

**SOCIO-CULTURAL DYNAMICS AND THEIR IMPACT ON MANAGEMENT  
OF INFERTILITY IN KENYA: THE CASE OF NAIROBI**

**By**

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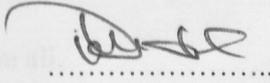
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**DECLARATION**

I declare that this project is my original work and that it has not been submitted to any other college for academic credit.

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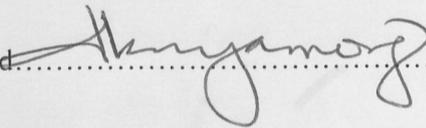
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This research project has been submitted with my approval as the University supervisor

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**PROF. ISAAC NYAMONGO**

## ACKNOWLEDGEMENTS

### DEDICATION

Firstly, I thank God Almighty for having revealed to me the mystery of his words in

Jeremiah 29:11  
This work is dedicated to my late mother Priscah Auma who gave me life, introduced me to Christ and dared me to think big. To God be the honour and glory. I also dedicate this work to my sister Susan Obare for facilitating my early education, thank you all.

Secondly, to my mother Priscah Auma and my sister Susan Obare I am truly grateful to you for giving me the first ladder and support to my education.

My sincere appreciation goes to Professor Isaac Nyamongo, the Director of the Institute for Anthropology, Gender, and African Studies, for the time and support he gave me during this study. Professor, "Your firmness, thoroughness, dedication and encouragement went a long way in helping me to understand this project fully." Thank you, God bless you indeed.

I sincerely thank my Children, Yvick, Sophie, Ezekiel, Emanuel, Brian and Nigel, your support has been quite invaluable. The support and encouragement I have received from my family has been the hinge of my strength to move on even when I had no energy to do so. My gratitude goes to my husband Fred Olande for his consistent support throughout this project. May God richly bless each one of you all.

Fourthly, I am grateful for the support from my research assistants, Kan, Amos and Dennis. You sacrificed your time in order to make this work a success.

Lastly, I am indebted to all the people who spared their valuable time during data collection or in any way to help me to complete this project together.

## ACKNOWLEDGEMENTS

Firstly, I thank God Almighty for having revealed to me the mystery of his words in Jeremiah 29:11, “ *For I know the plans I have for you declares the Lord, plans to prosper you and not to harm you, plans to give you hope and a future.* In addition, Daniel 11:32. “*The people that know their God shall be strong and do exploits*”. Indeed without God’s grace this project would not have been accomplished.

Secondly, to my mother Priscah Auma and my sister Susan Obare I am truly grateful to you for giving me the first ladder and support to my education.

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Fourthly, I am grateful for the support from my research assistants, Ken, Amos and Damila. You sacrificed your time in order to make this work a success.

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AART: Advanced Assisted Reproductive Technology

ART: Assisted Reproductive Technology

D&C: Dilation and Curettage

DES: Diethylstilbestrol

DHS: Demographic and Health Survey

EMRO: East Mediterranean Region Office

FGM: Female Genital Mutilation

HIV: Human Immunodeficiency Virus

IVF-ET: In vitro Fertilization with Embryo Transfer

NGO: Non Governmental Organization

NIY: New International Version

PID: Pelvic Inflammatory Disease

SSA: Sub-Saharan Africa

STI: Sexually Transmitted Infection

UNEP: United Nations Environmental programme

WFS: World Fertility Survey

WHO: World Health Organization

## LIST OF ABBREVIATIONS

<b>AART :</b>	Advanced Assisted Reproductive Technology
<b>AFRO:</b>	Africa Region
<b>ART:</b>	Assisted Reproductive Technology
<b>D&amp;C:</b>	Dilatation and Curettage
<b>DES:</b>	Diethylstilbestrol
<b>DHS:</b>	Demographic and Health Survey
<b>EMRO:</b>	East Mediterranean Region Office
<b>FGM:</b>	Female Genital Mutilation
<b>HIV:</b>	Human Immunodeficiency Virus
<b>IVF-ET:</b>	Invitro- Fertilization with Embryo Transfer
<b>NGO:</b>	Non Governmental Organization
<b>NIV:</b>	New International Version
<b>PID:</b>	Pelvic Inflammatory Disease
<b>SSA:</b>	Sub-Saharan Africa
<b>STI:</b>	Sexually Transmitted Infection
<b>UNEP:</b>	United Nations Environmental programme
<b>WFS:</b>	World Fertility Survey
<b>WHO:</b>	World Health Organization

## ABSTRACT

This study was an exploration on the impact of cultural and psychosocial dynamics in the management and treatment of infertility. It also endeavoured to assess the knowledge, attitudes, perceptions regarding infertility and its causes among communities in Nairobi.

This study used descriptive research approach. The researcher used non-probabilistic sampling to administer semi-structured questionnaires, which were distributed to forty-three respondents within Diamond Trust Bank. Secondly, the researcher used the case study approach to carry out in-depth interviews with four individuals' (two males and two females) who are suffering infertility. Finally, four medical doctors in the field of reproductive health, specifically gynaecologists were selected purposively and interviewed.

The study revealed that persons suffering from infertility were stigmatised. Infertility was perceived from the standpoint of traditional practices and taboos such as lack of respect for elders, curses, religious beliefs and "incompatibility of blood between the spouses". Most communities were found to have inadequate knowledge about the causes of infertility; however, those with higher education levels i.e. secondary, and postgraduate levels had knowledge on the medical causes of infertility. Community perceptions elevated the man thus led to bias and prejudice against women in instances of childlessness. The results from all communities sampled indicated that women who are infertile are mistreated thus the condition of infertility is feminised.

The dominant type of infertility revealed is the secondary form of the condition that is found to result from a history of STIs, injury, poor corrective surgery or growths in women's' reproductive systems. Facilities for the management of infertility were found to be concentrated in the urban areas and at a high cost.

Management and treatment of infertility is a crucial factor for the public's well-being. Dealing with infertility within the populace is challenging due to the sensitive and personal nature of the condition. Cultural factors play a big role in interpretations of infertility therefore there is great need to create awareness and address infertility as a medical condition right from the grassroots. In addition, affordable and easy accessibility to medical facilities and doctors should be facilitated in all parts of the country.

This study recommends that the department of Public Health should have reproductive health experts at the district level to help those who cannot access urban treatment. It also recommended reduction of adoption process by removing some of the bureaucracies, which makes the process too long and tedious.

## CHAPTER ONE

### 1.0 Introduction

Infertility is a reproductive health problem, which is related to a couple or persons who have not been able to conceive a child. The biological causes of infertility relate to either one or both partners, however in some cases the problem is unexplained, e.g. no medical diagnosis has been identified (Sekadde-Kigundu et. al, 2005).

Infertility affects millions of couples worldwide. Statistics in the 1980's and 1990's estimated that a one in six couple are faced with infertility at some time during their reproductive years (Seibel, et. al, 1990). World Health Organization (WHO 1982) defines infertility as the inability to conceive after one year or more of regular sexual relations without the use of contraceptive. WHO recognizes infertility as an illness, which can be treated? According to its estimates in 1982, in 32% of cases the problem of infertility lies with men and 26% is with women, whereas in 20% the problem may be in both partners while in 22% the cases of infertility are idiopathic/unexplained (WHO, 1982).

Although estimates of its prevalence are not accurate and vary from region to region, about 8% of couples experience some form of infertility during their reproductive lives, a condition that causes personal suffering and disruption to family life (Centola, et. al, 1996). All people assume they are fertile, unless proven otherwise. Until the end of the nineteenth century, infertility (understood as the inability to conceive) was generally believed to be entirely a female condition. Childless women were considered 'barren' and the notion that the male could in any way be the responsible factor was never even considered.

Modern research on infertility, however, has brought to light that sperm defects and dysfunction are the largest single factor responsible for infertility, yet andrology, which is the study of male infertility, remains a less developed discipline (Gupta, 2000).

### **1.1 Societal Context of Male Infertility and Masculinity**

Historically across most patriarchal cultures, there has been difficulty in accepting the existence of male infertility. The individual and collective denial of male factor infertility may occur for a variety of reasons. Since it takes two to create a pregnancy, the assumption of who is defective may be guided by the gender that is easier to label as abnormal. Historically, women have been viewed as being less valuable, less intelligent, and less capable in our male-dominated society, hence when problems exist they are more likely to be attributed to the less powerful non-dominant group (Centola et al., 1996). The societal inability to assign responsibility for infertility to men reflects both the level of importance that men have in society and the importance that fertility holds for men. Men are valued in most cultures and there are very high standards of behaviour they are expected to meet, any signs of weakness or defectiveness are viewed with great concern.

Thus traditional components of male role norms include: avoiding femininity, restrictive emotionality, non-relational attitudes toward sexuality, self-reliance, aggression, homophobia, and seeking achievement and status (Levant et al., 1992). The sexual and fertile capabilities of men are viewed as synonymous. Men are expected to exhibit sexual readiness and prowess at all times (Zilbergeld, 1978), and the most overt indicator of sexual competence is the ability to impregnate a woman. Thus, sexual virility and reproductive capacity are essential to the male's self-image, termed the 'masculine

mandate'. The closely intertwined image of sexual and fertile capabilities is further woven into our societal views of masculinity to impregnate women.

However, if a man suffers from infertility he may also be portrayed as less masculine, and the diagnosis of infertility thus depreciates his masculine self-image. The threat of a male infertility diagnosis can shatter the man's basic sense of self-esteem. Fertility therefore is very central to male identity than to the female identity (Chodorow, 1978). The above accounts are some of the societal and cultural expectations on sexual performance of the man. This, therefore explains the male reluctance to seek treatment for infertility and hence the gender bias that exists in the treatment and management of infertility in most societies. Men are threatened by the shame that can be triggered when a routine sperm count turns into a statement about his limited capacity to reproduce, and especially the fact that this condition becomes common knowledge to his doctor, the laboratory and office personnel (Centola et al., 1996).

The problem of infertility has been ignored in many health institutions all over the world, mainly because it is not considered as an illness. In particular, couples afflicted with infertility in developing countries remain under served due to lack of facilities at all levels of health care management. There are contrasting statistics of the prevalence of infertility in different regions of the world, between countries while variations are also found within countries from community to community. For instance, in the African Region (AFRO) countries tubal pathology is the most prominent factor while hormonal imbalance plays a major etiological role in the Eastern Mediterranean Region (EMRO) (M'Imunya Machoki et al., 2005).

In the developed world the infertile couple/persons have access to various technologies that have been developed in the last three decades for the management of infertility. However, few African countries have resources to provide sophisticated assisted reproductive technologies (ART) such as Microsurgery or Invitro- Fertilization with Embryo Transfer (IVF-ET), for the management of infertility due to tubal occlusion.

There are some countries in Africa where new reproductive technologies are available however such facilities are still not easily accessible to the majority who require such services, this is because they are situated in private institutions and are therefore very expensive. Consequently there is need to establish guidelines for the management of infertility in poor resource settings where women and men seek medical care either too late or not at all due to the stigma attached to infertility. There is also great and urgent need to document and to define best practices in order to maximise utilisation and effectiveness of available resources however limited (M'Imunya Machoki et al., 2005).

Infertility is a major health care problem that has very definite physiological, psychological and sociological implications. Questions like when are you two going to have a baby is usually the order of the day, yet this is a question such a couple suffering infertility dreads to hear, to such extent that they will avoid social events to protect themselves from public ridicule. Each month, when the woman menstruates, she experiences a sharp reminder that yet another month has gone by without conception (Stout, 1990). The stigma of infertility often leads to stress and tensions developing within the family. Infertility in Africa is almost always feminized; the derogatory terms used to define a person suffering infertility in Kenya specifically, are very demeaning, they target the female gender and marginalise women. *The Luos refer to an infertile*

woman as *Lur* or *sunu* meaning completely barren and almost good for nothing. The *Kambas* refer to such a woman as *ngungu*, the *Kikuyus* refer to an infertile woman as *Thaata*, the *Luhyas* refer to an infertile woman as *Mikumba*, while in *Kiswahili* the infertile woman is referred to as *Tasa*. These unkind words describe the female gender only. Since our society is patriarchal, infertile or impotent men are rarely discussed about out loud let alone identified in public, yet there are infertile men in every community (Sekadde-Kigonde, 2002).

Many scholars among them Seibel and colleagues have proved that in some cases 46% of the infertility problem could be women, 42% of the infertility problem could be the man and the remaining 12% could be both or unknown (Seibel et al.,1990). Yet because of cultural beliefs that a man cannot suffer infertility, andrologists are not as frequently consulted as the gynaecologists. According to (Sekadde-Kigonde 2002) male related disorders of fertility, alone or in combination with female factors are present in up to 40% of childless couples. However, despite the high incidence, it is observed that because of firmly entrenched beliefs, in most cultural settings; it is the woman who is usually blamed for the couples' inability to bear children (Shobary, 2002).

## **1.2 Statement of the Problem**

Despite such remarkable increases in Sub-Saharan Africa and global populations, infertility is a major health predicament, which has very definite physiological, psychological and sociological implications in both the developing and developed world. It is estimated that worldwide 50-80 million people have a problem with fertility, with over two million new infertile couples per year entering this pool (Gupta, 2000).

For a long time infertility has not been considered an illness in many health institutions all over the world (Stout et al., 1990). As a result many couples are ignorant about the causes of infertility, and may disregard treatment of sexually transmitted diseases, which are the main causes of some form of infertility. Yet, in some societies it is a cultural belief that without children marriage is null and void. Such beliefs make those without children a subject of ridicule hence they become traumatised. Feminization of infertility compounds the diagnosis of infertility altogether. Men may blame their wives and re-marry to get children or divorce their perceived infertile wives altogether.

Childless couples dread discussing the problem of barrenness. In some traditional societies, women would rather consult their fellow women folk or the traditional birth attendants than seek conventional medical advice from professionals. Husbands are usually averse to seeking help from conventional medical practitioners or gynaecologists. Men appear reluctant to enter the treatment process for infertility. The prospect of being diagnosed as infertile appears quite threatening to them. According to (Berger, 1980), a majority of men develop impotence after receiving a male factor diagnosis. The primary force behind the focus on the woman may result from an underlying reluctance to uncover a male factor infertility problem.

The stigma and shame associated with male infertility is perceived to be so great that some (fertile) female partners of infertile men have been reported to assume a courtesy stigma, by making people believe they are the ones with the problem. On the other hand, some women who are fertile would rather secretly get children from other fertile men mainly in-laws hence make their husbands believe that all is well rather than request such partners to go for sperm analysis.

The above reproductive intrigues, coupled with the societal pressure on couples to produce children are some of the causes for the delay in seeking proper medical treatment. The socio-cultural wellbeing of such couples and/or infertile persons is at risk because childlessness has been stigmatized thus the management of this condition may be done secretly and/or inadequately advised.

Notwithstanding, in some incidences a childless couple may be quite informed about the help offered by the new reproductive health technologies, which may help them: have their own biological children, seek surrogate motherhood, or seek adoption. Such a couple may not come out to seek help because of the social stigma pegged on infertility.

In the traditional African setting, children are perceived to be insurance in old age and assurance of personal and lineage immortality. In such a setting, a woman's social status, direction in life, economic achievement, well being and the very meaning marital life hinges around her ability to beget and rear children. The ability to beget children is therefore, seen as a true mark of womanhood and pride of a man.

In Kenya the social perception of those who suffer infertility is not different from those of other Sub-Saharan regions. Infertile people are likely to be denied positions of leadership whether in a church setting or even in the secular world. When it comes to inheritance for example land division in a family, the infertile brother or wife will receive the least portion because they have no children to feed and no one to pass on the property to. Childless couples may be excluded from taking leading roles in important functions and events because the society perceives them to be under some curse spell and hence they do not approve of their handling of the children. Infertility, therefore, has far-

reaching socio-psychological and socio-cultural implications among those affected by it (Kaonde, 2002).

### **1.3 Research Questions**

This research aims to answer the following research questions

- i. What knowledge do Nairobians' have regarding the causes of infertility?
- ii. What are the perceptions and attitudes regarding causes of infertility?
- iii. What effects do socio-cultural factors have on infertility management in Nairobi?
- iv. Which is the most prevalent infertility type in Nairobi?
- v. What are the health care management options available for the management of infertility in Nairobi?

### **1.4 Objectives of the Study**

The overall objective of this study was to explore the effects of socio-cultural dynamics in the management and treatment of infertility in Nairobi.

The specific objectives of the study were:

- i. To assess the knowledge, attitude, perceptions regarding infertility and its causes among communities in Nairobi.
- ii. To explore the effects of socio-cultural dynamics on infertility management in Nairobi.
- iii. To explore the most prevalent infertility types.
- iv. To explore the health care management options available for the management of infertility in Nairobi.

## **1.5 Significance of the Study**

The study provided insights into the knowledge, perception, and attitude towards infertility. These insights should influence National Health management of infertility as a condition amongst the citizenry.

The study therefore is significant for the Ministry of Health, as it has proposed how to address the problem of infertility in regard to educating the society on how to relate with people perceived to be infertile. The study has also identified possible management measures that could be used in controlling infertility. On the other hand the study provided necessary information to the Public Health policy makers on the specific aspects of socio-cultural perceptions and practices, which are prevalent in Nairobi, which impede the management of infertility as a medical condition.

The findings could also be used by public health sector to adequately address the problem of infertility both at policy and service levels and also to rank infertility against other perceived pressing priorities of maternal and child health care.

## **1.6 Assumptions of the study**

The citizens in Nairobi have adequate knowledge on the causes and management of infertility. The impact of cultural dynamics is responsible for the stigma attached to infertility. Most couples/persons affected by infertility are willing to seek medical attention as early as possible, but there are no adequate health care management options available for them and where such services are available, they are too expensive and inaccessible to most people who need it.

## 1.7 Scope and Limitation of the Study

This study focused on infertile persons within Nairobi, it assessed the attitudes, knowledge and perceptions regarding infertility and its causes among communities in Kenya. The study also assessed the socio-cultural dynamics and their impact on the management of infertility in Nairobi; it also explored the health care management options available for the management of infertility in Nairobi.

Insufficient time to undertake a larger survey and inadequate financial resources impeded the carrying out of extensive interviews for the research. Since infertility is still considered a personal/private problem, it carries with it stigmatization, thus it was very difficult to get those who suffer infertility to talk freely about their condition and what they go through. Given the above difficulties, the selected sample might not have been representative of the entire population of the study area.

The researcher overcame some of these challenges by spending more time explaining the benefits of the research outcome to the persons concerned, for example, by letting them know that the outcome may be used for policy advocacy in order to tackle the problem of infertility management. The researcher also spent more time looking for other willing respondents to interview in order to achieve a reasonable sample size.

## 1.8 Operational Definition of Terms

**Primary infertility in females:** This is a condition in which the woman has never been able to conceive despite cohabitation and exposure to pregnancy for a period of one year.

**Secondary infertility in females:** This is a condition in which the woman has previously conceived but she is subsequently unable to conceive despite cohabitation and exposure to pregnancy for a period of one year. If the woman has breastfed a previous infant, then exposure to pregnancy should be calculated from the end of the period of lactation amenorrhea. Appropriate allowance is also needed for women who have been on injectable contraception.

**Pregnancy wastage:** This is a condition where the woman is able to conceive but she is unable to carry the pregnancy to full term and give birth to a live baby. Loss of pregnancy during the first 28 weeks is referred to as early or intermediate foetal death or abortion, and may be spontaneous or induced. Beyond 28 weeks of gestation and up to term, such losses are referred to as late foetal death or stillbirth.

**“Unproven Infertility” or “Unproven fertility”:** These terms refer to problems sometimes perceived by individuals or couples as infertility or included as infertility in demographic surveys whereas, the woman may have the potential to conceive but she is unable to do so.

**Male infertility:** Is defined as inability of a man to achieve a conception with a woman after 12 months of regular unprotected sexual intercourse.

**Primary male infertility:** This is a condition in which a man has never been able to impregnate a woman.

**Secondary infertility in men:** is a condition in which a man had previously impregnated a woman, but consequently fails to do so when the need for a child arises

## CHAPTER TWO

### 2.0 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

#### 2.1 Introduction

Infertility is an area of concern among reproductive health experts. Clinically a couple is considered to be infertile after at least one year of cohabitation without the use of contraceptive and without pregnancy (Weinberg and Wilcox, 1998; Soviets et al., 2002). This definition assumes that the woman is regularly sexually active with her male partner, and she is within reproductive age which is between 15-49, and also that the woman is not lactating. The latter is the epidemiological definition and recommended by the World Health Organization (Rowe et al, 2002). On the other hand, to a demographer, infertility is defined as: “the percentage of ever-married women who are childless at the end of their reproductive life (a measure of primary infertility) and the percentage of married women who have not conceived in the previous five years (a measure of the total of secondary and primary infertility)”. These measures are not able to differentiate between involuntary and voluntary childlessness and are complicated by the high levels of contraceptive use in certain regions of the world. In demographic studies five years is the cut-off period of exposure. To two people affected, infertility may mean overall childlessness regardless of whether conception and/or delivery have taken place (M’Imunya Machoki, 2007).

There are many reasons why some people do not become parents. Some are infertile, some do not want children, children can be socially unacceptable and for others alternative life goals are more important, this position has not been well distinguished by the demographic definitions for infertility and are bias lacking clarity on voluntary and

involuntary infertility. While the fertile majority has a vested interest in promoting support for contraception and population control, the infertile deserve a compassionate and social, rather than a demographic consideration of their problem (Gupta, 2000).

According to Rowe et al, (2002), male infertility is the inability for a man to father a child after 12 months of regular unprotected sexual intercourse. It encompasses the capacity to initiate and sustain sexual intercourse with ultimate conception. Infertility types is divided into two, in cases where a man has never ever been able to father a child even though he had been exposed to the favourable conditions of doing so for period of one year, then, the condition is referred to as primary infertility. On the other hand, secondary infertility is considered when a man had previously impregnated a woman irrespective of whether it is with the present partner and/or of the outcome of the pregnancy. Rowe goes on to say that men with secondary infertility, in general, have a better chance of future fertility (Rowe et al, 2002). The same scenario applies to women. A woman is said to suffer primary infertility when she has never been able to conceive for at least one year without the use of contraceptives. However, if she had been able to conceive before regardless of the outcome of the pregnancy, but later fails to conceive for at least one year without the use of contraceptives, then, her condition is referred to as secondary infertility.

Infertility however, is a problem that affects men and women everywhere in the world. Although estimates of its prevalence are not accurate and vary from region to region, about 8% of couples experience some form of infertility during their reproductive lives, a condition that causes personal suffering and disruption to family life. When extrapolated to the global population this means that 50-80 million people probably have

a problem with fertility, and that there are about two million new infertile couples per year.

There have always been couples that were unable to conceive. In Genesis, there is the story about Rachel and Jacob who were involuntarily childless. Rachel said to Jacob: “Give me children, or else I die” (Genesis; 30, 1). Rachel asked her maid to give her children with Jacob and the maid delivered two sons. This is, probably, one of the first written stories of motherhood surrogacy.

## **2.1 Social and Psychological Impact of Infertility**

The inability to conceive or the awareness of personal infertility can be a shattering experience for both women and men. Psychologically it may lead to identity dilemmas, lowered self-esteem, frustration, self-pity, anxiety and a sense of powerlessness (Gupta, 2000).

An unfulfilled desire for a child can lead to all kinds of complaints-psychosomatic problems, depression, chronic headaches, stomach aches, and menstrual problems requiring physical and psychiatric treatment (Gupta, 2000). Apart from the sadness and disappointment experienced at being unable to conceive, many spouses suffer feelings of failure and guilt towards their partners, once he or she is found to be infertile. Many doctors talk of couples faced with the problem of infertility going through a process similar to bereavement, and while bereavement usually lessens with time, couples that grieve for children that never were, carry sorrow that never ends.

In Kenya there are derogatory terms by which infertile women are referred; the Luos refer to an infertile woman as “lur”, the Luhya refer to them as “mikumba”, the

Kambas “ngungu” and the Kikuyus “thaata” and all these terms are feminine, meaning, traditionally, men were not considered to be infertile. In many cultures, inability to conceive bears a stigma. In closed social groups, a degree of rejection (or a sense of being rejected by the social group) may cause considerable anxiety and disappointment. Some respond by actively avoiding the issue altogether; middle-class men are the most likely to respond in this way (Schmidt, 2005).

## 2.2 Knowledge Access

All people assume they are fertile, unless proved otherwise, the question which is usually in the minds of newly wedded couples is, what type of contraceptive method they are going to use, not if they will ever conceive (Stout, 1990). In most African cultures infertility is not well understood. The woman is usually blamed or sometimes the inability to conceive is said to be as result of a curse, witchcraft, bad luck, or punishment for lack of respect for elders.

A study carried out by the University of Nairobi’s Department of Medicine in 2000 in two communities living in a slum area in Nairobi (Baba Dogo) and a rural community in Muranga District revealed that both communities had inadequate knowledge of the causes of infertility, except for the secondary and post secondary students who tried to explain medical causes such as the relationship between STIs and blocked tubes. The rest of the communities blamed infertility on a category of social ills, such as the use of drugs and local brews, behavioural changes in both spouses. This study found out that there was inadequacy in understanding the management of infertility among the communities. It further found out that urban dwellers had slightly better

knowledge on infertility than their rural counterparts. Compared with men, women were found to have insight into infertility and its management. In these two communities health facilities for the management of infertility were either lacking completely or they left a lot to be desired.

### **2.3 The Male Response to Infertility**

The societal inability to assign responsibility for infertility to men reflects both the level of importance that men have in society and the importance that fertility holds for men. Men are valued in most cultures and there are very high standards of behaviour they are expected to meet: any signs of weakness or defectiveness are viewed with great concern.

Traditionally the sexual and fertile capabilities of men are viewed as synonymous. It is not uncommon to hear a layperson refer to an infertile man as being 'impotent' even though sexual functioning and the reproductive quality of the sperm are separate functions. Men are expected to exhibit sexual readiness and prowess at all times and the most overt indicator of sexual competence is the ability to impregnate a woman. Thus, sexual virility and reproductive capacity are essential to the male's self-image, termed the 'masculine mandate' thus the traditional components of the male role norm include: avoiding femininity, restrictive emotionality, non-relational attitudes toward sexuality, self-reliance, aggression, homophobia, and seeking achievement and status. Therefore when men do not fulfil the requirements of this mandate, they can experience shame and fear rejection from others because of their perceived shortcoming. The confounding of reproductive and sexual potency has furthered the sense of shame that men can feel when

diagnosed with infertility because they are often wrongly viewed as sexually inadequate (Centola et al, 1996).

## **2.4 Cultural Attitudes about Infertility**

Infertility is considered a female problem. Culturally, childbirth is considered the ultimate proof of fertility. Consequently, infertility is perceived as a female “fault”. Societal pressures are heavy on the barren woman because her inability to reproduce is perceived as a failure to live up to her expected bio-social role as child bearer and breach of her marital obligations to herself, her husband, his family and her family. A child is perceived as an important element of family continuity and a source of power and pride. Infertility has predominantly been viewed as a female infliction (Menning, 1988).

In some cultures, when a couple is unable to conceive the man may be granted a divorce so he can remarry, on the basis of the automatic assumption of female factor infertility (Greil, 1991). The notion that the problem might originate in the man is not even entertained. According to Menning, research has focused on the female reproductive system, resulting in greater array of diagnostic and treatment alternatives for women than for men. Yet, approximately 35% of infertile couples have trouble conceiving due to male factor infertility and another 20% due to combined male and female factor problems (Menning, 1988).

### **2.4.1 Implications of Infertility on Women in Some Parts of Africa**

For women, fertility and infertility are central issues in their lives as it determines their social position, sense of fulfilment and person happiness. The threat of infertility looms over her happiness not only because it threatens the woman’s sense of personal

fulfilment but also because it prevents her from feeling that she is a full and respected member of the society.

Among the Yoruba of Nigeria, infertile women, too, would be sensitive to any discussions about children or pregnancy, as they would feel that their failure to achieve any of these was being ridiculed.

Infertility therefore exposes women to social discrimination; infertile women are entirely without power and are destined to remain marginalized in their community. Among the Ekiti of South West Nigeria, infertile women are treated as outcasts and their bodies are buried in the outskirts of the village or town. People tend to keep off infertile women because of the belief that they are witches, and can harm other people's children or might not know how to look after children properly.

In the East African region, childless or infertile women are not held in respect and are often the object of pity and sometimes contempt and ridicule. In South West Uganda infertility is the reason for marital instability; an infertile woman can be expelled from the husband's home either as a result of the decision by the husband himself, or pressure from the husband's family members. In Mozambique infertile women are excluded from cultural ceremonies; they are also concerned about who will care for them in old age. Whereas in Cameroon infertility is a ground for divorce and if a woman was not divorced, she may be abandoned in old age; her in-laws may subject her to physical and verbal abuse especially when the husband passes away and he had been known to be protective of her when he was a live. In South Cameroon also, because of fear of childlessness, people enter into 'trial marriages' until the woman has one or more children before the union is considered binding (Shobary, 2005).

## **2.5 Results of Infertility Pressure on Women**

An infertile woman faces pressure, abuse and mistreatment from in-laws and other members of the community. As a result of pressure to get treatment for her infertility, a woman may submit herself to unorthodox means prescribed, for instance, by the traditional medicine man who can promise to cure her of her condition. Having sex with their clients is among the infertility remedies carried out by some male healers specializing in treatment of barrenness.

### **2.5.1 Social and Economic Exclusion**

To women in Sub-Saharan Africa, infertility leads to their economic disempowerment because it affects inheritance, and economic production. A childless widow does not benefit from the allotment of her husband's property. Infertility is a reason to deny a woman access to land distributed by her husband. The number of children a woman gives birth to is a major determinant of economic power in rural agrarian economies that characterize much of Sub-Saharan Africa because more hands are needed to work in the farms. Since infertile women experience economic hardships, some of them move out of their homes and end up as prostitutes or barmaids in urban centres (Chepng'eno et al, 2005).

### **2.5.2 Perception of Infertility**

Perceptions of childless/childfree adults and parents provide a barometer of young adults' attitudes about childbearing and family norms. Increased acceptance of childlessness in recent decades reflects the greater prevalence of delayed childbearing

and permanent childlessness as well as the greater visibility of childfree lifestyles (May, 1995). Made possible in part by the availability of highly effective contraceptives (Morgan & King, 2001), delayed fertility also resonates with societal messages about the need to meet specific criteria before entering into parenthood, including marriage, economic stability, emotional maturity, and personal 'readiness' (Jencks & Edin, 1995; May, 1995; Rindfuss, Morgan, & Swicegood, 1988).

Despite these social changes, it is not clear how the society currently perceives couples without children compared to parents and how these perceptions relate to individual attitudes and fertility plans. Surveys have indicated greater acceptance of childlessness among younger adults compared to older cohorts, but not necessarily a positive endorsement of childless/childfree life paths (Koropeckyj-Cox & Pendell, 2007). Popular culture continues to celebrate childbearing (Douglas & Michaels, 2004), and current ideologies have elevated the symbolic significance of procreation and moral standards of "good" mothering (Blair-Loy, 2003; Douglas & Michaels, 2004; Hayes, 1996). Within this context, a life without children may still be regarded as potentially incomplete, undesirable, or subject to later regrets (Hewlett, 2002; Edin & Kefalas, 2005).

## 2.6 Causes of Infertility

Infertility is sometimes defined as the percentage of ever-married women who are childless at the end of their reproductive life (a measure of total of primary and secondary infertility). These definitions do not differentiate between involuntary and voluntary

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childlessness and are complicated by the high levels of contraceptive use in certain regions of the world.

Human fertility is influenced by many factors such as the age of the couple, duration and frequency of intercourse, emotional factors and certain diseases. Causes of infertility can be classified as: general, developmental, endocrine and genital disease. In females the general causes include factors such as dietary disturbances, severe anaemia, anxiety and fear. While in males they include fatigue, excess smoking and alcohol, fear and impotence. Other causes are the result of stress related to modern lifestyles, industrial pollution and adverse effects related to the use of tobacco, drugs, alcohol, and medical drugs such as diethylstilbestrol (DES) a synthetic drug related to oestrogen (previously used by the woman's mother) have been related to infertility (Machelle, 1990). General factors that lead to infertility in both males and females include marital disharmony, sexual dysfunction, and ignorance regarding the right timing for conception.

Causes of infertility in the developed and developing world vary very much. The question is why this variation. According to Machelle, universally, 5% of couples suffer from anatomical, genetic, endocrinological and immunological problems that cause infertility. The remaining couples are infertile because of preventable conditions including: Sexually transmitted infections (STIs), post abortion and parasitic diseases, inappropriate health care practices and policies, socio-cultural factors and habits, environmental factors for example, exposure to toxic substances at work and diet (Machelle, 1990).

For a woman to conceive, certain conditions must be met: intercourse must take place around the time when an egg is released from her ovary; the systems that produce

eggs and sperm have to be working at optimum levels; and her hormones must be balanced. There are several possible reasons why conception may not be happening naturally. In a third of the cases, it can be because of male problems such as low sperm count. Problems affecting women include endometriosis or damage to the fallopian tubes which may have been caused by infections such as Chlamydia (Machelle, 1990).

In recent years, a link has been demonstrated between contraceptive use and female infertility due to pelvic inflammatory disease (PID) a general term for infection of the upper genital tract, including the uterus, fallopian tube and ovaries (Gupta, 2000). PID in the fallopian tubes may cause tubal damage, adhesion, or complete tubal obstruction. It may result in either an ectopic pregnancy or infertility. PID occurrence is greater in women who have never been pregnant (Gupta, 2000).

Sexually transmitted infections (STIs) are the leading predisposing factor in both male and female infertility in sub-Saharan Africa. In females STIs cause pelvic inflammation disease, which, if not treated early and effectively, leads to tubal obstruction. In men STIs cause epididymitis and orchitis, resulting in blockage of epididymal ducts. Thus a key strategy in prevention of infertility in Africa is to institute measures for the control and treatment of STIs, including community based educational programmes.

### **2.6.1 Effects of HIV on Fertility**

According to Machoki (2007) several other factors are known to affect reproductive performance in men and women, including the following: HIV infection that decreases fertility rates in communities and age-specific fertility rates that have been

shown to decrease by 50% among women with HIV infection. The underlying factors for this decline include behavioural reasons, reduced coital frequency due to ill health, male erectile dysfunction, and increased prevalence of sexually transmitted infections among HIV infected individuals (Machoki, 2007).

HIV infection predisposes one to severe pelvic inflammatory disease (PID) and damage to the fallopian tubes. As in most chronic infections, women in advanced HIV disease many have anovulatory cycles (Machoki, 2007).

According to a WHO (1987) multi-national study; it was found that 64% of infertile women in the SSA had diagnoses that could be attributed to infections such as sexually transmitted infections, post-partum and post-abortion. Sexually transmitted organisms that cause tubal damage in most of the cases are either *N. gonorrhoea* *C. trachoma* (Sekadde-Kigonde et al., 2002).

Different institutions-based studies have shown that the commonest cause of primary and secondary infertility in the African region is tubal occlusion in females and accessory gland infection and varicocele in the males. In addition, *schistosomiasis*, malaria, sickle cell disease and pelvic tuberculosis contribute to infertility (Inhorn et al, 1994). It has been proposed that success of malaria control programs over the past twenty years may explain a reduction in the infertility rates in Tanzania (Kiros, 2002). Studies in Thailand, Hungary and Slovenia showed 93% of women with bilateral occlusion had antibodies to *C. trachomatis* and/or *N. gonorrhoea*, (WHO 1995).

### **2.6.3 Inappropriate Health Care Practices**

Health care practices and polices also contribute to infertility most notably unhygienic obstetric practices, which lead to post-partum infection. In addition; chronic

pelvic pain, may also lead to infertility. In Egypt, for example, physicians routinely misdiagnose cervical erosion and then treat it inappropriately with cervical electrocutlery, potentially causing infertility in the process. Mishandling of the tubes during surgery may lead to tubal adhesions. In Nigeria, where hernia repairs are left to inexperienced surgeons, there is a pattern of male infertility due to vascular injuries sustained during these procedures (Kuku, & Osegbe 1989).

Men and women in developing nations face environmental and occupational conditions that interfere with their fertility. Researchers in Mexico have documented high level of arsenic in the semen of infertile men that drank water with high content of arsenic metal (Osage, 1989). Nigerian men were found to contain high level of aflotoxins, the metabolites of fungi that infest staple foods in many tropical countries. Male infertility in Egypt, Ethiopia and Singapore has been linked to exposure to heat (factory workers, gold smith, etc), pesticides, tobacco, alcohol, caffeine and other chemicals. Egyptians men who smoke tobacco in the traditional water pipes have been shown to suffer more than twice the risk of infertility as other men (Inhorn, Mc and Buss 1994).

Cultural and social factors can play an important role in the causation of infertility: marital and sexual customs such as early marriage before the physiological maturity of the reproductive system; female genital mutilation (FGM) and cultures that allow polygamy can influence the risk of infection (Erickson, and Brunnet 1996). It is suspected that close cousin marriages in some Muslim countries may be linked to infertility.

## 2.6.4 Perceived Cultural Causes of Infertility

Men have also attributed infertility to a curse of malevolent spirits, thus in effect removing the fault and ultimately blame from themselves. Although men referred to sexual behaviours of women as a likely cause of infertility, the same was rarely brought up as applying to men as well. This is intriguing considering that in Kenya, as elsewhere in Sub-Saharan Africa, infertility is largely attributed to STIs, and men are recognized as the main vectors of the infection through their contact with multiple partners (M'Imunya, 2007).

In some instances, it was also recognised that advanced age in women could lead to infertility. The physical characteristics of infertile female and male were also perceived to contribute to infertility, example, if a girl had not developed breast by the age of 13 years, and this predicted infertility in the future. Small breasts and long nipple, and the growth of hair on women's chests were also predictors of one's inability to conceive. The size of the woman also mattered since it was believed that if one was too fat or too thin, this could predispose to infertility. Culturally in Kenya, among the two communities studied i.e. in Baba Dogo slums and Muranga, they hold the belief that *slimness made the eggs "too cold" thus led to non ovulation, and if a woman was too fat the eggs "got burned out because of excess heat in her womb* (Kigondu et al, 2005). In addition, infertility is viewed broadly to encompass pregnancy loss. Failure to give birth in a society that attaches high value to children affects one negatively. There is hardly any sympathy for those who lose children either through miscarriage or during delivery. Women without children were simply pitied, feared, or ostracised (Kigondu, 2007).

## 2.7 The Most Prevalent Infertility Types

The definition of infertility varies among clinicians, epidemiologists and demographers. Clinicians and epidemiologists use the concept infertility to describe having difficulties to conceive, in the case of female gender or being unable to make a woman pregnant while referring to a male gender. By this definition both clinicians and epidemiologists describe those men and women who have been trying to achieve pregnancy without the use of contraceptives but have achieved no success after at least one year of doing so (Weinberg and Wilcox, 1998; Savitz et al., 2002; Homburg, 2005). In 1975, the World Health Organization (WHO) recommended the preferred definition as more than 24 months of unprotected intercourse (WHO 1975). Later WHO (1982) changed their infertility definition to a “lack of conception after at least 12 months of unprotected intercourse” (Rowe et al., 1993, p. 7). In many demographic studies, infertility has come to mean no live birth over a certain amount of time, irrespective of whether the couple wanted children or used birth control (Hobbema et al, 2004; Homburg, 2005).

There are two major types of infertility; primary infertility which is the non-achievement of a first pregnancy and secondary infertility which is non-achievement of a subsequent pregnancy. Further, involuntary childlessness in this thesis is called primary involuntary infecundity, and is defined as having no live birth.

### 2.7.1 Prevalence of Infertility

Worldwide it is estimated that one in seven couples have problems conceiving, with the incidence similar in most countries independent of the level of the country's

development (Rowe et al., 2002). The problem of infertility is widespread and it affects men and women of reproductive age everywhere in the world. Although estimates of its prevalence are not precise and vary from region to region, about 8% of couples experience some form of infertility problem during their reproductive lives.

When extrapolated to the global population, this means that 50-80 million people probably have a problem with fertility, a condition that causes personal suffering and disruption to social and family life. It is estimated that there are about two million new infertile couples per year, and the numbers are increasing (Rowe, 2000). Fertility problems affect one in seven couples in the UK. Most couples (about 84 out of every 100) who have regular sexual intercourse (that is, every 2 to 3 days) and who do not use contraception will get pregnant within a year. About 92 out of 100 couples who are trying to get pregnant do so within 2 years. Women become less fertile as they get older. For women aged 35, about 94 out of every 100 who have regular unprotected sexual intercourse will get pregnant after 3 years of trying, for women aged 38, however, only 77 out of every 100 will do so. The effect of age upon men's fertility is less clear. In people going forward for in-vitro fertilization (IVF) in the United Kingdom, roughly half of fertility problems with a diagnosed cause are due to problems with the man, and about half due to problems with the woman.

However, about one in five cases of infertility have no clear diagnosed cause. In Britain, male factor infertility accounts for 25% of infertile couples, whilst 25% remain unexplained. 50% are female causes with 25% being due to an ovulation and 25% tubal problems/other. In Sweden; approximately 10% of couples are infertile. In approximately one third of these cases the man is the factor, in one third the woman is the

factor and in the remaining third the infertility is a product of factors on both parts (Centola et al., 1996).

## 2.7.2 Prevalence in Africa

In Africa as in many other places in the world, infertility is generally considered a huge problem by the persons involved. The incidence varies enormously in each region. Gerrits (1997) in his studies in Africa and Asia reported that proportion of primary and secondary infertility varies from 0.7-22.8% respectively (in Kegondu, 2002).

In general it can be said that the exact magnitude and importance of infertility as a public health problem in Africa is largely poorly understood or even unknown. However, the experience of many gynaecologists in Africa shows that 50-60% of their consultation time is taken by patients complaining of infertility, and in most referral hospitals there are long waiting lists for investigative and /or treatment procedures such as laparoscopy, semenanalysis and tubal surgery (Friday, 1997 & Mati, 1986).

In Kenya, it can be said that the infertility prevalence remains inadequately determined, though depending on the definition, it may range from 2%-20%. The 2003 Kenya Demographic and Health Survey (KDHS) reported that 2.2% of women aged 40-49 years had not given birth to a child, which may imply infertility. However, secondary infertility may exist in a much larger proportion of women depending on the desired family size norms and the extent of pregnancy wastage. Questions often are raised about whether levels of infertility, primary or secondary have risen because of sexually transmitted infections (STIs) including HIV, environmental factors, or changes in sexual and reproductive behaviours. A decline may be expected with an upsurge treatment –

seeking behaviour and increased use of modern technologies of assisted reproduction (KDHS, 2003).

The KDHS, 2003 and the World Fertility Survey (WFS) both have demonstrated that the prevalence of infertility in Sub-Saharan Africa ranges from 11-20% in the 27 country surveyed. Although the annual number of visits to physicians for infertility has more than doubled since 1980, there is in fact little data to support the popular notion that infertility is increasing. A recent population study showed that infertility rates adjusted for the woman's age are about the same as they were in 1965 (Centres for Disease Control, 1985). This severely compromises other pressing and life threatening reproductive health services in a country like Kenya where there are approximately 250 Obstetricians/Gynaecologists serving 28 million people hence the quality of care is severely compromised (M'Imunya et al., 2007).

In their study of patterns and predictors of fertility Karen and Brunette (1996), estimate national infertility prevalence in Kenya to be around 11.9%, with Western and Coast provinces having highest rates. It is estimated that the prevalence of primary infertility is less than 5% while secondary fertility affects more couples, and may range from 10-30% depending on the cultural settings (M'Imunya et al, 2007).

**Table2.1: Trends in Infertility in East Africa Region**

<b>Country (Years)</b>	<b><u>DHS I</u> % infertile (No of women)</b>	<b><u>DHS II</u> % infertile-(No of women)</b>	<b><u>DHS III</u> % infertile</b>
Uganda (1988, 1995)	5.4 (612)	2.3 (815)	N/A
Tanzania (1992,1996,1999)	3.1 (1,436)	1.8 (1,224)	1.7 N/A
Kenya (1989,1993,1998)	2.7 (907)	1.9 (1,071)	1.8 (1,162)

*Source: M'Imunya et al, 2007*

The above Table 2.1 shows that overall, infertility levels have been declining in the East African region with the largest declines in the recent past. This may be due, in part, to concerted efforts toward sexually transmitted infections diagnosis and treatment as part of the campaign to deal with the HIV/AIDS pandemic in the region (M'Imunya et al, 2007). An examination of trends in infertility using the proportion of exposed women unable to conceive within one year also shows the same pattern of decline. This trend may be due to improvements and advances in treatment technology available to infertile couples such as surgical procedures, drugs and advanced assisted reproduction technologies (AART).

## **2.8 The Health Care Management Options Available for Infertility in Kenya**

In Kenya the health sector comprises the public (Government) system, with major players including the Ministry of Health (MOH) and parastatal organizations, and the private sector, which includes private-for-profit health facilities, Non-Governmental Organizations (NGOs), and Faith-Based Organization (FBO) facilities. The public system services are provided through a network of over 4,700 health facilities countrywide, accounting for about 51 percent of all the facilities, the private sector approximately 41%, and others 8%.

However, infertility services are mainly available at the tertiary level and at some district hospitals which are lucky to have a gynaecologist. Some private hospitals and NGOs offer infertility services to those who can afford it. At the community level traditional healers are involved in the management of infertility.

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Other challenges are the absence of high quality research and management of data which should offer a well documented means of reliable evidence, and give advice on effective quality health care, policies and guidelines, on the management of infertility. So far almost all available data is hospital based, and as in many other parts of the world, heavily focused on the female gender. A review of access to assisted reproductive technologies (ART), such as IVF-ET, revealed that these were currently very limited, and mostly located in the private sector.

While couples/persons who suffer infertility in the developed countries have ready access to new reproductive technologies such as IVF-ET, in Sub-Saharan Africa, the high cost involved in these technologies creates a barrier to their utilization, especially in low-resource countries like Kenya (M'Imunya et al., 2005). According to M'Imunya in Kenya, only one centre owned by Dr. Noreh has succeeded in having two live births as a result of ART. However, in such private institutions, the cost per cycle is estimated to range between 200,000- to 400,000 Kshs, which is out of reach for most Kenyans (M'Imunya, 2007).

Liefoghe et al. state that the relationship between culture, health-related beliefs and health behaviour is complex (Liefoghe et al., 1977). Personal experiences, attitudes of the social network and health beliefs interact to influence health-seeking behaviour. The evaluation of a couple with infertility and the results of treatment have defied comparability because of lack of standard definitions of infertility as well as clearly defined categories of infertility. Many clinicians in the developing countries and especially in Africa still limit their investigations to the female partner, which is obviously an incomplete approach (Sekadde-Kigundu et al, 2002).

Many infertile people in Africa have experienced frustration and psychological torture, thus they have lost confidence in modern medicine and therefore prefer to seek traditional medicine (Sekadde-Kigonde et al., 2002). District studies indicate that couples and individuals affected by infertility consult traditional systems of medicine, before coming to modern health institutions. Traditionally infertility is blamed on curses which may have come from the ancestors who probably were wronged and need to be appeased or an aunt who never gave birth needs to be silenced by giving some blood sacrifices e.g. slaughtering a ram or a he goat to appease the aunt. This has resulted in the delays to initiating investigation for infertility that has been observed in Africa (Mati et al., 2002). Different communities in Kenya have different beliefs when it comes to the cause and treatment of infertility.

The Luo for example believe that, if a woman loses a child through natural death or suffers a miscarriage, she should not have sex with a different man apart from her husband, if she does go out of her matrimonial bed, chances are that she may become infertile this is called (*gothruok gi गया* or *rochruok- e- Siroho*) it is a very serious offence that if proved true, then the village elders must meet and decide whether treatment is possible or else divorce may be granted (Mboya, 1938).

### **2.8.2 Modern Management of Infertility and Their Challenges in Africa**

The last quarter of the 20<sup>th</sup> century witnessed several major advances in reproductive medicine. One of the most widely publicized celebrated and, even controversial medical landmarks in this area was the birth, in 1978, of the first human baby resulting from in vitro fertilization (IVF). Since then IVF has become a routine and widely accepted treatment for infertility. However, IVF is but one of the many

procedures in the increasingly complex and sophisticated field of biomedicine known as assisted reproduction. Since 1978, nearly one million babies have been born worldwide as the result of assisted reproductive technology (ART) of one form or another. It has been estimated that in some European countries up to five per cent of all births are now due to ART. It is clear that ART has made a significant impact on the lives of many infertile and sub fertile couples (Oehninger, 1991).

The prevalence rate of infertility is higher in the Sub-Saharan Africa than in developed countries. The main causes of infertility (STIs, per-partum infections, unsafe abortion) are commoner in Africa than in developed countries. Within the sub-region there are multiple cultures, religions, poor socio-economic environment and poor status of women. This situation is made worse by the high premium placed on childbearing. These factors combine to emphasize the need for solutions to infertility in a region with low resources.

### **2.8.3 Challenges of Managing Infertility in Kenya**

According to Machoki, in his review article on challenges of managing male infertility in Africa, noted a wide range of findings which are to a very large extent applicable to the Kenyan situation: He noted that the incidence of STIs, HIV/AIDs and other infectious diseases continues to rise yearly in spite of provision of treatments by the governments and NGOs, and extensive information education and communication programs (IEC). Poverty, high illiteracy and unemployment rates, poor social amenities and communication systems and inaccessible health facilities were major confounding variables. Other challenges are the absence of high quality research and management

data which is a well documented means of reliable evidence to offer advice on effective quality health care, policies and guidelines, infertility included. So far almost all available data is hospital based, and as in many other parts of the world, heavily focused on the female gender (Machoki, 2005).

According to Machoki infertility management without reliable laboratory backup can be very frustrating both to the patient and the clinician. He also observes that, the cost of infertility investigations (chromosomal, hormonal analysis, screening for infections, histopathology, and imaging and laparoscopy) continues to pose challenges in the management of infertility in most African countries. Although, the facilities are now more available, many patients cannot afford them as the cost of living and unemployment rate continues to rise (Machoki, 2005).

#### **2.8.4 Cultural Norms**

Due to the diverse cultures of the sub-region, the individual right to consent is still subject to cultural variations. A woman is not expected to give consent to any procedure without her partner's approval. Yet it is common for a man to request that his partner should not be fully informed of the details of his or their treatment. It is also common in some countries for couples to require that donor semen should be mixed with husband's semen for donor insemination.

However, it's extremely unusual for a couple to reveal that they have had donor insemination (DI), although a few couples are now prepared to reveal that they had a child by IVF. Cultural beliefs and perceptions delay management of infertility in Sub-Saharan Africa (Giwa-Osagie, 2005).

## **2.8.5 Socio-Economic and Cultural Factors Influencing Infertility in Sub-Saharan Africa**

The problem of infertility has been inadequately addressed both at policy, research and service delivery levels mainly due to other perceived more pressing and competing national health priorities such as the serious and prevalent diseases like HIV/AIDS, tuberculosis, and malaria, perceived high fertility and population growth rates.

Other socio-economic and cultural factors affecting infertility in Sub-Saharan Africa include teenage marriages, polygamy, traditional practices such as female circumcision, induced abortions, low-level of education. Poor hygiene, poverty, effects of modernization and cultural beliefs like witchcraft, customs and taboos, limited access to infertility services; delay in seeking health care by affected individuals and couples, knowledge and attitude towards infertility (Njikam, 1992).

## **2.9.1 Cultural Factors which Increase Risk of Exposure to Sexually Transmitted Infections**

Modern education, urbanization, social factors, and economic considerations all exert a great deal of pressure on African couples to reduce the number of their children. These have led to plethora of conjugal patterns and sexual mobility contributing to the spread of STIs among individuals and couples. The traditional attitudes of women and their partners during pregnancy and in the post partum period may have consequences on their future fertility. During early periods of pregnancy women abstain during lactation

to avoid “contaminating” the breast milk. These attitudes frequently lead to their partners engaging in extra-marital sex and exposure to STIs. Other practices are Female Genital cutting which is done under unhygienic conditions, wife inheritance that exposes both partners to sexually transmitted diseases including HIV/AIDs infections, induced abortions done by quacks which may become sepsis (Sekadde-Kigonde et al, 2005).

Local beliefs on the causation of STIs also contribute to the high prevalence of STIs and infertility. A variety of cultural definitions and perceptions on STIs and infertility abound in our societies. On the one end of the spectrum, women tend to consider STIs a male ailment hence they abstain from sex during early pregnancy and during lactation to protect the foetus/baby from being infected. Most of the local names in this category make reference to the disease as painful urination, a typical male symptom. By implication therefore, it is not expected that there might be cross infection evolving from males to females and vice versa.

Polygyny is a common practice in Africa, its prevalence ranging from 12 to 40% depending on environmental factors. Apparently, it is logical to assume that polygamy increases the number of births, but in reality polygamy is often linked to infertility within partnerships. It is now known that defects may contribute to as much as 30-40% of couple infertility. In Africa the male can divorce the female on the grounds of infertility, but the female cannot divorce an infertile male partner (Sekadde-Kigonde et al, 2005). Unsafe abortion contributes to infertility: Twenty million of abortions are terminated each year in developing countries, most often illegally. In African, induced abortion is frequently illegal and often performed under septic conditions by unqualified personnel with the consequences that this entails. In Cameroon, 38.4% of maternal deaths that

occurred in the Central Materiality Unit were due to complications of induced abortions (Leke & Nash, 1979).

Infertility may trigger off sexual relations among women in search for children thus putting them at risk of contracting HIV/AIDS. A study carried out in Mozambique show that 65% of infertile women with two or more lifetime partners tested positive for syphilis and all the infertile women interviewed admitted committing adultery with the hope of conceiving. This may reflect either a lifestyle-associated increased risk of acquisition of STIs with ensuing risk of infertility or a consequence of infertility with multiple exposures to unprotected sexual partners with the hope of achieving the much-desired pregnancy (Chepng'eno. et al, 2005).

On the other hand, in an involuntary childless condition, men are also encouraged by their family members to either seek another wife, or to impregnate another woman outside marriage so as to have a child and prove his fertility. Among the Meru community of Kenya, a member of the man's age group would impregnate the wife of an infertile age mate on his friend's behalf and the matter would be kept secret. Such customs have implications for the spread of HIV/AIDS and other sexually transmitted infections (Chepng'eno et al, 2005).

### **2.9.2 Gender Differences in Reactions to Infertility**

The problem of infertility certainly has historical significance. Prior to the last few decades' infertility has focused on women within their social context. More women than men have been identified with infertility issues. Furthermore, historical material is limited in that the women studied were likely to be Caucasian, middle class and urban

(Rhodes, 1988). It is estimated that one in six couples that desire to have a child will experience infertility. In the 1960s', 40% to 50% of infertility had no known physical cause. In the 1980s' research revealed that 90% of infertility had a known physical cause; 40% of infertility was causally related to the women, 40% was causally related to the man and 20% was shared (Menning, 1988). Although infertility is typically due to physical problems of only one partner, both partners feel the effects. Cultural and societal norms generally place a higher pressure on females to procreate and to become mothers, due to the high value of the role of motherhood in society.

Traditionally, motherhood is perceived as the central role for women, while paid employment is the central role for men (Miall, 1989; Whitehead & Gonzalez, 1994). Thus, infertility represents a different threat to the social roles of men and women.

### **2.9.3 Impact of Infertility on the Marital Relationship**

The impact of infertility on marital satisfaction is sparse and largely conceptual and qualitative in nature. Most studies focus on the psychological impact of infertility and extrapolate that the psychological reactions that a couple experiences must have a resulting negative effect on marital satisfaction. There is a lack of empirical knowledge addressing marital satisfaction for infertile couples. Many of the claims that infertility leads to a negative effect on psychological functioning, emotional distress and marital problems are based on anecdotal reports and lack the use of standardized measures (Edelmann, Connelly & Bartlett, 1994).

A common thread in the literature identifies the fact that infertility can be devastating for a couple desiring a child. For many couples, procreation represents a

highly significant and emotional bond. A public display of their coupledness to be frustrated or thwarted in this enterprise of making a baby together is a major insult as well as, potentially, a major loss (Leiblum, 1996). The experience can stress a couple's personal relationship, diminish sexual satisfaction, deplete financial resources, threaten perceptions of masculinity and femininity and cause psychological stress. The experience of infertility is unanticipated, and often represents a challenge to or loss of a primary life goal for a couple (Forrest & Gilbert, 1992). Research indicates that many couples facing infertility go through a series of reactions similar to those found in other grief and crisis experiences.

Although these phases have been conceptualized differently by different authors (Forrest & Gilbert, 1992; Menning, 1988; Shapiro, 1982), some basic reactions include denial, anger, isolation, guilt and depression. Most authors agree that there is no set order to the reactions and that revisiting phases is common for those struggling with infertility.

#### **2.9.4 Traditional approaches to infertility**

Although men have tended to behave as if only women cause infertility, the traditional society in Sub-Saharan Africa recognizes that men can be the cause of infertility. In some societies when a man has been unable to make any of two or more partners pregnant, within-the-family "insemination" by a family member is implemented. The children of such a relationship are accepted as the children of the infertile man.

## 2.10 Theoretical Framework

This study was guided by the Individual Identity Theories proposed by (Linda Sharon, 2000). These theories were important and relevant to this study because they encompassed the psychological, psychosocial and the general perception of infertility, as well as explained the psychological impact of infertility that makes the infertile person lose their identity. On the other hand this theoretical framework suggested ways of helping the individuals who suffer infertility to move on.

According to this theoretical approach, infertility alters an individual's sense of self by creating or exacerbating feelings of deficiency, hopelessness, and shame. Both infertile men and women experience altered self conceptual self image as a result of infertility, although they may experience it differently. Women often feel inadequate and defiant for failing to fulfil personal and societal roles, while men often feel inferior, ashamed, and angry. This theory holds that whether infertility involves an actual pregnancy loss or the loss of the couple's wished child, it is a loss that is experienced as a narcissistic injury as well as a symbolic loss of self.

A core concept of Individual Identity theory is that individuals experiencing infertility must integrate and incorporate infertility into their individual identity, sense of self, or self-definition. This theory also asserts that when individuals suffering infertility accept their condition then the individual is able to move beyond a personal identity of oneself as 'infertile' and transcend the experience through overcoming, circumventing, or reconciling the identity of self as infertile.

## CHAPTER THREE: METHODOLOGY

### 3.0 Introduction.

This chapter covers relevant research methodology used in the study and provides a general framework for the research. The study was an exploration on the impact of cultural and psychosocial dynamics in the management and treatment of infertility. It also endeavoured to assess the knowledge, attitude, perceptions regarding infertility and its causes among communities in Nairobi.

This chapter therefore, discusses a number of research processes that were used to facilitate effective enquiry into the critical issues under investigation and in particular, the research design, the sampling method types and data collection tools.

### 3.1 Research Site and the infrastructures.

This research was conducted in Nairobi. The researcher chose Nairobi because of the following characteristics:

- i. Nairobi's urban set up: Nairobi has a wide ethnic representation which helped the researcher in collecting data and understanding the dynamics of socio-cultural impact on the management of infertility in Kenya.
- ii. Nairobi has most of best health care facilities in Kenya: Nairobi also has two hospitals in the country that have fertility and infertility departments namely: Kenyatta National Hospital and Nairobi Hospital. There are other health centres like the Nairobi In-vitro Fertilization Centre from which relevant data on the management of infertility using new reproductive techniques was collected.

- iii. The researcher considered these aspects of the research very important and useful in collecting both primary and secondary data.
- iv. Nairobi's population is highly literate: This made it easy for the researcher to delve freely into some of the taboo subjects, which otherwise would have been very difficult to talk about publicly due to the stigma pegged on infertility as a condition.

### **3.2 Descriptive Research Design**

This study relied on descriptive research design for collecting the required data, because a descriptive research determines and reports the way things are. This type of research attempts to describe such things as possible behaviour, attitudes, values and characteristics. Secondly a descriptive research design offered the methodology to appropriately describe and portray characteristics of events, situations amongst people, community and population (Chandran, 2004). In addition, descriptive research design method offered the opportunity to acquire accurate information using structured questionnaires to conceptualise a number of psychosocial and cultural variables and effects in the management and treatment of infertility for this study. Descriptive research design was relevant to this study because, being a quantitative and qualitative research study; the researcher was interested in a survey as well as collecting in-depth data by undertaking intensive interviews in order to get in-depth information on the phenomenal of psychosocial and cultural impact on the management and treatment of infertility in Nairobi.

### 3.3 Population Universe

This study was done in Nairobi, whose entire population is currently around five million people. The study, however, was carried out among residents in Nairobi, the professionals, managers and support staff working at Diamond Trust bank, as well as among the people who live in Kibera, and Kileleshwa. Kileleshwa is an up market area within Westlands Constituency; Diamond Trust Bank has branches spread over the country however, the questionnaires were sent only to Nairobi branches, namely Head Office on Kimathi Street, Capital Centre, Westgate, and AgaKhan Hospital. The doctors selected for the study practice in Nairobi and Kenyatta Hospitals.

The researcher however, encountered a big challenge in Kibera as most of the people approached were not keen to talk about fertility matters. Kileleshwa was chosen for the diversity in the challenges of infertility.

#### 3.3.1 Primary data

According to Cooper and Schindler (2003), primary data are original works of research or new data without interpretation that represents an opinion. Primary sources of

#### 3.3.1 Sampling

For this study, the researcher used non-probabilistic sampling. Specifically the researcher used purposive and snowballing sampling techniques. This method is necessary where there is need to reach the target population quickly and innumeracy is impossible (Barbbie, 1990). Four medical doctors in the field of reproductive health, specifically gynaecologists were selected purposively and interviewed. Forty-three respondents out of an estimated one hundred in the population universe were purposively selected. This represented 10% which is often representative enough for descriptive studies (Sekaran, 2003). The key informants used in the case studies were 2(two) infertile males and 2(two) infertile females who were purposively selected.

3.4.2 Getting infertile respondents was very difficult, however, one of the researcher's female friends is infertile, and she agreed to be interviewed. Through this first informant the researcher was able to reach three others whom she also interviewed.

### **3.4 Methods of Data Collection**

Data collection tools may range from a simple observation in one location to a major survey at different sites. In a research, data is normally collected from primary and secondary sources. Primary sources of data are collected by the researcher herself while secondary data are collected by others to be re-used by the researcher in relevant and appropriate manner.

#### **3.4.1 Primary data**

According to Cooper and Schindler (2003), primary data are original works of research or raw data without interpretation that represents an opinion. Primary sources of data are the materials on a topic upon which subsequent interpretations or studies are based, such as interviews and research results generated by experiments, surveys, etc. Some examples of primary sources are scientific journal, articles reporting experimental research results or proceedings of meeting conferences and symposia.

The other primary sources of data are technical reports such as census statistics, works of literature interviews, surveys and individuals providing information through face to face interviews, or self administered questionnaires based on fieldwork.

### **3.4.2 Data collection instruments**

These are techniques employed to gather data using various instruments. For the purpose of this study, the researcher administered semi structured questionnaires which were purposively distributed to the accessible population. Secondly, the researcher also carried out in-depth case studies targeting individuals who are suffering infertility. Finally, gynaecologists who because of their profession encounter and interact with patients suffering infertility were also interviewed.

#### **3.4.2.1 Survey Questionnaires**

The use of questionnaire is more appropriate when addressing sensitive issues and in this study “infertility” and especially when the research survey offers anonymity to avoid reluctance or deviation from respondents (Barbbie, 1998). The questionnaire used in this study was designed as objectively as possible to minimize biases that are likely to arise during data gathering. The questionnaire (Appendix 2) was divided into two parts; the first part was used to gather demographic data such as age, gender, marital status, length of service and academic qualification and other information such as functional roles etc. The second part was used to gather information that formed knowledge about infertility, opinion held by the public about the causes of infertility, knowledge about the existing health care options available for the management of infertility, and the general attitude and ethical considerations which is held against new reproductive techniques.

### **3.4.2.2 Interview schedules**

An interview schedule is a set of questions that the interviewer asks when interviewing. An interview schedule makes it possible to obtain data required to meet specific objectives of the study (Mugenda and Mugenda, 2003) which in this case, was to explore the impact of psychosocial and cultural dynamics in the management and treatment of infertility.

The researcher used semi-structured interviews to gather information on the trend and pattern of infertility as a condition, such information was gathered from the medical practitioners specifically gynaecologists who interact with individual/couples suffering infertility.

### **3.4.2.3 Case Studies**

Yin (1994) suggests that case study research is most appropriate for conducting studies that answer “why” and “how” questions. It is appropriate for examining contemporary phenomena in their real-life context, particularly when the boundaries between the phenomenon and the context are unclear. Specifically, a case study has the following characteristics:

- i. It considers the technically distinctive situation where there are more variables of interest than data points;
- ii. Multiple sources of data are used in a triangulating fashion;
- iii. Prior development of theoretical propositions guides data collection and analysis.

Typically case study research uses interviews, reports, document analysis and observations to help determine how and why a particular phenomenon occurred. The

phenomenon being studied in this case is the psychosocial and cultural dynamics and their impact on the management and treatment of infertility in Nairobi. The case studies therefore enabled the researcher to get accurate data through interviews with the key informants who were the infertile individuals themselves. During sessions of the interviews, the researcher was able to observe the pain and difficulty with which the respondents described their conditions.

#### **3.4.2.3.1 Identification of Key Informants for the Case Study**

Critical to obtaining sufficient and accurate data was gaining complete access to persons who are infertile and who were willing to participate in in-depth interviews, so as to share their experiences regarding their condition. The researcher used snowball sampling technique. The few identified subjects then named others whom they knew had the same characteristics which the researcher was looking for. The researcher then organised meetings with the respondents and upon their willingness to participate, in-depth interviews were conducted in an effort to explore and understand their experiences as the people living with infertility. Particular emphasis was placed on the impact of psychosocial and cultural dynamics on the management and treatment of infertility.

### **3.5 Data Analysis and Presentation**

Quantitative data was tabulated and analyzed using simple frequencies and percentages generated using SPSS (Scientific Package for Social scientists). The data collected was coded appropriately. It was then entered into SPSS for generating the statistics to be analyzed. Descriptive statistics mainly frequencies and percentages were

generated. Data was presented in the form of tables, pie charts and descriptively in Chapter Four.

The researcher obtained detailed information about the phenomenon being studied, and then established themes, patterns, trends and relationships from the information gathered (Mugenda and Mugenda, 2003). The researcher collected in-depth data and conducted intensive interviews on the respondents. The researcher then transcribed the data and analysed it according to themes generated from the interviews. The researcher then arranged the data collected under the various themes generated and made reference to verbatim quotes to illustrate the import of the impact of psychosocial and cultural in the management and treatment of infertility

The researcher then made general statements on how categories or themes of data are related. The texts, materials, which described the occurrences, were then thoroughly read so that the researcher became very familiar with the data. The researcher made notes from the interviews conducted and organized such data. These notes were then transcribed. Themes and categories were then established for ease of understanding the findings.

The researcher detected various categories; the researcher then established the relationships in these categories and discussed the constructs of the phenomenon and the relationships among these constructs. Data analysis in qualitative research was therefore done by generating themes and categories.

## CHAPTER FOUR

### STUDY RESULTS AND DISCUSSION

#### 4.0 Introduction

The study was an exploration on the impact of cultural and psychosocial dynamics in the management and treatment of infertility. It also endeavoured to assess the knowledge, attitude, perceptions regarding infertility and its causes among communities in Nairobi. In this data analysis, interpretations and discussion of the research findings are presented. Central to the presentation of study results and findings is an attempt to meet the specific study objectives, namely:

- i. To assess the knowledge, attitude, perceptions regarding infertility and its causes among communities in Nairobi.
- ii. To explore the effects of socio-cultural dynamics on infertility management.
- iii. To explore the most prevalent infertility types.
- iv. To explore the health care management options available for the management of infertility.

In this chapter the researcher discussed the findings of the quantitative data from the questionnaires first. Then the researcher discussed the findings from the qualitative data namely the case studies and the doctors' interviews.

## 4.1 Characteristics of Respondents (N=43)

To integrate sample heterogeneity in a way that improves external validity of the study findings, the researcher considered respondent distribution in the general public category in terms of a number of respondent characteristics such as; sex, marital status, number of children, tribe, religion, employment status and type and level of education. On the other hand, whereas the selection of key informants in the case study was based on their infertility status, selection of experts was based on their areas of expertise and experience in fertility management and treatment. The subsequent sections present descriptions of the different respondents of interest to the study.

**Age, gender and marital status:** The age, gender and marital status are presented in Table 4.1. The majority of respondents were aged between 31-40 years accounting for 62% of those interviewed. Twenty-six out forty three (60.5%) were female respondents. On the other hand respondents who reported that they are single accounted for 44% of those interviewed, while 47% accounted for those who reported that they are married and another 4.5% reported that they are divorced.

The skew of the distribution of the population by sex was in part based on the consideration that, within the African context fertility problems have long been held as women's problem. To this extent, views and observations by the female respondents is expected to present the more compelling prevailing situation on infertility as a phenomenon. This however does not discount the fact that men are equally knowledgeable on matters of fertility. In addition, the study also interviewed men

**TABLE 4.1 Characteristics of Respondents (N=43)**

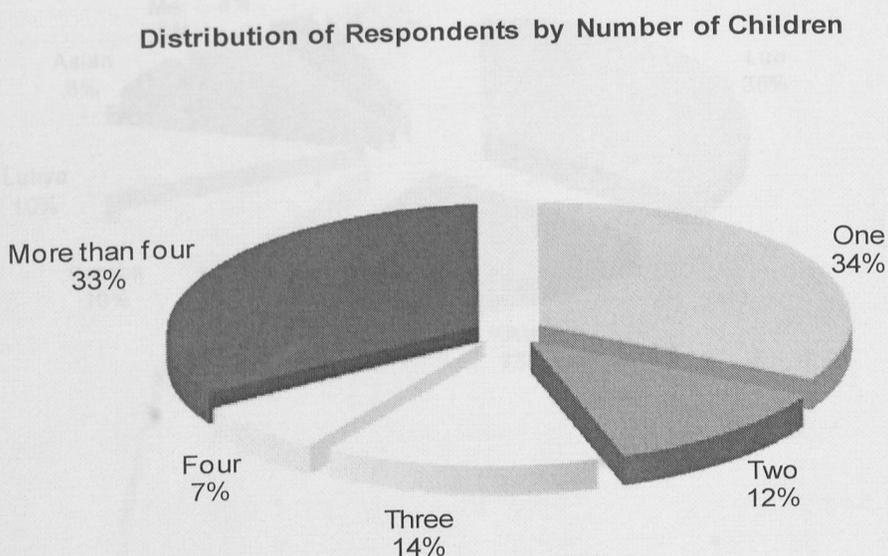
Age	Frequency (N=43)	%
21 to 30	11	25
31 to 40	27	62
41 to 50	4	10
51 to 60	1	3
61 and above	-	-
<b>Gender</b>		
Male	17	39.5
Female	26	60.5
Total	43	100.0
<b>Marital status</b>		
Single	19	44.0
Married	20	47.0
Divorced	2	4.5
Non responsive	2	4.5

The skew of the distribution of the population by sex was in part based on the consideration that, within the African context fertility problems have long been held as women's problem. To this extent, views and observations by the female respondents is expected to present the more compelling prevailing situation on infertility as a phenomenon. This however does not discount the fact that men are equally knowledgeable on matters of fertility. In addition, the study also interviewed four

infertile persons of whom two were female and two were male. Also interviewed were four medical experts specializing in infertility treatment and management.

**Number of children of the respondents:** Number of children can indicate the general fertility level, the higher the number of children the more fertile a person can be presumed to be and this is especially for women. The number of children is shown in Figure 4.1.

**Figure 4.1** Distribution of number of children the respondents have n=43



The Respondents who had one child only were 34%. While the respondents who had more than four children were 33%.

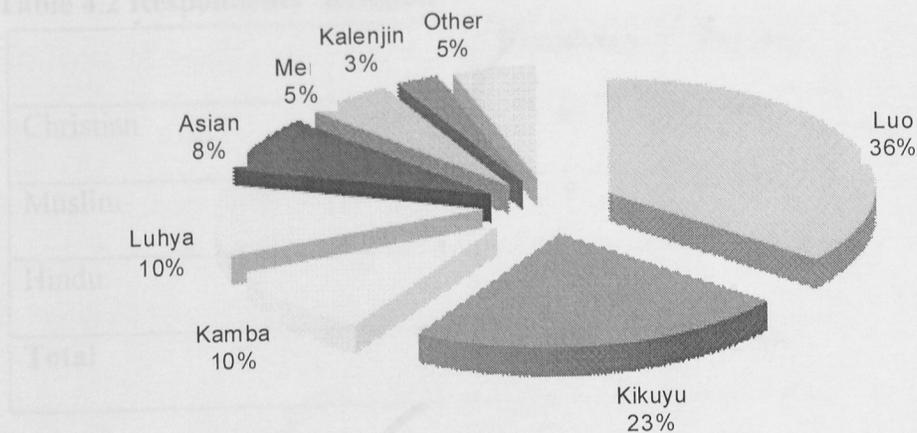
### **Ethnic Affiliation**

Ethnic affiliation of respondents was considered an important component of the study to the extent that the cultural and traditional practices that could be considered

incidental to infertility has been shown to possess ethnic orientation; with each person from a given ethnic community having similar perceptions of infertility.

**Figure 4.2: Distribution of Respondents by ethnic affiliation**

**Ethnic Identity of Respondents**



As shown on Figure 4.2 above, respondents were drawn from different ethnic backgrounds that generally reflect the ethnic mix of Kenya's population. While 36% of respondents were of Luo origin, 23% were Kikuyu, 10% Kamba, 10% Luhya compared to 8% Asian, 5% Meru and 3% Kalenjin. Although the distribution of respondents by ethnic identity in this study does not necessarily reflect the proportional strength in the whole country, the ethnic mix of respondents sample helps in aggregating the Nairobi's infertility situation and whether some cultural practices and behaviours or life style of some ethnic groups are responsible for high infertility rates.

### Religious affiliation of respondents:

Religion is an important consideration in the determination of a person's stand with respect to matters of reproduction and was therefore considered important; it is one of the three measures considered while managing involuntary childlessness apart from the social and medical interventions. One Asian Muslim and one Hindu responded, these were employees for Diamond Trust Bank Ltd.

**Table 4.2 Respondents' Religion**

	Frequency	Percent
Christian	41	95.3
Muslim	1	2.3
Hindu	1	2.3
<b>Total</b>	<b>43</b>	<b>100.0</b>

As shown on Table 4.2, the absolute majority 95.3% of respondent participating in the study was of Christian faith, while only one person reported Islamic and Hindu faith respectively.

### Employment:

Having a job or a means of livelihood can be an important consideration on whether one should have children or not. This question sought to establish whether the respondents had means of livelihood and the results were as indicated in Table 4.3.

**Table 4:3 Employment Status of the Respondents**

	<i>Frequency</i>	<i>Percent</i>
Yes	37	93
No	3	3.5
No Response	3	3.5
Total	43	100

As shown in Table 4:3 above, a majority of the respondents (93%) indicated being employed compared 3.5 % who were not employed while other 3.5% did not respond.

The type of employment one does will determine the stability of in-come and hence whether the person will be able to take care of the desired number of children. The findings on the type of employment of the respondents are indicated in table 5.

**Table 4:4 Type of Employment**

	<b>Frequency</b>	<b>Percent</b>
Casual	8	22.2
Permanent	30	83.3
Business	2	5.6
Non Response	3	8.3
Total	43	100

Table 4:4 above indicate that a majority of respondents (83.3%) were permanently employed within the study locale, 22% were casually employed and 5.6% were not employed. This indicates the likelihood of the need to have children, because of the ability to be able to support them. Figure 2 shows that most of these respondents had between them 1 to 4 children

### Level of education of respondents:

The level of education often indicates the level of understanding and the general level of awareness. It is often assumed that the higher the level of education the better informed one can be and hence one may have a positive perception on the management of infertility as opposed to an illiterate person. The results of the level of education of the respondents are as shown in Table 4.5 below

**Table 4:5 Respondents Level of Education**

	Frequency	Percent
Post graduate	3	7.0
Graduate	16	37.2
Post Secondary Certificate	14	32.6
High school	3	7.0
Secondary level	2	4.7
Primary level	3	7.0
No schooling	2	4.7
Total	43	100.0

As shown in Table 4:5 above, 32.6% and 37.2%, respondents with post secondary school and graduate qualifications, respectively, dominated the respondents' responses. Only 7.0% of respondents in the general public category had primary level of education. This distribution suggests that most participants were literate and informed enough to contribute meaningfully to the study.

### 4.2 Knowledge, Attitude and Perceptions on Infertility

To determine the level of knowledge various categories of respondents had on the concept infertility; respondents were asked to give brief accounts of their understanding of the concept. Figure 4.3, shows respondents presented a number of

related views concerning infertility. From the below, it means that over 50% of the respondents view inability to have children as the main source infertility. This is what is referred to as secondary infertility.

**Figure 4:3 Concept of Infertility**

Concept of Infertility		Frequency	Percent
Inability to reproduce sexually		2.4	
Inability to conceive due number factors that are corrected		2.4	
Inability to procreate through natural means		4.8	
A condition that renders a person to unable to have children		4.8	
Inability to conceive for long time than expected		7.1	
A person who is not biologically able to get children		11.9	
A situation where a woman is unable to give birth/man unable to fertilize		19	
Inability to get children (bareness)			47.6
	<b>Proportion (%)</b>		

on the concept infer

#### 4.2.2 Knowledge of Occurrence of Infertility as a Condition

This question sought to understand how one would identify infertile person within their own settings. The results are as indicated in Table 4.6 below.

**Table 4.6 Respondents Knowledge on Infertility as a Condition**

	Frequency	Percent
Yes	36	85.7
No	6	14.3
Non response	1	2.3
Total	43	100

A majority (85.7%) of respondents are aware of infertility as a condition through direct knowledge of sufferers. Only 14.3% of all the respondents indicated having no knowledge of sufferers of the condition.

The high proportion of affirmative response is further confirmation that infertility is a widely prevalent condition in the society.

### 4.2.3 Community Identification of Infertility

Holding that the social indicators of infertility significantly differ from medical or clinical indicators, the study sought social cultural indicators of the phenomenon.

**Table 4.7 Community Indicators of Infertility**

	Frequency	Percent
Test	3	7.7
Lack of children	33	84.6
Other	7	7.7
	43	100

Study results in Table 4.7 above shows that up to 84.6% of respondents indicated that the most common measure of infertility would be lack of children. The remaining 14.4% of respondents indicated tests (7.7%) and other indicators as ways of identifying infertility.

The above results showed lack of children as the dominant indicator of infertility is consistent with evidence in showing that the presence or absence of children is by far the most potent cultural determinant of a couple's infertility status. However in the face of advancement in reproductive health, such a traditional parameter becomes a less dependable determinant of fertility status of either an individual or a couple since

deliberate delay in child bearing through contraception would not necessarily suggest infertility.

#### 4.2.4 Community Perceptions on Infertility

Although study findings indicate similarities in societal perceptions of men and women afflicted by infertility, there are also glaring differences in these perceptions across the gender divide. The following sub-sections present study findings on how the society perceives male and female infertility.

#### 4.2.5 Community Perceptions on Male Infertility

This question sought to establish how the traditional community would take a male infertile person; the findings are as indicated in Table 4.8 below.

**Table 4.8 Community Perception on Male Infertility**

	<b>Frequency</b>	<b>%</b>
Community don't believe men can be infertile	16	37.2
Not regarded as a complete man/no respect	11	25.5
Cursed/punishment from God	3	7.0
Usually men don't accept but blames the woman	3	7.0
Kept as a secret	2	4.7
Should marry other wife	2	4.7
The community is not bothered	2	4.7
No idea	1	2.3
Take your wife to other men who can impregnate her	1	2.3
Cooperative in search for best medicine	1	2.3
Non Response	1	2.3
<b>Total</b>	<b>43</b>	<b>100</b>

Findings reveal that the dominant societal perception on male infertility suggests that there is a widely held, but evidently wrong, perception that men cannot be infertile (37%). In Table 4.8, the second most commonly cited view of infertility in men suggested that such infertile men are neither regarded as complete nor respected (26%). About 7% of respondents noted that infertile men were those who were either cursed or punished by God. Other perceptions on male infertility were; usually men don't accept but blame the woman (4.7%), that infertility should be kept as a secret (4.7%), and that the man should marry another wife (4.7%).

The above findings are a compelling confirmation of the findings in other literature indicating feminization of infertility within the African society to an extent where society still largely hold the view that the man occupies an exalted position of invisibility and cannot suffer infertility.

The downside to this view is that infertility is exclusively a female problem. When such views are held cardinal by the society it becomes clear that people will resist conventional approaches to the infertility problem, instead, resorting to a blame game targeting the woman who could otherwise be innocent and actually fertile. On the other hand the second and third most commonly cited perceptions on male infertility; male social incompleteness/disrespect and curse/punishment from God, are equally strong suggestions that rather than actively participate in the positive search for solutions for the afflicted, these views by the society only advance the fatality concept of infertility and high stigma. Fatality is adopted in this context to suggest a beyond human ability to manage thus a sense of hopelessness takes precedence.

Societal selectivity, prejudice and bias in apportioning the infertility blame are further demonstrated by the perception that men never accept their condition but instead blame the woman. The import of this finding is that such male rigidity would further impede any objective efforts to find meaningful remedy to infertility regardless of whether it is male or female based. As a result of this fixed mind set, the man is likely to resist, subvert or outright stand in the way of a search for help initiated by the woman, even if there would be all the strong suggestions that it is the man who is afflicted by the infertility problem.

#### 4.2.6 Community Perceptions on Female Infertility

As presented on Table 10, up to one in every three respondents (33%), noted that women perceived to be infertile were regarded as outcasts and disgraced. The second most commonly cited community positions about female infertility were; being sent back to their maternal homes (16.3%), and the perception that such women were cursed/being punished by God (16.3%). Up to 14.0% of respondents indicated that the position of their communities on female infertility was lack of respect where such women are viewed with a lot of contempt. Another 11.6% of respondents also noted that in instances of female infertility, male partners were allowed by the communities to marry other women.

**Table 4.9 Community Perception on Female Infertility**

	<b>Frequency</b>	<b>Percent</b>
Woman regarded as an outcast and disgrace to the family	14	32.5
They are sent back to their home	7	16.3
Cursed/being punished by God	7	16.3
Not respected/ Viewed with a lot of contempt	6	14.0
Male partners marry other woman	5	11.6
Other	3	7.0
Non Response	1	2.3
<b>Total</b>	<b>43</b>	<b>100</b>

The findings presented in Table 4.9 above is further confirmation of the high level of feminization of infertility to a point that women perceived as being infertile are subjected to inhumane treatment by all including close family members. Clearly the finding that infertile women are regarded as outcasts and a disgrace is an indication that how the community perceives infertile women has a great potential to impede any attempts at the management of the condition, particularly where the woman is the perceived victim. In addition, the finding showing that infertile women are sent back to their maternal homes is further confirmation that negative societal perceptions on female infertility easily stand in the way of a search for viable management options.

The finding showing that male partners to infertile women are allowed by communities to marry other women is another fact that aggravates an already bad situation where the infertile woman's self esteem suffers from the feeling that she is unworthy of society's respect.

The situation gets more difficult for the infertile woman when instead of the spouse being urged to search for appropriate management of the woman's condition; society presents him with the 'easier' alternative of marrying another wife who is likely to bear him children.

#### **4.3. Prevalence and Typology of Infertility**

To determine the prevalence of infertility as a condition by type, the researcher sought information from practicing obstetricians and fertility experts. There were two types of infertility namely; primary and secondary. In primary infertility, the man is deemed to have never been able fertilize and impregnate a woman, on the other hand

primary infertility in women meant that the woman had never been able to conceive from a natural intercourse process.

Secondary form infertility is a condition whereby even though previously there was evidence of a woman's ability to conceive or a man's ability to impregnate a woman; such persons lose this ability in the course of life owing to a number of factors. Experts interviewed indicated that the most prevalent form of infertility in Nairobi was that of the secondary type. The relatively high prevalence of secondary infertility was attributed to the prevalence of sexually transmitted infections that normally cause tubal blockage in women or loss of ability to produce adequate sperm concentration in men.

Some medical experts interviewed however, suggested that areas such as Machakos and North Eastern tend to have slightly higher numbers of infertile persons due inadequate food which results from persistent draught and famine. Suffice to say that this geographical distribution still lacks empirical evidence as a condition in relation of their patients. This finding makes it difficult to determine if there are any socio-cultural practices prevalent in certain regions inhabited by specific ethnic groups that could be attributed to the occurrence of infertility.

From the interviews that were conducted among the persons suffering infertility; one of whom suffered primary form and the other who suffered secondary form; cultural practices seem to impact on the seeking and management of infertility. The findings of this research will shed more light on this.

#### 4.4. Community Level Remedies/Solutions for Infertility

In attempts to understand the varied ways through which different communities represented in the study sample provided solutions or remedies to the infertile, questions were posed to respondents on the remedies that their communities had in the past or still have for infertile men and women. In this study, gender differentiation of remedies to male and female infertility is deliberate and takes cognizance of the expectation that society would at a point approach issues of infertility differently depending on whether it was male or female infertility. Study findings indicate that the various remedies to male and female infertility can be grouped in four main categories namely; traditional medicine, socio-cultural, spiritual, and conventional medicine.

The most commonly cited socio-cultural remedy to male infertility was the tendency by such men to marry other women (23.3%). Another form of solution for male infertility was the tendency by some nuclear family of the infertile man to privately talk to his wife to agree to select and seduce one of her husbands' male relatives, preferably a brother in-law, to sire children for him. Such decision and arrangement was kept as a top secret, which was only privy to very few members of that family, example of those who could have such knowledge, could be a mother to the infertile man, his father, and may be his paternal grandmother.

In some incidences, the wife to the infertile man may never even disclose to her brother in-law the goal of their friendship even after she will have had intercourse with him. After achieving pregnancy, she may purport it is from her husband.

**Table 4.10: Community level Remedies/solutions for infertility**

Remedies	Male	Female	Total (%)
<b>Socio-cultural</b>			
Tend to marry another wife/wives	11	13	24 (55.8)
A few members of the nuclear family may privately request a brother to the infertile man to sire children for him.	3	6	9 (20.9)
A man may marry/inherit a woman who already has children from another marriage or who is widowed but has children.	2	5	7 (16.2)
Have another partner(s)	1	2	3 (6.8)
<b>Total</b>	<b>17</b>	<b>26</b>	<b>43 (100)</b>
<b>Spiritual Remedies</b>			
Traditional treatment /consult witchdoctors	12	16	28 (65)
Seeking prayers / diviners	4	6	10 (23)
Cleansing and appeasing gods	1	4	5 (12)
<b>Total</b>	<b>17</b>	<b>26</b>	<b>43 (100)</b>
<b>Medical remedies</b>			
Seek medical intervention	14	20	34 (79)
Seek AART (test tube baby)	3	6	9 (21)
<b>Total</b>	<b>17</b>	<b>26</b>	<b>43 (100)</b>

The significance of keeping it a top secret was to protect the image of the family and, especially the infertile man was protected from social ridicule. In some instances, even the infertile man himself was not made aware of such decision, especially if the family is of the opinion that he may not accept their remedy. This strategy is favoured by traditional communities because it promotes family tree continuity and protects the infertile man from social ridicule and stigma which surrounds infertility and childlessness. Inheriting of children cited by 16% of the respondents was also another solution that members of some communities resort to in the event the men are completely unable to get children through natural means.

Although cited by a marginal proportion (6.8% of respondents), the decision by a man to have sex with multiple partners is informed by the subjective cultural prejudice

that men cannot suffer infertility and therefore childlessness in the family can only be attributed to reproductive defects in the woman. In an effort to 'test' sexual prowess and fertility, a man in denial would be tempted to have multiple sexual partners if only to increase chances siring children.

#### **4.4.3 Spiritual Remedies/Solutions for Infertility**

Spiritual remedies/solutions identified as useful options to the infertility problem include; traditional medical treatment, traditional cleansing, belief in prayer. Other spiritual options cited were; witchcraft, visiting the medicine men and appeasing of the gods through rituals. In Table 4.10 above, 65% of the respondents would rather have traditional medicine, as opposed to 23% who would rather see a diviner, and 12% would prefer offering sacrifices to gods.

#### **4.4.4 Medical Remedies/Solutions for Infertility**

Results presented in Table 4.10 above, shows that 79% would prefer, medical treatment that is not assisted by the new reproductive technologies, whereas only 21% would prefer assisted reproductive techniques. This is a demonstration of how deep cultural beliefs and practices hinder the impact of conventional medicine and new reproductive technologies. Secondly, in pursuit of the non-medical alternatives, patients with otherwise curable conditions may easily fail to seek doctor's advice on time such that by the time this alternative is sought, the condition may be beyond salvage.

#### **4.4.5 Remedies/Solutions to Female Infertility**

Similar to the case on remedies/solutions for male infertility, study findings indicate the various remedies and solutions to female infertility can be placed in three main categories namely; socio-cultural, spiritual, medical and 'other'. The subsequent sections present discussions on what remedies/solutions found in the above categories potent for female infertility.

#### **4.4.6 Socio-Cultural Remedies/Solutions for Female Infertility**

The most commonly practiced socio-cultural solution to female infertility is the decision by women deemed infertile to allow their husbands to marry another wife (18.6%). Of course the women usually have no option to this anyway, because even if they were to resist the husband's decision to marry, pressure from his relatives would soon have its way. Adoption of children was also identified by respondents as a solution to female infertility. Although cited by marginal proportions of respondents, the decision by a woman who cannot conceive to enter into sexual relationship with male relatives to the husband has been found to be one way of determining the possibility that the couple's inability to have children is not as a result of the woman's infertility. This form of male 'relative intervention' is also used as a way of keeping the infertility problem 'within the home' in an attempt to ward off the external stigmatization that comes with the condition of infertility among couples.

However, the decision by one or both couples to have the woman seek alternative male intervention only helps to illustrate that couples afflicted by the condition of

childlessness could be opting for socially expedient but less reliable and even risky options in their attempts to manage infertility.

In the end, such couples could waste a lot of time spanning the entire primary window period of an otherwise treatable medical condition.

#### **4.4.7. Spiritual Remedies for Female Infertility**

Closely related to the spiritual solution of witchdoctor intervention, some women and probably their families were found to resort to traditional healing, as cited by 11.5% of the respondents. Implicit in these two traditional solutions to the fertility problem is the fact that most people still believe that infertility is either a sign of bad luck or family curse hence the decision by its sufferers to resort to spiritual options that include witchdoctor services or traditional cleansing rites for the infertile or apparently barren woman.

Prayer and appealing the gods of fertility were other spiritual approaches cited by respondents as ways of solving the infertility problem. However there is no empirical evidence on the efficacy and reliability of these spiritual approaches to solving the infertility problem. Given the high levels of unreliability of these remedies, it is not uncommon to find infertile couples ending up at the doctor's desk after many months or even years of futile search for a solution to their infertility based childlessness problem.

#### **4.5. Gynaecologists' Interviews**

Four doctors were interviewed to get their views on infertility. These views are captured below.

#### **4.5.1 Who Seeks Treatment First**

The doctors were unanimous that the females as opposed to the males usually approached them first in the issue of fertility. They, however, said that men were sometimes forced by their wives to take fertility tests. They also blamed culture as an impediment to proper medical treatment of infertility. One of the doctors said the researcher that most men were comfortable taking the fertility test at night when there are no other clients in the clinic. As regards sperm analysis, he said most male patients were very uncomfortable with the presence of any female staff. Such patients requested the doctor to take their specimen in a very secluded place.

#### **4.5.2 How long does a Couple try to Conceive before they Seek Help**

Young couples were considered more open about their fertility. They come as early as six months of trying to conceive the doctors' reported. The older generation were, however, hesitant to talk about their fertility. They could have the information; however, they tend to listen too much to culture, and may come even as late as after trying to conceive for fifteen years and above.

#### **4.5.3 Type of Infertility More Prevalent**

The doctors interviewed were unanimous that in Kenya, the most prevalent type of infertility is the secondary one which is caused by sexually transmitted diseases and other conditions like abortion which are poorly performed. Such may be abortion performed by non-qualified medical practitioners, or performed under unhygienic conditions.

#### **4.5.4 Popularity of Advanced Assisted Reproductive Technology**

The younger well educated people appreciate this technology; they are the majority who tend to come for this type of treatment. As is expected, the older generation are very sceptical about the outcome; they see it as a method which competes with God in procreation. Religion is another inhibition to some extent. Those who are sceptical tend to lean on religion and some ethical considerations, for example, one would say, conception should take place in a "bedroom" not in a laboratory. Others also talk about giving birth to abnormal children.

**On information:** The doctors confirm that adequate information has not reached the grassroots; they say that, only those in major towns have the information, and even in major towns, a great number of individuals still have no access to adequate information. Others have deliberately shunned the information due to cultural, ethical and religious beliefs.

#### **4.5.5. Impact of Culture, Ethical Considerations or Morality on the Acceptance ART and IVF?**

Culture is very dynamic, even those who consider themselves highly educated are to some extent bound by cultural beliefs and ethical considerations in the issue of conception. However, one doctor said a good number of young people tend to shun retrogressive cultural inhibitions.

When they encounter problems with conception, such young people are open to the options offered by New Reproductive Technologies. Most of the young people will have gathered a wealth of information before consulting doctors, this makes it less strenuous for to explain the process as opposed to those who may want to use the technology, but already have very distorted information about the treatment.

#### **4.5.6. Has HIV/AIDS Confounded the Condition of Infertility?**

HIV/AIDS lowers immune systems of those infected, making them susceptible to sexually transmitted diseases and other infections. HIV/AIDS also lowers sexual urge. For those who suffer HIV/AIDS, the process of conception is a bit complicated; hence some people may decide to stay childless, although they are not infertile. What really confound the problem are the psychological, emotional and psychosocial effects. On the other hand the treatment offered to those suffering from HIV/AIDS may be responsible for reduction on the levels of sexually transmitted diseases.

In summary the doctors agreed that the younger generation were quick to seek medical help on infertility issues and take up modern methods such as ART and IVF to manage infertility. Conversely, the older generation the doctors' said would delay seeking medical help because they were bound by cultural constraints. The doctors agreed that women were the likely ones to seek help first and men would rather not be seen at the clinic seeking help and that some would seek treatment at night as well as prefer a male to treat them.

#### **4.6. Case Studies on Infertility**

The following case studies illustrate the emotional, psychological and psychosocial problems which infertile men and women have to deal with on daily basis.

##### **4.6.1 Case Studies on Female Infertility**

This section presents study findings on the infertility condition as experienced by patients themselves who were interviewed by the researcher. It presents views of two women and two men suffering infertility.

The case studies focus on the factors that lead to the occurrence of the type of infertility experienced by the subjects, their experiences as they interact with the society, what solutions these patients had sought and how people with their condition are viewed in their communities/society.

### **Case 1: Naliaka<sup>1</sup>**

Naliaka,- a 43 year old Luhya lady has been married for 13 years but has no children. She holds a postgraduate degree and married to a church pastor. The couple both hail from the Luhya community in Western Kenya. According to Naliaka, the main reason for their childlessness is her husband's low sperm count and her damaged fallopian tubes.

#### *Background*

Naliaka got married at the age of 30 and had planned to finish both her undergraduate degree and master's degree before settling down to marriage and raising a family. However, her plans changed as she married a pastor in 1994, and they agreed not to wait any longer since they were both not very young. Her husband was then 36 years old. After trying to conceive for two years, the couple decided to seek help from their general practitioner.

The general practitioner did all the basic investigations and after three months, he referred them to a gynaecologist at Nairobi Hospital, "After a battery of tests for both of us, my husband was found to have low sperm count which could be corrected, but the bad news was that one of my tubes was completely blocked and the other one was also too

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<sup>1</sup> Names of the respondents have been changed to protect their identity.

damaged and could not permit conception, this was the saddest news we had heard in many years.”

“I thought I was strong enough having been involved in counselling people with different types of problems and encouraging them that God is able, however for days I really got angry with God”. Naliaka says that on getting this verdict, they could not even pray; neither could they even tell anyone lest the people thought that she and her husband were cursed or had wronged God. “Sitting at the doctor’s desk, he helped me to go down memory lane to try and remember what could have blocked my tubes. At this point, I remembered having been admitted at Bungoma district hospital when I was 18 years old; I had fainted in school several times due to very heavy bleeding during menses.

On investigation, the doctor who attended to me then told me that I had fibroids that were too big and had to be removed. The fibroids were indeed removed and after a few days I was well enough to go back to school. Life after the surgery was normal, with normal monthly periods; I continued with my studies and looked forward to raising a family at the opportune time which was after getting married.

With this information, the couple again did a battery of tests with the hope that may be with treatment, at least one fallopian tube could be well enough to allow pregnancy. “Sadly the gynaecologist confronted me with the worst but bold news, confirming that the effect of fibroids and the poorly done operation to remove the fibroids had left my fallopian tubes so scarred that one was hopelessly blocked and the other was halfway blocked hence chances of normal conception was not possible for me.”

## *Knowledge of Assisted Reproductive Technology (ART)*

Naliaka says she has read a lot about assisted reproductive technology, and even went secretly to discuss with one of the leading IVF Centres in Britain. According to Naliaka, the discussion went on very well and the gynaecologist explained to her all the procedures that they would go through as well as the cost. However, when she came and shared with her husband this information, it seemed that she had inadvertently opened an old wound, he reminded her of who they were! They're calling to serve God without wavering. "To say the least, his reaction was not about wronging God; it was about the perceptions of the congregants and the society. As a pastor such a discussion had to end and my imagination of trying IVF was to be buried never to be raised again till Jesus comes to our rescue."

Naliaka reiterates that, because of the way people treated her, she was not able to talk freely about her problem, "I tried as much as possible to hide my infertility, in the early stages, I would tell people that pastor was still doing his doctorate degree and hence I needed to support him in the ministry. However, there are conditions which are very hard to hide and get a way with. Each time we celebrated our wedding anniversary, comments about a baby missing in our midst would come about, some church ladies would even comment like, "in your next wedding anniversary, we will buy you baby clothes" " I was dying slowly and quietly, some women in church did not even want me to participate in their baby dedication for fear of me passing bad luck to their babies, although they never told me on my face, some of the friends and relatives I had in the congregation would come and tell me". One particular lady was heard saying, "I have to

know when that *thaata* (Kikuyu word for barrenness) is away so that I can dedicate my daughter”.

### *Running away to escape the stigma*

When Naliaka and her husband could not take it (the stigma) anymore, they decided to take a sabbatical leave and went for further studies. However, she states that this too was not a solution. Two years later they had to come back and face the same congregation, it appeared there were allegations that they had gone for the treatment of ART abroad. “We realized that we both needed to change our working station; the issue of infertility was glaring on us like a birth mark wherever we went.”

We actually changed churches if only to have a breathing space, and at one point even the thought of leaving the country to work a broad crossed our minds, and we toyed with the logistics. But one question kept ringing in Naliaka’s mind, “who are we running a way from? God knows we cannot have children.” At one time one of the church elders thought he was being very considerate, during a discussion about improving the Senior Pastors’ house, he told the deacon board that “the Senior Pastor (Naliaka’s husband) does not need a big house; all he needs is peace of mind and understanding of his misfortune, we don’t want to give him a big house before God blesses him with children!” This remark pierced my soul like a big knife”.

Whenever a service took more time, especially during baby dedication or baptism, some congregants would get agitated and make insensitive comments like, “You know it is because they (the pastor and his wife) have no children to attend to, so they can keep preaching till tomorrow, they don’t consider that the following day is a Monday and we have to drive/take children to school”. Whenever a child would refuse to be held by

Naliaka during baby dedication Sunday or any other times, some women would comment like “even children are scared of her, she doesn’t even know how to hold, or sooth children”. The stigma of infertility is not only strengthened by men, women indeed are the worst. “Most of the derogatory comments that made my life hell on earth came from women. The notion that those who are more educated or those who are saved or religious have a better understanding of infertility is far-fetched and holds no water at all. Being a church leader who cannot have children is psychologically very traumatising, there are areas of the scripture that one is not strong enough to preach or counsel people about, example on family issues or on fertility”.

#### *Changes Naliaka would like to see in the management of Infertility*

Naliaka suggests the removal of gender discrimination and derogatory references towards women. She says “The society should understand that the inability to bear children is not the wish of those who find themselves in that category” neither is it a curse, it also does not mean that one wronged God and is therefore paying for their sins.” She goes on to say that the society should also be aware that infertility, like cancer or road accident does not know a pastor or a murderer and that the only difference is that for the murderer, the society will probably understand him and leave him a lone. Naliaka had this to add: “ I still think some doctrines should be changed to free pastors, or those serving God to live a fulfilling life, not to restrict them too much as to miss out on embracing the use technology such as assisted reproductive techniques e.g. invitro-fertilization that has helped many infertile couples to get their own biological children”.

According to Naliaka, Church leaders should not avoid the subject of infertility because even the Bible talks about women who suffered infertility. She also suggests that stigma pegged on infertility should be removed to free couples/persons who suffer infertility to look for conventional medical treatment such as those offered by the new reproductive technology. She goes on to say “We need more advocacies and more information about the caused of infertility, the society should consider infertility as an illness that needs to be treated and not ostracism” She also suggests that people should check their fertility status before getting married just like HIV/AIDS, in her views, such analysis would prepare people and allow them to make informed decisions whether to get married or not, especially if such persons are made aware from the results that one of them or both have fertility problems.

According to Naliaka, if in the course of checking their status those intending to get married discover they are discordant, then they should make an informed decision, either to get married and try the new reproductive technology to enable them have children. However if one partner is not comfortable with this then they should agree on the way forward including not getting married.

#### *Naliaka's Views on Community positions on Infertility*

Naliaka says that in her Luhya community, the older generation do not believe that a man can suffer infertility; they believe it is the woman who is the problem. She says “It does not matter if you are the wife of a pastor or not, their conclusion is that either I am cursed or I must have been promiscuous, and therefore, I suffered some very bad sexually transmitted diseases. Some also believe I procured abortion many times, others say that

we wronged God and so we are being punished". Naliaka notes that the list of derogatory statements is endless. Relatives to Naliaka's husband simply want their son to get married and get children. "They always tell their son to stop hiding in the church ministry. They qualify their quest by saying that even God had a son Jesus, and so they don't understand why I restrain their son from getting a second wife who can bear him children. Some of them suggests to my husband to divorce me and move on with his life by marrying a wife who is not barren".

As we closed the interview, Naliaka had this remarks to add: "I'm still praying that God will give my husband the favour of understanding and accepting the intervention of the new reproductive technology in our search for a child before it is too late. However should the church politics continue to prevail upon such methods, then we may have to consider adoption." To other families/persons who are suffering infertility, she had this to say, "let us not shy away from seeking understanding and justice, both from the public and the government. We are not cursed; infertility is an illness which needs to be medically addressed". She adds that "There should be more affordable and accessible centres where couples/persons suffering infertility can readily find information about their fertility status before it is too late".

### **Case 2: Interview with Achieng<sup>2</sup>**

The following is a presentation of an interview with a female respondent suffering primary infertility. The section consisted of the interviewee's voice as she narrates her condition, it also consists of the researchers comments.

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<sup>2</sup> Names of the respondents have been changed to protect their identity.

*Informant- Achieng*, she is 65 years old she was born in 1940. Achieng was married but divorced after 10 years because she was unable to bear children.

### *Achieng's background*

Achieng was forcefully married off at the age of 13. Customarily Achieng was a replacement to her aunt who was married to a Mr. Baraka, but who died without getting children.

Achieng's parents divorced while she was only two years old. At nine years her mother remarried. Although, the Luo community have left the issue of accepting illegitimate children to the discretions of the man marrying who already had children from a another marriage or out of wedlock, they silently don't accept such children altogether. Worse still is when such as a child is a boy. Depending on individual homes, such a child may be killed through witchcraft, because they are considered a bad omen.

In the case of Achieng's mum, when she realized that Achieng was being mistreated by her new husband's family, she took Achieng to her younger brother Owino to take care of her. At Owino's, Achieng was not welcomed either. Owino's wife and children kept reminding Achieng to go and look for her biological father. They always told her she was a bad influence to the young people in that village. Achieng remembered one time her uncle's daughter was unusually late from school. The mother commented that Achieng had influenced her daughter negatively. This earned Achieng thorough beating from her uncle.

*Achieng got married at age thirteen.*

In 1953 while she was thirteen years old, Achieng was married off to an old man who was twenty years older than her. The man, as she later learnt had married her late aunty who apparently died childless. Her uncle Owino deceived her that she was going to work as a house help to his friend Baraka. Little did Achieng know that she was taken in as a wife to replace her aunt who died when she was only three years old?

Baraka had married two other wives. Though there existed a traditional promise that had to be fulfilled by his late wife's family—"a wife replacement". According to the Luo customs and traditions, when a husband loses a wife with whom they had not lived for over ten years or with whom they did not have a certain number of children, say from three onwards, the family of the dead wife is bound by traditions to replace the dead wife. Those who were targeted to fulfil these seemingly retrogressive acts were either, the immediate sister of the deceased wife, her cousins or her younger aunts. In this case, Achieng was chosen and was secretly "betrothed" at the age of three years when her aunty died.

According to the Luo traditions, in a polygamous home, the youngest wife was placed under the care of the first wife. Therefore when Achieng was married off to Baraka, she was under the care of Anjelina who assumed the first wife's roles after Achieng's aunty died. For a period of two months, Achieng worked as a house help, taking care of all the domestic chores for Anjelina the first wife, she fetched water, gathered fire wood and did all that a house-help should do. During these two months, no one in Baraka's home or village hinted to Achieng that she had come to replace her dead aunt as a wife to Baraka. Further more her uncle Owino only informed her that Baraka

was his long time friend, so she never got to know that her aunt had been married to Baraka either.

***Achieng lured by the first wife to take evening uji (porridge) to Baraka's abillah/hut***

An Abillah/hut was a small traditional grass thatched house erected in the middle of a polygamous home, it distinctively belonged to the man of the *boma* (home) and his wives only visited the *abillah for overnight stay* strictly on his invitation. It was also the place where his male friends would visit him for celebrations e.g. for a good farm harvest, his son's marriage, etc. It was purely masculine, however, to keep his polygamous home in peace, such a man had a roaster, for each wife's overnight visit. Each wife knew their time and did not interfere with each other. Traditionally such visits acted as a way of family planning. Achieng explains.

For the two months Achieng had been living in Barakas' home, she had never entered that hut, she saw Baraka's wives take to him either food or uji (porridge) but none of them had ever assigned such duties to her. She had not even talked to Baraka on one to one, she saw him from a far. She feared him, and respected him as her "dad".

This very night however, Anjelina asked Achieng to accompany her to the *abillah* as she took uji and food to Baraka. After delivering the uji at the *abillah*, Achieng excused herself to go back to their house as was the tradition, but Anjelina beckoned her to stay in the *abillah* until Baraka finished his *uji* and his food. After a while Anjelina, explained to Achieng she was actually a wife and not a house help. Anjelina warned Achieng against screaming or making any resistance to Baraka's sexual advances.

*Achieng taken a back and confused, and traumatized*

Achieng found it hard to comprehend that the women she had referred to as 'mothers' had become co-wives' and worse still the man she referred to as 'father' had suddenly became her husband! She sobs but Baraka busily prepared himself to take her to bed!

*Achieng I stared at Baraka and mum Anjelina for five minutes in disbelief but without a word," I sought mercy from them but even as I did this I thought it was just a joke or a very bad dream".* Before mum Anjelina went out, I overheard her whisper to Baraka "I think she could be a virgin, please be easy on her", to which Baraka shouted "this is not a child, didn't you give her enough training? If I get disappointed, let me not see you in this abillah for the next six months". Achieng: "all these utterances sounded so unfamiliar to me, I did not understand what they were talking about". Anjelina left then hell broke loose, Baraka roared at me, and commanded me to get into the inner room; in fear she made her way into the inner room which had no bed or any form of lighting. Before Baraka came into the inner room he roared again, "let me not find you dressed". At this point I was trembling, I was looking for any escape rout, but there was none this abillah was traditionally built with no windows. All this time, Baraka was seated in the sitting room on a three legged stool smoking his traditional cigar.

*Achieng raped by Baraka as Anjelina watched*

Achieng- Baraka came into the inner room where I was, when he found I had not undressed he called Anjelina once and within seconds Anjelina came to the inner room and quickly and forcefully removed my clothes without a word, she then walked out and

Baraka came and pounced on me like a lion, I could not bear the pain so I screamed, within a second Anjelina was there telling me “if you scream again, you will be dead” meanwhile Baraka went on inflicting more pain as he forced himself to penetrate me.

#### *Achieng got badly ruptured and passed out*

Baraka raped me repeatedly until at some point I passed out. The following day I was woken up by Anjelina and some two women who apparently Anjelina had called to come and assess my injuries. I later learnt they were Traditional Birth Attendants (TBAs). When I became conscious, I was lying in a pool of blood, I had even passed stool, I was sweating and very feverish, I could not talk, neither could I sit. I was very confused; I could not think straight I can not describe the excruciating pain I was in. Later I learnt that Baraka had gone for his usual morning chores; he milked the cows and then went fishing as was the tradition.

#### *Traditional Birth Attendants –Treating Achieng’s episiotomy*

Achieng- For two weeks the birth attendants gave me herbs, one was in liquid form which I drunk three times daily and the other type was for bathing, but none of these worked, “I think I got a very bad infection from the tear which needed prompt stitching by trained medical personnel. Because this was not done, I could not control my urine or stool, I suffered fistula. After two weeks Baraka was at it a gain, however he also realized something was very wrong. A part from the tare, I was too frail, I was stinking! pus oozed from my private parts,” I was dying!”.

*Baraka called Achieng's Uncle to collect her for treatment.*

My uncle Owino came, he was almost in tears, he took me to some hospital in Nakuru, but after one week I was transferred to Mulago Missionary Hospital in Uganda. We were told this was the only hospital which dealt with reproductive health issues. I was admitted under Doctor Smith a white man who was the only gynaecologist. I stayed in the general ward for two months; then Dr. Smith told my uncle that I had to go for a major operation.

*Angelina the first wife explains to Achieng the rules for visiting Barakas ma.*

*Achieng underwent hysterectomy without her consent or knowledge*

Due to the delay in correcting the fistula and the virginal tear, the infections from such wounds damaged her uterus beyond repair and Achieng's uterus had to be removed. However this was never revealed to her. A month later she left the hospital. She was in good health; she could now control both her bladder and her stool. Achieng stayed at her uncle's home for another three years hoping she would not be told to go back to Baraka again. Yet this was a bad dream.

*Angelina*

*Achieng forced to go back to Baraka after her "hysterectomy"*

By 1958 I was now 17 years old, one morning, as we prepared to go to the farm, my uncle Owino and his wife beckoned me to the house, they explained to me that it was time I went back to Baraka to fulfil the traditional promise. I tried resisting, but I finally just had to heed to their wishes. I was still very traumatized, I cried most of the times, I could not imagine I was going to stay with that beast who raped me and left me for dead.

*Achieng given the rules for visiting Baraka's hut/abillah*

For two weeks I stayed with Anjelina. After this Baraka built for me my house. While in my house Anjelina called me and gave me the rules/roaster for visits to the Abillah. She told me to go there only when I take food to my husband or if he sends for me, she also told me Baraka himself will not call me, however, Anjelina herself was in full control for the two of us, that is me and Deborah who was the second wife.

*Anjelina the first wife explains to Achieng the rules for visiting Barakas hut.*

Achieng- I went back in July, 1958, I was then 18 years. July coincided with Anjelina's turn for visiting the abillah every night for one month unless she was attending her menaces. She then told me August would be for Deborah, and then my turn would be from September, she also cautioned me to observe and follow the sequence strictly. She also explained to me the strictness and the importance of the roaster as it did not change and that if there was any change, she Anjelina, would be the one to convey to us. I later realized that the change could only take place when one was either sick or when one is pregnant and does not feel she should continue having sex. At that point the person affected would inform Anjelina, and then she would report to Baraka, whose word would be final.

*Achieng Discovered she was "infertile"*

After I came back to Baraka and he built a house for me, I knew my fate was sealed. I accepted my fate and was now looking forward to get a baby. After all, my

uncle told me there was nowhere I could turn to, since the dowry which was paid to him by Baraka he had already used to marry his second wife.

By the time, I was forced to return to Baraka, Anjelina the first wife had four children and Deborah the second wife had a daughter. I had no child!.

The roaster for sleeping in the abillah favored every wife in terms of the ovulation cycle, and so I knew it was not going to take long before I became pregnant. However, when Anjelina talked to me she mentioned something about my monthly period, she cautioned me about it and told me that although I will be visiting the abillah for a month, I must sleep in my house for the 4 days during my menaces, then I could resume after the cycle is over. At this point I remembered that since my operation in Mulago Mission Hospital three years ago, I had not received my menaces, I however did not think much about it as I was still naïve and young.

After three years without any sign of conception, I started getting worried, Anjelina had asked me a year earlier but ignored hoping all was well. Women would look at me in a strange way, especially when we bathed in the river. One day I overheard two women talking, they wondered why I could not give birth. In their conversation one exclaimed to the other, have you looked at her tummy! She has some strange scar as if she gave birth through caesarean section! But one elderly lady said, I think Baraka damaged her uterus, referring to what happened when Baraka raped me at thirteen years.

### *The pain and stigma of childlessness in a polygamous marriage*

After trying to get pregnant for three years without success I got so worried, Anjelina the first wife had been told by Baraka to find out what my problem was, she told

me their patience had dried up; she wondered how a young girl like me could have procured numerous abortions and destroyed her chances of getting children. She reminded me that the reason I was married to Baraka was to give him children to compensate for the dowry he paid on my aunt who died before getting children. Deborah and Anjelina were not in good terms, and this made Deborah my friend. She too seemed to have had low fertility. She had been married for five years, but she had only one daughter. However this was not a consolation to my condition. Things got worse for me, other women treated me with contempt, I went through too much psychological and emotional torture. I was the story on women's lips as they went to the market or a social function. I stayed home most of the times just to avoid social ridicule. I was ostracized, some referred to me as a witch, and others called me *tasa, lur* (an infertile woman).

#### *Economic and social exclusion*

After being childless for over six years, Baraka apparently told Anjelina to inform Achieng that she would no longer continue with her one month overnight visits to Baraka's hut, the reason for this drastic action was due to the fact that Achieng was barren, hence her night visits was denying his two other fertile wives chances of getting pregnant. She could stay for even one year without visiting or talking to her husband. Apart from being denied sexual visits, Baraka stopped even giving her any attention or help.

As it were in a polygamous marriage, the husband gave each wife land and other assistance according to the number of children they had. Achieng had been given one cow to milk, one acre to do subsistence farming, and she would still get some assistance

like having her husband till the land for her. All these stopped. The farm she was given was taken away and given to Anjelina, the one cow she was assigned for milk was also taken from her and given to Deborah. She was left to fend for her self. Life became unbearable. She would secretly seek treatment from the Traditional Birth Attendants, but she had to stop for lack of funds.

*Kochia village elders resolved that Achieng was a bad omen and had to be divorced*

When it was now obvious that I could not get children, one evening Baraka called me in his hut/abillah and interviewed me about my inability to bear for him children, he told me barren women were cursed hence they brought bad luck wherever they went. He also told me that the whole village of Kochia had been complaining about my infertility to the extent that the village elders vowed not to associate with him/Baraka unless he sent me away. They alleged that I brought bad omen to their village. The counsel of elders attributed all the evils that was happening to their village to the fact that a barren women was in their midst.

The following are some of the evils that were supposedly caused by Achieng's presence in Kochia village. Poor farm harvests, measles outbreak; smallpox outbreak, frequent hailstones, it was alleged that more women were suffering miscarriages, more children died in that village since she got married etc., any sickness or problem that could not be properly explained in Kochia was heaped on Achieng s' infertility .

After informing me about the village elders concerns, Baraka called his two other wives, Anjelina and Deborah. He told them the concerns of the clan elders; he also told them he concurred with such concerns because he had also not prospered since he

married me. When Anjelina and Deborah were given a chance to contribute to this debate, as usual Anjelina murmured “why has it taken you too long to realize that since you married Achieng even our farm harvests reduced” then she went on “I’m sure if you did not marry this lady, referring to me Deborah would be having three children by now” at this point I saw Baraka nodding in agreement to Anjelina’s sentiments. Deborah on the other hand said, it was too cruel to heap such allegations on Acheing, she asserted that children were a gift from God. Deborah begged Baraka and Anjelina to let me stay.

Baraka therefore gave a ruling, he said, I could stay as a house help to Anjelina and Deborah, but not as his wife. I agreed to this because I had nowhere to go to. I also hoped that some day I could get a child even if it meant secretly sleeping with one of my in-laws. I really wanted to prove to them that I was a complete woman. Unfortunately this was not to be. I stayed under Deborah’s care, but I worked for both of them.

*Achieng chased a way for bewitching Deborah.*

I lived in hell, after Baraka stopped caring for me. I was always beaten by Anjelina and her sons. I did all the donkey work for them. I did not even have money to buy a dress, I dressed in rugged clothes, and I could go without food for days, especially when Deborah happened to be away from home.

After staying with Deborah for one year, she gave birth to her second child which was a son. I got so depressed; I wondered how unfortunate I was. However, I continued to nurse Deborah the best I could. One day she asked me to add raw chilli to the meat stew I prepared for her. She ate the food as usual, but at night she had a running stomach, she was vomiting, she had a splitting headache.

I used to sleep in Deborah's kitchen, so after serving her with this meat stew, I ate and went to sleep. In the middle of the night, and unaware that something was terribly wrong, I heard Anjelina and some women shouting "we will kill that infertile witch! before she kills Deborah" a minute later they banged my door open and pulled me out side, some women started beating me and shouting the witch has finally killed her friend Deborah! I was in shock, no one explained to me what was going on. I could hear some women asking Anjelina, since when did a barren woman nurse her co-wife who has just given birth to a son? The commotion woke Baraka up, he came and ordered every woman to keep quiet. After Deborah narrated to him that she started feeling unwell after eating the stew I prepared, Baraka did not say a word, he asked for his machete. At this point Deborah faintly told me to run away as Baraka was going to kill me. As I made to run, some three women held me and told me I had to face the consequences, but by God's grace, I managed to free myself and hid in a maize plantation over night. The following day I walked to the nearest market and some good Samaritan gave me Kshs. 2 which I used to reach the place my mother was married.

### *From the first hell to the second hell*

After running away from Baraka's home, I stayed for two years at my mothers place, but life was not easy. She then connected me to a woman who needed someone to work in her hotel in Nairobi. I accepted the job; I had matured enough to face the world on my own. This was in 1975. Life in Nairobi was much better than what I had ever known. In 1980, after having moved with different men in pursuit of children, I decided to talk about it. One day I gave my life history to a nurse who was then working at

Kenyatta Hospital. She then made an appointment for me to consult with a gynaecologist. After numerous tests, which included and x-ray, the doctor told me to just accept my fate. He revealed to me that I did not have uterus and there was no way under the sky I could have children. I was shocked, I knew something was wrong, but I did not know my uterus was removed.

During the investigations at Kenyatta Hospital I had given the doctor my life history including the ordeal I went through at 13 years, I also told them how I was treated by a Dr. Smith at Mulago Hospital in Uganda. Kenyatta Hospital wrote to Dr. Smith who was still in Mulago Hospital in Uganda, the letter requested Dr. Smith to forward the details of my treatment. This was promptly made available to my Doctor at Kenyatta Hospital. The report read “to save Achieng’s life, we had to do a hysterectomy”.

After two weeks, I went back Kenyatta Hospital and my doctor explained to me the type of treatment I went through in Uganda. I was in shock, I had nowhere to turn to, I got so disturbed, life to me became meaningless, I went into depression. I became promiscuous, I wanted to die. I cursed Baraka and Anjelina, I never wanted to talk or see my mother again. I swore never to get married again.

At sixty five years old Achieng still works for a young couple in Nairobi. She tried to adopt her brother’s daughter, but after the girl realized Achieng was not her biological mother she ran away and went back to her parents.

*Acheings Major challenges as an old childless single lady.*

Achieng detests divorce, she says if her parents had not divorced she probably would have been married and had children. She felt her mother was too selfish, and did

not have motherly love for her. She blamed her mother for all her woes. She advises mothers never to reject their children because of their love for another man. Achieng also cited poverty as partly the cause of her miseries.

#### *Achieng's Advice to young people*

#### *Retrogressive beliefs and practices*

Achieng is asking parents and the society as a whole to stop practices such as the ones that forces girls to be married off to strangers to replace their dead relatives.

#### *The pain of involuntary childlessness*

In her conclusion to this interview Achieng says "It is better to be HIV positive than to suffer infertility. As it is, no one ever bothered to know why I could not have children. Instead, I'm more ostracized than a promiscuous woman who became HIV positive, but who has a child or children. At least such a woman has proved her womanhood. An HIV positive woman can hide her status, but how about Achieng who is childless? She is barren, she has never put on a maternity dress, she has never experienced labour pain, neither has she ever breastfed!" Achieng sobs and wipes her tears.

She goes on –losing a loved one is painful, but the bereavement wears out with time and with different life circumstances. However the pain of childlessness lives with you forever. You go to a function people talk about their children, you join religious groups, they want to know your family background, you join an organization, there is a clause asking the number of children, the list is endless. It is like wherever you go someone is noticing you as a barren woman. Those who know your circumstances are

even worse, either they may avoid inviting you to some social gathering, or they make sure they avoid talking about children in your presence all together.

### *Achieng's Advise to young people*

Do everything within and without your means to have your biological child/children. As a woman do not be under the elusion of your husbands love or under his kind words to think he does not mind. He may understand you, but the pressure from the society will overwhelm him. Exhaust all the available options. During my days there were not many options available for persons with a condition of infertility. Today you have new reproductive technologies, go and try your lack. Adopt if you can't have your biological child. Pursuing academic excellence is a noble course, but if you asked me, without a child all that is useless. "I'm now sixty five years old, I have no child, no home, and I can't continue working. *Who am I? I consider myself lower than a pregnant bitch!*" She wept and we ended the session.

### *Achieng on-Knowledge of Assisted Reproductive Technology (ART)*

Achieng confesses that she had no knowledge about assisted reproductive technology until a few years ago when she was already too old to bear children. She wished such knowledge would have been made available to her she would have tried. She did not even know about legal adoption. She also advises young people who may suffer infertility not to hesitate to try this new technology.

#### 4.6.2 Case Studies on Male Infertility

##### Case 3 Interview with Ndirangu<sup>3</sup>

The following is a presentation of an interview with a male respondent suffering secondary infertility. The section consisted of the interviewees voice as he narrates his condition, it also consists of the researchers comments.

##### *Personal information:*

Ndirangu aged 53 years hails from the Kikuyu community of central Kenya. He had been married for 30 years. They have one son who is now 30 years old. Ndirangu states that when his son was only two years a robbery took place in Thika town where he worked as a watchman hence he was wrongly implicated and imprisoned for three years. During the initial investigations stages, he was allegedly severely beaten during interrogations. The beating, according to him ruptured his testicles and rendered him infertile.

*Ndirangu explaining to the researcher the root course of his secondary infertility.*

“In 1975 when I was 19 years old, I got married to a 17 year old young lady called Ann from my community. Ours was a traditional marriage performed in accordance with Kikuyu customs. After two years, we were blessed with a baby boy now aged 30 years and married with three children, two boys and one girl”.

Ndirangu: When I got married in 1975, I was working in Thika town as a guard. Unfortunately, one night while I was on duty in 1979, we were attacked by armed robbers

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<sup>3</sup> Names of the respondents have been changed to protect their identity.

who tied our hands and sealed our mouths before locking us inside a toilet. Because of this robbery, the company incurred huge losses. When the police was called, they took us to Thika Police station; at the police station three of us were locked in police cells for interrogations for five days. We were then taken to court and two of us were jailed for three years.

Ndirangu alleges that, during the interrogations he was badly beaten by the police and according to him, his testicles ruptured. "One particular policeman hit me several times forcing me to name the robbers, I kept telling him I knew none of them, at this point he got so angry with me, he hit my manhood so hard, I experienced a very excruciating pain then I passed out. When I came to, my manhood was so swollen and very painful and for a few days I was not able to pass urine normally. I was not given any medical check up or attention at all."

Ndirangu served his three year jail term and was released in 1982. Having been in jail for that long, immediately he was released the couple could not wait to increase their family numbers, his wife wanted more children. They agreed conceive, but when two years passed without conception, they opted to consult conventional doctors.

As usual, Ndirangu's wife went for a check up first, however before her results were revealed to her, the doctor, asked her to tell her husband to go for a check up as well, he was reluctant, but after discussing with one of his friends, he got the courage to take the investigations. What encouraged her most was the fact that he already fathered a son. The couple was told to go for the results after two weeks, when the results came out, doctor who examined them said that all seemed to be well with Ndirangus' wife. He however asked them to go to Kenyatta hospital for more specialised investigations from

the reproductive health experts. At Kenyatta we were told to wait for six months before the doctor could see us. We waited since we had no money to go to private doctors.

When the time for the appointment came, we were examined; again my wife was told she did not have any problem concerning her fertility, this left me very worried. Our doctor at Kenyatta hospital insisted that I take some other tests which I did. By this time, I was almost convinced that the doctors had agreed to embarrass me. I could not bring myself to believe that my fertility was questionable; after all, I was sexually active and I had fathered a son! These repetitive tests left me psychologically and emotionally very disturbed.

I went for the results, but before the doctor could release them to me, he appeared a bit apprehensive, he asked me whether my wife accompanied me, realising I was alone, he counselled with me for a while, and he brought the bombshell home! He said, "Mr. Ndirangu I'm sorry, according to the tests we have done to assess your fertility levels, it is unfortunate, you can no longer father a child, due to the injuries you said you sustained from the beating during police interrogations". At this point my world came crumbling down; my life came to a standstill! I was in total denial, I told the doctor those could not be my results anyway. I wondered how I could have become infertile, yet am sexually active and functional!

A number of questions went through my mind such as: how was I going to break this news to my wife? Was she going to believe my story about the injuries I sustained during the interrogations? How about if she goes on to discuss with her friends or her sister? How about if other people got to know? I told myself, the best remedy to this was to end my life.

On reaching home my wife Anne was quick to find out the outcome of the tests I went to collect. I cheated her doctor had travelled meaning we had to wait for another two months. I kept my condition secret for two months, but I was so disturbed, I lost appetite, I got easily irritated even by just being asked to eat. I promised myself not to disclose my status even to my best friend.

My health deteriorated, I lost so much weight, it was obvious to my wife and my friends that all was not well with me. Anne dared me to tell her what I was going through, without which she was ready to go back to our doctor to find out. I finally gathered courage and told my wife.

Ndirangu's wife got very angry with him, she thought Ndirangu got into homosexual activities while in jail and ended up with some very serious sexually transmitted infections which damaged his fertility. She regretted having been faithful while Ndirangu was in jail. She too wondered how she was going to break the news to her relatives. She felt ashamed and cheated. She wanted to divorce him in order to escape the wrath and humiliation from the community, when they get to know her husband's condition.

This is what Ndirangu had to say: "I did not blame my wife for her reactions and disappointments. In the African society, children are highly valued, they are our assets, a man is respected not just because of how many acres of land, cars, or even estates he has, but most importantly because of how many sons he has. Another serious concern about the problem of male infertility is that, culturally there is no word, which distinguishes infertility and impotence, therefore, if I cannot father a child, I will automatically be

ostracised and be branded as an impotent man! Yet I function well, I still have erections and I enjoy a fulfilled sex life”.

Ndirangu got very worried about the negative perception, the distorted understanding and attitude which are perpetuated by the society about male infertility; his concern was how he could protect himself and his wife from the community's ridiculous remarks and derogatory comments.

The people who got to know his condition were heard saying: - “We do not even believe he fathered his son.” Some women were also not comfortable with his wife around their husbands, they thought she was looking for sexual relationships; this is because they believed Ndirangu was impotent. Ndirangu- “ Indeed I'm a very disturbed man”.

### *Ndirangu's Experiences on the Role of Culture in Treatment and Management of infertility*

According to Ndirangu male infertility whether primary or secondary is very traumatising, the psychological, psychosocial and emotional torture does not seem to evaporate no matter how much you try to ignore other peoples feelings towards you. Looking for help is even harder because it involves revealing your condition either to the traditional healer, a gynaecologist or to someone from whom you are seeking help. Most unfortunate is the fact that in our community there is almost no literature or folk stories about male infertility. The folk stories available are focus on female infertility. This is because, men were not supposed to suffer infertility. The traditional medicine men in our community are either dealing with female infertility, childhood diseases or other general

illnesses. Ndirangu, however, praises culture on the management of female infertility, he is aware that women whose husbands were known to be infertile, were secretly told to make private arrangements with their husbands' age mates or close friends who could father children on behalf of their infertile friend.

This traditional method of managing infertility worked well especially in cases where parents were aware that at some point in life their son suffered some illness or went through an ordeal that probably interfered with his reproductive system and rendered him infertile. In Ndirangu's case, however, he "claimed" to have fathered a son he could not therefore talk about male infertility. The community has no knowledge about secondary infertility, a fact which further complicated his condition.

His community lack of knowledge about secondary infertility left him in a very hopeless situation; those who got to know that he could no longer father a child went as far as doubting if indeed he fathered their son. Rumours went on that probably he was not the biological father of their son.

#### *Changes Ndirangu would like to see in the Management of Infertility*

Ndirangu's main concern is the pressure put on couples by their communities to produce children. He is disturbed that historically and across cultures, there is difficulty in accepting the existence of male infertility. The individual and collective denial of male factor infertility may occur for a variety of reasons: Since it takes two to create a pregnancy, the assumption of who is defective may be guided by which gender is easier to be labelled as abnormal, and historically, women have been viewed as being less

valuable, less intelligent, and less capable in our male-dominated societies. Therefore when problems such as infertility exist it was attributed to them.

The notion that the problem might originate from the man is not even entertained. Men are highly valued in most cultures and there are very high standards of behaviour they are expected to meet, hence any signs of weakness or defectiveness are viewed with great concern. There is discomfort when men possess traits typically assigned to women such as infertility. The sexual and fertile capabilities of men are viewed as synonymous.

In laypersons language, they refer to an infertile man as being impotent. Men are expected to exhibit sexual readiness and prowess at all times and the most overt indicator of sexual competence is the ability to impregnate a woman.

Thus, sexual virility and reproductive capacity are essential although conception is dependent upon a certain level of sexual proficiency in the man; male infertility is rarely the result of impaired sexual functioning.

Since every man enjoys this exalted position in our community, I find it very difficult to accept to fall below the masculine mandate. The society should be educated to view infertility as an illness that can affect both men and women. The notion that it is a woman's problem only makes it worse. Such distorted cultural beliefs may explain why men divorce their wives when faced with childlessness in a marriage, instead of both looking for a medical help.

The derogatory cultural/traditional terms that are used to refer to infertility have got very painful and demeaning connotation, for a man it is even worse, a word like *thaata* which is the term used to describe both male and female infertility, may also be

used to refer to a man to mean impotence, yet a man could be sexually functional, and yet he is infertile.

Although there are new reproductive technologies which try to help men and women, who suffer infertility, one finds it very hard even to talk about such treatment; this is because the clinics which offer infertility treatment are synonymous with women. Worse still, a man is not expected to visit even herbalists to talk about his inability to father children. I wish men in our community and elsewhere could be open about their reproductive problems and not hide behind masculinity. I also wish the church could stop interfering with families who are looking for a child. If we did not have our son, I would have blamed my wife, I could have divorced her, or I could have married a second wife, I would not even have agreed to go for fertility tests.

#### *Ndirangu's Views on Community positions on Infertility*

On the community's position on infertility he observes that; in the rare circumstances, that a man is *thaata*/infertile, the Kikuyu community do not consider him a whole man, he suffers deep ridicule, including being barred from men's functions such as naming or even goat eating, his status in the community is lower than that of the uncircumcised man, he is categorized as a woman.

#### **Case 4: Interview with Mutua<sup>4</sup> an infertile man aged 39 years**

##### *Background*

Mutua is middle aged man from Ukambani. Up to the age of 30 years he did not know that there was anything wrong with his fertility. He had a girl friend called Lydia whom

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<sup>4</sup> Names of the respondents have been changed to protect their identity.

he was planning to marry. Due to hard life, he decided to donate his sperm for sale in one of the private hospitals. In so doing he discovered he was infertile. The doctor had to explain to him why they could not proceed with the process of sperm donation and why they could not even tell him how much he would have been paid. Mutua shares his frustrations with the researcher. He blames his failure to stay with his wife on social stigma and the pressure from his community which expects him to be ready at all times to impregnate a woman and have a family whenever the need arises.

The following is a presentation of an interview with a male respondent/Mutua suffering primary infertility.

This section consists of the interviewees voice as he narrates his condition, it also consists of the researchers comments.

Mutua: Until the year 2003, I was a very happy young man looking forward to face all the challenges of life, I grew up in the rural Ukambani, and I went to Kadhiani primary school and a local secondary school within the same district. I had a very difficult life as a young person. In most cases two meals a day was a luxury. My mum and dad struggled so much to feed us and pay school fees for us. At the time I went to Machakos Boys Secondary School, I promised myself to work so hard so that I could join Nairobi University, where I had promised to study political science if only this could enable me to fight for the rights of my people in Ukambani, I wanted to be one of the people who would reduce, if not eradicate poverty by bringing programs which could enhance food security. I worked hard, but I faced many challenges; I could not study a full term, I was always sent home for late payment of fees. I had to do odd jobs such as working for people in their farms; I worked as a watchman for some rich Kamba man

during the holidays. Although the pay was as little as Ksh.50 a day, I managed to pay my fee which was Kshs. 3000 a term. I could also buy a pair of uniform and give my mum something small as well.

As a result of the above challenges, I did not perform as well as I had expected, I managed an aggregate of a C grade. My world tumbled down because there was no one to pay for me to join parallel degree programmes. I ended up with odd jobs once more only that this time round I worked in a shop before my uncle invited me to go to Nairobi.

In Nairobi life was unbearable; I joined a group of young men job seekers who used to walk from Dandora to Industrial Area to look for odd jobs. One day we read a story about sperm donation for sale, first I rubbished the whole idea as it was too foreign to me. However, there was this friend of mine Jim, who kept toying with this idea to the extent that we went to one of the private hospitals to inquire. We were told to go back after two weeks. We gained courage and went back not knowing what it would entail, when time came to see the doctor I was called in first. I met this heavily bearded doctor; he looked at me for some time and asked me, "Young man are sure you want to do this? Do you really know what is involved in this process or are you just driven by the urge for money?" Then he quipped, "I do not mean to be rude, but I wish you could look for something which is long term, however, take a seat" he told me. He then started explaining to me how the process works, he took me through a series of detailed verbal interview, before giving me a ten page form to read and fill. When I finished the ten page form I was given a consent form to fill, this was to give the institution the okay to proceed with all the tests and processes as stipulated in the form.

As I went out my friend Jim was ushered in by the receptionist, however, after a short while he came out and told me he could not go on with this process, he disqualified himself on account of not wishing to do HIV/AIDS test, but more importantly, he said the whole process sounded so weird. I filled the form and signed a separate consent form, after which I was given an appointment to the hospital for sperm analysis and donation. I pondered with the whole idea especially the ethical issues which are involved. However, I decided to go through with it if only it could help me do a course in accounts.

Seven days later I went back to the hospital ready to face whatever the process would be. The nurse ushered me into a room where I changed my clothes, the doctor came and I went through a very horrifying ordeal, they explained to me that one has to masturbate in order to ejaculate for the collection of sperm for analysis. I persevered during this entire process hoping that at the end I may get money to go to college. Previously I had done a battery of tests to rule out any genetical disorder, HIV/AIDS or any chronic diseases. After going through all the processes, the nurse told me to go home and check with them after two weeks. I went back hoping to discuss about payment because I had already been told there was a couple looking for a donor who has my features and complexion, I was confident I would be paid whatever amount which I heard from unreliable sources could be up to Kshs. 50,000 depending on one's level of intelligence, physical features, ethnic background, and if such attributes met the specifications a particular recipient.

### *Shocking revelation*

At the reception, I was told to wait for the doctor, when my turn came I went in and the doctor appeared a bit apprehensive, however after a while he told me "young

man, you are not lucky, we can't use your sperm as they are defective", by this moment I had not grasped what he was saying, he went on to explain to me, and at this point he told me "I am sorry, you may not be able to impregnate a woman, and this means you may not have your biological children when you need them;" before I could ask more questions he called the nurse who took me to a counsellor. The counsellor introduced himself as a Mr. John. We talked at length and after about thirty-five minutes he brought a bombshell which shattered my life, and left my whole world crumbling down! he explained to me in details how the medical report was going to change my whole course of life altogether. The counsellor asked me whether I had a girlfriend, I replied in the affirmative, he went on to ask me whether we were planning to get married. The whole episode at the moment sounded to me like a bad-dream, I was sent into a crisis, and I thought I would wake up and find the condition had changed, but this was never to be.

### *Living in denial to escape social stigma*

I continued seeing my girlfriend, and in 2003, we got married. My wife was very excited about getting pregnant; she kept reminding me how we needed to save whatever little money we got from the odd jobs we were doing so that when the baby comes we could at least be able to take good care of it. Two years went and Lydia got so worried, she kept asking me to take her to the doctor, she believed she could be the one with a problem; this is because she never knew men could as well suffer infertility. By this time, I was dying slowly, I was so disturbed, I wondered, how, to tell her what the doctor told me three years ago? How would she react? How about my parents, she may share this with them since my mother was so fond of her and kept asking her when she would

stop wearing skirts and instead wear maternity dresses? Being the first born my parents really wanted to see their grandchildren.

*Lydia and my mother secretly consulted a traditional birth attendant.*

One weekend Lydia told me she needed to go to visit my mother at Ukambani. When she came back she informed me that they had visited a traditional birth attendant to find out why two and a half years had elapsed since we got married and still she could not conceive. Lydia also told me she was given some herbs to boil and drink for one month. She was promised it was not going to take three months before she could conceive. All this time I kept wondering how to break the sad news to her. I became so disturbed such that I lost sexual urge, I failed many times to achieve proper erection, psychologically and emotionally I lost control of my actions. This only made the situation worse.

After taking these herbs for three months, Lydia became very anxious, each time she received her monthly periods she would feel so disappointed and offended, she kept on asking me whether we would be under some curse or bewitchment. For a while I almost fell in the trap of lying to her by pretending that she could be the one with the problem, but guilt got the better of me and I held back my evil thoughts.

Six months later Lydia went back to the traditional healer, and this time round she was given some herbs which the two of us were supposed to take for another one month. Each attempt by Lydia to get pregnant made me guiltier and emotionally disturbed. I felt ashamed, I felt so worthless, and I wished some darkness could whisk me a way to some unknown place.

When I could not live with the guilt anymore, I agreed to take Lydia to a gynaecologist for fertility assessment. After a battery of fertility tests, Lydia was found to be fertile; the doctor asserted that her fertility levels was very high. After such crystal clear confirmation about Lydia's fertility, I was stripped naked, I had no tricks left, and I had to face the knife of infertility. After giving us Lydia's results, the gynaecologist requested that I also take the test.

As I had said, I had been stripped off all my hiding places. I took the test, during the process, I requested the doctor not to reveal the results to my wife Lydia. A few days later, I dragged myself to the hospital to collect the results. On my way, many thoughts crossed my mind, I kept praying for a miracle concerning the results. I wished I could be knocked down by a vehicle if only this could alleviate the pain, shame and guilt of being infertile. I reached the clinic and the look on the nurse's face as I talked to her told me no miracle happened. She called me a side and *once again I was told I could never father a child.*

On my way home, I was so confused, I remember the first time this news was broken to me, I almost ran mad, however, this time round it was more terrifying, I had a wife who loved me so much and who believed that a man could not be infertile. At home Lydia was very excited to know my status; she knew all was well, after all she knew men not to be infertile. When she asked me about the results I pretended that I was not given the results because the doctor was not available, she was disappointed, however, I promised her she would be the one who would go to collect the results for me.

I made another appointment with the doctor and I requested him to break this news to Lydia, I could not live with this secret anymore. Lydia went to our doctor's

clinic knowing she was going to collect my results; she was excited, she thought this would end our worries and she would soon become pregnant. When the doctor talked to her she got more confused, Lydia refused to believe the doctor's report, but I confirmed to her the same. We held each other and wept uncontrollably, but the sad facts remained unchanged.

### ***Social pressure forced me to divorce my wife.***

One year later, as we pondered on how to live with this misfortune, my wife was already receiving social stigma, some of her fellow women kept asking her why she was not conceiving, she was being told all sorts of insults as regards her failure to give birth. My parents also did not spare her; according to them it is the woman who must have fertility problems. My parents came to Nairobi in 2006 and brought another lady for me to marry and send Lydia away. I requested them to give us time; meanwhile I talked to Lydia and requested her to just return to her parents. It was very difficult for both of us, but we had to do it.

### ***Hiding from social and cultural stigma***

After some time Lydia had to tell the truth about our separation, she wrote a letter and sent it to my parents, and to her sister, when I heard my parents were looking for me frantically, I went to Mombasa, my intention was to make sure I do not discuss my infertility with any of my parents. I was so ashamed of myself; I pondered how I was going to live with this demeaning identity! I was lower than a woman. In a community,

where masculinity is almost worshipped, being unable to impregnate a woman is worse than being HIV positive.

The derogatory terms by which the infertile male is referred to do not differentiate between being infertile and being impotent, once word go round that you suffer male infertility, your fate is sealed, to the community, you are impotent, you are "a woman" you should not even dress like a man, neither should you go to male meetings.

While in Mombasa a friend helped me to get a job as a watchman at the south coast. I worked at night and slept most of the day. I just wished I would die.

#### *Visiting herbalists and witch doctors to drive a way the infertility spell*

In Mombasa I gathered courage and I shared my unfortunate condition with a friend, he later took me to (a *juju man*) an herbalist/witch doctor. We went to Malindi, while at the home I went through a very frightening experience, the man told me to spend a night in a room where he kept a male and female crocodiles, this I was supposed to do from 9:00 p.m. to midnight after which he came woke me up and instructed me to move to another room where there were other reptiles mainly black mamba snakes both male and female; At dawn we went to the ocean deep inside in a boat, here he did some rituals. I was made to stay naked holding my man hood as he held two crocodile eggs against my balls. This act was supposed to do some magic which would reverse my infertility. I was left more confused and frightened.

Back to his home the witch doctor gave me those two crocodile eggs and told me that each night from 5.00 a.m., I was to wake up and press those two crocodile eggs against my manhood for three months as I continue taking some herbs. This was meant

to bring my fertility to normal, after which I would be able to impregnate a woman. The herbalist told me I was under a curse which he would reverse. My condition never changed, I befriended a lady while in Mombasa and I promised to marry her. We had unprotected sex most of the time, but after two years when she did not conceive, I knew my condition had not changed. I left her in Mombasa, and came back to Ukambani in 2008.

### *Faced my parents*

With much pain and shame, I faced my parents; I narrated my ordeal to them. They were too shocked, my mother cried and wondered what curse had befallen her family, she even started blaming some of my uncles for bewitching me. My father tried to keep his calm, he probed me to know more about the problem and why I had not shared with him. He was a bit understanding but he was very worried and concerned about how the community would perceive them and me. My parents however cautioned me never to share my condition with anyone. A few weeks later when my mother came to terms with the reality, she called me and after a long talk, she suggested that I could get married to a lady with at least two children, under the pretext that this was my wife whom I married while in Mombasa.

My father did not support this, he said, eventually the truth would come out, he advised me to get married while in Nairobi and ask my wife to get children from other men. I did none of these, I decided to stay a bachelor and nurse my pain alone. I did not want to let another woman go through the stigma that my first wife Lydia went through. I'm still very scared of any discussion regarding marriage and children.

Lydia, my former wife got married to another man and has since given birth to two children.

*Mutua discovered he had suffered from Mumps at age 5*

Having been told some of the causes of male infertility, I sat with my mother just to jog her mind to tell me which diseases I could have suffered as a child. After counting a number of diseases, she told me I suffered from mumps and that I constantly suffered from serious tonsillitis. I believe this could be the cause of my unfortunate and painful condition.

*Mutua's concern about lack of knowledge on Male infertility*

I'm particularly concerned about the lack of knowledge communities in Kenya have about male fertility, people are not even concerned about it, and it is as if it doesn't exist. In the few circles I have ever heard people talk about childlessness, they only talked about women being the cause. Men in our community are expected to be sexually alert and ready to father children whenever they need to. There should be more advocacy and understanding of the causes of both male and female infertility. The ambiguity with which our communities approach the condition of infertility makes it very difficult for a person like me to even look for help. Or even share ones experiences.

*On the treatment and management of Infertility*

Mutua says at the community/grassroots level, there is no medical help that a man suffering infertility can get. The little help being offered by herbalists and traditional birth

attendants is mainly tailored for women, making it very difficult for a man to seek help. There should be help at the district level both for men and women. Stigma is the main reason why persons who suffer infertility do not come out early enough to declare their problem. Whether herbalists and traditional birth attendants have the capacity to help infertile persons is something which needs empirical evidence. I spent so much money and ended up more scared about the whole issue of seeking treatment for infertility.

I can only say it is very unfortunate for a man to suffer infertility. *My passionate request to fellow men: Please do not take your fertility for granted. What the masculine mandate is all about is impregnating a woman, and not just being able to satisfy her sexually. Secondly, be kind to those who do not have their biological children, and do not consider them to be under curse or under God's punishment.*

Men should come out and push the government to seriously consider the issue of infertility as one of the public health problems. Hiding and blaming women is not a cure. There is help offered by the new reproductive technologies, but the treatment is far too expensive and is not available for the poor infertile persons.

#### **4.7 The concerns of the Key Respondents.**

In this section the themes that have developed from the Case studies are discussed. The following themes stood out from the case studies: the four infertile respondents interviewed experienced stigma. In addition they all confessed that the public have wrong attitude and negative perception toward infertility. The men mostly felt that there was distorted knowledge about male infertility. They said that their communities believed that men do not suffer infertility. Under the prevailing circumstances, those men

who can not father children are believed to be under curse, if not, then they are paying for generational sins which could have been committed by their fore fathers.

All the four respondents decried the role of deeply rooted cultural beliefs for all the evil they suffered within their communities. They pointed out some of the social injustices which were attributed to them on the account of childlessness. They informed the researcher that such discriminations are very conspicuous during resource distributions, or role allocation within the family, within the community, and even at the churches level. The four key respondents therefore appeal to the Public Health department to sensitize the public to appreciate that infertility is a medical condition like any other illnesses.

#### *Role of Culture in Treatment and Management of infertility*

The role of culture came out very strongly as one of the reasons for the delay in the investigations, and subsequent treatment for infertility. These concerns were expressed by both men and women who were infertile and even those who were not. The following were the areas of concern. Throughout the in-depth interview with the infertile persons themselves, *Stigma* was cited as an inhibition to the treatment and management of infertility across the gender divide.

Naliaka says, "I tried as much as possible to hide my infertility. She goes on, in the early stages, I would tell people that pastor was still doing his doctorate degree in theology and hence I needed to support him in the ministry. On the role of culture, Ndirangu a male Kikuyu suffering infertility said that culture's role in treatment and management of childlessness is significant because "infertility whether primary or

secondary is very traumatising, the psychological and emotional torture does not seem to evaporate no matter how much you try to burry your head on the fact that the community have very little knowledge of infertility and so they are judging you wrongly on that account”.

Achieng blames retrogressive cultural practices and beliefs as being responsible for her infertility. She strongly believes that, had she not been forced by her uncle to get married at a tender age of thirteen years, to a man almost twice her age, she would not have suffered infertility at all. According to her the way communities stigmatises those who suffer infertility is in itself impediment to its treatment and management. Achieng reiterates that the communities have no capacity to help those who suffer infertility neither can they prevent it this is because it is never properly defined or talked about except in whispers.

Mutua is concerned that at the community level, there is no knowledge about infertility. He adds that whenever a couple suffers involuntary childlessness, the community believes it is the wife who has the problem. He is also concerned about the social stigma which he says prevents individuals who suffer infertility from sharing their experiences.

#### **Key finding for chapter 4**

1. On Knowledge, attitudes, perceptions regarding infertility and its causes, the four key respondents expressed the following concerns.

*That their Communities do not have adequate knowledge about the causes and management of infertility.*

The perception of most people in their communities is that, infertility is not just a medical condition, but also a curse or punishment for wrong doing either to God or to their ancestors.

Lack of proper distinction between impotency and infertility keeps men away from seeking medical treatment, their most fear is to be thought of to suffer impotency.

The four key respondents were also unanimous that communities need to be vigorously sensitized about the causes and prevention of infertility.

## *2. Regarding socio-cultural dynamics on infertility management.*

The four respondents pointed out that culture still holds retrogressive beliefs about infertility; this acts as an impediment to conventional medical treatment. Secondly, socio-economic status or poverty also play a big role in preventing majority of infertile persons from seeking advanced medical treatment. Thirdly, culturally, infertility has been highly feminized to the extent that men are hardly believed to suffer infertility.

3. In Kenya the most prevalent type of infertility is the secondary one. This is the type of infertility which is caused mainly by sexually transmitted infections or through abortion which is done under unhygienic conditions or abortion which is performed by unqualified medical personnel or non medical persons.

4. The key respondents expressed being disappointed by Public Health Department about the absence of medical help on infertility at the district level. They complained that doctors are concentrated in big cities, and especially in private hospitals where they charge very exorbitant consultation fees.

## *Cultural remedy to infertility*

Traditionally men whose wives are infertile are advised to marry more wives who can give them children. On the other hand such men are traditionally allowed to divorce the infertile wife.

In cases where it is confirmed that the man is the one with infertility problems, his wife is advised to secretly get children from their brothers in-laws or close relatives and close family friends. (*This is gender discrimination*).

The specific objectives of the study were:

1. To assess the knowledge, attitude, perceptions regarding infertility and its causes among communities in Kenya.
2. To explore the effects of socio-cultural dynamics on infertility management in Nairobi.
3. To explore the most prevalent infertility types.
4. To explore the health care management options available for the management of infertility in Nairobi.

This section presents summary, conclusions and recommendations of the study.

Those who are well learned, for example those with University education and above, approached the issue of infertility from a medical stand point, as opposed to those in the lower cadre of academic achievement. Those who were not formally educated however took the lead on cultural beliefs. Women in general however, had slightly better knowledge about the causes of infertility than the men.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.0 Introduction

This chapter presents a discussion of the findings from the study on socio-cultural dynamics and their impact on management of infertility in Nairobi as revealed by this study. Further, it presents policy recommendations that the researcher made in view of the study findings and conclusions. This discussion will summarise the findings under each objective that guided this study.

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*On attitudes and perceptions,*

The researcher found stigmatization to be one of the leading impediments in the management and treatment of infertility. People who are infertile are viewed with utmost contempt, they are considered to be cursed. In some communities they suffer social and economic isolation. Men who are infertile suffer identity dilemmas. Women who are infertile are considered to be worthless, empty, better than nothing. Both men and women suffer diminished self esteem. This study was guided by the Individual Identity Theories which were suggested by (Linda Sharon, 2000). Indeed the theoretical framework of this study further confirms this loss of self-concept as it also explains the psychological impact of infertility that makes the infertile person lose their identity.

Owing to the impact of socio-cultural dynamics on infertility as a condition, most people who suffer infertility do not believe that it's a medical condition, they believe they are cursed, bewitched or that they are being punished by God may be because of some sins deemed to have been committed either by them or by their parents/ancestors. People who suffer infertility are ostracised, they suffer diminished self-esteem, they have been made to feel guilty, and they blame themselves. For the discordant spouses, the one who is infertile, feel a sense of guilt for failing his/her spouse and the in-laws as well. Others go through endless grief. Infertility plays a big role in divorce. Because of infertility some couple or individuals get too traumatised by their misfortunes that they become suicidal.

As the theoretical framework states women often feel inadequate and defiant for failing to fulfil personal and societal roles, while men often feel inferior, ashamed,

and angry. This theory holds that whether infertility involves an actual pregnancy loss or the loss of the couple's wished child, it is a loss that is experienced as a narcissistic injury as well as a symbolic loss of self

Culture inhibits treatment and prevention of secondary infertility. Retrogressive cultural practices such as wife inheritance and women secretly sleeping with their in-laws in order to get children especially when the fault is with the husband are some of the reasons why secondary infertility could be on the rise in some regions in Kenya.

The study found that the most prevalent type of infertility is the secondary one which is caused by sexually transmitted diseases such as gonorrhoea, pelvic inflammations and other sexually transmitted diseases which may end up blocking the fallopian tubes in ladies and affecting sperm maturity in men. This finding was mainly attributed to by the doctor's interviewed.

Culturally the health care management is mostly through consulting traditional birth attendants, witch doctors, religious leaders, and performing some rituals to expel evil spirits. On the other hand, respondents, complained about the lack of knowledge about the new reproductive technologies.

Others complained about the fact that new reproductive technologies treatment clinics are concentrated in major towns such as Nairobi, Mombasa, Kisumu and Nakuru. Respondents also complained about the costs of such treatment which they confess was far beyond many Kenyans who are in dire need to use them.

5.1.1 Male key respondents are concerned that there are no clinics where they can readily find help, as opposed to women who can always find help from the gynaecologists.

## **5.1 Conclusion**

This section presents the conclusions to this study. The conclusions are arranged according to the themes generated from the study.

### **5.1.2 Perception and Socio-cultural impacts of infertility**

Infertility has health, physiological, psychosocial, psychological, and sociological implications. Each month, when the woman menstruates she experiences a sharp reminder that yet another month has gone by without conception. Family members, friends and work-mates keep inquiring, "When are you two going to have a baby?" The childless couples dread to hear such a question to the extent that they may hide from social events to protect themselves from the distress.

The stigma of infertility often leads to stress and tensions developing within the family. It forces couples to avoid their own friends. It can lead to mental disharmony; it can also lead to marital and sexual problems. Infertility is one of the major causes of divorce; it also causes ostracism from the wider family unit.

### **5.1.3 Knowledge on infertility**

The younger persons have enough knowledge about infertility as a condition. However, because of cultural beliefs, older people would rather not approach treatment through new reproductive technologies. They trust the traditional methods of managing infertility.

#### **5.1.4 Feminization of infertility**

The results show that in Nairobi infertility is feminized, when a couple is childless, the woman is usually blamed as men are rarely thought to be infertile. Infertile women suffer from discrimination, ridicule, verbal abuse, mistreatment, especially by their in-laws and at times such women suffer physical abuse. To a woman; infertility also means economic disempowerment since it affects inheritance and economic production. The number of children a woman gives birth to is a major determinant of economic power in rural agrarian economies. One such example is Achieng who was one of the key respondents in this study. She was economically disempowered. When it was discovered that she was infertile, her husband took the piece of land and added to the wife who had children.

#### **5.1.5 Male response to infertility**

Men find it difficult to accept the existence of male infertility. The individual and collective denial of male factor infertility may occur for a variety of reasons. Since it takes two to create pregnancy, the assumption of who is defective may be guided by which gender is easier to label as abnormal. A man does not carry pregnancy; there is nothing physical/conspicuous that will demonstrate his inability to have children. The societal inability to assign responsibility for infertility to men reflects both the level of importance that men have in society and the importance that fertility holds for men. This study shows how men are valued hence the society view any signs of weakness or defectiveness with great concern. The traditional components of male role norms include avoiding femininity, restrictive emotionality, non-relational attitudes towards sexuality, self-reliance, aggression, homophobia and seeking achievement and status. In addition

the sexual and fertile capabilities of men are viewed as synonymous. Therefore, sexual virility and reproductive capacity are essential to the male's self-image.

### **5.1.6 Impotency and infertility**

Culturally, there is no distinct term which clearly describes a man who is impotent and a man who is infertile, in many cultures in Kenya, if a man is diagnosed as infertile, the general belief and understanding is that such a man is impotent. Such cultural connotations are responsible for the fear and shame that prevents men from seeking medical diagnosis on their reproductive health.

### **5.1.7 Infertility Management and treatment**

Culture was found to be responsible for the poor and delayed management of infertility. The communities approached treatment in three faces, religious affiliations, social and medical interventions. This study results show that there are no ready clinics where men can find fertility treatment in most rural areas. As opposed to the women who can consult with gynaecologists. Andrology which is the study of male reproductive health is less known to many male sufferers.

Because of the belief that infertility is a result of either a curse, wronging the gods, or bewitchment, communities do not take medical intervention as the first option for its treatment and management. Women who are infertile are divorced or returned to their maternal homes. Culturally/traditionally, men were not considered infertile; however in "rare" incidences in where a man is proved to be infertile, the immediate family would secretly request his wife to talk to her preferred in-laws or her husbands

friends/age mates to get for him children. These kinds of behaviours impede the diagnosis and treatment of infertility especially in men.

Study results also show that, although there is help from the new reproductive technologies, the information about the treatment is not available at the grass root level. Another complaint is that such hospitals are only found in main cities like Nairobi, Mombasa and Kisumu, which is out of reach for most rural dwellers. Infertile persons also complain that even if one is in the main cities where they can access the information, the cost of the treatment is far too beyond their reach.

### **5.1.8 Infertility and Sexual Behaviour**

The prevalent type of infertility in Kenya was found to be secondary infertility which is mainly due to promiscuous behaviour that leads to contracting sexually transmitted infections. Secondly, abortion procured under unhygienic conditions or procured by non trained medical personnel were also found to be some of the causes of secondary infertility in Kenya. Although not all causes of infertility are preventable, the major ones which are caused by sexually transmitted diseases and retrogressive cultural practices can be prevented. Such prevention will require both partners to change their sexual life styles; it will also require communities to embrace conventional medical treatment as opposed to traditional approaches of managing sexually transmitted diseases.

In conclusion, all communities interviewed perceived infertility from the standpoint of traditional practices and taboos such as lack of respect for elders, curses, religious beliefs and “incompatibility of blood between the spouses”. Most communities were found to have inadequate knowledge about the causes of infertility; however, those with higher education levels i.e. secondary, and post graduate levels had adequate knowledge

on the medical causes of infertility. The results from all communities sampled indicated that women who are infertile are mistreated.

On the whole, compared with men, women tended to have better knowledge about infertility and its management. Facilities for the management of infertility were found to be concentrated in the urban areas. This means the infertile persons in the rural areas has no access to such facilities. Communities still place a high premium on child bearing to a point that, having children is used as the single most important determinant of fertility status almost to the exclusion of any other indicator. The high premium placed on children has great potential at confounding efforts to seek appropriate and timely medical intervention to help a couple facing infertility challenges.

Community perceptions that elevate the man to high grounds of invincibility subsequently leads to biases and prejudice against women in instances of childlessness with the woman bearing the brunt of the blame game. Such biases and prejudices easily confound the search for the medical solutions to the infertility problems. In cases of discordant couples where the man is the infertile one, misplaced focus on the woman effectively delays the much needed timely medical attention for the man.

The dominant type of in fertility is the secondary form of the condition that was found to result from a history of sexually transmitted infections, injury, poor corrective surgery or growths in women.

Available health care services for the management of infertility such as ART were still concentrated in the urban regions. Inaccessibility to these services is further heightened by information asymmetry to the disadvantage of those who live in predominantly rural regions.

The main socio-economic factor impeding access to medical services for treatment and management of infertility was the high cost of these services. Socio-cultural factors on the other hand confound the treatment and management of infertility primarily because they draw sufferers closer to social options and away from known conventional medical options and lengthen the turn around time into seeking the right medical remedies or solutions to infertility.

Management and treatment of infertility is a crucial factor of the public's well being. Dealing with infertility within the populace is challenging due to the sensitive and personal nature of the condition. Cultural factors play a big role in interpretations of infertility therefore there is great need to create awareness and address infertility as a medical condition right from the grassroots. In addition, easy accessibility to medical facilities and doctors should be facilitated in all parts of the country

## **5.2 Recommendations**

In view of the study findings and the questions the researcher sought to answer, the following recommendations for improvement and further research can be made.

- i. State investment in awareness campaigns to reduce stigma and identify where the curative and preventive medical services for infertility can be accessed; Expansion of ART service provision to more regions; intervention by state and non-state actors to cut the costs of ART provision.
- ii. There should be advocacy at the District level; this would help communities to accept that infertility is a couple problem and not a woman's problem. The public should be made aware that infertility affects both men and women almost equally.

- iii. The government should give the treatment of infertility equal priority amongst other compelling health problems. Although infertility causes psychological, physiological and psychosocial problems, at present it is given low priority by the Ministry of Health.
- iv. District Hospitals should have reproductive health departments where women and men can consult reproductive health experts on their reproductive health. At the moment, most reproductive experts are concentrated in major urban areas.
- v. Legal experts should look into ways of making adoption processes less bureaucratic than it is today. This will alleviate anxiety and psychological effects which are synonymous with waiting for a child during the adoption processes.
- vi. Governments should put in place a clearly stated policy on the management of infertility. There is need for guidelines on infertility management, as well as training of personnel at different levels of care giving, including appropriate trainings for Traditional birth attendants, village midwives and social workers

### **5.2.2 Recommendations for further studies**

In view of the scope and findings of the study, the researcher recommends the following studies:

- i. A study should be carried out to establish the magnitude and distributions of male infertility in Kenya.
- ii. A study should be conducted to determine the most prevalent causes of the forms of infertility common in Kenya with a view to recommending preventive strategies while making curative approaches better targeted.

- iii. Based on the finding the ART services are still exorbitant, a study should be conducted to profile the costing of these services so as to assist in their rationalization for affordability.
- iv. There should be further research concerning the following: the treatment and diagnosis of male infertility, the impact of culture, and the traditional approaches in relation to the management of infertility. This will shade may light especially on the belief that infertility is a woman's problem. It may also free couples suffering infertility to seek early medical intervention instead of believing that they are bewitched or cursed.
- v. More research is needed to establish the extent of Pelvic inflammatory and sexually transmitted diseases in relation to infertility.

## REFERENCES

- Barbbie, Earl. R. (1990). *The Practice of Social Research* (8<sup>th</sup> Edition) Belmont: Wordsworth Publishing Company.
- Blair-Loy, M. (2003). *Competing devotions: Career and family among women executives*. Cambridge, MA: Harvard University Press.
- C. Sekadde-Kigonde, VN Kimani, LW Kirumbi, et al (2005) Perception of Infertility in Two Communities in Kenya.
- Carlsson, G.: The decline of fertility: Innovation or adjustment process? *Population Studies*, **20**: 149- 174 (1966).
- Chandran, E. *Research Methods – a quantitative approach* ((2004).
- Das Gupta, M. and P. N. Mari Bhat (1998). Intensified gender bias in India: a consequence of fertility decline. In *Gender, Population and Development*, K. Krishnaraj, R. Sudarshan, and A. Shariff, Eds. New Delhi: Oxford University Press.
- Davis, Kingsley and Judith Blake: Social Structure and Fertility: An analytical Framework. *Economic Development and Social Change*, **4(3)**: 211-235 (1956).
- Douglas, S. J., & Michaels, M. W. (2004). *The Mommy Myth: The idealization of motherhood and how it has undermined women*. New York: Free Press.
- Dumont, A.: *Depopulation et Civilisation. Étude Démographique*, Lecrosnier et Babé, Libraires éditeurs, Paris (1890).
- Edin, K., & Kefalas, M. (2005). *Promises I can keep: Why poor women put motherhood before marriage*. Berkeley, CA: University of California Press.

- Edelmann, R., Connolly, K. J., & Bartlett, H. (1994). Coping strategies and psychological adjustment of couples presenting for IVF. Journal of Psychometrics Research. Vol. 38, n. 4. p. 355-364.
- Forrest, L., & Gilbert, M. S. (1992). Infertility: An unanticipated and prolonged life crisis.
- Friday E. Okonofu, (1996): The case against new reproductive technologies in Developing Countries. As contained in Desk Review: Infertility in Kenya: Edited by Machoki M'Imunya J (2007).
- Gerrits T, (1997). "Social and cultural aspects of infertility in Mozambique." *Patient education and counseling*. May; 31(1):39-48.
- Hewlett, S. A. (2002). *Creating a life: Professional women and the quest for children*. New York: Talk Miramax Books.
- Inhorn, MC and Buss, KA, (1994). Ethnography, Epidemiology and Infertility in Egypt. *Social Science and Medicine*, 39(5): 671-686.
- Jencks, C., & Edin, K. (1995). Do poor women have a right to bear children? *American Prospect*, 20, 43 - 52.
- Leedy, P.D. (1997). *Practical research: Planning and design* (6<sup>th</sup> Ed.). Upper Saddle River, NJ: Prentice-Hall, Inc.
- Leiblum, S. (1996). Love, sex and infertility: The impact of infertility on the couple. In Session: Psychotherapy In Practice, 2(2), 29-39.
- Leke RJI, Nasah B.T. (1979). Aspects biologiques et socio-culturels de l'infécondité et de la sous-fécondité en Afrique. *Dynamique de la population: Fécondité et mortalité en Afrique* 1979:580-90 Liefoghe, J, Baliddawa, J.B, Kipruto, E.M.

- and De Munynck, A.O. et al. 1997. From their own perspective, A Kenyan community's perception of Tropical medicine and international health
- Karen, E., and Brunette, T., (1996). Patterns and predictors of Infertility among African Women: Across-Sectional Survey of 27 Nations. *Social Science and Medicine*, 42 (2) 209-220
- KDHS (2003). Kenya Demographic and Health Survey
- Kerlinger, F.N (1993) *Foundation of Behavioral Research*: New Delhi, surjeet publications.
- Khan, Khalid; Janesh K. Gupta; Gary Mires (2005). *Core clinical cases in obstetrics and gynaecology: a problem-solving approach*. London: Hodder Arnold. pp. 152. ISBN 0-340-81672-4.
- Kigonde C.B. Sekadde, et al, (2002). *Infertility Management in Africa and Eastern Mediterranean Regions*
- Kothari, R (1990) *Research Methodology*. New Delhi: Wiley. Eastern Publication Cochian.
- Koropecj-Cox, T., & Pendell, G. (2007). Attitudes about childlessness in the United States: Correlates of positive, neutral, and negative responses. *Journal of Family Issues*, 28, 1054 - 1082.
- Kuku, SF and Osegbe, DN, (1989). Oligospermia in Nigeria *Archives of Andrology*. 22:23238
- Machoki M'Imunya. J. (2007). Desk review: Infertility in Kenya, Survey on Magnitude, causes, Management and Challenges of Infertility in Kenya

- Mati JKG. (1986): Infertility in Africa: *magnitude, major cause and approaches to management*. In *journal of obsstet. & gynaecology*. East Africa, Vol. 5.pp 65-69.
- May, E. T. (1995). *Barren in the Promised Land: Childless Americans and the pursuit of happiness*. Cambridge, MA: Harvard University Press.
- Menning, B. (1988). Infertility: A guide for the childless couple. (2nd Ed.). Englewood Cliffs, New Jersey: Prentice-Hall.
- Miall, C. (1989). Reproductive technology vs. stigma of involuntary childlessness. Social Casework: The Journal of Contemporary Social Work, 43- 50.
- Michelle. S. (1987). Reproductive Technologies-Gender, Motherhood and Medicine.
- Mugenda, O. M. and Mugenda, A. G. (1999). Research methods: qualitative and quantitative approaches. NRBI: ACTS.
- Mugenda, O. M. and Mugenda, A. G. (2003). Research methods: qualitative and quantitative approaches. NRBI: ACTS.
- M'Imunya J., M., Sekadde-Kigonde C., Kimani, V., & Nyabola, L., O., (2007). *Magnitude, Causes, Management and Challenges of in fertility in Kenya*
- Morgan, S. P., & King, R. B. (2001). Why have children in the 21st century? Biological predisposition, social coercion, and rational choice. *European Journal of Population*, 17, 3 - 20.
- Nanda, S. and Ram, F.: Teenage Motherhood, Child Survival and Child Health: Evidence from National Family Health Survey, India, *Working paper No. 134, GIDR, India* (2003).

- New International Version Bible (2005). Old Testament and New Testament: Genesis, 1st Samuel and Luke.
- Njikam S.O.M Socio-cultural factors affecting infertility in sub-Saharan Africa: A presentation at the WHO Regional Meeting for the prevention of maternal mortality and infertility in sub-Saharan Africa, 1992:1-5
- Rhodes, R. (1988). Women, motherhood and infertility: The social and historical context. *Journal of Social Work and Human Sexuality*, 6(1), 5-20.
- Rowe, PJ, Comhaire, FH Hargreave, TB, Mahmoud, AMA, WHO Manual for the investigation, diagnosis and management of infertile male. Published by Cambridge university press page 5, 2000.
- Schmidt L, Christensen U, Holstein BE (Apr 2005). "The social epidemiology of coping with infertility". *Hum Reprod*. 20 (4): 1044–52.  
Doi:10.1093/humrep/deh687. PMID 15608029
- Sekaran, U, (2003). Research methods: a skill building approach. US: John Wiley & sons.
- Shobary, Abel.A. (2002 Social and cultural Impact of infertility. A plea for counselling Services-as contained in infertility management in Africa and Eastern Mediterranean Regions. Edited by: Kigondu, C.S. et al, 2002.
- WHO, (1987). Infection, pregnancies and infertility: perspective on prevention. *Fertility and Sterility*. 27(6): 964-968.
- WHO Task Force on the prevention and management of Infertility (1995). Tubal ligation: serologic relationship to past chlamydial and gonococcal infection. Sexually transmitted diseases.

APPENDIX B

CONSENT FORM

Good Morning/Afternoon/Evening,

My name is MARGARET AKINYI OLANDE. I am a Masters student at the University of Nairobi. I am conducting a survey on the impact of socio-economic and cultural dynamics in the management of infertility, and the impact of Assisted Reproductive Technologies as a medical intervention. I would like to discuss with you a few issues about infertility to enable me establish what you know about infertility and its treatment options. I would be grateful if you could kindly spare a few minutes to answer the questions I am going to ask you.

May I assure you that the information you provide will be treated with strict confidentiality and that your name will not appear anywhere in the interview schedule.

Please let me proceed. Yes.  No.

Interviewer's

Signature

Date.....

(If the respondent consents)

**APPENDIX I:**

**CONSENT FORM**

Good Morning/Afternoon/evening,

My name is **MARGARET AKINYI OLANDE**. I am a Masters student at the University of Nairobi; I am conducting a survey on the impact of socio-economic and cultural dynamics in the management of infertility, and the impact of Assisted Reproductive Technologies as a medical intervention. I would like to discuss with you a few issues about infertility to enable me establish what you know about infertility and its treatment options. I would be grateful if you could kindly spare a few minutes to answer the questions I am going to ask you.

May I assure you that the information you provide will be treated with strict confidentiality and that your name will not appear anywhere in the interview schedule.

Please let me proceed. Yes.  No.

**Interviewer's**

**Signature.**

**Date.....**

(If the respondent consents)

## APPENDIX 2: GENERAL PUBLIC INTERVIEWS

### CONSENT FORM

Good Morning/Afternoon/evening,

My name is **MARGARET AKINYI OLANDE**. I am a Masters student at the University of Nairobi; I am conducting a survey on the impact of socio-economic and cultural dynamics in the management of Infertility, and the impact of Assisted Reproductive Technologies as a medical intervention. I would like to discuss with you a few issues about infertility to enable me establish what you know about infertility and its treatment options. I would be grateful if you could kindly spare a few minutes to answer the questions am going to ask you.

#### Demographic Details

1. State your gender: \_\_\_\_\_
2. What religion are you? \_\_\_\_\_
3. How old are you? \_\_\_\_\_
4. What is your level of education? \_\_\_\_\_
5. How many children do you have? \_\_\_\_\_
6. Are you employed? \_\_\_\_\_

#### Section One

1. Do you know about infertility? Yes ( ) No ( )
1. If yes, roughly how many people do you know who are infertile?

- a. Males between 5-10( ) 15-20( ) more or less specify in figures...
- b. Females, 5-10 ( ) 15-20( ) more or less specify in figures.....
2. Do have any relatives who are suffering infertility? Yes ( ) No ( ), if yes please indicate the number in figures, Gender: Male.....Female.....
3. Do you consider infertility a medical problem which needs to be addressed through convention medicine or a curse which has no cure?
- a) Curse without cure ( )
- b) Medical problem which should be addressed ( )
4. Infertility is considered a psychological and an endless emotional pain, how would you help such people?
1. Tell them to pray and wait on God to give them children ( )
  2. Tell them to seek medical attention from the experts ( )
  3. Tell them to go to witch doctors ( )
  4. Tell them to accept their misfortune and live with involuntary childlessness ( )
  5. Tell them to go for adoption of a child. ( )

### **Causes of Infertility**

In your opinion, what causes infertility in women?

1. Ancestral curses ( )
2. Promiscuity which may lead to sexually transmitted diseases ( )
3. Poorly procured abortion ( )

#### 4. Traditional practices such as FGM ( )

Traditionally when a couple suffers infertility, which amongst them is likely to be blamed as the cause of their childlessness? The man ( ) the woman ( ) both ( ).

Do you know about male infertility? Yes ( ) No ( ), if yes, do you know the causes? Yes I know the causes ( ) No, I know a man can be infertile, but I don't know the causes.

#### **Treatment of infertility**

In your opinion, can infertility treated?

1. No ( ) those who are unable to bear children are cursed
2. ( ) God did not find them suitable to bear children so looking for treatment would be a waste of time and resources.
3. Yes may be through prayers ( ).
4. Yes through consulting witch doctors ( )
5. Yes through conventional medicines ( ).

Advanced Assisted Reproductive Technology is said to be the best method that has helped many infertile persons to have children:

Do you have any information about it? Yes ( ) No ( ). If yes, would you recommend it to those suffering infertility? No ( ) Yes ( )

In-vitro fertilization takes place in a laboratory instead of a bedroom, if you were to know such a couple, what would be your perception of their baby?

1. I would think he/she is not a real human being ( )

2. I would just perceive him/her the same as the babies conceived in bedrooms ( )

3. I don't even want to think about such a process ( ).

Considering that Kenya is a low resource region, and the ministry of health is hard pressed by diseases such as Tuberculosis, HIV/AIDS, Measles, and other health concerns that affect a large population, do you think Public health should also consider infertility as one of their major concerns?,

Bearing in mind that the treatment for infertility or adoption of a child is usually too expensive for most Kenyans, yet again, childlessness in this society causes too much psychological torture and social stigma.

1. No, infertility should be dealt with at an individual level ( )

2. No those who are not able to have their biological children can go for take care of the many children ( )

3. Yes the pain of involuntary childlessness is too traumatizing; infertility is a condition that needs to be addressed by the Government. ( )

4. Yes treatment of infertility would save many marriages and reduce the number of divorce cases witnessed in this nation.

5. Do you know of any health facilities where you can refer an infertile person to go for medical help? Yes I do ( ) No I don't know of any. ( )

In your opinion, if only one of the partner is infertile and the other can get children, what would you advise them to do?

1. Divorce the infertile partner and marry or get married and get your biological children. ( )
2. I would ask them to seek help from the relevant institutions. ( ), I would tell them to pray because children are gifts from God ( ). I would ask them to go for adoption. ( ).

Questionnaire Number .....

Name of Health Facility .....

Date of the interview .....

Name of interviewer .....

Time interview started .....

May I assure you that the information you provide will be treated with strict confidence and that your name will not appear anywhere in the interview schedule. Please let me proceed. Yes  No

Interviewer's

Signature

Date .....

(If the respondent consents)

**APPENDIX 3 INTERVIEW SCHEDULE**

**UNIVERSITY OF NAIROBI**

**INSTITUTE OF AFRICAN STUDIES**

**INFERTILITY/INVOLUNTARY CHILDLESSNESS: AN EXAMINATION OF SOCIAL CULTURAL DYNAMICS IN SOCIETY.**

Questionnaire Number .....

Name of Health Facility .....

Date of the interview .....

Name of Interviewer .....

Time interview started .....

May I assure you that the information you provide will be treated with strict confidence and that your name will not appear anywhere in the interview schedule. Please let me proceed. Yes. No.

**Interviewer's Signature.**

**Date.....**

(If the respondent consents)

## APPENDIX 4: DOCTOR/GYNAECOLOGISTS INTERVIEW SCHEDULE

### Questions for the Doctor/ gynaecologists

1. How often do you attend to patients who suffer infertility? Rarely ( ) Very often ( )
2. In a marriage, who comes first to seek help about their problem to get children? The wife ( ) the husband ( ).
3. After what period of trying to conceive do couples/persons visit you to seek help concerning their fecundity? One year ( ) 2-5years ( ) 10-15 years.
4. According to your statistics, which type of infertility is more prevalent in Kenya Primary infertility ( ) Secondary infertility ( ).
5. As a doctor practicing in Kenya, empirically, are there some regions in this country with lower fertility rates than others. If there are what are the dynamics are responsible for such a trend.

.....  
.....

Advanced Assisted Reproductive Technology has been touted as a method which is helping infertile couples/persons conceive, especially in the western world; in your evaluation is it a preferred method in this country? And would you ascertain that the majority of people suffering infertility have adequate information about the technology?.....

.....  
.....

Generally what impact does culture, ethical considerations or morality have on the acceptance or success of Assisted Reproductive Technology (ART)/Invitro Fertilization (IVF) by infertile persons/individual in Kenya? Please give your comments.

.....  
.....

According to your experience, has HIV/AIDS confounded the condition of infertility? Please comment.

.....

[1] Names of respondents have been changed to protect their identity

[2] Name have been changed to protect informant

[3] Names have been changed to protect the identity of the informant.

[4] Names of the respondents have been changed to protect their identity.