain the purpose of the research and the participant's role should they participate in the study. After reading and understanding the consent form, participants gave a written assented by signing an informed consent form prior to participation. The consenting procedure for the different populations was as follows:

Survivors: Those who fell at the interval of sampling in the register were sought for their consent upon their arrival by being given the consent form after which if they ascent they went first to the doctor for the review and later to the private room where they filled the questionnaire guided by the researcher. The informed consent was sought prior to the doctor's review to allow the respondent to reschedule their time and insert time for response. This was be done by the in charge at the triage who records the respondents as they register their visit.

Professional key informants: informed consent was sought prior to the interview that was conducted privately in their private office whereas those who shared an office used the private room used by the survivors to ensure privacy and confidentiality. The consent was be sought by the researcher.

Community informants: informed consent was sought prior to the interview by the researcher. This was done within the hospital premises at the waiting bay for those who accompanied the survivor.

Risks

There was no possible physical risk in undertaking the study. Some psycho social risks may have been encountered by the fistula survivors due to the nature of some questions that needed recollection from past experiences that may be painful causing undesired changes on the thought processes. The researcher ensured that respondents were comfortable throughout the process of the research by first disclosing the full nature of the information being sought by the study giving a description of the risks and benefits of the study so as to psychologically prepare the respondents so share the information. This risk was minimized through subjecting the questions to be used in the study to the ethical review committee that reviewed the questions within the tools to ensure the risk is reduced to the fullest extent possible.

Ethical Approval

Ethical approval was sought from the Kenyatta National Hospital /University of Nairobi Ethics Research Committee (ERC).

An approval letter to conduct the research was also sought from University of Nairobi, department of Sociology and social work.

CHAPTER FOUR
PRESENTATION AND INTERPRETATION OF FINDINGS

4.1 Introduction

This chapter endeavors to give the analysis of findings of the study that sought to establish the dynamics of social reintegration of women after obstetric fistula repair in Nairobi. To achieve the, the study used the following research questions:

- What are the effects of fistula on individual lives? What are the coping strategies employed?
- What are the needs of women suffering from fistula?
- What is the perception on reintegration strategies of fistula from the survivor's viewpoint?
- What are challenges experienced in the reintegration process of fistula survivors?

The respondents included 36 survivors who had undergone fistula repair, 10 professional key informants and 10 community key informants. The researcher collected primary data, both qualitative and quantitative using an interviewer administered questionnaire and interview guides. The response rate was 100 percent since the researcher ensured all questionnaires were filled. None of the respondent who voluntarily consented to participate in the study withdrew. Descriptive data analysis was used to analyse data and presented using frequency distribution tables, prose narration and quotes.

4.2 Background characteristics of fistula survivors

4.2.1 Socio- demographic Characteristics of Survivors

Area of Residence

More than half of the population (53.7 %) was from rural areas whereas 41.7 % hailed from the urban areas as shown in table 4.1.

Table 4.1: Area of residence of fistula survivors

Area of residence	Frequency (n)	Percentage (%)
Rural	21	53.7
Urban	15	41.7
Total	**36**	**100**

From this information one can deduce that fistula development is an issue both in the rural and urban areas

Age of the Survivors

The modal age range was between 19-28 years constituting of 47.3 % of the respondents, followed by 29-38 years and those above 49 years both at 19.4%, 39- 48 years and below 18 years at 11.1% and 3 % respectively as shown in table 4.2.

Table 4.2: Age of the survivors in years

Age of survivors (years)	Frequency (n)	Percentage (%)
Below 18	1	2.8
19-28	17	47.3
29-38	7	19.4
39-48	4	11.1
49 and above	7	19.4
Total	**36**	**100**

On further observation Most of the respondents (66.7 %) were between 18-38 years. This can be attributed to high vulnerability of women within the child baring age to obstetric fistula development.

Level of Education of the Survivors

Most of the survivors, 47.3 %, had reached secondary level of education followed by 25 percent who had attained the upper primary level of education, 13.8% having tertiary level, 11.1% having lower primary and 2.8% having none as shown in table 4.3.

Table 4.3: Level of education of the survivors

Education level	**Frequency (n)**	**Percentage (%)**
None	1	2.8
Lower primary	4	11.1
Upper primary	9	25.0
Secondary	17	47.3
Tertiary	5	13.8
Total	**36**	**100**

One can therefore allude from the above information that women in all categories of literacy levels are subject to fistula development. High levels of education can be attributed to the free primary and secondary education in Kenya.

Marital Status of the Survivors

Marital status as reported by the survivors constituted of 36.1% separated, 30.6% single, 27.7 % married, 5.6 % widowed and none divorced as shown in table 4.4.

Table 4.4: Marital Status of the Survivors

Marital status	**Frequency (n)**	**Percentage (%)**
Single	11	30.6
Married	10	27.7
Divorced	0	0
Widowed	13	36.1
Separated	2	5.6
Total	**36**	**100**

The high number of separated survivors could be explained by the need to abstain from sex for a period of at least six months after the surgery. This can as well be explained by the strained relationships among partners due to incontinence and other effects of fistula.

Duration of the Survivors with Unrepaired Fistula

Duration of the survivors with unrepaired fistula, before corrective surgery, was recorded as 44.4 % with less than one year experience , 25.0 % with 1- 3 years experience, 16.7 % with 7- 9 years of experience 8.3% and 5.6% percent with 10 and above years and 4- 6 years of experience respectively as shown in table 4.5.

Table 4. 5: Time with Unrepaired Fistula

Time (years)	**Frequency(n)**	**Percentage (%)**
Less than one year	16	44.4
1-3 yrs	9	25.0
4-6 yrs	2	5.6
7-9 yrs	6	16.7
10 an above years	3	8.3
Total	**36**	**100**

The high number with a short period of experience (44.4 %) could be explained by the efforts of the medical professionals who advice the survivors to seek repair as soon as possible. This as well connotes that there has been an increase in awareness of fistula treatment among the community members. The long period of time would be attributed to the inability of survivors to disclose their condition due to shame as well as not having information about treatment of fistula which leads to the delay in repair.

Number of Surgical Repairs

The number of repair surgeries ranged from 1 surgery which constituted of 63.9 %, 2- 3 surgeries at 27.7 %, 4-5 surgeries at 5.6 % and 2.8% with six and above surgeries as shown in table 4.6.

Table 4. 6: Number of Surgical Repairs

Number of fistula repairs (surgeries)	Frequency (n)	Percentage (%)
1	23	63.9
2-3	10	27.7
4-5	2	5.6
6 and above	1	2.8
Total	**36**	**100**

The few number of surgeries as from table above can be attributed to the success of first repairs whereas the high number may be due to the complexity of the fistula which needs to be repaired in stages to achieve total closure.

4.2.2 Perception of the Cause of Fistula

The respondents had a wide range of perception on the cause of obstetric fistula which varied among the survivors and the community informants. Most of the respondents associated the cause as a result of having a big baby, prolonged unattended labor, non responsive health care providers, delay in seeking specialised delivery services, not sure and don't know as shown in table 4.7.

Table 4.7: Perception of the Cause of Fistula

Cause of obstetric fistula	Frequency (n)
Big baby	7
Prolonged unattended labor	13
Non responsive heath care providers	9
Delay in seeking specialised delivery services	6
Difficult delivery	3
Not sure	5
Don't know	3

One of the respondents attributed it as a disease of the women that they get as a complication during child birth:

"This is just a women illness that get them when they are giving birth mostly when the child takes long before coming out because it is big." K.I community- spouse

Another respondent attributed it to delayed care at delivery in the health center where in her words said:

"it comes because of issues with the health care providers especially their attitude towards patients. For instance in our case we had gone to hospital early and they said it is false labour so we went home. We returned again and they said it was false labour, since I did not want to stay with anxiety I requested them to admit her since she will be in better hands and her days are near. So when she was calling the nurses for assistance they were just assuming her and she heard them saying; "ule wa false anaitana" (that one of false labour is calling out). Now by the time they were attending to her she had really struggled and after delivery she noticed the problem of wetness." K.I community – mother

4.2.3 Signs of Fistula Development

Fistula Survivors reported the first signs that suggested development of fistula included leakage of urine or/and feces, passing wind through the vagina, painful sexual intercourse and foul smell of vaginal discharge. Most of the respondents experienced one or more symptoms. From the signs it is evident that vesico vaginal fistula (VVF) is more prevalent compared to rectovaginal fistula (RVF)

Table 4.8: Signs of Fistula Development

Sign	**Frequency (n)**
Urine leakage	24
Fecal leakage	9
Both urine and feces	3
Passing of wind through the vagina	11
Pain during sexual intercourse	7
Foul smell vaginal discharge	13

4.2.4 Source of Information about Fistula Repair in KNH

Respondents were asked on the main source of information about fistula repair in Kenyatta National Hospital and the study established that most of the respondents had received information from television and radios followed by referrals from health facilities followed by print media and others as illustrated by table 4.9.

Table 4.9: Source of Information about Fistula Repair in KNH

Source of information	Frequency (n)
Television and Radio	14
Print media	6
Referrals from health facilities	18
Others (church, friends, family)	5

4.3 Quality of Life Before, During and After Development and Repair of Fistula

4.3.1 Before

Most of the respondents (80.6 %) recorded a normal life before development of fistula where they could actively participate in social and community activities, work, engage in happy relationship with spouses and relatives, undertake their gender roles and attend school among other activities whereas 19.4 % recorded the normal life challenges such as inadequate food, unemployment among others which could not be directly linked to the development of fistula.

4.3.2 During

The onset of fistula was viewed widely by the respondents as the beginning of life challenges. Disclosing their situation was a challenge to many since it is a shameful thing to share as an adult this explains why some had endured a long period of suffering before seeking treatment due to silence. The survivors received mixed reactions from family members, relatives and friends from whom they disclosed their condition where some were ready to assist and some not ready to assist due to reasons such as not being aware of what to do or avoiding the financial implication of helping the survivor. Their daily schedules and interaction patterns changed due to low self esteem and shame. Some stopped working, schooling and even attending social gatherings such as church, chama, weddings funerals among others. One of the survivors reported that: "*I stopped talking to people since I was so stressed by the incontinence and every time I would go to work I could not*

concentrate and kept on going to the washroom to check of I was okay. This made me to stop working. I did not know how to express my situation to any person since I did not know if they would understand what I was going through."

Some received a lot of warmth from family members after disclosure where they helped the survivor financially and undertaking their home chores such as cooking and washing. Upon further probing on the kind of assistance received from, it was evident that community members and friends supported them emotionally by encouraging them and praying with them for healing, provided economic support through giving them money for treatment and planning for their treatment.

4.3.3 After

After the repair, survivors with successful repairs recorded improved quality of life since there was no incontinence that was caused shame. An increase in social interaction was recorded in about 90% of the survivors since they had regained their confidence and was engaging in different social activities. Some survivors recorded reduced productivity where they could not work as much as they used to work before the development of fistula since they felt weak in terms of body strength. This could be explained by the instructions to avoid intense manual work and lifting heavy objects to aid healing after the repair.

4.4 Effects of fistula on the Survivor's social life

4.4.1 Social Interaction

The study found that survivors used self isolation as defense prior to correction since they were not confident to stay among their relatives and acquaintances. This is because they kept worrying of being shamed by leaking in public. They would only engage in short conversation and get back to be alone. This loosened the social ties and friends slowly reduced since they found the survivors difficult to understand. Many at times in the moments of self isolation the survivors were deep into self piety thoughts trying to find reasons as to why this happened to them and what their friends and relatives are thinking of them leading them to exhibit an antisocial behavior . The survivor was not interested in social activities such as attending merry go round or church or even just visiting out to bond and catch up. Every time they were sought they said they were busy with some work and canceled their availability. This led to their exclusion in social activities. One of the respondents reported:

"after she came from hospital, I noticed that she liked staying in the bedroom alone and she did not want to come and eat with others on the table. I assumed that it was because of the baby so I thought as the baby will grow she will be normal again. The baby started to be weaned and still she did not want to participate in the family activities like get togethers or even going to church and every time I updated her of an event she always said no. so I stopped even asking her out since I knew she will refuse. This burdened me and I had to pester her so that she tells me what was happening in her life and eventually she disclosed to me what she was going through that now I came to know it is fistula." Community K I- sister

4.4.2 Financial Constraints

Most of the survivors had to stop working due to the development of fistula and thus were fully dependent on spouse or family members. This was a major challenge among the survivors where due to self isolation, they could not mingle with others as before and therefore could not transact any business and this made the business to collapse.

The scheduling of the reviews also contributed to the loss of jobs for some survivors where they could not keep asking for off duty every time to attend the checkups and so they had to stop working since they did not want to disclose their condition to the employer or other workmates.

The prescribed medicines were very expensive as well as the incontinence products. This drained the survivors financially since most of their income or savings was used up to purchase medicine and diapers which was way beyond their usual budget considering the survivors' dependence on others.

4.4.3 Grief

Some survivors lost their babies due to complications during birth and this posed a challenge to them. Every time they could see a happy woman breastfeeding the baby they always thought about their lost child and feel grieved. This therefore subjects the survivors to psychological trauma upon the memory of the experience of child birth. One of the respondents posited that:

"the survivor had a challenge of reaching out to people and she showed no interest in enquiring about others which we interpreted it as a way if dealing with the grief of losing her baby. We gave her space since we thought after she accepted the fate of losing a child she will be fine again. She

was not happy as before and many times she would appear to be in her own world in deep thoughts." Community K I- aunt

4.4.4 Marital Challenges

Marriages experienced challenges where the husbands were not enjoying their conjugal rights due to the incontinence especially during intercourse. The husbands complained about the mess and even threatened to move out of marriage due to the situation prior to repair. After the repair the husbands could not as well understand why they could not engage in intercourse and yet there was no more leaking. Since abstinence for six month is a requirement for healing after correction, the woman had to go to their home and thus separated for the same period where upon the lapse of six months a lot of changes are experienced in their relationship. The husband may want a child soon after healing which scares the survivor who is as well advised to stay at least for two years without giving birth to avoid the reoccurrence of fistula.

4.4.5 Barrenness

Some had to undergo surgery to remove the uterus rendering them barren due to birth complications that damaged the uterus. The thought of never getting a child of their own also serves as a source of stress to the survivors since one becomes uncertain of how to keep their marriage especially for those with very young families as well as those anticipating marriage are not sure of getting a partner who will accept them in their state of infertility.

4.5 Coping Strategies Employed to Address the Effects

Different survivors had different coping strategies. The common strategies observed in the study are self isolation, avoiding eating or drinking, use of incontinence products, financial assistance from spouse and family, self acceptance, high levels of hygiene and religion as explained below.

Self isolation was widely recorded as a coping strategy where the survivors chose to isolate themselves from others to avoid shaming themselves by getting wet or passing wind involuntarily when in the company of people. The survivors avoided their acquaintance by switching off their phones, not receiving calls, locking themselves in the house among others.

Avoiding eating or drinking was also a coping strategy so as to avoid leaking. Whenever the survivor had to go for a social gathering, the survivor would avoid food and drinks as a way of controlling incontinence

The survivors would use incontinence products such as adult diapers, pants and surface protectors to prevent soiling of the clothes and foul smell. Since the products were expensive, they only used them when they were away from home and only have pieces of clothes with a polythene lining as a surface protector at home. They would always avoid sleeping away from home to avoid messing the beds at night and as well get ample time to change and dispose the diapers without being stigmatized.

Financial support from spouses, family friends and community helped the survivors to cope with the financial challenge. They would get money for personal items from provisions of the family and the contribution of the well wishers.

High levels of hygiene was observed as a strategy where the survivor could endeavor in frequent showers was also a coping strategy used where the survivors could wash themselves frequently and change the inner clothes to get rid of the foul smell of leakage and as well avoid getting burns and rushes due to constant wetness. One of the respondents alluded that: *Since she came from the hospital, she developed a habit of being extra clean and washed herself severally in a day. I thought it was the doctors instructions but it went on for a long period of time and I really wondered. When I asked her if she had healed she was shy to speak about it and I persuaded her. When she told me about the soiling iher clothes is when we came to understand why she washed herself so many times."* Community K I- mother

Self acceptance is another strategy employed. This is where through counseling, the survivor gets to understand herself as having a condition and one needs to take care of herself well health wise so as to regain strength and have the ability to work and get money for treatment. By this the survivors learned to accept the challenges that came up with fistula and avoid stress that came from people who talked about them.

Religion served as a coping strategy where the survivors believed in the healing ability of God. The survivors became more actively involved in religious matters where they would pray to God to take away the shame that befell them. The word of God served as a source of strength that gave

them encouragement in all that they went through knowing that one day is shall come to pass and they will be healed.

4.6 Survivors' Needs and Reintegration Opinion in the Reintegration Process

4.6.1 Incontinence Control

Since incontinence subjects the survivor to a lot of challenges, they felt the need to stop leaking. This would be achieved through successful repairs which restores their dignity and aids their engagement in social and economic activities since the worry of soiling and discharging of foul smell is eliminated. It was common among the survivors that physical healing served as a great indicator of reintegration and was highly valued among the survivors as the first step towards reintegration. The survivors looked forward for the doctor's declaration to be well after surgery and completion of the checkup sessions.

4.6.2 Finances

The survivors largely expressed the need of money to help them access the basic needs such as food, incontinence products, water, soap among others which helps them to manage their situation before surgery. They need money to buy the medicine and for transport to and from hospital for checkups after surgery. Suggestion from the survivors on how to take care of this need is through engaging in income generating activities that will provide them with the money. By this, they will gain financial independence for their treatment and avoid being a burden to the family and community at large whom they depend upon their finances.

4.6.3 Family and Community Support

The study found out that the survivors needed the care and understanding of their situation by the family and community at large by offering acceptance and protect them from being ostracized. Changes experienced by individuals after the development of fistula alter their personality and self esteem. The foul smell subjects them to stigmatizing positions where they cannot stay among people. The survivors expressed the need to be loved and be cared for in their condition through social, emotional and economic support.

4.6.4 Information

Many of the survivors recorded not to have had previous knowledge of the existence of fistula and thus they expressed the need to better understand fistula. This need can be addressed through reproductive health education that deliberately highlights fistula matters to girls and women. Increased awareness and sensitization to the community through conducting public campaigns that increase the publicity and public knowledge of causes of fistula and prevention measures would serve the informative role.

4.6.5 Spouse and Family Counseling

After surgery, one needs to adhere to recovery instructions such as abstinence and delaying child birth for a period of time. A number of survivors purported that men do not take it light and do not understand why they should abstain by simply being told by the spouse or partner. The study largely recorded the need of professional counseling to men and spouses involved with the survivor. This was explained by the respondent that the spouses and partners will tend to adhere and support the survivors if the information was delivered to them from an authoritative figure. Through counseling, misconception of the causes of fistula can be cleared among family members and this will improve the understanding of the experiences, care and support of fistula survivors and enhance social reintegration.

4.6.6 Support Groups

The survivors identified the need of a support group where they can meet and share among themselves. The survivors recorded sharing their experiences on random instances in the waiting section as they came for checkups. Some recorded learning about how to cope and would have wished to have a session with other survivors to share and open up on their experiences. Formation of support group among the survivors was suggested by the survivors where they could meet and share the experience. The group will serve the function of giving a platform to the reintegrated survivors to encourage those who are yet to be repaired and reintegrated. Support groups will be hubs of ideas where they can share on the coping strategies. This would aid their social reintegration by instilling hope of a normal life.

4.7 Existing Reintegration Strategies

The facility offered a wide range of services to fistula patients which include investigative services such as laboratory services and radiography, physiotherapy, surgical services such as the theatre, anesthesia and wards and counseling services as well. The reintegration services majorly for those who have already been repaired were mainly:

Investigative services offered after surgery included radiography where the survivors undertook further screening to ascertain the results of the correction. This service is offered to those clients who have complex fistula and need series of repairs where the results shows the extent of the fistula closure and guide decision making by the professionals on the next step in handling a client.

Counseling services are offered to the survivor where the major areas include how to maintain hygiene after repair where survivors are advised on general hygiene and how to take care of the wound to avoid infection. Family planning counseling services are provided to survivors since they are advised to stay for at least two years before giving birth to avoid re occurrence of the fistula. Survivors are advised healthy sexual practices where first they are to abstain from sexual activity for a period of six months after the repair to allow complete healing of the fistula. They are assured of regaining their sexual ability. They are encouraged to undertake kegel exercises for pelvic floor muscles. General counseling on self acceptance is also done where the survivors are encouraged to accept their situation especially those who have unsuccessful repairs and avoid stress which has a negative impact on their general health.

Community follow up services are also accorded to the survivors where a nurse accompanied by a social worker visits the survivor after a month or so from the date of discharge to find out on the well being of the survivor especially to the old women who have lived with the fistula for a long time. This is usually possible after a fistula camp since the nurse and the social worker are engaged by donors who facilitate their services.

4.7.1 Utility of Existing Reintegration Services

Upon establishing existing reintegration services which are majorly post operative services, the researcher asked the respondents what were the post operative services they received? This was to help the researcher understand further the utility of these services. The survivors recorded having received the above mentioned services as shown in table 4.10.

Table 4.10: Reintegration services received by the survivor after the repair

Service Received	Frequency (n)
Psychosocial counseling (needs, hygiene, personal care)	31
Clinical counseling (stress management, treatment, recovery)	18
Peer support	9
Investigative services	19
Follow up (home visit)	4

4.8 Challenges encountered during social reintegration

4.8.1 Unavailability of Health Care Providers

Due to issues like strike, travel among others, the survivors experience challenges since the professionals are not present to monitor their progress in healing where some may end up developing complications that are realized way later. Since most of the survivors understand physical healing as the first step to reintegration then this deters them from efficiently reintegrating since it stretches the time for follow-ups which reduces their confidence in engaging in social activities since they await for the doctors declaration of being well at the end of the sessions so as to be sure of complete healing.

4.8.2 specialised personnel in the facility

The number of specialized personnel is limited as compared to the number of patients. Majorly on the part of consultants who are few. This delays the process of admission of fistula survivors. Since the professionals are few, they are not able in some times to attend to all the patients. This leads to rescheduling of appointments.

There is a challenge in multidisciplinary staffing where the unit is only equipped with the medical personnel and other professionals such as social workers and counselors are not stationed in the unit. This therefore affects the social perspective of reintegration of the survivors to the community. One of the respondents posited that;

"The social workers and counselors are usually around the wards. They attend to those who have come from the theatre and since they are not only working with fistula patients sometimes some of the survivors miss their services. Those who are here coming for check up only see the doctor and

go home so unless they have opened up to the nurses who can give them advise they just go home after seeing the doctor. " (Professional K I - 4)

4.8.3 Training of Personnel

Training of professionals is faced with challenges since it is not continuous done but once yearly. This therefore offers limited opportunity to those who can attend and this therefore affects the total number of trained personnel.

"Now when training is announced, we have to arrange on who can go to the training since the clinic has to be up and running to provide the services. So we plan on the people who can go each year on rotation so that some are left at work to attend to the clients. Once the training is done we have to wait until next year for the next number to go for training." (Professional K I- 2)

This limits the number of trained personnel available to efficiently offer the services where the unit has to order the priority areas of the services provided where many at times that of physical reintegration overpowers that of social reintegration as said by one of the respondents;

"When we are here, because we want the survivors to be better every day and live their life, we have to go a little bit beyond checking if they are healing well and give advice. But you see those who are coming are both who have been repaired and those awaiting repair… so many at times I see those who have not been repaired having more suffering and may end up giving them priority of information then followed by those coming for follow up because you see them they are coming just to be seen if they are fine. Personally that is the moral judgment I make by myself not that I have been told to do so… "(Professional K I- 8)

4.8.4 Funding for Fistula Services

Fistula services are expensive and many of the survivors have been repaired through sponsorship from donors who foot the corrective bills only. This therefore leaves the burden of subsequent charges incurred during follow up on the survivor. The donors of the recent past have as well withdrawn from the support of fistula services and this therefore poses a challenge in the administration of the reintegration services especially counseling and community follow up of the survivors.

4.8.5 Honoring of Appointments by Survivors

Some of the survivors are not able to honor their appointments where they never come back for checkups after the repair. This in poses a challenge in their reintegration since the professionals are not aware of their whereabouts as expressed by one of the professionals:

*"When the survivors are discharged from the wards, some of them just disappear and this leaves us with the dilemma where we are not sure if the client is healing up well or the client is facing other complications or anything. This is because they do not come back to clinic as advised. I may not know a reason as to why this happens maybe it's because they do not have money to come or the problem is over. I just don't know why."(*Professional K I - 2)

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the study findings from the data collected and analysed. The chapter also presents conclusion and recommendation as guided by the study objectives that sought to establish the reintegration strategies employed beyond the medical repair to address the challenges experienced by survivors due to fistula by finding out the needs and perception of reintegration form the survivors and the challenges faced in the process of reintegration. The study sought to answer the following questions; what are the effects of fistula on individual lives? What are the coping strategies employed? What are the needs of women suffering from fistula? What is the perception of reintegration from the survivors' perspective? What challenges are experienced in the reintegration process of obstetric fistula survivors?

5.2 Summary

The findings of the study revealed that fistula is a challenge that is experienced by women both in the urban and the rural areas. The most vulnerable women in development of fistula are women within the child bearing age. Most of the fistula survivors are single or separated from their spouses due to the effects of fistula and majorly incontinence that leads to poor relationship between spouses and partners. The survivors period with unrepaired fistula was largely influenced by knowledge of treatment of fistula and the ability to disclose their experiences.

From the study, individuals suffer a wide range of effects from fistula. An alteration in their patterns of interaction came out clear where the survivors have to isolate themselves from others due to shame that comes with incontinence. The survivors are filed with questions on what might have gone wrong causing them emotional distress which is coupled up with grief from the loss of a child or fertility. Survivors lose their financial independence since they are unable to engage in their normal duties, economic activities and social roles and become dependent on family members and community. Most of their finances are drained towards management and treatment of fistula by buying incontinence products, paying for treatment and buying medication. Due to ambiguity of the exact cause of fistula to spouses and family, it challenges the relationship even after the repair where one had to adhere to medical advice on complete healing and had to separate from the spouse.

The study established a wide range of coping strategies that were employed by the survivors such as self isolation to avoid stigma, use of incontinence products such as adult diapers and surface protectors to avoid soiling of self and environs, avoiding food and drinks so as to control the amount of discharge, short moments of interaction so as to ensure no leakage in the presence of others, self acceptance as a sick person so as to learn how to manage oneself and cope with the stigma, supportive spouses and family who offer emotional and financial support to the survivor, engaging on religion by subscribing to a higher power of healing to drive consolation of getting better and extreme hygiene to avoid the foul smell. These strategies were combined differently among the individuals.

Needs of the survivors as documented by the study include incontinence control through successful surgeries in order to stop the leakage which is embarrassing, financial assistance so as to be able to have proper health treatment, information on the cause of fistula to clear the misconceptions and misinterpretation that is widely held among the community members, counseling to spouses and family members so that they can understand their situation, support groups to encourage one another and share experiences so as to help one another to overcome the effects of fistula, acceptance by family members and community where the survivors need to feel loved and accepted by members of the community despite their condition.

For the survivors to regain their functional state in the society, the study found out that they perceived the control if incontinence to be a greater need followed by having finances to take care of other health needs and as well to enable them establish an income generating activity that will allow them to have financial independence which in return will help their social interactions since they will no longer be viewed as a burden by the family or community members. Further awareness in the community of causes prevention and treatment of fistula through campaigns was also aired out so that other women who are suffering in silence can be made aware of the treatment and reduce stigma associated with fistula due to misconception on its cause.

The study found out that there are several post operative services that seek to reintegrate the survivors within the facility such as counseling to the survivor, health talks provision of accommodation and checkups to follow up the health of the survivor after the correction. A gap of knowledge was evident among the survivors on the existence of reintegration services such as psychological counseling that aims at offering emotional stability and improving self esteem of

the survivors who have interaction challenges due to self isolation that was practiced as a defense mechanism from stigma.

Community follow up is another strategy that is engages where a nurse and a social worker visits the survivor after a period of time to find out on the whereabouts of the survivor. The study found out that this strategy is employed occasionally since it is largely dependent on the donors who provide finance to aid the visits and is only applicable after a fistula camp since the funds are not sustainable to continually engage in this exercise.

The study found out several challenges experienced in the attempt to socially reintegrate fistula survivors which include; inadequate diverse personnel to efficiently offer all rounded medical and reintegration services where most of the professionals in the facility are medical oriented leading to a concentration on the medical services, inadequate funding to support reintegration services which are majorly donor driven, and challenges of protocol that outlines the diagnosis and treatment from a medical perspective concentrating on the survivor and little inclusion of the significant others such as spouses and family members.

5.3 Conclusion

Findings from the study indicate existence of social reintegration strategies for fistula survivors within the facility through the post operative services. Awareness of the existence and utility of the services is low among the survivors who only seek medical interventions. Implementation of the strategies is faced with challenges such as inadequate professional personnel to execute reintegration duties, inadequate funding to sustain the services, and survivor's compliance to instructions after repair. The effects of fistula on individual's social life as identified by the study reduced the socio economic productivity of the survivor leading to dependence on family members and alteration of interaction patterns leading to exclusion from the community for the period of suffering. The survivors engage in different coping strategies that help them to manage their new status as survivors.

The study revealed the reintegration needs of the survivors so as to regain their social functioning where some were being addressed by the current reintegration strategies and they suggested on more strategies to be employed to help them fully reintegrate to the community. The researcher established that there were no reintegration programmes that were existent within the facility.

Social reintegration according to the findings of the study involves a wide range of players such as the medical professionals, survivors, donors, social workers, family, and community members who should work hand in hand to realize successful reintegration of survivors.

5.4 Recommendations

1. Awareness of fistula should be increased among women through deliberate dissemination of information on fistula prevention, treatment and management in safe motherhood initiatives in the reproductive health policy. More sensitization should be undertaken in the facility on the existence and utility of post operative services that serve as reintegration strategies in the facility to complement the surgical repair.
2. Empowerment of fistula survivors should be undertaken where the survivors can be taught on healthy coping mechanisms on the challenges they face in order to reduce the effects of fistula on individual's social life.
3. Resource mobilization and increased funding for obstetric fistula services should be done to enable diversified specialised personnel within the facility so as to ensure prompt provision and sustainability of social reintegration services after the repair.
4. An integrated reintegration programme that engages all the players should be formulated to offer knowledge to the community and give peer support among the survivors. Initiatives such as vocational training and opening small scale markets enterprises can be done to encourage survivors to engage in their social roles after the repair.

Recommendation for further studies

The study was facility based and therefore could not use other methods of study such as observation in the actual context of the community. A comprehensive study should be undertaken within the community context to observe the actual social interaction and reintegration of the survivors.

REFERENCES

AbouZahr, C. (2003). Global Burden of Maternal Death and Disability. *Brit Med Bull*.67:191-204

Alder, A.J., Ronsmans, C., Calvert, C., Filippi, V. (2013). Estimating the Prevalence of Obstetric Fistula: A Systematic Review and Meta-Analysis. BMC *Pregnancy and Childbirth*; 13:246.

Ampofo, E.K., Omotara, B.A., & Out, T. (1990). Risk Factors Of Vesico-Vaginal Fistulae In Maiduguri, Nigeria: A Case-Control Study. *Trop Doct*; pp. 138-139.

Arrowsmith, S.D., Hamlin, E.C., Wall, L.L. (1996). Obstructed labour injury complex: obstetric fistula formation and the multifaceted morbidity of maternal birth trauma in the developing world. *Obstetric Gynaecol Survey*. *51*:568-574.

Arrowsmith, S.D., Ruminjo, J., & Landry, E.G. (2010). Current practices in treatment of female genital fistula: a cross sectional study. *BMC Pregnancy Childbirth*.

Babbie, E. (1992). The practice of social research. New York: Macmillan. Google Scholar

Bangser, M. (2003). Faces of Dignity: Seven stories of girls and women with fistula. Women's Dignity project 2003. University of Michigan.

Bangser, M., Mehta M., &Singer, J. (2010). Childbirth experiences of women with obstetric fistula in Tanzania and Uganda and their implications for fistula program development. *International Urogynecology Journal*. p. 1-8.

Biadgilign, S., Yihunie L, Ayali, A.R., Kabete D. Obstetric Fistula Prevalence, Reproductive Health 2013; 10:14

Browning, A., Fentahun, W., & Goh, J.T. (2007). The impact of surgical treatment on the mental health of women with obstetric fistula. *BJOG, 114*(11): 1439-1441. 10.1111/j.1471-0528.2007.01419.x.Google Scholar

Centers for Disease Control and Prevention (CDC). (2015). The Social Ecological Model: A Framework for Prevention.

Creanga, A.A., & Genadry, R.R. (2007) Obstetric fistulas: A clinical review. *International Journal of Gynecology & Obstetrics*, *99*(1): 40-46.

Creswell, J.W. (1998). Qualitative enquiry and research design: Choosing among five traditions. Thousand Oaks: CA. sage Publications, Inc.

Dahlberg, L.L., & Krug, E.G. (2002). Violence-a global public health problem, in World Report on Violence and Health. *World Health Organization*: Geneva, Switzerland.

FIGO and Partners. (2011). Global Competency-Based Fistula Surgery Trainining Manual. 2011, Waterloo Court, London, *UK: FIGO*. 119-157.

Kabir, M., Iliyasu, Z., Abubakar, I.S., & Umar, U.I. (2003). Medico-social problems of patients with VVF in Murtala Mohamed Specialist Hospital, Kano, Nigeria. *Animals of Africa medicine2;* 54-57

Roush, K.M. (2009). Social Implications of Obstetric Fistula: An Integrative Review. *Journal of Midwifery & Women's Health.*

Khisa, A.M., & Nyamongo, I.K. (2012). Still living with fistula: an exploratory study of the experience of women with obstetric fistula following corrective surgery in West Pokot, Kenya. *Reproductive Health Matters*: 59-66.

Lewis, G., & De Bernis, L. (2006). Obstetric fistula: Guiding principles for clinical management and programme development. WHO. Geneva.

Mabeya, H.M. (2003). Characteristics of women admitted with obstetric fistula in the rural hospitals in West Pokot, Kenya.*Pub Med*

Marston, C., Cleland, J. (2003). Relationships between contraception and abortion: a review of the evidence. *International Family Planning Perspectives. 1*(6): 6-13

Mati, J.K.G. (1968). Vesico vaginal fistula: A review of 100 cases at Kenyatta National Hospital between 1966 and 1967. Thesis for MRCOG, University of Nairobi, 1968

McFadden, E., Taleski, S.J., Bocking, A., Spitzer, R.F., Mabeya, H. (2011). Retrospective review of predisposing factors and surgical outcomes in obstetric fistula patients at a single teaching hospital in Western Kenya. *J Obstet Gynaecol Can*. 33: 30-35

Metro (2006), Modification of O'Conour's technique for treatment of VVF repair described. Retrieved from web: www.medicalnewstoday.com/medicalnews.php?newsid=40490

Ministry of Health, Division of Reproductive Health & UNFPA. (2004). Needs assessment of obstetric fistula in selected districts of Kenya Final Report.

Mugenda, O.M., & Mugenda, A.G. (2003). Research Methods; *Quantitative and Qualitative Approaches*. Nairobi: African Center for technology Studies Press.

Murray, C., J.T., Goh, M., Fynes. (2002). Urinary and faecal incontinence following delayed primary repair of obstetric genital fistula. *BJOG: An International Journal of Obstetrics & Gynaecology*. p.828-832.

Nicol, M. (2005). Conference of East Central and Southern Africa obstetricians. Tanzania: Dar es Salam.

Orwenyo, E.A. (1984). Retrospective study of 166 cases of acquired urinary genital and rectovaginal fistula treated at Kenyatta National Hospital 1979-1982. *M MED.Thesis*, University of Nairobi.

Pope, R., Bangser, M., & Requejo, J. H. (2011). Restoring dignity: Social reintegration after obstetric fistula repair in Ukerewe, Tanzania. *Global Public Health,* 6**:**859-873.

Raassen, T., Verdaasdonk, E., & Vierhout, M. (2008). Prospective results after first-time surgery for obstetric fistulas in East African women. *International Urogynecology Journal*, p.73-79.

Ramsey, K., Iliyasu, Z. and Idoko, L. (2007). Fistula Fortnight: Innovative partnership brings mass treatment and public awareness towards ending obstetric fistula *International Journal o f Gynaecology and Obstetrics',* 99;130-136

Roush, K.M. (2009). Social Implications of Obstetric Fistula: An Integrative Review. *The Journal of Midwifery & Women's Health:* e21-e33.

Stokols, D. (1996). Translating social ecological theory into guidelines for community health promotion. *American Journal of Health Promotion*. p.282-298.

Tebeu, P.M., Maninzou, S.D., Kengne, F.G. et al,. (2012). Risk factors for obstetric vesicovaginal fistula at University Teaching Hospital, Yaoundé, Cameroon. *International Journal of Gynecology & Obstetrics*. p.256-258.

Thaddeus, S., & Maine, D. (1994). Too far to walk: maternal mortality in context. *Soc Sci Med 38*(8): 1091-1110.

UNFPA and Egender Health. (2002). Needs Assessment Report: Obstetric Fistula Findings from Nine African Countries. Available from: http://www.unfpa.org/publications/obstetric-fistula-needs-assessment.

UNFPA (2013). The Compaign to end fistula: 10 years on. Available from:http://www.endfistula.org/sites/endfistula.org/files/pubpdf/UNFPA_Fistula_10th_Anniv_Report_FINAL.pdf.

Waaldijk., K. (2008). Obstetrics fistula surgery art and science*:* Ethical guidelines on obstetric fistula. Campion press: *FIGO, Int. J. of Gynecology and Obstetrics.*

Wall, L.L., Arrowsmith, S.D., Briggs, N.D., Browning, A., & Lassey, A. (2005). The Obstetric Vesicovaginal Fistulas. *The American College of Obstetricians & Gynaecologists*.

Wall, L.L., Karshima, J.A., Kirschner, C., et al., (2004). The obstetric vesicovaginal fistula: characteristics of 899 patients from Jos, Nigeria. *Am J Obstet Gynecol*; p1011-1019.

Wall, L.L. (2006). The medical ethics of Dr. J. Marion Sims: A fresh look at the historical record. *Journal of Medical Ethics:* 346–350.

Khisa, W., Mutiso, S., Mwangi, J. et al. (n.d.) Depression among women with obstetric fistula in Kenya. *International Journal of Gynecology & Obstetrics.*

WHO. (2012). Trends in maternal mortality: 1990 to 2010. *WHO, UNICEF, UNFPA, and The World Bank estimates* in *The World Health Report*.

WHO. (2005). Make every mother and child count. *The World Health Report*.

Yeakey, M.P., Chipeta, E., Taulo, F., Tsui, A.O. (2009). The lived experience of Malawian women with obstetric fistula. *Cult Health Soc 11:*499-513.

Zacharin, R.F. (2000). A history of obstetric vesico-vaginal fistula. The Australia and New Zealand. *Journal of Surgery*: 851–854.

APPENDIX I: QUESTIONNAIRE

INTRODUCTION

My name is Pauline Buyaki. I am a student at the University of Nairobi. I am doing a research on SOCIAL INTERGRATION OF FISTULA SURVIVORS IN NAIROBI. With your permission, would like to ask you some questions in relation to this topic. All information gathered will be used for academic purposes and will be kept confidential. Thank you in advance for your time.

QUESTIONS

SECTION A (personal information)

1. Residence area

2. Age

Age in years	✓	Code
below 18		1
19-28		2
29-38		3
39-48		4
49 and above		5

3. Education level

Education level	✓	**Code**
None		1
Lower primary		2
Upper primary		3
Secondary		4
Tertiary		5

4. Marital status

Marital status	✓	Code
Single		1
Married		2
Divorced		3
Separated		4
Widowed		5

If married, what was your age at first marriage?

SECTION B (Fistula experience)

5. How long have you had fistula?

7. What led to the development of fistula?

8. What were the first signs that suggested you had fistula?

SECTION C (Health seeking experience)

9. How long does it take to reach the nearest health center from your residence?

10. Have you sought any form of treatment other than the health facility prior to your surgery?

YES ☐ NO ☐

Explain the reason for your answer

11. How many repair surgeries have you undergone?

12. Who /What influenced you to seek treatment in the health facility?

13. How did you know/learn about fistula treatment in KNH?

14. Have you had children after the development and treatment of fistula?

YES ☐ NO ☐

If yes, how many and what are their ages?

Number ☐

Age in years	✓	Code
Below 5		1
6-10		2
11-15		3
16-20		4
21-25		5
Above 25		6

SECTION D (Social reintegration experience)

15. What post operative services have you received?

Service	**provider**	✓	**Challenges experienced when seeking the service**
Psychosocial counseling (needs, hygiene, nutrition, measures to take care of yourself)	Facility		
	Community		
	Political		
Clinical counseling (treatment, recovery, stress,)	Facility		
	Community		
	Political		
Peer support	Facility		
	Community		
	Political		
Empowerment (training, income generating activity)	Facility		
	Community		
	Political		
Socio- economic support (money, food, clothes)	Facility		
	Community		
	Political		

16. Have you experienced any challenges in life due to fistula?

YES ☐ NO ☐

Explain your answer

17. How can you compare your life experience before the development of fistula, during the fistula period and after treatment? (work, social interaction, marriage, community participation)

Before

During

After

How have you dealt with the change?

18. In your opinion, what do you need in terms of assistance in order to live a comfortable life in the society as a fistula survivor?

19. Do you know of any care program for fistula in your society?

20. Do community members offer support to you?

Yes ☐ No ☐

If yes, what kind of help.

APPENDIX II: INTERVIEW GUIDE FOR PROFESSIONALS

(FISTULA SURGEONS, NURSES, NURSE AIDS, SOCIAL WORKERS, DOCTORS, FISTULA UNIT ADMINISTRATION)

1. What is your role in fistula care in this facility?

2. Do you have the following fistula services in your facility?
    - Surgical services (theatres, wards, anesthetic services)
    - Investigative services (laboratory, x ray, blood banks)
    - Physiotherapy
    - Social reintegration services (counseling, psychotherapy)
3. Which fistula specialized personnel do you have in the facility?

4. Do you offer any post operative care for the patients?
   (If yes which ones, If no what are the reasons? any plans to improve services?)

5. What challenges do you face when handling fistula issues?
   Personnel staffing (trained nurses and nurse aides, surgeons, social workers)
   Funding (for fistula services)
   Training (fistula personnel)
   Accommodation (fistula patients)

6. Do you have any rehabilitation programs for fistula patients and their family members?

7. Are there any policies that guide the treatment of fistula? (if there how well implemented)

8. Are there any healthcare provider factors that deter or encourage social reintegration of the survivors after the repair?

9. What can be done within the facility to enhance the reintegration of survivors?

APPENDIX III: INTERVIEW GUIDE FOR COMMUNITY INFORMANTS (e.g NEIGHBOURS, CARE GIVERS, SPOUSE, RELATIVE)

1. What is your relationship with the fistula survivor?
2. How do you understand fistula? (What is it? how did you get to know about fistula)

3. What is your opinion on the cause of fistula in the community?

4. How well have you known fistula survivors?(their social interaction and community participation before, during and after)

5. How has your social interactions with the fistula patients been before, during and after surgery? (gender roles, participation in community activities, stigma, social support)

6. What kinds of help have you been able to offer for the survivors? (economic, social)
   How can you define the roles of the following in reintegrating fistula survivors?
   - Family
   - Community
   - Government
7. Are there initiatives to reintegrate the fistula patients into the community?(programs, economic aid, training)

APPENDIX IV: INFORMED CONSENT FORM

INFORMED CONSENT FORM

Title of the research: DYNAMICS OF SOCIAL REINTERGRATION OF WOMEN AFTER OBSTETRIC FISTULA REPAIR IN NAIROBI

Researcher: PAULINE BUYAKI NYAKUNDI

Introduction: I am a student at the University of Nairobi, undertaking Masters of Arts in Medical Sociology in the department of Sociology and Social work. My admission number is C50/81842/2015. For any questions or complaints you can contact me on my cell phone through this number 0713678617 or University of Nairobi, Department of Sociology and Social Work tel. 38182/5 ext28167.

Purpose of the research study: the research is undertaken for purely academic purpose where it seeks to establish the dynamics of reintegrating fistula survivors after fistula repair so as to understand the challenges that they undergo, their coping strategies and reintegration programmes available for the survivors.

Procedure: you will be asked to answer questions led by the researcher. The questions will range from general personal characteristics to specific personal experiences with obstetric fistula. This will take about 45 minutes to one (1) hour of your time.

Respondent's responsibility: You are allowed to ask as many questions as you like before you decide to participate in this study.

Participation in this study is on ***voluntary*** basis where you have the ***right to refuse or withdraw*** from participating ***at any time*** without a penalty or loss of benefits entitled to you.

Financial obligation: There are no charges for participation in this study.

Risks: there is no possible physical risk in undertaking the study nor invasive procedures like drawing out blood but some psycho social risks may be encountered by the survivors due to the nature of some questions that need you to recollect from past experiences that may be painful. This will be **addressed** by the researcher maintaining a professional relationship and making sure that you are comfortable throughout the process of the research. Referrals for counseling or any other

specialized care will be offered through a referral to a professional suppose the risk arises through the hospital's authorities.

Compensation and benefit of the study: There is no financial or any other form of compensation for the participation in this study but rather a long term benefit to the respondents where the findings will guide practitioners, policy makers and women at large in understanding the experiences of women and knowing exactly the wishes of fistula survivors in relation to social reintegration after fistula repair to further the prevention and treatment of obstetric fistula.

Confidentiality will be maintained at all times where the information shared will only be known to the researcher. "In the office" rule will be used where any information exchanged in the interview room will not be shared outside the office. Filled questionnaires and interview notes and records will be kept under lock and key only accessible by the researcher. No names or numbers will be recorded in order to ensure anonymity of the participant.

Privacy of the respondents will be achieved by having no labels on the interview room door that subject the respondents to embarrassment as well as have the door under lock and key during the session to limit the in and out movement of other people to the interview room. A quiet but audible tone will be used during the exchange of information to ensure auditory privacy.

Consent: Having read and understood the explanation of this consent form and I ***voluntarily*** agree to participate in this study by appending my signature. I have asked questions and have been satisfactorily answered and the researcher (Pauline Buyaki, 0713678617), will answer any future questions pertaining the study.

Signature (participant): ———————— Date: ————————

Signature (researcher): ———————— Date: ————————

APPENDIX V: APPROVAL LETTER FROM THE UNIVERSITY

UNIVERSITY OF NAIROBI
DEPARTMENT OF SOCIOLOGY & SOCIAL WORK

Fax 254-2-245566
Telex 22095
Varsity Nairobi Kenya
Tel. 318262/5 Ext. 28167

P.O. Box 30197, Nairobi
Kenya
Email: dept-sociology@uonbi.ac.ke

19/10/2017

TO WHOM IT MAY CONCERN

RE: PAULINE BUYAKI NYAKUNDI- C50/81824/2015

Through this letter, I wish to confirm that the above named is a bonafide postgraduate student at the Department of Sociology & Social Work, University of Nairobi. She has presented her project proposal entitled; "**Dynamics of Social Reintegration of Women After Obstetric Fistula Repair in Nairobi.**"

Pauline is required to collect data pertaining to the research problem from the selected organization to enable her complete her thesis which is a requirement of the Masters degree.

Kindly give her any assistance She may need.

Thank you.

19 OCT 2017

Prof. C.B.K. Nzioka
Chairman, Department of Sociology & Social Work

APPENDIX VI: APPROVAL LETTER FROM ETHICAL REVIEW COMMITTEE

UNIVERSITY OF NAIROBI
COLLEGE OF HEALTH SCIENCES
P O BOX 19676 Code 00202
Telegrams: varsity
Tel:(254-020) 2726300 Ext 44355

KNH-UON ERC
Email: uonknh_erc@uonbi.ac.ke
Website: http://www.erc.uonbi.ac.ke
Facebook: https://www.facebook.com/uonknh.erc
Twitter: @UONKNH_ERC https://twitter.com/UONKNH_ERC

KENYATTA NATIONAL HOSPITAL
P O BOX 20723 Code 00202
Tel: 726300-9
Fax: 725272
Telegrams: MEDSUP, Nairobi

KENYATTA NATIONAL HOSPITAL APPROVED 09 MAY 2018 KNH/UoN-ERC P.O. Box 20723-00202 NRB.

Ref: KNH-ERC/A/157

May 9, 2018

Pauline Buyaki Nyakundi
Reg.No.C50/81842/2015
Dept.of Sociology and Social Work
Faculty of Arts
College of Humanities and Social Sciences
University of Nairobi

Dear Pauline

RESEARCH PROPOSAL – DYNAMICS OF SOCIAL REINTEGRATION OF WOMEN AFTER OBSTETRIC FISTULA REPAIR IN NAIROBI (P640/11/2017)

This is to inform you that the KNH- UoN Ethics & Research Committee (KNH- UoN ERC) has reviewed and **approved** your above research proposal. The approval period is from 9th May 2018 – 8th May 2019.

This approval is subject to compliance with the following requirements:

a) Only approved documents (informed consents, study instruments, advertising materials etc) will be used.
b) All changes (amendments, deviations, violations etc) are submitted for review and approval by KNH-UoN ERC before implementation.
c) Death and life threatening problems and serious adverse events (SAEs) or unexpected adverse events whether related or unrelated to the study must be reported to the KNH-UoN ERC within 72 hours of notification.
d) Any changes, anticipated or otherwise that may increase the risks or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to KNH- UoN ERC within 72 hours.
e) Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. (*Attach a comprehensive progress report to support the renewal*).
f) Submission of an *executive summary* report within 90 days upon completion of the study. This information will form part of the data base that will be consulted in future when processing related research studies so as to minimize chances of study duplication and/ or plagiarism.

Protect to discover

APPENDIX VII: APPROVAL LETTER FROM FACILITY

KENYATTA NATIONAL HOSPITAL,
P. O. BOX 20723-00202,NAIROBI
Tel: 2726300-9/2726450/2726550
Fax:2725272
Email: knhadmin@knh.or.ke

KNH/RH/16/VOL.1

DATE: 16th May, 2018

To

Pauline Buyaki Nyakundi
Reg.No.H32/4894/2014
School of Nursing sciences
College of Health Sciences
University of Nairobi

RE: RESEARCH PROPOSAL: "DYNAMICS OF SOCIAL REINTEGRATION OF WOMEN AFTER FISTULA REPAIR AT KENYATTA NATIONAL HOSPITAL

This is to inform you that the department has given you permission to conduct the above study which has been approved by ERC.

Liaise with the Senior Assistant Chief Nurse and Senior Nursing Officers in charge clinic 66, to facilitate your study.

You will be expected to disseminate your results to the department upon completion of your study.

KENYATTA NATIONAL HOSPITAL
21 MAY 2018
P.O. Box 20723 - 00202 NRB.
Assistant Director Reproductive Health

DR. I.S.O MARANGA
HEAD OF DEPARTMENT
REPRODUCTIVE HEALTH

CC: SACN -RH
Incharge Clinic 66

APPENDIX VIII: ITEMISED RESEARCH BUDGET

ITEM	QUANTITY	AMOUNT @	TOTAL
Proposal $ Report printing	18	600	10800
Photocopying (questionnaires, interview guides and consent forms)	120	30	3600
Transport	15	500	7500
Stationery (files, pens, book)	10	90	900
Telephone expenses		2000	2000
Tape recorder	1	15000	15000
Miscellaneous			5000
TOTAL			**44800**

APPENDIX IX: TIME FRAME WORKPLAN

ACTIVITY	JUNE-OCT 2017	NOV 2017-JAN 2018	FEB - APRIL 2018	MAY 2018	JUNE 2018	JULY 2018
Proposal development						
Proposal approval						
Data collection						
Data analysis						
Report writing						
Report submission and publication						
Report printing						