

**INFLUENCE OF GENDER ON VULNERABILITY TO HIV/AIDS AMONG  
SMALL SCALE TRADERS AROUND LAKE VICTORIA, HOMA BAY  
COUNTY**

**Brenda Achieng Okello**

**A Research Project Report submitted in Partial Fulfillment of the  
requirement for the award of Masters of Arts degree in Project Planning and  
Management at the University of Nairobi.**

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## DECLARATION

This is my original work and it has never been submitted to any other college, university or learning institution other than University of Nairobi for academic credit.

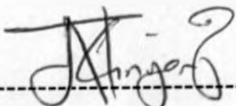
Signature  \_\_\_\_\_

Brenda Achieng Okello

Date: 26/11/12

Reg: No. L50/64246/2010

This Research Project Report has been submitted for examination with my approval as the University of Nairobi Supervisor.

Signature  ----- Date 26/11/2012 -----

Kinyanjui Jacob Nganga

Lecturer, Department of Extra-mural studies,

University of Nairobi.

## **DEDICATION**

This project is dedicated to my dear mother who supported me tirelessly throughout my studies. I shall forever abundantly appreciate your input towards my success in pursuit of advanced training.

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I wish to express my sincere gratitude to my project supervisor, Mr. Kinyanjui Nganga for his support, inspiration, guidance, patience and close supervision throughout this project. His comments, suggestions and insightful criticism aided this research project in innumerable ways.

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## LIST OF ABBREVIATIONS

		<b>Page</b>
AIDS	Acquired Immunodeficiency Syndrome	
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AIY	Asymptomatic	
CBV	Central Bureau of Statistics	
CEA	Commission on Revenue Allocation	
FAO	Food and Agriculture Organization	
HIV	Human Immunodeficiency Virus	
IPAD	Institute of Policy Analysis & Research	
KeN	Government of Kenya	
NACC	National AIDS Control Council	
NAC/STC	National Aids Control Council and STI Control Program	
STDs	Sexually Transmitted Diseases	
UNAIDS	Joint United Nations Programme on AIDS	
UNPF	United Nations Population Fund	
VCT	Voluntary Counselling and Testing	
WHO	World Health Organization	

**LIST OF ABBREVIATIONS**

- AIDS:** Acquired immunodeficiency syndrome
- ANC:** Antenatal Care
- ARVs:** Antiretroviral
- CBS:** Central Bureau of Statistics
- CRA:** Commission on Revenue Allocation
- FAO:** Food and Agriculture Organization
- HIV:** Human immunodeficiency virus
- IPAR:** Institute of Policy Analysis & Research
- GoK:** Government of Kenya
- NACC:** National AIDS Control Council
- NASCOP:** National Aids Control Council and STI Control Program
- STDs:** Sexually Transmitted Diseases
- UNAIDS:** Joint United Nations Programme on AIDS
- UNPF:** United Nations Population Fund
- VCT:** Voluntary Counselling and Testing
- WHO:** World Health Organization

## ABSTRACT

HIV/AIDS prevalence rates among women around Lake Victoria South are at a higher rate, the HIV-infection rate is about 70% according to (CRA, 2011). It is also one of the counties experiencing high HIV prevalence at 24%, compared with the national average of 7.8%. The purpose for the study was to investigate influence of gender on vulnerability to HIV/AIDS among small-scale trader around Lake Victoria south with specific reference to Homa Bay County. The specific objectives of the study were: to establish the extent to which gender poverty influence vulnerability to HIV/AIDS among small scale traders around Lake Victoria; to establish the extent to which gender illiteracy influence vulnerability to HIV/AIDS among small scale traders around Lake Victoria; to establish the extent to which gender health influence vulnerability to HIV/AIDS among small scale traders around Lake Victoria; and to establish the extent to which gender culture influence vulnerability to HIV/AIDS among small scale traders around Lake Victoria South .The research was grounded on the Theory of Gender and Power to evaluate gender influence on vulnerability to HIV/AIDS. A descriptive research design was used and primary data collected using semi-structured questionnaires and interview guides. The study population was three hundred small-scale traders and four health officers and beach leaders operating around Lake Victoria, Homa Bay County. Data collected was analyzed and presented using percentages and frequencies tables. The tool of analysis used was the measures of central tendency. The findings of this study were that gender plays a vital role in vulnerability to HIV/AIDS; women are more vulnerable to HIV/AIDS in comparison to their male counterparts along the Lake region Homa Bay County. Gender poverty influences vulnerability to HIV/AIDS; gender illiteracy influences vulnerability to HIV/AIDS; gender health influences vulnerability to HIV/AIDS; and gender culture influences vulnerability to HIV/AIDS. Based on the study findings, it is recommended: awareness of HIV/AIDS, sex education; women empowerment; job creation; education; supply of condoms; and the water hyacinth needs to be addressed.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Around the world, STDs, particularly HIV/AIDS, continues to spread, killing millions of women, men and children. At the end of 1998, UNAIDS and WHO estimated that 33.4 million people were living with HIV infection including 13.8 million women (43%) and 1.2 million children (Aniekwu, 2002). The vast majority of people living with HIV/AIDS are in developing countries; 22.5 million in sub-Saharan Africa (50% of whom are women), 6.7million in South and South East Asia, and 1.4 million in Latin America. According to Aniekwu, (2002) these numbers are increasing every year.

According to the Institute for Policy Analysis and Research (2004), HIV/AIDS has become one of the leading challenges to socio-economic well-being of the developing countries, of which sub-Saharan African nations are the most affected. This is because more than one half of the reported HIV/AIDS cases occur among the economically active and productive segment of the population (16-55 years). This is the age bracket in which investments in education and training begin to pay off and families are established and natured. As a result, the pandemic leaves behind a pool of destitute orphans, in most cases under the care of the elderly and less productive grandparents. The consequences are heightened poverty levels, low school completion rate, rising cases of child labour, depression and increasing crime rates in the urban as well as rural settings, among other problems.

Governments particularly those in developing countries where the epidemic is mainly focused, cannot ignore the statistics. The pandemic is concentrated in the poorest parts of the world with 90% of HIV positive cases living in the developing world. Many developing countries are continually experiencing exponential growth of HIV/AIDS cases especially amongst women and children. Global spending on HIV/AIDS care, research and prevention reflects this disparity. Developing countries, including Kenya, only receive about 12% of such resources despite having 95% of cases. Socioeconomic factors contributing to the spread of HIV/AIDS disproportionately impact on these countries and include poverty, illiteracy, gender inequality, increased mobility of populations within and between countries, rapid industrialization involving movement of workers from villages to cities, and consequent breakdown of traditional values (Odhiambo, 2012).

In a few years of accelerated spread, AIDS has become the leading cause of death in most developing African countries and maybe the most important macroeconomic and social determinant of human welfare and poverty. More than exclusively a health crisis today, AIDS is an emergency that affects many areas at once; human rights, development, economy and education (Odhiambo, 2012).

Homa-Bay County is one of the newly created counties in Nyanza under the new constitutional dispensation. Homa-Bay County stretches to Kabondo Division bordering both Nyakach, Belgut, Nyamira, Kitutu Chache and parts of Bonchari constituency in Kisii on the mainland. But also borders Kisumu Town, Kisumu Rural, Rarieda, Bondo and Budalangi across the Nyanza Gulf. Its major inhabitants are mainly Luos and Abasuba, but relatively with other residents of diverse ethnic backgrounds such as Luhya and Kisiis. Economically, this region has the potentiality of turning out to be the richest only if its vast resources were to be exploited to the maximum. It has a lot of minerals underneath such as cement and reported deposit of uranium and gold. It is also the major source of fishing and fish trade, which racks in millions of shillings in both local and foreign currencies (CRA, 2011). Homa Bay's status as a market town on the shores of Lake Victoria and transit point makes it a vantage point for the spread HIV/AIDS virus.

According to IPAR (2004), beach culture is conducive to casual and commercial sexual practices, hence playing a major role in the spread of the scourge. Some of the reasons cited include: high liquidity among the fishermen, which corresponds with the influx of poor women from the hinterlands; consumption of illicit brews and drugs. The peculiar characteristics of the beach community are that men have sex at random and can change partners at leisure; and each woman at the beach must have a husband at any one time, to be assured of fish supplies and other favours; and in addition, condom use is low. The consequences of the beach culture are felt not only among the immediate community but also in many neighboring hinterlands. This is because as the beach people move to the hinterlands to visit spouses and relatives, they carry the virus along with them (IPAR, 2004).

Vulnerability to HIV and AIDS stems from complex, interacting causes that may include the mobility of many fisher folk, the time fishermen spend away from home, their access to daily cash income in an overall context of poverty and vulnerability, their demographic profile, the ready availability of commercial sex in many fishing ports, the sub-cultures of risk taking and hyper-masculine behaviour

among some fishermen, including alcohol and drug abuse (FAO, 2004).

Poverty, Illiteracy, Health and culture are the major factors that lead to gender vulnerability to HIV/AIDS. These factors are interrelated and one factor usually influences the other. These factors affect both sexes but are not gender-neutral. To the extent that women are marginalized and powerless, they are more at risk of being exposed to HIV and less likely to seek health care.

Women, especially younger women, are also more biologically vulnerable than men to being infected in a given sexual encounter. Culture plays a vital role in determining the level of health of the individual, the family and the community. This is particularly relevant in the context of Africa, where the values of extended family and community significantly influence the behaviour of the individual. The behaviour of the individual in relation to family and community is one major cultural factor that has implications for sexual behaviour and HIV/AIDS prevention and control efforts. Culture is often shown to be a factor in the various ways that HIV/AIDS has impacted on the African population.

## **1.2 Statement of the Problem**

HIV/AIDS prevalence rate among women around Lake Victoria South-Homa Bay County is at a higher rate of 70% compared with that of men at 29 %.( CRA, 2011). It is also one of the counties experiencing high HIV prevalence at 24% compared with the national average of 7.8%. According to the local Ministry of Health, 22% of men and 29% of women who utilized voluntary counseling and testing services in the district between July and September 2007 were HIV positive. In addition 23% of the mothers who attended antenatal care services during the same period were also HIV positive. This trend can largely be attributed to common traditional practices that encourage unchecked spread of the disease (NASCO, 2008).

With around 1,500 landing sites on Lake Victoria and over 600,000 people, directly working in fisheries at the beaches the fishing sector around Lake Victoria is a huge industry in itself (Lake Victoria Fisheries Organization, 2012). According to statistics from the fisheries department, over Kshs. four billion worth of fish was caught in Lake Victoria in 2011 alone. Despite the huge potential of the fishing sector along Lake Victoria, it is clear that fishing communities have been sorely neglected in the provision of a wide range of services-from schools and health clinics to good roads and clean drinking water. This study therefore sought to establish influence of gender on vulnerability to

HIV/AIDS among small scale traders around Lake Victoria south with specific reference to Homa Bay County.

### **1.3 Objective of the study**

The broad objective of this study was to investigate influence of gender on vulnerability to HIV/AIDS among small scale trader around Lake Victoria south with specific reference to Homa Bay County.

#### **1.3.1 Specific Objectives**

The specific objectives of the study were:

- i. To establish the extent to which gender poverty influences vulnerability to HIV/AIDS among small scale traders around Lake Victoria
- ii. To establish the extent to which gender illiteracy influences vulnerability to HIV/AIDS among small scale traders around Lake Victoria
- iii. To establish the extent to which gender health influences vulnerability to HIV/AIDS among small scale traders around Lake Victoria
- iv. To establish the extent to which gender culture influences vulnerability to HIV/AIDS among small scale traders around Lake Victoria

#### **1.3.2 Research Questions**

The research questions of the study were:

- i. To what extent does gender poverty influences vulnerability to HIV/AIDS among small scale traders around Lake Victoria?
- ii. To what extent does gender illiteracy influences vulnerability to HIV/AIDS among small scale traders around Lake Victoria?
- iii. To what extent does gender health influences vulnerability to HIV/AIDS among small scale traders around Lake Victoria?
- iv. To what extent does gender culture influences vulnerability to HIV/AIDS among small scale traders around Lake Victoria?



#### **1.4 Delimitation of Study**

The study was delimited to Homa Bay County and specifically focused to the four beach areas around Lake Victoria. These Lake beaches were: Kananga beach, Lela beach, Oginga beach and Daraja beach. In addition, the study delimited itself to the influence of gender poverty, illiteracy, health and culture on vulnerability to HIV/AIDS among small scale traders around Lake Victoria south.

#### **1.5 Significance of the Study**

Like all sectors of the Kenyan economy, the fisheries sector has not been spared the scourge of HIV/AIDS. Fisherfolk have been described as among the “most vulnerable to HIV infection” but exact prevalence data have not been produced. Hence, even in Kenya where so much has been done to address the HIV/AIDS epidemic, there are crucial gaps in the knowledge base regarding HIV/AIDS and small-scale fishing communities (Bishop-Sambrook and Tanzam, 2004).

The findings of this study will be of importance to the public especially residents of Homa Bay county since it will help them understand vulnerability and how to approach HIV/AIDS in terms of gender differences. It will also help them identify some of the major factors that put people at risk for HIV infection, and find ways to intervene and help decrease HIV infection in Homa Bay.

The result of the study will also be used as reference material for future research work on HIV/AIDS in other parts of Kenya. For academicians and students the study may increase their knowledge and the need to keep an open and inquisitive mind when studying in the area of HIV/AIDS. The study will also be beneficial to the Government of Kenya and its relevant departments, as it will help it review the HIV/AIDS management policies.

#### **1.6 Limitations of the Study**

A major limitation was the limited time allocated for the research project, the available time was not enough to carry out a comprehensive study on the research topic. To overcome the limitation on time constraint, sampling was done. The other limitation was accessibility; due to poor roads in the area of study, it was difficult to access areas such as Lela, Oginga and Kananga beaches. To overcome this limitation, motorcycles were used as a means of transport. Inadequate funding to support all the research activities that could provide comprehensive analysis of the area of study, considering the extent the HIV/AIDS pandemic, a study of this nature would require a large resource base to undertake



it comprehensively. To overcome the limitation on funding, this study was self sponsored. Undertaking physical interviews in Homabay County was a challenge considering that HIV/AIDS is still a sensitive topic in the area and the high rate of illiteracy among workers around the lake was a barrier to effective communication. To overcome the limitation the researcher was well acquainted with beach leaders, this made it easier to access the rest of the study population.

### **1.7 Assumptions of the Study**

The researcher assumed that the sample size was a true representation of the population, towards the attainment of the objectives. In addition, the researcher also assumed that the information provided by the respondents would be factual and that the respondents would return the questionnaires on time. There was also assumption that the analyzed data would be valid and reliable. The researcher assumed that there was adequate security to enhance the execution of the study and that there would be sufficient funds to travel, buy stationery and do relevant correspondences.

### **1.8 Operational Definition of Terms**

**Antiretroviral therapy (ART):** Medications that stop or slow down viruses (like HIV) from multiplying in the body and therefore extends the length of a person's life. ART is given to patients

**Casual sex:** Having sexual contacts with another person with no plans on furthering a long term/committed relationship with that person and sometimes in exchange for favours

**County:** The region under which the study is conducted.

**Culture:** Culture is defined as the shared patterns of behaviors and interactions, cognitive constructs, and affective understanding that are learned through a process of socialization..

**Fishermen:** A term used to refer to people who fish especially for a living.

**Fish traders:** A term used to refer to people who sell fish as a means of income.

**Gender:** Gender refers to the socially constructed roles, behaviors', activities, and attributes that a given society considers appropriate for men and women.

**HIV/AIDS:** The human immunodeficiency virus (HIV) is a retrovirus that infects cells of the immune system, destroying or impairing their function. The most advanced stage of HIV infection is acquired immunodeficiency syndrome (AIDS).

**Illiteracy:** The inability to read and write a simple message in any language

**Poverty:** A condition characterized by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It is also characterized by lack of participation in decision making and in civil, social and cultural life.

**Prevalence:** The number of cases of a given disease (or other health conditions), in a given population, at a designated time, expressed as a percentage of all persons who can have the disease.

**Small scale traders:** Any individual or business person that handles a low volume of orders

**Vulnerability:** Vulnerability refers to the probability that an individual (or group) being in a situation or behaviour that exposes them to HIV.

## **1.9 Organization of the Study**

The study is organized into five chapters. Chapter One provides a general background into the subject of study. The chapter also provides focus on the objectives of the study and research questions. The objectives and questions developed provide a precursor to better understanding and articulation of the significance of the study. Chapter Two looks at available theories and literature done on vulnerability to HIV/AIDS. The chapter provides the empirical review which identifies knowledge gaps while the conceptual framework outlines the relationship between the variables under study. In Chapter Three, the researcher presents the research design, target population, sample size and sample design, data collection instruments and validity and reliability of instruments used in the study. Chapter Four presents analysis and interpretation of the data collected from the field. Qualitative methods were used in the analysis of the collected data. Summary of key findings from the study as per the set objectives, discussion of the findings, recommendations developed based on the findings and suggestions for further research are provided in Chapter Five.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter deals with theoretical framework, empirical review and conceptual framework. This chapter examined two theories on vulnerability to HIV/AIDS. These theories are: The biomedical theory and the theory of gender and power. The empirical review was done to identify knowledge gaps while the conceptual framework was done to determine the relationship under study.

#### 2.2 HIV/AIDS

Acquired Immune Deficiency syndrome or acquired Immunodeficiency syndrome (AIDS) is a disease of the human immune system caused by the human immunodeficiency virus (HIV). The illness interferes with the immune system making people with AIDS much more likely to get infections, including opportunistic infections and tumors that do not affect people with working immune systems. This susceptibility gets worse as the disease continues (Odhiambo, 2012).

HIV is transmitted in many ways, such as anal, vaginal or oral sex, blood transfusion, contaminated hypodermic needles, exchange between mother and baby during pregnancy, childbirth, and breastfeeding. It can be transmitted by any contact of a mucous membrane or the bloodstream with a bodily fluid that has the virus in it, such as the blood, semen, vaginal fluid, or breast milk from an infected person. The virus and disease are often referred to together as HIV/AIDS. Transmission through sexual contact accounts for 75 to 85 percent of the nearly 28 million infections with the human immunodeficiency virus (HIV) that have occurred so far (UNAIDS 2008)

##### 2.2.1 The Global Perspective on HIV/AIDS

Of the 33.3 million people living with HIV/AIDS worldwide by the end of 2009, 52% (or 17.3 million) were women (UNAIDS 2010). The HIV/AIDS burden that women bear varies by country and region. In sub-Saharan Africa, the percentage of women living with HIV/AIDS is 60%. The percentage of women living with HIV/AIDS in the rest of the world is 53% in the Caribbean, 44% in Eastern Europe and Central Asia, 36% in central and South America, 35% in the rest of Asia, and 27% in both Western and Central Europe and in North America. This makes Africa the leading region where HIV/AIDS prevalence is higher for women than men (the only other region is in the Caribbean). The relevant

question to ask is why there are gender differences in the HIV/AIDS prevalence rates, especially in Sub-Saharan Africa (Odhiambo, 2012).

Few discussions of the potential economic impact of the global AIDS epidemic fail to observe that HIV/AIDS, unlike most other infectious diseases, strikes working-age adults during what should be their most productive working years. The mortality component of this loss is clear: lives lost to AIDS cannot contribute to economic growth (Fox et al., 2004).

The geographies of HIV/AIDS, whether at the global, regional, national or local scale, have become very familiar to researchers in all the social sciences (Gould, 2005). Although there are well-founded caveats over the variable accuracy of HIV prevalence data, it is estimated that just over 1% of the adult population globally is HIV positive. Furthermore, there is a general awareness of the differential global reach of HIV/AIDS and of the intrinsic complexity of the epidemic. It involves the progressive destruction of the human immune system by the human immunodeficiency virus (HIV), and its spread has different primary causes in different parts of the world: primarily through heterosexual transmission in sub-Saharan Africa, where over two thirds of the global HIV+ population are to be found; initially primary homosexual transmission in the global North, but with heterosexual transmission now dominating new infections in these regions; driven by infected shared needles of drug users in former Soviet Union countries and Eastern Europe; epidemics locally heightened by infected blood supplies in parts of China (Zhang, 2004). Sero-prevalence rates for HIV for most world regions are generally less than 1%; outside Africa only the Caribbean region has a rate of over 1%.

### **2.2.2 The Kenyan Context**

The first identified case of HIV in Kenya was recorded in 1986. Since then, the epidemic and the government's mechanisms to monitor it have expanded greatly. While the highest rates of infection were initially concentrated in marginalized and special risk groups, for more than a decade Kenya has faced a mixed HIV/AIDS epidemic; new infections are occurring in both the general population and vulnerable, high-risk groups. In 1999, the Government of Kenya (GoK) declared the HIV epidemic a national disaster and established the National AIDS Control Council (NACC) to coordinate the multisectoral response to HIV/AIDS (NAS COP, 2008).

In the 1990s, HIV spread rapidly in Kenya-reaching prevalence rates of 20 to 30% in some antenatal care (ANC) sites-with major social and economic impacts at all levels of society. In 1999, the Government of Kenya declared HIV as a national disaster and established the National AIDS Control Council to co-ordinate a multi-sectoral national response. NACC has, to date, led the national response by coordinating two five-year strategic plans covering the periods 2000 to 2005 and 2005/06 to 2009/10 (NAS COP, 2012).

Since 1999, the national adult HIV prevalence is estimated to have dropped from over 14% to about 7.4% in 2007. Although this decline in prevalence can partially be explained by changes in measurement techniques, there is adequate evidence to suggest that Kenya has made progress in addressing HIV prevalence.

In Kenya, Nyanza Province is leading in the prevalence of the scourge. In spite of the high level of awareness, behavior change is desperately lagging behind, which can be traced to the retrogressive cultural practices among other factors (IPAR, 2004; NAS COP, 2012). According to NAS COP (2012), over 80 per cent of HIV transmissions in Kenya occur through unsafe sexual contact. Yet, in Nyanza, sex is so deeply entrenched in the cultural framework that it cannot be understood in isolation. This study therefore seeks to examine the role gender and vulnerability plays in the spread of HIV/AIDS among fisher folk in Homa Bay County.

This presents a review of literature on HIV/AIDS and vulnerability based on reports presented by other studies on the topic. This study is will analyze two theories, these are: the biomedical theory and the theory of gender and power. The study will adopt the theory of gender and power.

### **2.2.3 The Biomedical model**

Jones, H. R. (1990) identified HIV/AIDS as a 'wholly exceptional disease', and this has been further elaborated in three particular aspects: the medical, the demographic and the behavioural (Gould and Woods, 2003). For each of these aspects the contrast with malaria is most instructive. Malaria, the other major cause of death in Africa, is the classic environmentally grounded tropical disease, displaying characteristics with which geographers are very familiar and comfortable. The very substantial body of work on the geography of malaria over several decades epitomizes the application, with some qualification, of the biomedical model in the analysis of disease (Prothero, 2002), but this model cannot

be as comfortably applied in the case of HIV/AIDS.

In the first place, HIV/AIDS is different from malaria in directly medical or biological terms. It is not a single condition, rather a syndrome. Unlike in the case of malaria, people do not die of HIV/AIDS directly. They die of tuberculosis or pneumonia or of other infections because the HIV virus has brought about a collapse in their auto-immune system. Furthermore, most people who are HIV positive are typically asymptomatic, at least in the early stage of their being infected. They do not know that they are carriers of the virus unless that have had a blood test, and it may be up to a decade before the effects of the virus begin to show: weight loss and loss of energy, and increasing susceptibility to infections (Gould, 2005). In addition, there is no cure. For malaria, by contrast, there is a vector, the anopheles mosquito, known and readily identifiable. Malaria can be tackled directly, whether to prevent infection as a result of being bitten by an infected mosquito (e.g. in providing bed nets to avoid human-vector contact) or in destroying the mosquito in its habitat.

HIV infection can indeed be prevented, but in this case by individual behaviour rather than medical interventions. Through anti-retroviral therapies (ARVs) the progress of the disease can be slowed or even the viral-load reversed, but HIV/AIDS cannot yet be prevented or cured through medical intervention. There are also critical demographic differences between HIV/AIDS and malaria. Malaria mortality affects children mostly, and boys and girls equally. Since Africa's high infant mortality rates are generally attributed to malaria, the geography of infant mortality closely corresponds with the geography of malaria prevalence (Root, 1999).

For adults malaria is a major cause of morbidity but not mortality, and as such can have serious economic, rather than strictly demographic, effects. HIV/AIDS, by contrast, has a very distinct demographic impact, raising the mortality probabilities of adults in the sexually active age groups and, through vertical transmission from mother to child in the womb or post-natally through infected breast milk, of very young children. Given characteristic but not uniform patterns of African marriage and sexual relationships, HIV prevalence tends to be higher at younger ages for women than for men. Thus, overall more women are affected than men, and the UNAIDS (2004) AIDS Epidemic Update has highlighted the increasing feminization of the epidemic.

There are also very distinctive behavioural differences between these two major diseases. Explanations of malaria mortality and efforts to manage the disease are typically sought in structural and environmental conditions: controlling or eradicating the mosquito vector (Gould, 2005). For most other familiar diseases, interventions are directed to similar structural factors such as improving water supply, especially in the case of waterborne diseases like cholera or other intestinal conditions, or improving healthcare (e.g. in vaccination programmes for childhood diseases like measles or polio) or environmental conditions such as housing (e.g. for tuberculosis) or air quality.

Whereas fertility is about choice, and therefore about behavior-to choose to have a certain number of children, or to choose to use contraception-most diseases, as with malaria, are affected primarily by conditions beyond the direct control of individuals. This is why most diseases in Africa, including malaria, are diseases of poverty, disproportionately affecting people living in the poorest environments, with poorest nutrition, and with least access to healthcare (Gould, 2005).

Here again HIV/AIDS is distinctly different in that it is clearly more directly affected by individual behaviour, although structural or environmental conditions remain critically important. In the earliest phases of the epidemic, as in Uganda in the early 1990s (Kirunga and Ntozi, 1997), it was associated with wealth and mobility, with the educated rather than the uneducated, and with urban and trading centres rather than rural populations. As the epidemic has matured, however, it has spread more among the poor.

Disproportionately, the poor have been less exposed to media or political messages about the causes of HIV/AIDS (knowledge), and also have been unwilling or unable to make the behavioural changes necessary to avoid infection (Gould, 2004). Thus, understanding exposure to HIV/AIDS requires consideration of behavior and culture, and therefore the range of factors in behaviour and choice normally invoked to explain fertility levels and trends, as well as requiring consideration of structural conditions and the factors typically invoked to explain mortality levels and trends.

Kalipeni et al., (2004) argue that HIV/AIDS is a disease which is rooted in structural factors of history and poverty and in culture and society more than it is in biology and environment; that is, they



explicitly link structure and agency. Analysts therefore have to deal with HIV/AIDS not as health issues primarily, nor in the vulnerability terms in which disease patterns and spread have traditionally been examined by invoking a biomedical epistemology, but rather as a development issue.

#### **2.2.4 Theory of Gender and Power**

Connell (1987) developed a collection of writings on the theories of sexual inequality and gender and power imbalances. Connell identified the critical components of these existing theories and developed an integrative theory of gender and power. According to Connell, three major structures characterize the gendered relationships between men and women: the sexual division of labor, the sexual division of power, and the structure of cathexis. Both the sexual division of labor and the sexual division of power had been identified from previous research as two fundamental structures that partially explain gender relations. Connell devised the third structure, the structure of cathexis, to address the affective component of relationships. These three overlapping but distinct structures serve to explain the cultural bound gender roles assumed by men and women. Connell emphasized that none of the three structures is or can be independent from the others. Neither is there one structure from which the others are descended.

Connell (1987) also notes that these three structures (the structure of labor, the structure of power, and the structure of cathexis) exist at two different levels: the societal and the institutional. The highest level in which the three social structures are embedded is the societal level. The three structures are rooted in society through numerous abstract, historical, and sociopolitical forces that consistently segregate power and ascribe social norms on the basis of gender-determined roles. As society slowly changes, these structures remain largely intact at the societal level over a long period of time.

Raj et al., (1999) argue that the three social structures are also evident at a lower level, the institutional level. Social institutions include, but are not limited to, schools, work sites/industries, families, relationships, religious institutions, the medical system, and the media. The three social structures are maintained within institutions through social mechanisms such as unequal pay for comparable work, discriminatory practices at school and work, the imbalance of control within relationships and at work sites, and the stereotypical and/or degrading images of women in the media. The presence of these and other social mechanisms constrains women's daily lifestyle practices by producing gender-based inequities in women's economic potential, women's control of resources, and gender-based



expectations of women's role in society. Institutional changes occur more rapidly than societal changes, but changes at the institutional level are also very gradual.

From a public health and psychological perspective, it is these gender-based inequities and disparities in expectations that generate the exposures, or acquired risks, and the risk factors that adversely influence women's health. Connell's seminal work on gender and power has direct relevance for understanding issues with regard to women's health. We have extended Connell's original theory to develop a public health model that examines exposures, risk factors, and biological factors that adversely affect the health of women (Wingood and DiClemente, 2000). The public health field examines acquired risks, factors that are associated with an increased probability that a disease will later develop. These acquired risks are also called exposures. Exposures can be economic, physical, or social in nature. Exposures influence the risk of disease among populations and groups (MacMahon, 1970).

### **2.3 Empirical Review**

AIDS brings to the surface neglected inequalities such as the power differences between women and men (Sessay, 2010). Andersen (2003) defined power as a system of patriarchy, an organized structure whereby men hold more power than women. Power also determines whose pleasure is given priority and when and how sex takes place (Gupta, 2000).

Furthermore, gender inequality often gives men more power to decide on the timing and conditions of sex and the means of preventing infection, and therefore limits women's ability to negotiate protection with their partners (Das Gupta et al., 1995). Allen (1999) also stated that power can be defined as a relation of male domination over women. In this context, power is used to demonstrate how women lack power when it comes to decisions that pertain to sex and health care, as well as simple decisions such as purchasing household items.

A review of the literature shows that AIDS occurs in a cultural context whereby roles are culturally scripted and defined according to gender (Sessay, 2010). Women tend to have little power within patriarchy in Kenya and few alternatives are available to them (GoK, 1997). According to Thiam (1986): "The African woman has no real power, only a pseudo-power. She can act, as long as she

causes no embarrassment to her husband. Any power she may think she possesses is an illusion. The big decisions are the monopoly of the man, and she is not in any way involved in them. In Black Africa, the black man controls not only his own life but also that of his wife which makes her vulnerable to HIV.”

The fear of upsetting the patriarchal system and dependency on men for resources contributes to HIV vulnerability among women in Kenya (Institute of Economic Affairs, 2001). Patriarchy is so deeply entrenched in the Kenyan society that women have little control over resources that would allow them to live independently of men. For example, customary law dictates that women should not own or inherit property unless through their sons or male relatives (NACC, 2002).

Women are disempowered from the time they are young. The socialization of girls and women often curtails their autonomy and undermines their ability to negotiate with men. The ideology that men are naturally superior to women in essence, and in all areas, affects societal structures as women's input or voices are submerged (GoK, 1997). This ideology prolongs the attitudes of negative discrimination against women (Sessay, 2010). Research consistently shows that women are more vulnerable because of the inequality that exists between the sexes (Fleischman, 2003). HIV vulnerability is prevalent in cultures where women have little power in the family (Gupta, 2000).

### **2.3.1 Vulnerability to HIV/AIDS**

Schroeder and Gefenas (2009) define vulnerable populations as those who face a significant probability of incurring an identifiable harm while substantially lacking ability and/or means to protect themselves. Vulnerabilities within population groups can be differentiated by factors that determine the different probabilities of incurring identifiable harms (risks) people face and the means available to them to protect themselves (their protective capacity). Among these factors is gender. From a gender perspective, vulnerability is the probability of incurring harm, while lacking the ability and/or means for protection as a result of gendered inequalities, which in turn differentiate vulnerabilities among individuals and groups.

Gender-based vulnerabilities exist in almost all societies in the world, resulting from deprivation, discrimination, and oppression due to norms, practices, institutions, and policies that encourage or

tolerate or ignore differences in status, privileges, rights, and opportunities between men and women. This is seen in some contemporary societies where women are deprived of education, the right to own property, and the right to political participation (Sauer, 2004). Dahlberg et al., (2002) argue that it is well established that specific gender constructions are linked with different risks to men and women. For example, men are at greater risk of being victims of homicide and women are at greater risk of violence from their intimate partners (e.g., domestic and sexual abuse).

Statistics on HIV/AIDS in Africa are particularly instructive on gender differentiated vulnerabilities. In 1985, only 35% of the HIV+ populations were women (UNFPA, 2005). By 2004, almost 50% were women, 67% of whom were aged 15–24. Women's greatest risk of infection is from their male partners. Gender is also a factor that differentiates people's protective capacities. For example, the public health strategy of promoting condom use to prevent HIV transmission could fail to protect women if undertaken without recognizing the power differential in heterosexual relationships, where women have less power than men. Women may fear asking their partner to wear a condom as this may be seen as admitting adultery, or accusing her partner of such, and could result in violence and forced intercourse.

Both inside and outside of commercial sexual transactions, it is men who generally decide whether or not to use a condom; women oftentimes give in to the sexual demands of their partner. Additionally, as men may pay more for sex without a condom, sex workers may have a financial interest in taking this risk, thus further compounding the relationship between their poverty and their vulnerability to HIV infection (Jewkes, Kevina and Penn-Kekana, 2003).

These examples indicate some of the ways in which gender inequity severely compromises poor women's capacity to protect themselves. Any discussion of risk and protective capacity must be contextualized in the power relations that exist not only between the rich and the poor but also between men and women (Alvarez-Castillo et al., 2009).

Alvarez-Castillo et al., (2009) argue that there is a need for a nuanced, contextualized understanding of gender-based vulnerability among population groups as a basis for developing responses that give special protection to the most vulnerable. If the poor are at the bottom of the social ladder, poor women

are on the lowest rung. This differentiates the vulnerability of men and women in poverty. Chronic and simultaneously occurring risks cumulatively weaken protective capacity over time. Furthermore, those risks that cannot be avoided or mitigated because of weak protective capacity have a way of creating other, related risks. For example, the risk of job loss is high in a nonunionized/unregulated labor market (weak protective capacity), which creates a related risk of homelessness.

The risk of fishing communities experiencing high HIV prevalence rates is derived from both the characteristics of the community and the livelihood lifestyles associated with fishing (Bishop-Sambrook and Tanzam, 2004). There are daily flows of people into and out of sites to trade in fresh fish and, at some sites, as a transit point to the islands; seasonal flows by fishermen following shoals; and semi-permanent migration into fishing communities. The latter includes people attracted from the hinterland where their livelihoods may have failed (for example, youth and widows who are unable to inherit family assets) or have been disrupted by insurgency, and those who are drawn by the prospects of relatively easy money (Bishop-Sambrook and Tanzam, 2004).

### **2.3.2 Gender Poverty and Vulnerability**

As Alvarez-Castillo et al., (2009) show, although poverty is a key determinant of vulnerability, gender mediates the impact of poverty on risk and protective capacity. Aside from the risks and lack of protective capacity brought about by their poverty, gender creates additional constraints and deprivation for women. A gendered analysis of vulnerability prompts them to ask who defines women's vulnerability and the risks and harms they face. Standpoint theorists explain that knowledge is always particular and presupposes a social location, or standpoint, that is a characteristic feature of the knower in question and that can be explained (among other factors) by their economic circumstances. Feminist standpoint epistemologists argue that recognition among scholars of the influence of women's social location on their cognition can lead to a more objective assessment and understanding of women's knowledge (Harding, 1986).

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risks cumulatively weaken protective capacity over time. Furthermore, those risks that cannot be avoided or mitigated because of weak protective capacity have a way of creating other, related risks. For example, the risk of job loss is high in a nonunionized/unregulated labor market (weak protective capacity), which creates a related risk of homelessness Alvarez-Castillo et al., (2009).

According to ILO (2000), underlying the ways that women's livelihoods are affected by HIV/AIDS to their own detriment, and that of the community, are issues concerning women's most fundamental rights, both personal and social, and not just their value as economic agents. Women's economic contribution consists of their reproductive as well as their productive work. Reproduction is not just a biological, personal or even social undertaking-it is also economic because the household is an economic unit, and women serve and service this unit. Women bear and care for the workforce, present and future, as well as taking part in it themselves (Lisk, 2002).

The fact that much of women's work may not be counted in GDP does not alter society's economic dependence on them. It follows, therefore, that if women are vulnerable so are those who depend on them, from the household to the national economy. Hence, the economic vulnerability of women to HIV/AIDS, disproportionately greater than men's, is a matter of serious and urgent concern in addressing the economic impact of the epidemic. Particular attention should also be paid to the fact that women may be exposed to violence at home and often find themselves in positions of weakness and dependence at the workplace, which lead easily to sexual harassment and in turn increase their vulnerability. These factors jeopardize women's long-term economic security in the face of the epidemic and increase existing gender inequalities (ILO, 1995).

The ILO estimates that at least 26 million people infected with HIV worldwide are workers, aged 15 to 49 years, in the prime of their working lives (Lisk, 2002). This is about three-quarters of all adults living with HIV/AIDS. The effects are catastrophic-not just on workers and their families, but on enterprises and national economies. From the standpoint of its economic impact, HIV/AIDS has become a major threat to employment objectives and labour market efficiency. The loss of workers and work-days due to AIDS-related illnesses or the demands of caring can result in significant declines in productivity, loss of earning, and attrition in skills and experience. HIV/AIDS is changing the age and sex distribution of the labour force, and increasing the number of women, children and the elderly

facing economic uncertainty.

The vulnerability of women to HIV infection, as compared with men, increases existing gender inequalities. The early entry of orphans into the labour force exacerbates the worst forms of child labour, and the epidemic is forcing older persons back into the workforce due to economic need. The epidemic also strikes hard at the poor who least can afford treatment and care, thereby increasing existing problems of poverty and inadequate social protection. The effects of HIV/AIDS on employment and on the labour market are therefore a major concern of the ILO, which views the epidemic as a workplace issue and a major development challenge (ILO, 2000).

**Unemployment and underemployment:** A decline in employment opportunities is slowly creeping into Homabay County. Fishing, which has traditionally been the main economic activity practiced in the county, is fast dwindling due to various factors such as the over-exploitation of fish in Lake Victoria due to increased population; water pollution in the lake; and the resultant water hyacinth menace that has rendered most boating lanes inaccessible; falling water levels in the lake; and the receding shorelines. Moreover, the shipping route is also endangered (UNAIDS 1999).

The large government ferries that plied the shipping route to the City of Kisumu have since been recalled because of increased difficulties in berthing due to the declining water levels and the problems resulting from the water hyacinth. This has contributed to the reduction of employment opportunities and increased underemployment. Poverty in Homabay County is exemplified through the following factors: Lack of food security, Poor housing conditions, mushrooming of slums and squatter settlements, increased insecurity, dwindling health standards, and inequitable resource distribution (UNAIDS 1999).

### **2.3.3 Gender Illiteracy and Vulnerability**

The discourse on the relationship between literacy and HIV is dominated by the belief that illiteracy is one of the causes of HIV/AIDS; it is argued that together with poverty, people's inability to read and write makes them vulnerable to getting the virus. It is assumed that since these people are not able to read and write they have no access to information regarding HIV transmission and therefore renders them at risk. Furthermore, the gender disparity in literacy rates means that women illiterates belong to the high risk groups (UNAIDS, 1999).



Information and knowledge on the virus transmission and risk behavior is critical, it is not sufficient for HIV prevention. This knowledge has to be backed up with: an understanding of power relations that are in operation in sexual relations and, changes in attitudes and behavior that could equip young girls and women with skills to negotiate and transform relations. Whether paid, casual or long term, the kind of power operating in sexual encounters/relationships is a key mediating factor in the spread of the virus. (UNAIDS/WHO, 2004) Young illiterate women who are forced into prostitution and young students, who enter into relationships with older men to obtain material things, are all subject to unequal power relationships and would have difficulties in negotiation, among other things, for the use of the condom.

Whether literacy equips girls and women with bargaining skills to assert their rights and choices is still debatable. Longwe (1997) for instance argues that schools reproduce traditional gender roles and contribute more to women's subordination. While a number of feminists critique literacy programs as a way of reproducing inequalities, there are increasing number of literacy programs which are working towards the goals of women's empowerment and using them as a vehicle for the transformation of gender roles. It is clear from their experiences that literacy has both enabling and disabling potentials for women's empowerment.

There is increasing evidence which shows that risk behavior is reduced by empowering education which is adapted to the linguistic, social and cultural contexts of the populations. A gender sensitive HIV/AIDS strategy must necessarily address the gender-based discrimination and violence that contributes to the spread of the pandemic and in this, literacy has a key role to play in bringing changes in attitudes and behaviors that are reproducing gender inequalities. Literacy programs should help women and men understand how traditional gender roles influence sexual behaviors and increases women and men differential vulnerability and risk behaviors. (Longwe 1997)

#### **2.3.4 Gender Health and Vulnerability**

The sexual division of labour limits women's equal access to education and formal wage economy resulting in gender inequality in economic resources. The latter reinforces women's economic dependency on men and increases women's 'economic exposures' to HIV (Wingood & DiClemente, 2000). The theory hypothesizes that as the economic inequity between men and women increases and favours men women will be at greater risk for HIV. However, literature on Western societies shows that

absolute economic disadvantages of women such as living below the poverty line or being underemployed/unemployed increase women's vulnerability to HIV (Wingood & DiClemente, 2000). It is well documented that poorer women in sub-Saharan Africa may be at increased risk for HIV infection (Wojcicki, 2005).

Poor individuals, families, communities, and nations share this type of fragility. The risk of exploitation in medical research exposes poor people to the related risks of health deprivation. This is because when the poor do not receive their fair share of the benefits of research, that is, when they are deprived of access to necessary medicines, they are further deprived of the opportunity or potential for improving their situation, that is, to attain better health (Andada and Lucas, 2007).

Risk and protective capacity are dialectically related, in that risks are heightened by a weak protective capacity, and a weak protective capacity exposes the individual to additional risks. This can be illustrated by contrasting the case of healthy, altruistic women in the developed world who choose to donate ova to research programs to assist their childless peers with those of financially needy women in the developing world who undergo potentially dangerous and invasive procedures for the extraction of thousands of ova, although the potential benefits of this research may not ultimately be available to them (Hitchcock, Johnson and Haney, 2004).

Studies that have examined the association between the perception of risk and sexual behaviour remain inconclusive because of the difficulty of disentangling the complex relationship between the two variables (Cleland, 1995). The meaning and context of sexuality vary across populations and cultures, and this has been demonstrated to have a major impact on sexual behaviour. Bongaarts (1995) states that 'sexual behaviour is probably responsible for much of the differences in heterosexual HIV/AIDS epidemics among countries, as well as for the equally large differences among regions and demographic groups within countries'.

It has been suggested that in sub-Saharan Africa, sexual activity appears to be driven largely by socio-cultural beliefs and practices (Caldwell, Orubuloye & Caldwell, 1999; Akwara et al., 2004). Risk-taking sexual behaviour may be tolerated in some contexts while in others it may be strongly disapproved of and regarded as irresponsible or immoral. For example, multiple partnerships for men



may be tolerated, while women's infidelity is highly penalized, meaning that aspects of sexual conduct are beyond women's control (Caldwell et al., 1999).

Risk-taking sexual behaviour in sub-Saharan Africa is associated with a number of factors, including gender inequalities that place women in subordinate positions, the belief that men have stronger sexual drives than women, and the notion that men cannot do without sex (Akwara et al., 1998; Cohen & Trussell, 1996; Ocholla-Ayayo & Schwarz, 1991). These beliefs act to exacerbate the spread of sexually transmitted diseases (STDs), including HIV/AIDS. The lack of power to negotiate safer sex among women may be the central obstacle to AIDS prevention in Africa. Sexual behaviour may not be under an individual's volition but may be dependent upon the social and cultural environment in which one lives. The ability of individuals to be aware of, to initiate, and to sustain safer sexual behaviours may largely depend upon societal sexual norms and practices, and not just self-perceived susceptibility to HIV infection.

### **2.3.5 Gender Culture and Vulnerability**

Culture can be defined as a way of life of a group of people. According to Macionis (2004), culture refers to values, beliefs, and behavior that together form a people's way of life. Culture is a powerful force that shapes not only what people do but also what they think and feel. However, cultural practices are rituals that are carried out in a specific ethnic group or groups. Culture is not synonymous with cultural practices because not all ethnic groups in Kenya engage in female circumcision, widow inheritance, or polygamy. Cultural practices that contribute to HIV vulnerability among women are significant topics affecting women but have generally been understudied. According to Sessay (2010), cultural differences can be useful in explaining different HIV vulnerabilities.

Polygamy is a cultural practice found in most parts of Africa that allows a man to marry more than one wife. Polygamy is still widely practiced in Kenya particularly among Muslim communities (NACC, 2002). Polygamy, another cultural practice, predisposes women to HIV infection. In Kenya, polygamy is still culturally valued even though many men have only one wife. Some men in Kenya do not even admit that they are in polygamous relationships, despite the fact that they have two wives who would be living in different residences (NACC, 2002). However marriage arrangements are risky for women because men are not accountable for their behavior and can easily blame their wives if they are HIV

infected (Sessay, 2010).

Widow inheritance found among some ethnic groups in Kenya is another practice that exposes women to HIV infection (NACC, 2002). This is a cultural practice that involves the inheritance of a widow by the brother or male cousin of the deceased husband. According to Kenyan customary law, when a husband dies, the widow is absorbed into the husband's family as a way to ensure that the widow and her children are provided for and the family name is kept (Sessay, 2010). Widow inheritance has become dangerous with the advent of HIV/AIDS. This practice increases the risk of contracting the AIDS virus particularly when the new bride is infected or if the inheritor is infected, putting both at risk. In summary, in terms of cultural practices, the vulnerable position of women has to be recognized (Gupta, 2000) particularly because there are some cultural rituals that pose a danger to women because of the vulnerability of the female anatomy.

Different dimensions of gender inequality are increasingly recognized as important determinants of women's vulnerability to HIV infection (for example, Wingood & DiClemente's (2000) quantitative application of the Theory of Gender and Power to women's HIV risk and Mumtaz et al.'s (2005) study on gender and condom use using the Demographic and Health Survey data from sub-Saharan Africa). An understanding of the impact of gender inequality in enhancing HIV transmission among women is essential for the development of effective HIV intervention strategies, but empirical assessment of this issue remains limited, particularly in sub-Saharan Africa.

According to Connell's (1987) Theory of Gender and Power, the sexual division of labour, the sexual division of power, and the structure of cathexis are three overlapping but distinct structures that serve to maintain persistent gender inequalities at the societal and relational levels. Extending the Theory of Gender and Power, Wingood & DiClemente (2000) conceptualize women's heightened HIV risk as a function of the three structural gender disparities that generate different exposures (influences external to a woman) and risk factors (individual level influences) for HIV. This theoretical framework emphasizes that none of the three structures is independent of the others. Rather, they interact to elevate women's risk for HIV.

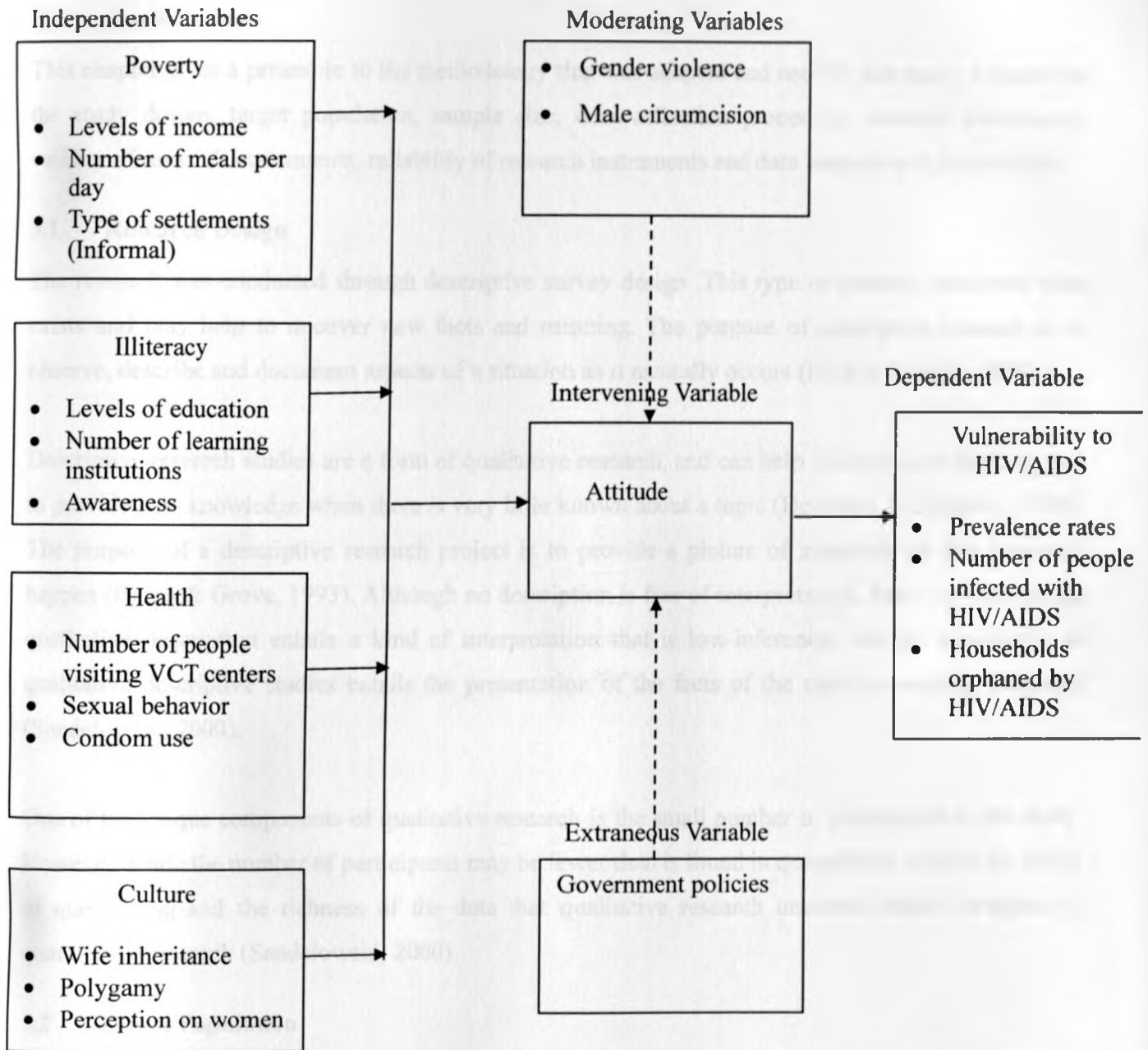
Though the theory of Gender and power analyzes gender vulnerability to HIV/AIDS, it has certain limitations. First, there is insufficient recognition of the impact of these gender-based vulnerabilities; there is a failure to address the need for protective mechanisms that specifically engage with women's vulnerabilities. One way to address this is to mainstream gender in the conceptualization of, and research on, vulnerability. Secondly, little is known or understood about influences on sexual behavior among women from different classes and ethnic groups.

Sexuality remains an extremely private and complex subject of human behavior surrounded with socio-cultural taboos that make talking about sexuality virtually impossible. The meaning of specific behavior patterns that place women at risk must be thoroughly understood in order to educate vulnerable women about their own HIV vulnerability. In the context of Kenya, not much has been written on women's sexual behavior because of the dichotomy between a good and a bad girl. The image of a good girl is prevalent, and most women try to emulate that good girl image even when their behavior contradicts that model.

#### **2.4 Conceptual Framework**

Conceptual frameworks, according to educational researcher Smyth (2004), are structured from a set of broad ideas and theories that help a researcher to properly identify the problem they are looking at, frame their questions and find suitable literature. Most academic research uses a conceptual framework at the outset because it helps the researcher to clarify his research question and aims. A variable is an empirical property that can take two or more values, any property that can change, either in quantity or quality. There were five variables in this study, these were: independent, dependent, moderating, intervening and extraneous variables.

## 2.4.1 Conceptual Frame Work



Source: Author (2012)

Figure 1: Conceptual framework

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.0 Introduction

This chapter gives a preamble to the methodology that was adapted and used in this study. It describes the study design, target population, sample size, data collection procedure, research instruments, validity of research instruments, reliability of research instruments and data analysis and presentation.

#### 3.1 Research Design

The research was conducted through descriptive survey design. This type of research describes what exists and may help to uncover new facts and meaning. The purpose of descriptive research is to observe, describe and document aspects of a situation as it naturally occurs (Polit & Hungler 1999).

Descriptive research studies are a form of qualitative research, and can help discover new meaning and to provide new knowledge when there is very little known about a topic (Dempsey & Dempsey, 2000). The purpose of a descriptive research project is to provide a picture of situations as they naturally happen (Burns & Grove, 1993). Although no description is free of interpretation, basic or fundamental qualitative description entails a kind of interpretation that is low-inference, and the description in qualitative descriptive studies entails the presentation of the facts of the case in everyday language (Sandelowski, 2000).

One of the unique components of qualitative research is the small number of participants in the study. However, while the number of participants may be fewer than is found in quantitative studies, the depth of questioning and the richness of the data that qualitative research uncovers cannot compare to quantitative research (Sandelowski, 2000).

#### 3.2 Target Population

Borg and Gall (1989) defines population as all the members of a real or hypothetical set of people, event or objects to which a researcher wishes to generalize the results of the study. According to (Mugenda and Mugenda 2003) a population is defined as a complete set of individuals, cases or objects with some common observable characteristics.

The study targeted a population of three hundred small scale traders, four health and beach officers

operating around Lake Victoria, Homa Bay County.

### 3.3 Sampling procedure and sample size

Polit and Hungler (1999) indicate that a researcher selects a sample due to various limitations that may not allow researching the whole population. According to Kothari (2003), an optimum sample is the one that fulfills the requirements of efficiency, representativeness, reliability and flexibility. Mugenda and Mugenda (2003) defines sample as a small group obtained from the accessible population. Each member in a sample is referred to as a subject. Sampling is the process of selecting a number of individuals for a study in such a way that the individuals selected represent the large group from which they were selected.

Purposive and simple random sampling techniques were applied in this study so that only four beaches were selected for this study. A representative sample of 30 % of the targeted population was randomly selected. Stratified sampling was used in selecting the respondents that gave both male and female an equal opportunity of selection for the study. According to Borg and Gall 1996, 30% sample size of the entire population is an adequate representative sample that is sufficient for statistical analysis.

Table 3.1 Respondents distribution

Stratas	Population	Sample	Sample %
Divisional Health Officers	4	4	100%
Beach Leaders	4	4	100%
Fishermen	42	30	60%
Other small scale traders	250	62	24.8%
<b>Total</b>	<b>300</b>	<b>100</b>	<b>30%</b>

### **3.4 Data Collection Procedures**

The researcher sought permission from the Ministry of Public Health and the Provincial Administration in order to visit the targeted population. The respondents were assured of strict confidentiality of their identity.

Data was collected through administration of questionnaires and conducting of interviews. Primary data was collected through administering of questionnaires. Questionnaires with open-ended and closed-ended questions were used in this study. The questionnaire was divided into sections that addressed the objectives of the study. In depth interviews were conducted on eight carefully selected key informants.

### **3.5 Research Instruments**

Research instrument is any device a researcher uses to collect data. The process of collecting data called instrumentation. This process involves the selection or design of the instruments and setting conditions under which the instruments will be administered. A research instrument must be valid, reliable and objective (Mugenda and Mugenda 2003).

The data was collected using questionnaires as the principal data collection instrument. A questionnaire is a pre-written series of questions used in gathering important information's from one or more persons. This was given to the individuals who had a direct bearing of the study and in order to satisfy the proponent's goal that is to get and measure the opinions, polls and attitude of the respondents of the study. The questionnaire was tested for their reliability and validity. For purpose of pretesting a sample of fifteen respondents was used (Gall, Borg and Gall, 1996). An interview guide with outlined areas of study was used. These key informants were purposively selected based on their personal and professional knowledge in the area of study.

#### **3.5.1 Validity of Research Instruments**

According to Borg and Gall (1989), validity is the degree to which a test measures what it is intended to measure. Mugenda and Mugenda (2003) define validity as the accuracy and meaningfulness of inferences, which are based on the research results. Content-related validity was used in this study; this type of validity refers to the content and format of the instrument.



To ensure validity of the instrument, a pre-testing (pilot study) was conducted on a sample of fifteen respondents. The reasons behind pre-testing was assess the clarity of the instrument items so that those items that were found to be inadequate in measuring the variables were discarded or modified to improve the quality of the research instrument thus increasing its reliability. During the pre-testing study after each respondent completed filling the questionnaire, each question item was discussed with him/her to determine: suitability, clarity and relevance for the purpose of the study

The researcher discussed the meaning of all significant terms with the supervisor. The researcher also used the beach leaders and volunteers in translation of the questionnaire to Dholuo language, the language well understood by a majority of the targeted population along the lake region, in Homa Bay County.

### **3.5.2 Reliability of Research Instruments**

Reliability of a measuring instrument is the degree of consistency with which it measures whatever it is meant for (Dempsey & Dempsey, 2000). Mugenda and Mugenda (2003) define reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trial. The researcher administered the test-retest method in this study; this involves administering the same test twice to the same group after a certain time interval has elapsed since the previous test.

To ensure reliability 'consistency' of the instrument, using the test-retest technique amongst a sample population, the research instruments were tested with fifteen respondents within a period of one and a half weeks prior to commencement of the actual study.

### **3.6 Data Analysis and Presentation**

The study was predominantly qualitative. Descriptive data collected were analyzed and interpreted through triangulation of information using percentages and frequencies tables. The tool of analysis that used was the measures of central tendency. According to Mugenda and Mugenda (2003), the purpose of descriptive statistics is to allow for meaningful description of a distribution of scores or measurements using a few indices or statistics.



## OPERATIONALIZATION OF VARIABLES

**Table 3.2: operationalization of variables**

Objectives	Variables	Indicators	Measurement	Measuring Scale	Research Design	Type of Analysis	Tools of Analysis
<b>Topic:</b> Gender influence on vulnerability to HIV/AIDS among small scale traders around lake Victoria south-a case of Homa bay county	Dependent variable: Vulnerability to HIV/AIDS	<ul style="list-style-type: none"> <li>• Prevalence rates</li> <li>• Number of people infected</li> <li>• Orphaned households</li> </ul>	<ul style="list-style-type: none"> <li>• Percentages</li> <li>• Numbers</li> <li>• Numbers</li> </ul>	<ul style="list-style-type: none"> <li>• Ratio</li> <li>• Ordinal</li> <li>• ordinal</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative</li> <li>• Qualitative</li> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Descriptive</li> <li>• Descriptive</li> <li>• Descriptive</li> </ul>	<ul style="list-style-type: none"> <li>• Mean</li> <li>• Mean</li> <li>• Mean</li> </ul>
<b>Objective i:</b> To establish the extent to which gender poverty influence vulnerability to HIV/AIDS among small scale traders around Lake Victoria South	Independent variable: Gender Poverty	<ul style="list-style-type: none"> <li>• Income</li> <li>• Number of meals per day</li> <li>• Settlements</li> </ul>	<ul style="list-style-type: none"> <li>• Levels</li> <li>• Numbers</li> <li>• Type</li> </ul>	<ul style="list-style-type: none"> <li>• Interval</li> <li>• Ordinal</li> <li>• Nominal</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative</li> <li>• Qualitative</li> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Descriptive</li> <li>• Descriptive</li> <li>• Descriptive</li> </ul>	<ul style="list-style-type: none"> <li>• Median</li> <li>• Mean</li> <li>• Mode</li> </ul>
<b>Objective ii:</b> To establish the extent to which gender illiteracy influence vulnerability to HIV/AIDS among small scale trader around Lake Victoria South	Independent variable: Gender Illiteracy	<ul style="list-style-type: none"> <li>• Education</li> <li>• Learning institutions</li> <li>• Standard of education</li> </ul>	<ul style="list-style-type: none"> <li>• Levels</li> <li>• Numbers</li> <li>• Grades acquired</li> </ul>	<ul style="list-style-type: none"> <li>• Interval</li> <li>• Ordinal</li> <li>• Interval</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative</li> <li>• Qualitative</li> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Descriptive</li> <li>• Descriptive</li> <li>• Descriptive</li> </ul>	<ul style="list-style-type: none"> <li>• Median</li> <li>• Mean</li> <li>• Median</li> </ul>
<b>Objective iii:</b> To establish the extent to which gender health influence vulnerability to HIV/AIDS among mall scale traders around Lake Victoria South	Independent Variable: Gender Health	<ul style="list-style-type: none"> <li>• Health facilities</li> <li>• Proximity to health centers</li> <li>• VCT centers</li> </ul>	<ul style="list-style-type: none"> <li>• Numbers</li> <li>• Distance</li> <li>• Numbers</li> </ul>	<ul style="list-style-type: none"> <li>• Ordinal</li> <li>• Ordinal</li> <li>• Ordinal</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative</li> <li>• Qualitative</li> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Descriptive</li> <li>• Descriptive</li> <li>• Descriptive</li> </ul>	<ul style="list-style-type: none"> <li>• Mean</li> <li>• Mean</li> <li>• Mean</li> </ul>
<b>Objective iv:</b> To establish the extent to which gender culture influence vulnerability to HIV/AIDS among small scale traders around Lake Victoria South	Independent variable: Gender Culture	<ul style="list-style-type: none"> <li>• Wife inheritance</li> <li>• Polygamy</li> <li>• Inequalities</li> </ul>	<ul style="list-style-type: none"> <li>• Numbers</li> <li>• Percentages</li> <li>• Types</li> </ul>	<ul style="list-style-type: none"> <li>• Ordinal</li> <li>• Interval</li> <li>• Nominal</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative</li> <li>• Qualitative</li> <li>• Qualitative</li> </ul>	<ul style="list-style-type: none"> <li>• Descriptive</li> <li>• Descriptive</li> <li>• Descriptive</li> </ul>	<ul style="list-style-type: none"> <li>• Mean</li> <li>• Mean</li> <li>• Mode</li> </ul>

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.0 Introduction

This chapter presents the data analysis, presentation and interpretation

#### 4.1 Overall response rate

Ninety two questionnaires were administered and eighty five of them were responsive as shown in Table 4.1. This indicates that the overall response rate for the administered questionnaires was 92% which was a credible fraction for analysis purposes. At the same time, eight respondents were purposively interviewed and they were all responsive.

Table 4.1 Overall response rate

Item	Frequency	Percentages
Responsive Instruments	85	92
Non-responsive instruments	7	8
<b>Total number of instruments administered</b>	<b>92</b>	<b>100</b>

#### 4.1.1 Response rate by gender

Out of the eighty five responsive respondents, 53% were male respondents while 47% were female respondents. The response rate per gender was as shown in Table 4.2

Table 4.2 Response rate by gender

Respondents	Frequency	Percentages
Male	45	53%
Female	40	47%
<b>Total</b>	<b>85</b>	<b>100</b>

#### 4.1.2 Response rate by Occupation

Out of the eighty five responsive respondents, 29% were fishermen while 71% were all other small scale traders. The response rate per gender was as shown in Table 4.3

Table 2.3 Response rate by occupation

<b>Respondents</b>	<b>Frequency</b>	<b>Percentages</b>
Fishermen	25	29%
Other small scale traders	60	71%
<b>Total</b>	<b>85</b>	<b>100</b>

#### 4.1.3 Response rate by period of stay

The respondents were asked to indicate the duration of stay by the beach. The responses indicate that 4% of the respondents had worked at the beach community for less than one year; 14% of the respondents had worked at the beach community for between one and five years; 16% of the respondents had worked at the beach community between six and ten years; while 66% of the respondents had worked at the beach community for more than ten years as shown in Table 4.4. This implies that majority (82%) of the respondents had worked at the beach communities for more than five years; a period in which one would understand the intricacies of a given community. As such, one can conclude that the information collected from the majority (82%) of the respondents was valid and reliable for analysis.

Table 4.4 Response rate by period of stay

<b>Period of stay</b>	<b>Frequency</b>	<b>Percentages</b>
Less than 1 year	3	4%
1 – 5 years	12	14%
6 – 10 years	14	16%
More than 10 years	56	66%
<b>Total</b>	<b>85</b>	<b>100%</b>

## 4.2 Gender poverty and vulnerability to HIV/AIDS

The indicators that were used to measure the relationship between gender poverty and vulnerability to HIV/AIDS were: income per day; meals per day; type of settlement; availability of work; and involvement in casual sex.

### 4.2.1 Income per day

Respondents were asked to indicate whether they earned less than KES 200 per day. The findings

indicate that 75% of the male respondents earned less than KES 200 per day while 85% of the female respondents earned less than KES 200 per day. From documentary analysis, one earning less than KES 200 per day is below the poverty index and as such regarded poor (Gupta, 2000). Further, the study revealed that more female respondents lived in poverty in comparison to their male counterparts. The study findings indicate that 4% of the male respondents while 3% of the female respondents were not responsive to this particular item of the instrument. The responses were as shown in Table 4.5

Table 4.5 Income per day

<b>Responses</b>	<b>Male</b>	<b>Percentage</b>	<b>Female</b>	<b>Percentage</b>
Strongly Disagree	3	7%	2	5%
Disagree	5	11%	3	8%
Not Sure	1	2%	0	0%
Agree	20	44%	24	60%
Strongly Agree	14	31%	10	25%
Non Responsive	2	4%	1	3%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

#### 4.2.2 Meals per day

Respondents were asked to indicate whether they had three meals per day. The findings indicate that 53% of the male respondents had three meals per day while 73% of the female respondents had three meals per day. From documentary analysis, one having less than three meals per day lived below the poverty index and as such regarded poor (Gupta, 2000). Further, the study reveals that more female respondents lived in poverty in comparison to their male counterparts. 4% of the male respondents while 3% of the female respondents were not responsive to this particular item of the instrument. The responses were as shown in Table 4.6

Table 4.6 Meals per day

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	5	11%	3	8%
Disagree	12	27%	5	13%
Not Sure	2	4%	2	5%
Agree	14	31%	20	50%
Strongly Agree	10	22%	9	23%
Non Responsive	2	4%	1	3%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

#### 4.2.3 Type of settlement

Respondents were asked to indicate whether they lived in informal settlements. The findings indicate that 80% of the male respondents lived in informal settlements while 86% of the female respondents lived in informal settlements. From documentary analysis, one living in informal settlements is below the poverty index and as such regarded poor (Dahlberg, etl, 2002). Further, the study revealed that more female respondents lived in poverty in comparison to their male counterparts. The study showed that 9% of the male respondents were not responsive to this particular item under study while 3% of the female respondents were also non responsive. The responses were as shown in Table 4.7

Table 4.7 Type of settlement

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	1	2%	1	3%
Disagree	4	9%	3	8%
Not Sure	0	0%	1	3%
Agree	22	49%	23	58%
Strongly Agree	14	31%	11	28%
Non Responsive	4	9%	1	3%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

#### 4.2.4 Availability of work

Respondents were asked to indicate whether they went to work every-day. The findings indicate that 76% of the male respondents went to work every-day while 86% of the female respondents went to work every-day. In as far as securing daily work is concerned, the study revealed that more female respondents lived in poverty in comparison to their male counterparts. The responses were as shown in Table 4.8

Table 4.8 Availability of work

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	2	4%	1	3%
Disagree	6	13%	3	8%
Not Sure	1	2%	1	3%
Agree	21	47%	25	63%
Strongly Agree	13	29%	9	23%
Non Responsive	2	4%	1	3%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

#### 4.2.5 Involvement in casual sex

Respondents were asked to indicate whether they were compelled by poverty to engage in casual sex. The findings indicate that 22% of the male respondents were compelled by poverty to engage in casual sex 85% of the female respondents indicated that they were compelled by poverty to engage in casual sex. Intuitively, being compelled by poverty to engage in casual sex is a key indicator of one living in poverty; and as such, the study revealed that more female respondents lived in poverty in comparison to their male counterparts (Amaro, 2009). The responses were as shown in Table 4.9

Table 4.9 Involvement in casual sex

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	12	27%	1	3%
Disagree	21	47%	3	8%
Not Sure	2	4%	1	3%
Agree	6	13%	18	45%
Strongly Agree	4	9%	16	40%
Non Responsive	0	0%	1	3%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

### 4.3 Gender illiteracy and vulnerability to HIV/AIDS

The indicators that were used to measure the relationship between gender illiteracy and vulnerability to HIV/AIDS were: completion of primary education; proximity to schools; post school technical skills; awareness of HIV/AIDS; and sensitization on HIV/AIDS.

#### 4.3.1 Completion of primary education

Respondents were asked to indicate whether they completed primary education. The findings indicate that 60% of the male respondents completed primary education while 33% of the female respondents completed primary education. From documentary analysis, there is a direct correlation between education and poverty. Majority of people with quality education have managed to cross the poverty line (Alvarez-Castillo, etl, 2009). The responses were as shown in Table 4.10

Table 4.10 Completion of primary education

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	5	11%	9	23%
Disagree	9	20%	14	35%
Not Sure	2	4%	3	8%
Agree	16	36%	8	20%
Strongly Agree	11	24%	5	13%
Non Responsive	2	4%	1	3%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>



### 4.3.2 Proximity to a school

Respondents were asked to indicate whether there was a school in their village. The findings indicate that 74% of the male respondents had a school in their village while 75% of the female respondents indicated that they had a school in their village. Proximity to a school can influence acquisition of education which enhances literacy levels thus reducing vulnerability to HIV/AIDS (NASCOP, 2009). The responses were as shown in Table 4.11

Table 4.11 Proximity to a school

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	2	4%	3	8%
Disagree	5	11%	3	8%
Not Sure	2	4%	3	8%
Agree	21	47%	20	50%
Strongly Agree	12	27%	10	25%
Non Responsive	3	7%	1	3%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

### 4.3.3 Post school technical skills

Respondents were asked to indicate whether they had acquired post school technical skills. The findings indicate that 58% of the male respondents had acquired post school technical skills while 41% of the female respondents had acquired post school technical skills. Literature indicates that when people are equipped with technical skills enhance their chances of both employment and entrepreneurial engagements which reduces vulnerability to HIV/AIDS. The responses were as shown in Table 4.12

Table 4.12 Post school technical skills

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	7	16%	9	23%
Disagree	9	20%	12	30%
Not Sure	2	4%	2	5%
Agree	17	38%	11	28%
Strongly Agree	9	20%	5	13%
Non Responsive	1	2%	1	3%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

#### 4.3.4 Awareness of HIV/AIDS

Respondents were asked to indicate whether they had heard about HIV/AIDS. The findings indicate that 91% of the male respondents had heard about HIV/AIDS while 91% of the female respondents had heard about HIV/AIDS. Awareness to HIV/AIDS is the first step towards fighting the scourge (Gould. W. T. S. 2005) thus reducing the vulnerability to the HIV/AIDS menace. The study revealed that an equal percentage of male and female respondents were aware of HIV/AIDS. The responses were as shown in Table 4.13

Table 4.13 Awareness of HIV/AIDS

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	1	2%	1	3%
Disagree	3	7%	2	5%
Not Sure	0	0%	0	0%
Agree	27	60%	19	48%
Strongly Agree	14	31%	17	43%
Non Responsive	0	0%	1	3%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

#### 4.3.5 Sensitization on HIV/AIDS

Respondents were asked to indicate whether they had undergone sensitization on HIV/AIDS. The findings indicate that 31% of the male respondents had undergone sensitization on HIV/AIDS while

28% of the female respondents had undergone sensitization on HIV/AIDS. From documentary analysis, sensitization on HIV/AIDS increases responsible sexual behavior thus reducing the vulnerability to HIV/AIDS. The responses were as shown in Table 4.14

Table 4.14 Sensitization on HIV/AIDS

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	8	18%	11	28%
Disagree	20	44%	17	43%
Not Sure	2	4%	1	3%
Agree	9	20%	8	20%
Strongly Agree	5	11%	3	8%
Non Responsive	1	2%	0	0%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

#### 4.4 Gender health and vulnerability to HIV/AIDS

The indicators that were used to measure the relationship between gender health and vulnerability to HIV/AIDS were: voluntary counseling and testing; number of sexual partners; and use of condom

##### 4.4.1 Voluntary counseling and testing

Respondents were asked to indicate whether they would go for voluntary counseling and testing. The findings indicate that 40% of the male respondents would go for voluntary counseling and testing 60% of the female respondents would go for voluntary counseling and testing. Going for voluntary counseling and testing helps one to understand her / his status which in turn helps inform one's conduct in responsible lifestyles which reduces vulnerability to HIV/AIDS (Gupta, R. 2000). The responses were as shown in Table 4.15

Table 4.15 Voluntary counseling and testing

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	5	11%	6	15%
Disagree	17	38%	8	20%
Not Sure	1	2%	1	3%
Agree	12	27%	16	40%
Strongly Agree	6	13%	8	20%
Non Responsive	4	9%	1	3%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

#### 4.4.2 Number of sexual partners

Respondents were asked to indicate whether they had more than one sexual partner over the last one year. The findings indicate that 67% of the male respondents had more than one sexual partner over the last one year 55% of the female respondents had more than one sexual partner over the last one year. Having sexual relations with more than one partner increases vulnerability to HIV/AIDS (Gupta, R. 2000). The responses were as shown in Table 4.16

Table 4.16 Number of sexual partners

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	5	11%	6	15%
Disagree	8	18%	9	23%
Not Sure	1	2%	1	3%
Agree	18	40%	14	35%
Strongly Agree	12	27%	8	20%
Non Responsive	1	2%	2	5%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

#### 4.4.3 Use of condom

Respondents were asked to indicate whether they use condom when having sex outside marriage. The findings indicate that 67% of the male respondents use condom when having sex outside marriage while 43% of the female respondents use condom when having sex outside marriage. Regular use of condom when having sex outside marriage reduces vulnerability to HIV/AIDS (Gupta, R. 2000). The responses were as shown in Table 4.17

Table 4.17 Use of condom

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	5	11%	8	20%
Disagree	8	18%	14	35%
Not Sure	1	2%	0	0%
Agree	17	38%	11	28%
Strongly Agree	13	29%	6	15%
Non Responsive	1	2%	1	3%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

#### 4.5 Culture and vulnerability to HIV/AIDS

The indicators that were used to measure the relationship between gender culture and vulnerability to HIV/AIDS were: women as sex objects; polygamy; polygamy and sexual immorality; and wife inheritance.

##### 4.5.1 Women as sex objects

Respondents were asked to indicate whether they see women as sex objects. The findings indicate that 86% of the male respondents see women as sex objects 15% of the female respondents see women as sex objects. According to (Fleischman, J. 2003), one's perception of women as sex objects informs one's sexual behavior and is a key determinant to vulnerability to HIV/AIDS. The responses were as shown in Table 4.18

Table 4.18 Women as sex objects

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	1	2%	9	23%
Disagree	5	11%	24	60%
Not Sure	0	0%	0	0%
Agree	24	53%	4	10%
Strongly Agree	15	33%	2	5%
Non Responsive	0	0%	1	3%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

#### 4.5.2 Polygamy

Respondents were asked to indicate whether they are polygamous. The findings indicate that 73% of the male respondents are polygamous 43% of the female respondents are polygamous. Previous studies carried out indicate that people who are polygamous are more vulnerability to HIV/AIDS (IPAR, 2004). The responses were as shown in Table 4.19

Table 4.19 Polygamy

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	3	7%	7	18%
Disagree	8	18%	13	33%
Not Sure	1	2%	2	5%
Agree	20	44%	11	28%
Strongly Agree	13	29%	6	15%
Non Responsive	0	0%	1	3%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

#### 4.5.3 Polygamy and sexual immorality

Respondents were asked to indicate whether polygamy reduces sexual immorality. The findings indicate that 65% of the male respondents believe polygamy reduces sexual immorality while 50% of the female respondents indicated that polygamy reduces sexual immorality. Previous research carried out by Fleischman 2003, found out that believing that polygamy reduces sexual immorality increases one's vulnerability to HIV/AIDS. The responses were as shown in Table 4.20

Table 3 4.20 Polygamy and sexual immorality

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	3	7%	6	15%
Disagree	5	11%	9	23%
Not Sure	6	13%	5	13%
Agree	17	38%	12	30%
Strongly Agree	12	27%	8	20%
Non Responsive	2	4%	0	0%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

#### 4.5.4 Wife inheritance

Respondents were asked to indicate whether wife inheritance should be upheld. The findings indicate that 57% of the male respondents believe that wife inheritance should be upheld while 33% of the female respondents indicated that wife inheritance should be upheld. Previous research carried out by Fleischman 2003, found out that the culture of wife inheritance increases vulnerability to HIV/AIDS. The responses were as shown in Table 4.21

Table 4.21 Wife inheritance

Responses	Male	Percentage	Female	Percentage
Strongly Disagree	5	11%	9	23%
Disagree	11	24%	15	38%
Not Sure	1	2%	2	5%
Agree	15	33%	9	23%
Strongly Agree	11	24%	4	10%
Non Responsive	2	4%	1	3%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>



#### 4.6 Improvement strategies

Respondents were asked to indicate ways in which vulnerability to HIV/AIDS can be reduced. The responses were categorized, grouped and tabulated in Table 4.22.

Table 4.22 Improvement strategies

Responses	Male	Percentage	Female	Percentage
Sex education and Awareness to HIV/AIDS	10	22%	9	23%
Poverty reduction	8	18%	7	18%
Accessibility to health centers	7	16%	7	18%
Availability of condoms	7	16%	6	15%
Others	12	27%	10	25%
Non Responsive	1	2%	1	3%
<b>Total</b>	<b>45</b>	<b>100%</b>	<b>40</b>	<b>100%</b>

The study revealed that 22% of male respondents while 23% of female respondents indicated that sex education and increased awareness to HIV/AIDS would reduce vulnerability to HIV/AIDS. The study revealed that 18% of male respondents and 18% of female respondents indicated that reduction to poverty is the key to reduction in vulnerability to HIV/AIDS. Further, the study revealed that 16% of male respondents while 18% of female respondents indicated that accessibility to health centers would reduce vulnerability to HIV/AIDS. In addition, the study revealed that 16% of male respondents while 15% of female respondents indicated that vulnerability to HIV/AIDS would be reduced by availability of condoms.

All other strategies combined that were proposed to reduce vulnerability to HIV/AIDS attributed to 27% for male respondents and 25% for female respondents. These other improvement strategies include: More VCT awareness centers; Abstinence; Discouraging wife inheritance within the society; Avoidance sexual exchange for monetary or material things; Constant use of condom when having sex outside marriage/relationship; People to go for voluntary counseling and testing to know their HIV status; Women empowerment; Faithfulness, sticking to one sexual partner; Government to intervene to prevent children from leaving school at an early age; Job creation by the government along the lake region; and Avoid stigmatization.

## CHAPTER FIVE

### SUMMARY OF KEY FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.0 Introduction

This chapter presents summary of key findings, discussions, conclusions, recommendations and areas for further research.

#### 5.1 Summary of key findings

Table 5.1 Summary of key findings

Objective	Findings
Gender poverty and vulnerability to HIV/AIDS	<p>The findings indicate that majority of the female respondents earned less than KES 200 in comparison to the male respondents.</p> <p>The findings indicate that 53% of the male respondents earned less than KES 200 per day while 73% of the female respondents had three meals per day.</p> <p>The findings indicate that 80% of the male respondents lived in informal settlements while 86% of the female respondents lived in informal settlements.</p> <p>The findings indicate that 76% of the male respondents went to work every-day while 86% of the female respondents went to work every-day.</p> <p>The findings indicate that 22% of the male respondents were compelled by poverty to engage in casual sex 85% of the female respondents indicated that they were compelled by poverty to engage in casual sex.</p>
Gender illiteracy and vulnerability to HIV/AIDS	<p>The findings indicate that 60% of the male respondents completed primary education while 33% of the female respondents completed primary education.</p>

	<p>The findings indicate that 74% of the male respondents had a school in their village while 75% of the female respondents indicated that they had a school in their village.</p> <p>The findings indicate that 91% of the male respondents had heard about HIV/AIDS while 91% of the female respondents had heard about HIV/AIDS.</p> <p>The findings indicate that 31% of the male respondents had undergone sensitization on HIV/AIDS while 28% of the female respondents had undergone sensitization on HIV/AIDS. From documentary analysis, sensitization on HIV/AIDS increases responsible sexual behavior thus reducing the vulnerability to HIV/AIDS.</p>
Gender health and vulnerability to HIV/AIDS	<p>The findings indicate that 40% of the male respondents would go for voluntary counseling and testing 60% of the female respondents would go for voluntary counseling and testing.</p> <p>The findings indicate that 67% of the male respondents had more than one sexual partner over the last one year 55% of the female respondents had more than one sexual partner over the last one year.</p> <p>The findings indicate that 67% of the male respondents use condom when having sex outside marriage while 43% of the female respondents use condom when having sex outside marriage. Regular use of condom when having sex outside marriage reduces vulnerability to HIV/AIDS (Gupta, R. 2000).</p>
Gender culture and vulnerability to HIV/AIDS	<p>The findings indicate that 73% of the male respondents are polygamous 43% of the female respondents are</p>

polygamous.

The findings indicate that 65% of the male respondents believe polygamy reduces sexual immorality while 50% of the female respondents indicated that polygamy reduces sexual immorality.

The findings indicate that 57% of the male respondents believe that wife inheritance should be upheld while 33% of the female respondents indicated that wife inheritance should be upheld. Previous research carried out by Fleischman 2003, found out that the culture of wife inheritance increases vulnerability to HIV/AIDS.

## 5.2 Discussions

The discussions in this study were informed by the research objectives.

### 5.2.1 Discussions on gender poverty and vulnerability to HIV/AIDS

The indicators that were used to measure the relationship between gender poverty and vulnerability to HIV/AIDS were: income per day; meals per day; type of settlement; availability of work; and involvement in casual sex. Respondents were asked to indicate whether they earned less than KES 200 per day. The findings indicate that 75% of the male respondents earned less than KES 200 per day while 85% of the female respondents earned less than KES 200 per day. From documentary analysis, one earning less than KES 200 per day is below the poverty index and as such regarded poor (Gupta, 2000). Further, the study revealed that more female respondents lived in poverty in comparison to their male counterparts. The study findings indicate that 4% of the male respondents while 3% of the female respondents were not responsive to this particular item of the instrument.

Respondents were asked to indicate whether they had three meals per day. The findings indicate that 53% of the male respondents earned less than KES 200 per day while 73% of the female respondents had three meals per day. From documentary analysis, one having less than three meals per day lived below the poverty index and as such regarded poor (Gupta, 2000). Further, the study reveals that more female respondents lived in poverty in comparison to their male counterparts. 4% of the male

respondents while 3% of the female respondents were not responsive to this particular item of the instrument.

Respondents were asked to indicate whether they lived in informal settlements. The findings indicate that 80% of the male respondents lived in informal settlements while 86% of the female respondents lived in informal settlements. From documentary analysis, one living in informal settlements is below the poverty index and as such regarded poor (Dahlberg, etl, 2002). Further, the study revealed that more female respondents lived in poverty in comparison to their male counterparts. The study showed that 9% of the male respondents were not responsive to this particular item under study while 3% of the female respondents were also non responsive.

Respondents were asked to indicate whether they went to work every-day. The findings indicate that 76% of the male respondents went to work every-day while 86% of the female respondents went to work every-day. In as far as securing daily work is concerned, the study revealed that more female respondents lived in poverty in comparison to their male counterparts.

Respondents were asked to indicate whether they were compelled by poverty to engage in casual sex. The findings indicate that 22% of the male respondents were compelled by poverty to engage in casual sex 85% of the female respondents indicated that they were compelled by poverty to engage in casual sex. Intuitively, being compelled by poverty to engage in casual sex is a key indicator of one living in poverty; and as such, the study revealed that more female respondents lived in poverty in comparison to their male counterparts (Amaro, 2009).

### **5.2.2 Discussions on gender illiteracy and vulnerability to HIV/AIDS**

The indicators that were used to measure the relationship between gender illiteracy and vulnerability to HIV/AIDS were: completion of primary education; proximity to schools; post school technical skills; awareness of HIV/AIDS; and sensitization on HIV/AIDS. Respondents were asked to indicate whether they completed primary education. The findings indicate that 60% of the male respondents completed primary education while 33% of the female respondents completed primary education. From documentary analysis, there is a direct correlation between education and poverty. Majority of people with quality education have managed to cross the poverty line (Alvarez-Castillo, etl, 2009).

Respondents were asked to indicate whether there was a school in their village. The findings indicate that 74% of the male respondents had a school in their village while 75% of the female respondents indicated that they had a school in their village. Proximity to a school can influence acquisition of education which enhances literacy levels thus reducing vulnerability to HIV/AIDS ((NAS COP. 2009.

Respondents were asked to indicate whether they had acquired post school technical skills. The findings indicate that 58% of the male respondents had acquired post school technical skills while 41% of the female respondents had acquired post school technical skills. Literature indicates that when people are equipped with technical skills enhance their chances of both employment and entrepreneurial engagements which reduces vulnerability to HIV/AIDS.

Respondents were asked to indicate whether they had heard about HIV/AIDS. The findings indicate that 91% of the male respondents had heard about HIV/AIDS while 91% of the female respondents had heard about HIV/AIDS. Awareness to HIV/AIDS is the first step towards fighting the scourge (Gould. W. T. S. 2005) thus reducing the vulnerability to the HIV/AIDS menace. The study revealed that an equal percentage of male and female respondents were aware of HIV/AIDS. Respondents were asked to indicate whether they had undergone sensitization on HIV/AIDS. The findings indicate that 31% of the male respondents had undergone sensitization on HIV/AIDS while 28% of the female respondents had undergone sensitization on HIV/AIDS. From documentary analysis, sensitization on HIV/AIDS increases responsible sexual behavior thus reducing the vulnerability to HIV/AIDS.

### **5.2.3 Discussions on gender health and vulnerability to HIV/AIDS**

The indicators that were used to measure the relationship between gender health and vulnerability to HIV/AIDS were: voluntary counseling and testing; number of sexual partners; and use of condom. Respondents were asked to indicate whether they would go for voluntary counseling and testing. The findings indicate that 40% of the male respondents would go for voluntary counseling and testing 60% of the female respondents would go for voluntary counseling and testing. Going for voluntary counseling and testing helps one to understand her / his status which in turn helps inform one's conduct in responsible lifestyles which reduces vulnerability to HIV/AIDS (Gupta, R. 2000).

Respondents were asked to indicate whether they had more than one sexual partner over the last one year. The findings indicate that 67% of the male respondents had more than one sexual partner over the

last one year 55% of the female respondents had more than one sexual partner over the last one year. Having sexual relations with more than one partner increases vulnerability to HIV/AIDS (Gupta, R. 2000). Respondents were asked to indicate whether they use condom when having sex outside marriage. The findings indicate that 67% of the male respondents use condom when having sex outside marriage while 43% of the female respondents use condom when having sex outside marriage. Regular use of condom when having sex outside marriage reduces vulnerability to HIV/AIDS (Gupta, R. 2000).

#### **5.2.4 Discussions on gender culture and vulnerability to HIV/AIDS**

The indicators that were used to measure the relationship between gender culture and vulnerability to HIV/AIDS were: women as sex objects; polygamy; polygamy and sexual immorality; and wife inheritance. Respondents were asked to indicate whether they see women as sex objects. The findings indicate that 86% of the male respondents see women as sex objects 15% of the female respondents see women as sex objects. According to (Fleischman, J. 2003), one's perception of women as sex objects informs one's sexual behavior and is a key determinant to vulnerability to HIV/AIDS. Respondents were asked to indicate whether they are polygamous. The findings indicate that 73% of the male respondents are polygamous 43% of the female respondents are polygamous. Previous studies carried out indicate that people who are polygamous are more vulnerability to HIV/AIDS (IPAR. 2004).

Respondents were asked to indicate whether polygamy reduces sexual immorality. The findings indicate that 65% of the male respondents believe polygamy reduces sexual immorality while 50% of the female respondents indicated that polygamy reduces sexual immorality. Previous research carried out by Fleischman 2003, found out that believing that polygamy reduces sexual immorality increases one's vulnerability to HIV/AIDS. Respondents were asked to indicate whether wife inheritance should be upheld. The findings indicate that 57% of the male respondents believe that wife inheritance should be upheld while 33% of the female respondents indicated that wife inheritance should be upheld. Previous research carried out by Fleischman 2003, found out that the culture of wife inheritance increases vulnerability to HIV/AIDS.

#### **5.2.5 Discussions on improvement strategies**

Respondents were asked to indicate ways in which vulnerability to HIV/AIDS can be reduced. The responses were categorized, grouped and tabulated in Table 4.22. The study revealed that 22% of male respondents while 23% of female respondents indicated that sex education and increased awareness to



HIV/AIDS would reduce vulnerability to HIV/AIDS. The study revealed that 18% of male respondents and 18% of female respondents indicated that reduction to poverty is the key to reduction in vulnerability to HIV/AIDS. Further, the study revealed that 16% of male respondents while 18% of female respondents indicated that accessibility to health centers would reduce vulnerability to HIV/AIDS. In addition, the study revealed that 16% of male respondents while 15% of female respondents indicated that vulnerability to HIV/AIDS would be reduced by availability of condoms.

All other strategies combined that were proposed to reduce vulnerability to HIV/AIDS attributed to 27% for male respondents and 25% for female respondents. These other improvement strategies include: More VCT awareness centers; Abstinence; Discouraging wife inheritance within the society; Avoidance sexual exchange for monetary or material things; Constant use of condom when having sex outside marriage/relationship; People to go for voluntary counseling and testing to know their HIV status; Women empowerment; Faithfulness, sticking to one sexual partner; Government to intervene to prevent children from leaving school at an early age; Job creation by the government along the lake region; and Avoid stigmatization.

### **5.3 Conclusions**

The conclusions arrived in this study were informed by the research findings and guided by the objectives of the study. The study established that gender plays a vital role in vulnerability to HIV/AIDS; women are more vulnerable to HIV/AIDS in comparison to their male counterparts among communities living along the Lake region Homa Bay County. The study revealed that gender poverty influences vulnerability to HIV/AIDS; people living below the poverty index are more exposed to HIV/AIDS. Gender illiteracy influences vulnerability to HIV/AIDS; enhanced literacy levels helps in reducing vulnerability to HIV/AIDS. Gender health influences vulnerability to HIV/AIDS; awareness of one's health status increases responsible sexual behavior thus reducing vulnerability to HIV/AIDS. Gender culture influences vulnerability to HIV/AIDS; retrogressive cultural practices such as wife inheritance and polygamy increases vulnerability to HIV/AIDS.

### **5.4 Recommendations**

Based on the findings of the study, the following was recommended:

- i. Awareness of HIV/AIDS and sex education: It is recommended that the Government of Kenya and its partners in the fight against HIV/ AIDS should carry out a comprehensive HIV/AIDS

awareness along the Lake Region. A comprehensive sexual education should be provided in schools to help decrease high risk behavior; a substantial minority of young people continues to engage in high-risk practices despite HIV/AIDS knowledge, underestimating their own risk of becoming infected with HIV. Sensitization programmes should also be targeted at communities around the lake region to facilitate their attitude change.

- ii. **Women empowerment:** Women are the more vulnerable in the community and unless they are educated on HIV/AIDS and empowered the fight is far from over. It is recommended that the Government and the local community engage in women empowerment programmes such as; income generating business that specifically target women and educating women on their rights to say no illicit sexual behaviors.
- iii. **Job creation:** It is recommended that the Government of Kenya should build a fish processing factory; this will create job opportunities especially for the youth so that people living around the Lake Victoria region should not use poverty as an excuse to engage in unhealthy sexual behavior that exposes them to HIV/AIDS.
- iv. **The water hyacinth:** The Government of Kenya and concerned bodies should look into ways of eradicating the water hyacinth. The water hyacinth has increased poverty levels along the lake regions; it has covered half the lake making it impossible for boats and fishermen to go into the lake.
- v. **Plight of HIV/AIDS patients:** It is recommended that people should focus on prevention rather than cure for HIV/AIDS; and avoid stigmatization of HIV/AIDS victims. It is also recommended that Government should take into account the plight of HIV/AIDS patients around the lake and give them the necessary support.
- vi. **Education:** It is recommended that the local community in conjunction with the Non Governmental organizations operating around the Lake region should emphasis on the importance of education and its benefits to prevent children from dropping out school from an early age.

- vii. **Supply of condoms:** It is recommended that there should be free and continuous supply of condoms especially around the Lake to encourage healthy sexual behavior. It also recommended that female condoms should be introduced.

### **5.5 Suggestions for further research**

On the basis of the research findings, the following areas were identified for further research:

- i. The influence of gender violence on vulnerability to HIV/AIDS among communities living along the Lake region.
- ii. The relationship between male circumcision and vulnerability to HIV/AIDS among communities living along the Lake region.
- iii. The effects of Government policies on vulnerability to HIV/AIDS among communities living along the Lake region.

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## APPENDICES

### APPENDIX I: AUTHORIZATION LETTER

**Brenda Achieng Okello,  
P.O Box 51456-00200,  
Nairobi.**

**University of Nairobi  
Department of Extra Mural Studies,  
P. O. Box 30197-00100,  
Nairobi.**

Dear Sir / Madam,

**RE: TO WHOM IT MAY CONCERN**

This is to certify that the bearer of this letter Brenda A. Okello REG.NO L50/64246 is a student of University of Nairobi pursuing her Master in Arts project Planning and Management degree. As part of her completion requirements, she is conducting a research on gender influence on vulnerability to HIV/AIDS among workers around Lake Victoria with specific reference to Homa Bay County.

The purpose of this letter is to introduce her and request you to grant her the necessary authority and approval to carry on her research in your institution.

I am pleased to thank you for your assistance.

University of Nairobi.



Brenda Achieng Okello.

## APPENDIX 11: QUESTIONNAIRE

### Introduction

My name is Brenda Achieng, a student of University of Nairobi pursuing a Master of Arts degree in Project Planning and Management. I am conducting an academic research in Homa Bay County on influence of gender on vulnerability to HIV/AIDS among workers around Lake Victoria Homa Bay County. You have been randomly selected as one of the respondents to be interviewed. I would like to assure you that all information you give will be confidential. Some of the questions in this questionnaire are personal and intimate due to the nature of the study and I ask for your kind understanding. I hope that you agree to answer all questions as openly and honestly as possible.

### General Information

1. Your name (optional)

\_\_\_\_\_

2. Beach Name

\_\_\_\_\_

3. Your Gender (Please tick one)

Male     Female

4. Occupation

Fisherman     Fish Vender     Shop owner

Other (Please specify) \_\_\_\_\_

5. How long have you lived in this community?

Less than 1 year

1-5 years

6-10 years

More than 10 years

### Specific Information

6. On a Scale of 1-5 where 1- Strongly Agree; 2 - Agree; 3 - Not Sure; 4 - Disagree and 5 - Strongly Disagree; please rate the following statements/factors.

<b>Factors/Statements</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
i. I earn less than Kshs. 200 per day					
ii. I have three meals per day					
iii. I live in an informal settlement					
iv. I go to work everyday					
v. Poverty compels me to casual sex					
vi. I did not complete primary education					
vii. There is a school in my village					
viii. I have acquired post-school technical skills					
ix. I have heard about HIV/AIDS					
x. I can identify people living with HIV/AIDS					
xi. I have undergone sensitization on HIV/AIDS					
xii. I would go for voluntary counseling and testing					
xiii. I am currently sexually active					
xiv. I have had more than one sexual partner over the last one year					
xv. I use a condom when having sex outside marriage					
xvi. I see women as sex objects					
xvii. Women should submit to men's sexual demands					
xviii. I am polygamous					
xix. Polygamy reduces sexual immorality					
xx. Wife inheritance should be upheld					

7. Suggest three ways which can reduce vulnerability to HIV/AIDS around Lake Victoria

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8. Any other comment

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**THANK YOU**



### **APPENDIX III: INTERVIEW GUIDE**

This will be conducted professionally. Regardless of acquaintances with those involved, the researcher will set up appointments and conduct it professionally.

The interviews will have four main topics based on the research objectives, outlined below. For each topic, the researcher has formulated a suggested opening question.

1. Gender poverty influence on vulnerability to HIV/AIDS among small scale traders around Lake Victoria South
2. Gender illiteracy influence on vulnerability to HIV/AIDS among small scale traders around Lake Victoria South
3. Gender health influence on vulnerability to HIV/AIDS among small scale traders around Lake Victoria South
4. Gender culture influence on vulnerability to HIV/AIDS among small scale traders around Lake Victoria South

#### **INTERVIEW GUIDE**

Date: \_\_\_\_\_ Venue of Interview: \_\_\_\_\_

Number of participants: \_\_\_\_\_

1. What is the average earning per day for people living in this community?
2. What are the main sources of income among people living in this community?
3. Does poverty compel people living around the lake to engage in casual sex in exchange for favours?
4. Are there enough schools in this community?
5. Are the people living in this community aware of HIV/AIDS? How do they get that information?
6. Is it easy to identify people living with HIV/AIDS around here?
7. Have these people undergone any sensitization on HIV/AIDS?
8. What are the chances of people in this community going for voluntary counseling and testing?

9. What is the average condom use in the community?
10. What is the sexual behavior of people living in this community?
11. What is the place for women in this community?
12. Are women still viewed as sex objects in this community
13. What is the general feeling about polygamy in this community?
14. Is wife inheritance still practiced in this community? To what extend?
15. What recommendations would you give that can reduce vulnerability to HIV/AIDS around  
Lake Victoria
16. Any other comment?