PSYCHOLOGICAL AND SOCIO-ECONOMIC IMPACT OF HIV/AIDS ON PEOPLE LIVING WITH AIDS: A CASE OF MUKURWE-INI DIVISION, NYERI DISTRICT, KENYA

BY

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DECLARATION

This research project report is my original work and has not been submitted for the award of a diploma or degree in any other university.

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RECOMMENDATION

This research project report has been submitted for examination with my approval as University supervisor.

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Dr. B.E.E. Omulema

COPY RIGHT

DEDICATION

To my family members whose love, care and understanding have been my source of inspiration.

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ABSTRACT

The HIV/AIDS pandemic has devastating social, economic and psychological impact on people infected and affected. In order to minimize the effects of the disease in the society, people infected and living with HIV/AIDS are encouraged to accept their status and live positively by seeking counselling services. This help in minimizing and even overcoming psychological and socio-economic impact associated with the disease. The purpose of this study was to find the psychological and socio–economic impact of HIV/ AIDS on people living with AIDS in Mukurwe-ini division of Nyeri district, Kenya. This study adopted an *ex post facto* research design. The target population included 600 people identified and living positively with HIV/AIDS in six administrative locations, and affiliated to Community Based Organizations in the division. A proportional sample size of 158 respondents was selected from the six administrative locations. A structured questionnaire was used to collect data from the selected respondents. The collected data was then processed and analysed using descriptive and inferential statistics using Statistical Package for Social Science (SPSS) version 11.5 for windows. The study findings indicated that more than a half of the people living with HIV/AIDS suffered low level of psychological impact of the disease. Majority of the people living with HIV/AIDS suffered high level of socio-economic impact of the disease. There was no significant gender difference in the psychological impact of HIV/AIDS between female and male people living with HIV/AIDS. There was no significant gender difference in the socio-economic impact of HIV/AIDS between female and male people living with HIV/AIDS. The study recommends that there is need for all people living with HIV/AIDS to have access to counselling services so as to be able to develop positive behaviour change and reduce the impact of HIV/AIDS. There is need for the society to change its attitudes toward HIV/AIDS and demystify the social stigma associated with the disease and instead take care and assist people living with HIV/AIDS. There is need for increased level of sensitization and awareness campaigns to assist in reducing stigmatization and the negative attitudes and perceptions about people living with HIV/AIDS

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	- Acquired Immune Deficiency Syndrome
ARVs	- Antiretroviral Drugs
CACC	- Constituency Aids Control Council
CBO	- Community Based Organizations
CSW	- Commercial Sex Workers.
FAO	- Food and Agriculture Organization.
G.O.K	- Government of Kenya
HIV	- Human Immuno Deficiency Virus
KIE	- Kenya Institute of Education
N.C.C.K	- National Council Churches of Kenya.
NACC	- National Aids Control Council
NASCOP	- National AIDS Control Programme
P.C.E.A	- Presbyterian Church of East Africa
PLHA	- People Living with AIDS
STD's	- Sexually Transmitted Diseases
UNAIDS	- United Nations Programme on HIV/AIDS.
UNHCR	- United Nation High Commission of Refugees.
UNICEF	- United Nation Children Education Fund.
USA	- United States of America.

CHAPTER ONE: INTRODUCTION

1.1 Background Information

AIDS is the most recent threat to the world health that has emerged in this century. There has been no breakthrough in developing of treatment or vaccines (Adler, 2001). According to Hubley (1990) in 1981, doctors were baffled by a strange disease where healthy young men and women were developing pneumonia caused by micro-organisms *pneumocystis carinii* which does not cause the disease in a normal healthy person. They were also suffering from other "opportunistic infections", which healthy persons could resist. These young people were found to be homosexuals, and were injecting themselves with drugs such as heroin. The first case of the acquired immune deficiency syndrome (AIDS) occurred in summer 1981in United States of America (USA) according to Adler (2001). It was reported in California in San Francisco among a person without immunity who were homosexuals and drug abusers. Later heterosexual and bi-sexual (those who are homosexual and hetero sexual at the same time) were also infected. In 1982 the word AIDS was coined and its causes and modes of transmission were not immediately known. In 1983 in Central Africa and Haiti the first HIV/AIDS cases were reported. The same year the virus known to cause AIDS was given various names. The internationally accepted term is Human immunodeficiency virus (HIV), hence the discovery of two types of: HIV - 1 and HIV-2. HIV 1 is dominant in Kenya and HIV 2 is in West Africa (United Nations programme on HIV/AIDS - UNAIDS, 2002).

In Africa, transmission has mainly been through heterosexual sex, mother to child transmission and through blood transfusion. Heterosexual accounts for 90 percent of HIV/AIDS infection cases, while mother to child transmission and blood transfusion contribute 10 percent. The main focus of infection was East and Central Africa, where, in some large urban centres, between a quarter and one third of adults aged 15–49 years were estimated to be infected. The early spread of the epidemic followed closely the highways with truck drivers and roadside night stops playing a significant role in transmission (Hubley, 1990). Figures published by the joint UNAIDS (2007), show that

AIDS has been diagnosed in every continent on the globe, yet its distribution is far from even. Table 1 data illustrates the scenario.[2]

Table 1

Global Distribution of HIV/AIDS Infection

Countries	People infected with HIV/AIDS
North America, Western And Central Europe	2.8 million
Latin America	1.6 Million
Caribbean	230,000
North Africa & Middle East	380,000
Sub-Saharan Africa	22.5 Million
Eastern Europe and central Asia.	1.6 million
Oceania	750,000

Source: Joint UNAIDS programme on HIV/AIDS (UNAIDS) and World Health Organization, 2007.

In 1984, the first HIV/AIDS case was reported in Kenya in Mombasa. It was a mysterious disease, which was called "slim" due to loss of weight and one becoming skinny before death. According to National AIDS Control Council (NACC, 2005), AIDS is a number one cause of death in sub-Saharan Africa. In Kenya it is estimated that there are about 115,000 people who are infected annually and about 315 are dying every day. Kenya life expectancy is 46 years and without AIDS it would be 65 years. About 10percent of adults (ages 15-49) of Kenyans are infected with AIDS virus. All those infected will die. Death due to AIDS is prolonged and painful both for individual and his/her family. People in the age of 15-49 years often support children and elderly parents and the death of such an adult from AIDS can cast a family into poverty situation resulting in children being forced to leave school in order to help support their family or run the household (NACC, 2006). Nyeri district has the prevalence rate of 5.6percent according to NACC (2005), hence contributing a portion in National HIV status. With coffee, tea and milk being major economic earners, people who are economically able have engaged in risk behaviours that put them at risk of acquiring HIV status. Sexual transmission accounts for 90percent of the HIV infections. Youth and young adults form 80percent of people who are sexually active outside marriage according to Presbyterian Church of East Africa - P.C.E.A (2000). In Mukurwe-ini, AIDS threatens personal and well being of PLHA by

negatively affecting their health, lifespan and productive capacity of the individual and critically constraining the accumulation of human capital and it is transfer between generations.

According to Food and Organizational Report (FAO, 1995), migration is a factor which may often be associated with spread of HIV. Although Mukurwe-ini division is a rural area, a lot of migration and movement takes place. People looking for work such as coffee harvesters are recruited seasonally from other parts of Nyeri district and many trucks and *Matatu* drivers pass through Mukurwe-ini daily on their way along the major communication routes. Long separation and frequent breakdown in family patterns contributed to arise in prostitution and high incidence of sexually transmitted diseases (STD's) long before HIV appeared. This created a conducive ground for HIV infection. Migrants who contracted HIV infected their spouses when they returned home. The orphans, PLHA, widows and widowers were increasing everyday. Despite campaigns on creating awareness to the public in this division through Constituency Aids Control Council (CACC), the problems created by HIV/AIDS is still ravaging families and residents of this division (G.o.K., 2006).

1.2 Statement of the Problem

HIV/AIDS continues to pose the greatest health challenges to many developing countries. The disease has caused a lot of social, economic and psychological impacts among the infected and affected persons in the community. The high level of prevalence rate of the disease has been associated with and complicated by the increasing levels of poverty. However, people living with HIV/AIDS disproportionately shoulder the burdens of the social, economic and psychological impacts associated with the disease. This in turn increases their level of vulnerability to the disease. In developing countries like Kenya, little documented information exists on the extent of these impacts on people living with HIV/AIDS. Therefore a study to investigate the psychological and socio-economic impact of HIV/AIDS on people living with HIV/AIDS was vital.

1.3 Purpose of the Study

The purpose of this study was to find the psychological and socio–economic impact of HIV/AIDS on people living with AIDS in Mukurwe-ini division of Nyeri district.

1.4 Objectives of the Study

The objectives of this study were: -

i) To determine the psychological impact of HIV/AIDS on people living with HIV/AIDS.

ii) To establish the socio-economic impact of HIV/AIDS on people living with HIV/AIDS.

iii) To examine whether there is any gender difference in psychological impact of HIV/AIDS on people living with HIV/AIDS.

iv) To examine whether there is any gender difference in socio-economic impact of HIV/AIDS on people living with HIV/AIDS.

1.5 Research Questions

The research questions for this study were:

(i) What is the psychological impact of HIV/AIDS on people living with HIV/AIDS?

(ii) What is the socio-economic impact of HIV/AIDS on people living with HIV/AIDS?

(iii) Is there any gender difference in psychological impact of HIV/AIDS on people living with HIV/AIDS?

(iv) Is there any gender difference in socio-economic impact of HIV/AIDS on people living with HIV/AIDS?

1.6 Significance of the Study

In order to adequately address the effects of HIV/AIDS in the society, there was need for detailed and empirical studies highlighting the socio-economic and psychological impact of HIV on people living with HIV/AIDS. This was more so given the social isolation,

stigmatization, discrimination and attitudes toward people infected and affected by the disease. This was important in determining the extent to which people living with HIV/AIDS had been affected by the socio-economic and psychological factors as a result of their illness. Such a study would help in providing information that could be useful in developing strategies that cater for people infected by HIV/AIDS. It would encourage them to live positively and avoid risky sexual behaviours that might aggravate their conditions or lead to more infection and transmission. The society could utilize the findings of the study in changing its attitudes toward people living with the disease and thus reduce stigmatization. The output of this study also help in providing input into projects and programmes that seek to address HIV/AIDS and assist people living with the disease in the country. The study is in line with NACC objectives of trying to enhance interaction and acceptance of PLHA. Policy makers in the Ministry of Health benefit from the findings in improving of the social conditions of PLHA and demystifying HIV/AIDS among the people of Kenya.

1.7 Scope and Limitations of the Study

The study was conducted in six locations of Mukurwe-ini division. The population of the study was 600 PLHA who had declared their viral status and are under ARV's programme. The study was limited by the sensitivity of PLHA viral status which the respondents could have feared that a stranger may use against them. The parents and relatives of the PLHA were required to give consent for them to take part in the research. However, the researcher assured them of confidentiality of the information given. Most of the PLHA were above 18 years and did not seek family approval but informed consent was obtained from them. The illiteracy level was high in Mukurwe-ini division hence in collecting the data the researcher took a lot of time in interpreting the questionnaire to the language the respondents could understand. The researcher personally administered the questionnaires so as to help illiterate respondents to correctly understand and respond to the questions, while literate respondents completed the questionnaire individually.

1.8 Assumptions of the Study

The study was based on the following assumptions:

i) The respondents were honest in answering the questionnaire.

ii) The infected and vulnerable groups are aware of HIV/AIDS community-based organizations.

1.9 Definition of Terms

In this section, operational definitions are presented as used within the context of the study.

Aids – Acquired Immuno-Deficiency Syndrome. It is a disabling and fatal disease caused by human immunodeficiency virus (HIV). It is accepted that every one infected with HIV will eventually develop AIDS since the body immunity is weakened by HIV.

Counseling – The process by which one individual, the counselor assists another individual, the client, to face, understand and accept information about himself and his interaction with others so that he can make effective decisions about various life choices.

Economic Factors: These refer to economic attributes and conditions that characterize people living with HIV/AIDS. For example, poverty, and increased medical expenses, etc.

Economic Impact: This refers to economic consequences that people living with HIV/AIDS go through as a result of their health status. They include loss of employment, reduction in income, strain in economic budget, etc

HIV- It is a virus that causes AIDS, it is of two types known as HIV-1 and HIV –2. HIV – 1 is predominant. Both types of virus are transmitted by sexual contact, through blood, from mother to child and appears to cause clinically indistinguishable Aids.

Immuno – deficiency – It is the inability of the immune system to satisfactory protect the body, which results in an increased susceptibility to various cancers and opportunistic infections.

Prevalence rate – Proportion of a defined population with infection, disease or health related event of an interest at a given point of period in time. It is proportion of population with a disease at a specified point in time.

Psychological impacts: This refers to emotional consequences that people living with HIV/AIDS go through as a result of their health status. They include experiences of fear, worry, feeling of helplessness, anxiety, confusion and even depression.

Risk behaviours – Conditions or behaviour which makes it more likely that a person will become infected with HIV. These are termed as thoughts and actions that put life of a person in danger.

Social Factors: These refer to factors that characterize the society, its behaviour and perception about people living with HIV/AIDS. The society tends to discriminate against people living with HIV/AIDS and even isolate them. This lowers their self esteem, self-respect and leads to loneliness

Socio-economic impact – It is combined effects of social and economic conditions facing people living with HIV/AIDS as a result of their health status. For example, the direct cost and social problems associated with caring for increasing number of orphans coupled with existing high poverty levels place severe burdens on family and societal structures.

Stress – Is an emotional condition experienced or felt when an individual has to cope with unsettling frustration or a harmful situation. It is a disturbing sense of helplessness, which is uncomfortable and creates uncertainty and self-doubt.

Sub-Saharan Africa - These are countries that are found on the southern part of the Saharan desert.

Trauma- It is an emotional shock producing along lasting harmful effects on the individual.

Viral load- It measures the amount of virus in the blood. It is used for diagnosis of acute HIV infection for predicting probability of transmission, predicting rate of progression in chronically infected patients and for therapeutic monitoring.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the literature on impact of HIV/AIDS. The chapter discusses the general overview of HIV/AIDS historical background. It covers the HIV/AIDS impact on socio-economic development, HIV/AIDS impact on health care, HIV/AIDS impact on the families, HIV transmission, people at risks of HIV infection and HIV/AIDS prevention. The chapter concludes by explaining the theoretical and conceptual framework adopted for the study.

2.2. Historical Background of HIV/AIDS

According to Elison, Parker and Campbell (2003), the historical background of HIV/AIDS can be traced to 1980 and can be seen as the era of AIDS as the gay disease. By May 1985, in USA, 10,000 cases of AIDS had been reported and most of them died within two years after the diagnosis being made (Schoub, 1995). These cases were mostly found among homosexual men and people injecting themselves with illicit drugs. In Africa it was different as the disease appeared to be spread mainly by heterosexual contact and was particularly common among female prostitutes. The 1990's saw the developing countries taking the central stage particularly Africa. Africa suffered a double stigma of being held responsible for the origin of disease and being identified as having high incidence of HIV. In mid 1980's media reports were horrifying where statistics reflecting prevalence in Africa were exaggerated, for example, in Kenya a report indicated that 90percent of Turkana were sero- positive (Elison *et al*, 2003).

Adler (2001) postulated that the first recognised case of AIDS occurred in 1981 in USA. It was among the homosexual, even though the condition became known early as AIDS, the causes and mode of transmission were not immediately obvious. The virus known to cause AIDS in a proportion of those infected was discovered in 1983 and given various names. The definition has changed over the years as a result of an increased appreciation of the wide spectrum of clinical manifestation of those infected with HIV. Immune deficiency is characterised by diseases which make AIDS to be a clinical diagnosis

defined by one or more of indicator diseases like skin rashes, herpes zoster, pubic boils, blood coughing, loss of weight etc. According to Mutie and Ndambuki, (1999), it is a viral infection that severely damage immune system allowing other diseases such as pneumonia to attack the body. This weakens the individual and leads to death. AIDS is a syndrome of various symptoms and clinical pictures caused by the weakening of the immune system as a result of infection with HIV. It is the last stage of HIV disease and it is characterised by appearance of a multitude of opportunistic infections, resulting from the breakdown of immune system. The virus attack CD4 cells (helper cells) specifically and uses them for its own reproduction. CD4 are subgroup of white blood cells. In the process of virus reproduction and subsequent release the CD4 cells are destroyed. The cells decline steadily for 4 to 6 years after infection, until the complete collapse of immune system (Weinreich & Benn, 2004).

In Africa prevalence rate of HIV had rose form 2 million in 1988 to more than 6 million in 1992. This scenario worsened the epidemiological situation, which was confirmed by reports of significant increase in HIV infection rate in virtually all Africa countries and all socio-economic levels. It was reported to be a leading cause of death in adult males and second cause among women especially in cities in western Africa (Lamboray & Elmendorf, 1992). HIV/AIDS ranks among the top health problems in Africa urban populations and is exacerbating the risk of other endemic diseases such as tuberculosis. In Kenya, the first HIV/AIDS case was reported in 1984 among the commercial sex workers in Mombasa. It was declared a National disaster in 1999 by the former President Daniel arap Moi. HIV AIDS control programmes in Kenya are funded by donor aid and external loan. There's a lot of bureaucracy in enacting the programme to reach the infected and affected people (Ellison, *et al,* 2003). Currently the prevalence rate is 5.1 percent and it is high in urban areas where in every 8 adults one is infected compared to 13 in the rural areas. AIDS has left traces of anger, sadness, despair and loneliness (NACC, 2007). According to NACC 2006, the government has made access of ARV's treatment free of charge. Advocacy in the last year plan had seen condom distribution across the country surge to 120 million from 100 million when the programme began. High cost of female condom is a major drawback since they are not readily distributed to women while

government speedily provides free condoms to men. According to the National AIDS Control Program (NASCOP, 2005), the Ministry of Health and United Nations Population Fund (UNPF) are distributing female condoms freely although by January 2005 only over 600,000 female condoms had been distributed. Statistics indicates that only one female condom is available for very 100 women of reproductive age in Africa, Asia and Latin America. The device is not easily accessed and women do not know how to use it (Wafula, 2007). Integration of the Aids lesson in the curriculum is a clear message about the dangers of HIV/AIDS to students who are considered as a high-risk group (Agutu, 2005).

Voluntary test centres in the country had reported an increased number of people requesting to know their HIV/AIDS viral status. AIDS workers now want the government to include HIV testing kits as items in the national budget to cushion the country from the uncertainty of donor funds. Taxes and duties imposed on the kits should be scrapped as has been done for anti-retroviral drugs (Okwemba, 2005). AIDS present a serious threat to health and economic development in this country. Prevention will be reinforced by improved testing, counselling facilities and educating uninfected adolescents- a group particularly at risk. By 1990 Kenya was ranked as one of the countries with high STD prevalence rates which reflect the sexual behaviour patterns conducive to HIV transmission (NACC, 2005).

2.3 HIV/AIDS Impact on Socio–Economic Development

Today AIDS is a major development and health problem. The scourge has continued to have devastating effects on young members of population that are economically active. According to NACC (2005), it is estimated that 200,000 people died between 1984 and 1995. By the year 2000 it was estimated that 2 million people were infected with HIV viruses and death due to AIDS was three times the number of death of the other diseases combined. According to the NACC Report (2006), by the year 2005, 2½ million Kenyans had died while another 2½ million were infected. Table 2 shows the people living with AIDS by the year 2002.

Table 2

Estimates of People Living with AIDS 1999-2002

		People living with AIDS (in millions)				
		Total Adults & Children	Adults (15-49)	Women (15-49)	Men (15-49)	Children (0-14)
Global	1999	34.3	33.0	15.7	17.3	1.3
	2002	40.0	37.1	18.5	18.6	3.0
Sub-Saharan Africa	1999	24.4	23.4	12.0	11.4	1.0
	2002	28.5	25.9	15.0	10.9	2.6
Kenya	1999	2.1	2.0	1.1	0.9	0.078
	2002	2.5	2.3	1.4	0.9	0.22

Source: Reports of the global HIV/AIDS epidemic & UNAIDS assessment of epidemiological situation in Kenya 2002.

According to Kihiko (2000), the economic impact of Aids includes:

i) Economic effects of AIDS are felt by individuals' families then ripples outward to firms and businesses.

ii) When a family member becomes sick with AIDS, children may leave school to take care of the sick, family exhausts its savings to pay for drugs and funeral expenses. They may sell the land hence the family becomes poorer, children's education suffers and standard of living for entire family declines.

iii) In companies there is reduced labour force through AIDS related deaths, absenteeism and loss of skilled workforce. Increased expenditure on staff recruitment, training, funeral expenses, medical costs and increased employees benefits.

iv) Adverse HIV/AIDS effects on agriculture include loss of both skilled and unskilled labour supply, decline in labour productivity and loss of remittance of income due to AIDS related death. For example according to FAO (2001), 58percent of deaths in Kenya's agricultural Ministry are AIDS related. There is reduced household, community food security, decline in nutritional and health status of small scale farmers and their families (NACC, 2005/6 – 2009/10 Plan).

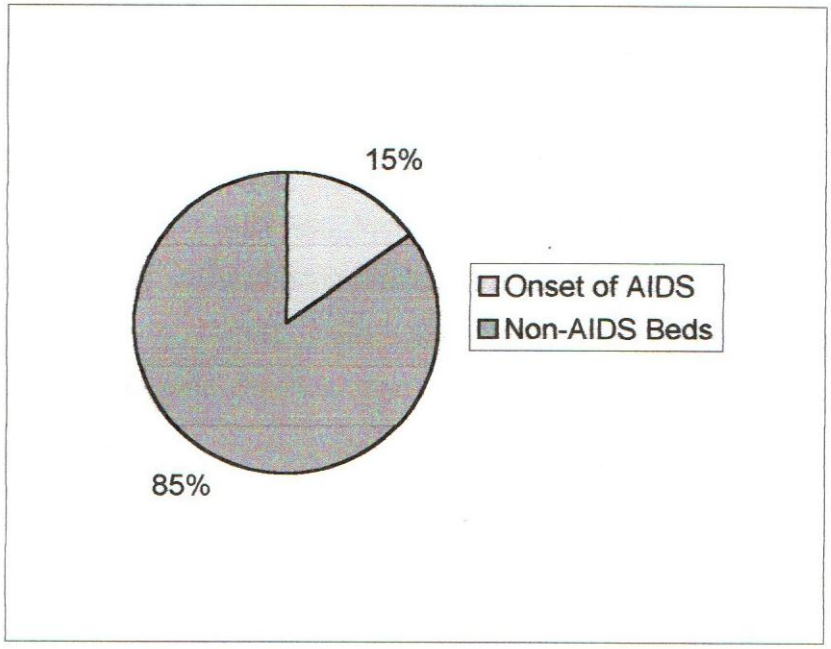
From the economic impact of HIV/AIDS a vicious circle develops, the poor have less access to treatment and care in the event of chronic sickness, they lose their already low

incomes and thus had even less access to resources. This increases the risk of HIV infection. Due to lack of education and subsequent lower social status, girls are more susceptible to commercial sex and other situation which increased their vulnerability to HIV. According to Weinrech and Benn (2004), the epidemic substantially slows economic growth, in the 1990's AIDS reduced per capital growth in Africa by 0.8percent. It is estimated that by the year 2020, in most heavily affected countries, growth will be 20-40percent lower than it will be without AIDS. A country entire economy may be affected by a reduction in tax revenues, lower profitability, productivity and a lower savings-income ratio. AIDS has an impact on educational system by reducing the numbers of the teachers and other active members of the system such as inspectors, administrative staff etc. With introduction of Free Primary Education in 2003, available evidence indicates that primary school classes typically have more orphans than teachers can cope with, hence compromising the quality of education. Gender disparity has emerged. Girl-child more than boys, are expected to stay at home to care for parents and other relatives dying from HIV/AIDS (NACC, 2005). Education gain in access, quality and quantity is seriously threatened by HIV epidemic and its impact on the demand for, and supply of education (Teachers Service Commission Policy, 2007). Mukurwe-ini division was not exception being an agricultural rural population area.

2.4 HIV/AIDS Impact on Health Care

Before the year 2000 the number of infected PLHA was low and hence bed utilization in the hospitals was 15percent, while after 2000 the bed utilization by AIDS patients is 60percent of referral hospitals (Siringi & Odhiambo, 2006). The Ministry of health has removed the cost of ARV's and majority of the PLHA can have free access to them. The direct cost on morbidity (illness) and mortality (death) is very high and stretches the survivors including individuals and communities beyond coping limits. The costs of laboratory tests and radiology are the overhead cost to be paid by PLHA. Figure 1 illustrates this scenario.

Before 2000



After 2000

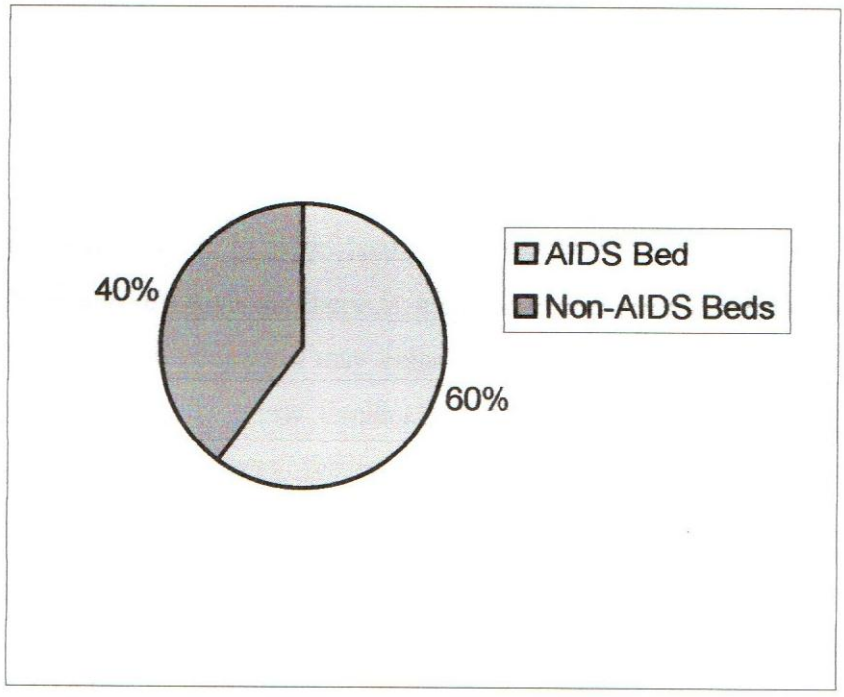


Figure 1: Hospital Bed Utilization

Source: Report of Global HIV AIDS Epidemics and UNAIDS Assessment of Epidemiology Situation in Kenya (2002).

2.5 HIV/AIDS Impact on the Families

Rao (2000) postulated that within the families, the common situation was that a man became infected by the commercial sex workers and then puts the wife at risk of infection, which created severe stress and tension. Women in African communities are expected to be submissive and hence when having conjugal sex they cannot insist on use of condom for safer sex. According to P.C.E.A. (2000), due to stigma attached to AIDS, some HIV infected individuals and their families have sought to conceal and/or deny their illness. Denial, guilt, shame, anger and blame are common responses of both individuals and families. This research will help in identifying such families and be counselled to facilitate positive living.

The extended families continue to struggle to take care of orphans as well as other family members. Difficulties in diagnosing HIV in children less than 18 months has been a challenge since diagnosis in this group requires use of DNA as they might have maternal antibodies which will result in false positive results if antibody tests are carried out. High cost of syrup and paediatric tablets has hampered putting up of more children under ARVs. Due to trauma associated with the infection, parents are unwilling to expose their infected children to health workers (Oywa, 2007) Children whose parents have died of AIDS lack the basic necessities for survival including food, shelter and clothing. Most do not have access to basic health care and may not complete their primary education. In Mukurwe-ini division there is a kit for orphans in constituency development fund and free primary education may enhance primary education for these orphans. According to P.C.E.A (2000), some families' households are being led by children as young as 10-12yrs old. In others, the entire structure has fallen leaving orphans homeless on the streets. This research will identify such cases and put forth recommendations for dealing with such cases.

2.6 HIV/AIDS Transmission

According to Weinrech and Benn (2004), risk of transmission of HIV by an infected partner through sexual intercourse for a one time sexual contact is substantially lower

than is widely assumed, at an average of 0.01 percent (Gray, Wawer, Brook *et al.*, 2001). The risk increases with high virus concentration in the blood. The risk of HIV infection is higher for girls, since their genital organs are not yet mature, and if sex takes place violently. In blood transfusion, infected blood has the highest transmission probability (more than 90 percent), since in this case large quantity of infected blood enter directly into the recipient's bloodstream. They further indicated that in Africa 87percent of Africa infections are through heterosexual intercourse, with lower proportions due to blood transfusion (2percent), intravenous drug use (1 percent) and mother to child (10percent). UNAIDS (2003), shows that since the appearance of the first HIV cases in 1981 more than 60 million people had been infected with the virus and around 20 million have died.

HIV/AIDS is high among the Commercial Sex Workers (CSW) who includes women who earn their livelihood by prostitution, women forced by poverty to exchange sex for money, or other favours (transactional sex), forced prostitution and slavery. In 2005, the International Labour Organization estimated that 1.4 million sex workers were on forced labour without access to ARVs treatment (Stablum, 2007). Moore and Rosenthal (1995), postulated that in 1991, in USA, 31 percent of reported HIV infection cases were within 13 to 29 age group. They reported that between 1980 and 1990's premarital sex was a common practice by the end of high school although there was a wide variation among young people in the age at which they began to be sexually active. There was wide spread sharing of multiple partners and hence increased infection of HIV/AIDS.

According to P.C.E.A (2000), sexual transmission accounts for over 90 percent of the HIV infections. Among the youth and young adults, 80 percent of them are sexually active outside marriage. The report stated that the youth that attended the church on regular bases, 50 percent were sexually active prior to marriage. The virus that causes AIDS passes from one person to another while having sexual intercourse.

In Mukurwe-ini, especially when coffee earnings have been received, CSW come in the area and hence there is an increase in prevalence rate. Babendrier (2003), states that the virus gets into the human body through, direct contact with infected fluids gives one HIV,

the infected body fluid most likely to give HIV/AIDS are blood and blood products, semen and vaginal mucus. Sharing of needles for injecting drugs by drug users enhances their infection chances; babies can get HIV from their mother's milk and prolonged kissing especially when intimate partners have wounds in their mouth. According to P.C.E.A (2000), the report indicated that HIV is not transmitted through, shaking hands and hugging, saliva – therefore not transmitted by kissing, (unless there is bleeding sores in the mouth), mosquito or other biting insects. This research demystified these ideologies among the residents of Mukurwe-ini Division.

2.7 Psychological Impact of HIV /AIDS

The fact that HIV /AIDS is having an enormous impact on the society is undisputed. Not only does it cause physical suffering and death, but it also causes a lot of psychological stress related to HIV/AIDS (Tarantole, 2000). According to UNAIDS (2000), once one is informed that he/she is HIV positive, there is no such a thing as being a symptomatic. One may not have physical symptoms, but his/her life is forever changed. Anger, fear, depression and denial are common initial reactions to an HIV positive result, leading to profound psychological distress. Then the feelings of helplessness, withdrawal and isolation, despair and loss of hope for the future, frustration and confusion are other psychological effects that set in (K.I.E, 1999).

According to studies done in India on the impact of HIV/AIDS, people living with HIV/AIDS are affected psychologically in discharging their household roles. In case the people living with HIV/AIDS have family responsibilities, their health situation compromises their ability to effectively discharge these responsibilities. For women, when family members fall ill, it is them who provide nursing care and in the case of illness of the breadwinners they usually take over as providers of basic needs for themselves and other family members. Such women face the fear of death of their spouses, fear of their own infection status, and feeling helpless and mental stress over the physical and psychological burden of care and sense of despondency and failure about the future (Berer, 1993). HIV/AIDS affects girls and young women in many subtle ways. Even if they are not infected, they are affected; when a father falls ill and his

responsibilities are taken up by the mother, the latter's responsibilities is borne by the younger family members. When a parent dies, the responsibilities increase. Apart from the normal chores, the psychological burden and stress often have serious negative effects on them (UNAIDS, 2006). Access and barriers to HIV/AIDS information and services for girls and young women in Kenya indicate that those who know that they have HIV or AIDS feel different emotions. Initially, they are shocked, angered and fear for their own future and that of their loved ones (Red Cross Society, 1998).

Most personal testimonies by women describe how much they are affected by learning that they have HIV /AIDS and the difficulties of coming to terms with this knowledge. They question their whole lives, they worry about the future and what will happen to them, their close relationships and families particularly that of their children (K.I.E 1999). Since women are particularly susceptible to stress and depression, the rejection and discrimination experienced by many living with HIV/AIDS can exacerbate these problems. Fear of rejection can be worse and often stops women from telling anyone or seeking help (Berer, 1993).

Research shows that adult and young men are less likely to care for their health in general and are reluctant to reveal their HIV status. This social isolation leads to stress and can directly impact the health of men (Global Aids Link, 2005). HIV and AIDS have raised a lot of fears and misconceptions. In turn, people who are HIV positive or related to someone who is HIV positive often experience a hostile reaction from relatives, co-workers and other (Ray, 2002). There is increasing difficulty in managing one job as health declines, increase absenteeism and non-reliability, and reduced productivity may cause resentment, suspicion, demotion or loss of job (Jackson, 2002).

2.8 People at Risk of HIV Infection

People at risk of HIV infection can be termed as people whose thoughts and actions expose them to HIV infection. A group at higher risk includes young men and women, armed forces, men away from home, sex workers, orphans and vulnerable children who may be raped. The concept of risk group has been expounded to risk behaviour, which

includes unprotected sexual intercourse. This was supposed to avoid limitation to certain group of persons and their stigmatisation. Migrants often change their sexual behaviour to a higher–risk one with several sexual partners and commercial sex. Truck drivers were the first to be affected by HIV and they are still vulnerable due to their mobility and long absence from their families (Weinrech & Benn, 2004). Crisis, wars and conflicts are characterized by collapse of traditional structures and worsening of medical care and nutrition. In war, rape is employed as "strategic" means, as has been the case in Democratic Republic of Congo and Rwanda, where 80percent of women raped during the genocide became HIV positive after testing (UNHCR, 2001). High refugee population in Africa, with destruction of traditional structures they do not have a secure income and hence refugees as displaced people run a risk of HIV infection. Prostitution with children is increasing throughout the world due to HIV infection and its widely assumed that children are "HIV free". Urban residents have a significantly higher risk of HIV infection (9.7 percent) than rural residents (5.2 percent) (NACC, 2005). Prevalence rate has been on increase especially among women who are at higher risk of being raped, forced to have sex by their husbands and separation with their husbands who are away from home as breadwinners. The prevalence rate among them has been changing overtime as NACC reports in 2000-2005 strategic plan shows. The scenario is the same in Mukurwe-ini Division.

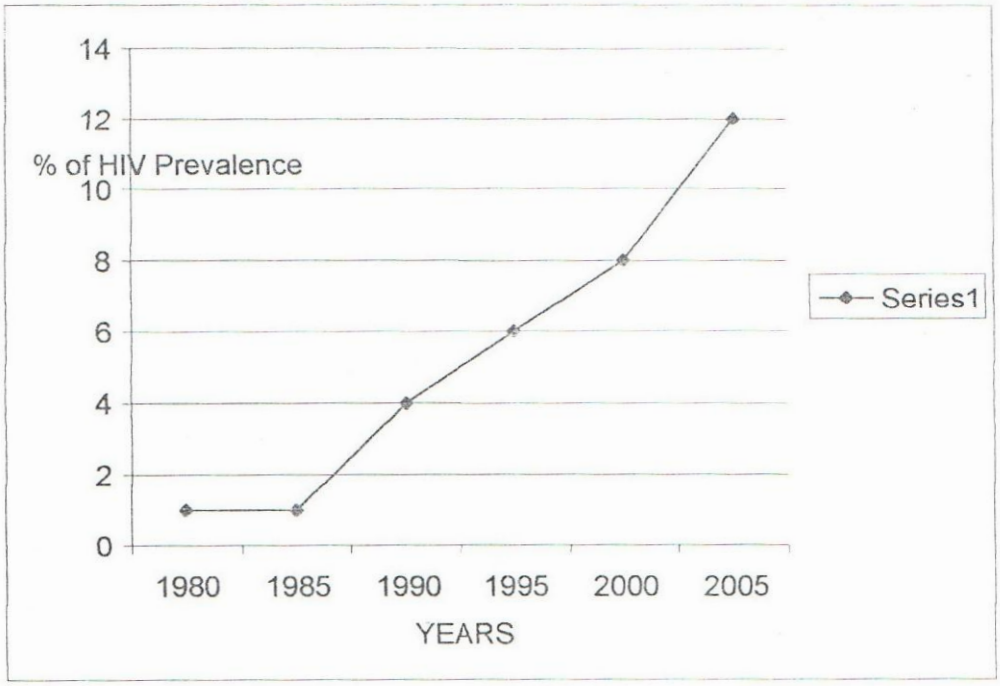


Figure 2: Adult HIV Prevalence

Source: NACC 2000-2005 – Strategic Plan

2.9 HIV/AIDS Prevention

Prevention can only be achieved through abstinence, being faithful to one uninfected partner and proper use of condoms.

A – Abstaining from sex. The church mostly backs it but even focussing on the church, 50percent of the youth who attends the church are sexually active before marriage (P.C.E.A, 2000).

B-Being faithful: - The church and the local communities tend to agree on the method. But with migration jobs that put one at higher risk like watchmen and nurses etc. This concept has not achieved a lot. According to Hirmer (2001), the church concurs with the government in use of the above two methods but opposes the use of condoms.

C- Condom – According to P.C.E.A (2000), proper knowledge on condom usage and controls of Sexually Transmitted Diseases (STD) will enhance about 99percent effectiveness of condom. The condom use should be correct and consistent (NACC, 2006). The most effective method among the three is combination of A+ B+ C as Figure 3 shows.

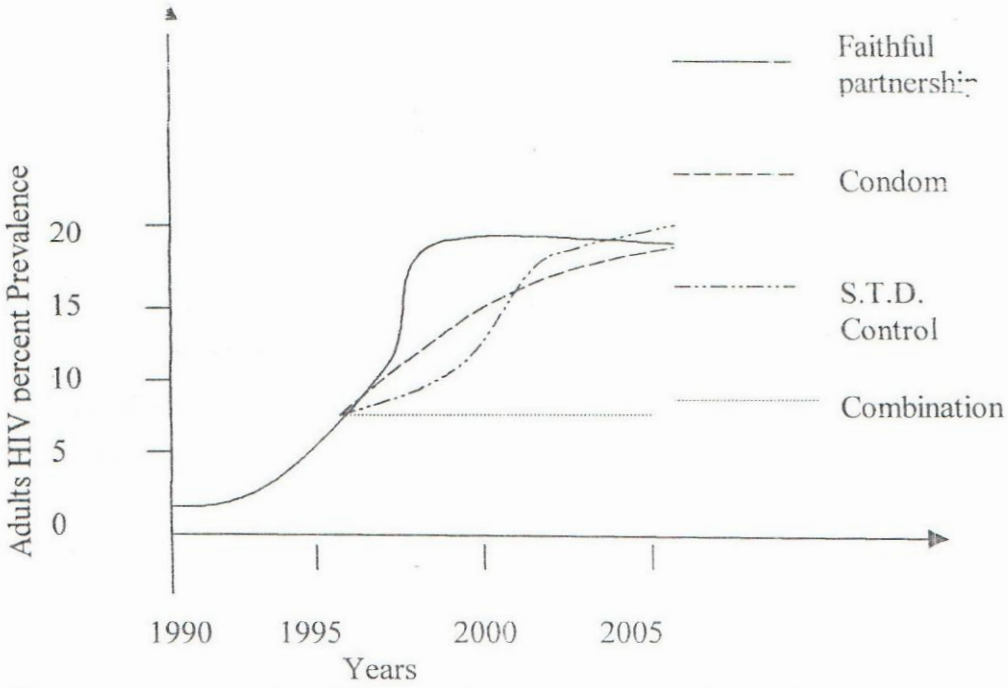


Figure 3: Effects of AIDS Interventions among Adult Population

Source: The Kenya National HIV/AIDS Strategic Plan 2000-2005

HIV health promotion that simply addresses a behaviour change, for example condom use, misses the point, because it fails to take into account of the varied social and cultural meanings of the practice. For example the practice of condom use in a brothel or a casual sexual encounter, although the behaviour is the same in all three contexts (NACC, 2006). HIV transmission risk and viral load, influence the actions of some people, but not others .A person with HIV may act differently from someone who is HIV negative and a person who is HIV positive, but with undetectable viral load, may act differently from someone with a high viral load. The research will check on the utilisation of the three methods in HIV prevention in Mukurwe-ini division.

2.10 Theoretical Framework

This study was guided by the following theories: behavioural theory and social learning theory.

2.10.1 Behavioural Theory

Skinner (1953), perceived people as reacting to an environment which controls them. In this view human beings are considered to have no control over their destiny, feelings, thoughts and actions are all but the result of surrounding forces. Man is viewed mainly to respond to environmental influences, which automatically shapes and control his behaviour. Promiscuity and high rate of HIV infection are high in low economic population as some people engage in this behaviour for financial gain and HIV infection is not perceived as a major problem. Infection rate and viral load is contained in high economic communities and hence low infection rate in developed countries. Standards of sexual behaviour vary widely. Looking across various cultures there is incredible attitude towards sexual behaviour. In some cases, sex is seen as pleasurable in others as innocuous and others potentially dangerous (Deaux, 1984). PLHA have anxiety disorders and hence rate themselves low in social set-up thus having a low self-esteem. Positive reinforcement for good behaviour and negative reinforcement for bad behaviour determines society attitude towards the PLHA.

According to Eysenck (1952), in Sdorow (1993), pioneer of the term behaviour therapy, the abnormal behaviour, like the normal behaviour is learned and therefore can be unlearned. Observational learning is clearly implicated in the development of a whole range of society behaviour, from fear of touching the PLHA, immoral behaviour associated with the infection and avoiding those infected (Malim & Palgrave, 1998). The society learns from what others have gone through or it is conditioned by prevailing circumstances. The integration of the community, the affected and those living with HIV/AIDS is paramount in behaviour change. Behaviour change has been slow due to negative attitude and mythology attached to sexual issues. The gender bias as men are

more open on sexual matters and their dominance is higher than that of female makes women to be at a higher risk of contracting HIV/AIDS.

2.10.2 Social Learning Theory

According to Bandura (1962), in Deaux (1984), argues that in social situations people often learn much more rapidly simply by observing the behaviour of others. Observation teaches the probable consequences of new behaviours. Socialization, then is a process that occurs over developmental history of the person and is accomplished by one or more of a set of mechanisms for transforming social influences into changed dispositions of the person (Seidenberg & Snadowsky 1976). According to Bandura (1971), people do not simply react to environmental events; they actively create their own environments and act to change them. Positive or negative feed back from behaviour in turn influences people's thinking (cognition) and the way they act to change the environment. According to Bandura (1986), in Ryckman (1993), the behaviour of a society is regulated by anticipated outcome. The anticipated ultimate death of PLHA makes them to be neglected and rejected by their significant others. Like Skinner, Bandura focuses on behaviour rather than on any internal motivating variables that might constitute individual behaviour. Punishment is the most common technique of control of behaviour in modern life. Religious control is exerted through penances, threats of excommunication and consignment to hell fire. Thoughts of punishment create discouragement and depression among PLHA especially when PLHA are perceived by the society to be promiscuous. Hence, society views PLHA as being punished because of their "sin". Religion is used as a moral justification for homophobic persecution of PLHA and AIDS epidemic has been held as expression of divine anger. There is conflict between religious teachings, values and measures used to control the epidemic. The controversies continue unabated, as religion plays a dominant role in the culture and regulation of society (Schoub, 1995).

Part of the universal content of socialization is that HIV/AIDS is spread through sexual intercourse hence people are socialized to stigmatise PLHA. Sexual taboo of AIDS infection makes the PLHA to be perceived as adulterous, prostitute, promiscuous and

people who have no control over their sexual appetite. The mechanisms of socialization results in a process by which the individual comes to incorporate in some unique way a set of evaluative possibilities which are displayed to him or taught to him by social host in which he develops. According to May (1953), postulated that there is a close association between emptiness and loneliness. When there is general upheaval and confusion about values in the society, people sense danger and turn to people around for answer and comfort. When people attempt to reach out to others to ease feelings of loneliness, the more lonely and desperate they become. The primary result of the confusion that comes from the disintegration of values is that PLHA feel "empty" inside and isolated by significant others. The feelings of emptiness come from feelings of powerlessness and the HIV infection seems beyond their control.

2.11 Conceptual Framework

The relevance of the theoretical framework to the study basically drew ideas from two psychological theories that attempt to study behaviour. This means that the psychological and socio-economic impact can be as a result of one or a combination of various factors related to the two previously mentioned psychological theories. The study looked at the issue from many different perspectives.

The behavioural theory explains that the environment shapes peoples behaviour. Economic status determines prevalence of HIV and community response when it's people are infected. This influences perception of the PLHA. Social learning theory determines the society attitudes to PLHA, because of their infection and relationship with them in socialization. The theoretical framework of this study was conceptualised in the model.

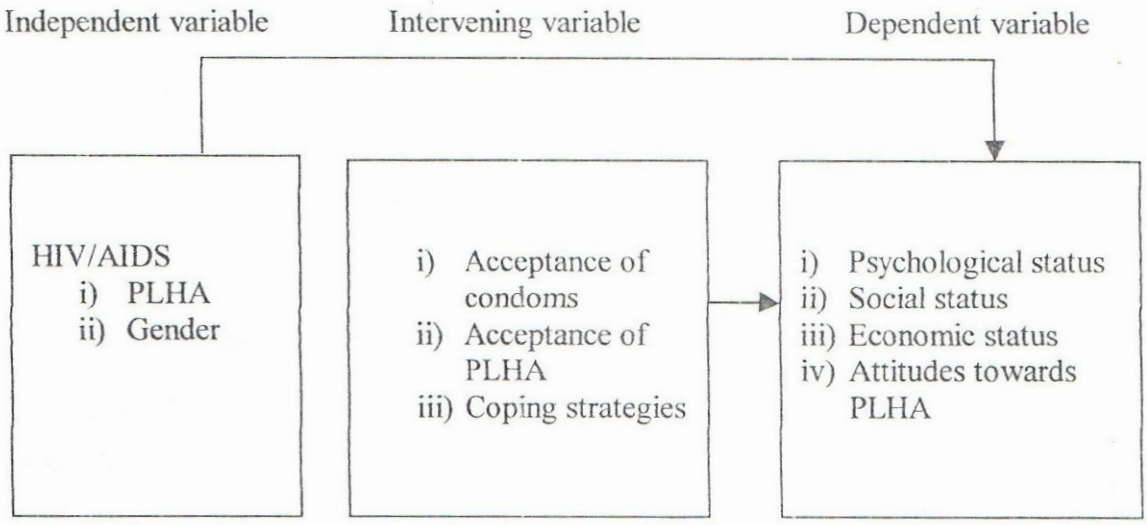


Figure 4: Relationship between HIV/AIDS and its Impact on PLHA.

The independent variable was HIV/AIDS which included PLHA and their gender. HIV/AIDS directly affects psychological, social, and economic status of PLHA, which are dependent variables. However, the actual impact of HIV/AIDS would depend on number of intervening variables such as coping strategies, acceptance of condoms and acceptance of PLHA. These intervening variables will determine the magnitude of the impact of HIV/AIDS on the person. For example, PLHA coping strategies depends on their economic status. The gender differences determine the acceptance of the condom which depends on the psychological status of the individual. HIV/AIDS status determines the acceptance of PLHA which depends on attitude of the others towards them. The intention of the study was to investigate whether there was a relationship between psychological and socio-economic impact of HIV/AIDS and PLHA.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology which includes the following; research design, location of the study, population of the study, sampling procedure and sample size, instrumentation, data collection procedures, and data analysis.

3.2 Research Design

The study utilized *ex-post-facto* research design. The term *ex post facto* is used to refer to an experiment in which the researcher rather than creating the treatment, examined the effects of a naturalistically occurring treatment after that treatment has occurred (Kathuri & Pals, 1993). The researcher attempted this after-the-fact treatment to an outcome or dependent measure. The treatment was included by selection rather than manipulation. For this reason it was not possible to assume a simple causative relation between independent and dependent variables. If the relation failed to be obtained, then it was likely that no causative relationship holds. But if the predicted relationship was obtained, this did not necessary mean that the variables studied were casually related. In the study people living with AIDS were in existence and so there was no manipulation of the variables. Therefore the research was based on what already existed and the cause and effect inferred from the outcome.

3.3 Location of the Study

The study was conducted in Mukurwe-ini division of Nyeri District in Central province of Kenya. Mukurwe-ini division was chosen as a research site due to the available evidence of high prevalence and infection rates of HIV/AIDS. Majority of the PLHA were also accessing counselling services through their allied community-based organizations. This had pointed out to evidence of challenges facing people living with HIV/AIDS and efforts to address these challenges.

3.4 Population of Study

The target population of this study comprised of 600 people living with HIV/AIDS and who were under ARVs in the year 2007 in Mukurwe-ini division. The division had six administrative locations. The 600 people living with HIV/AIDS in the division were stratified into the six locations. Table 1 summarizes the distribution of the 600 people living with HIV/AIDS in the six locations in Mukurwe-ini division.

Table 3

Population of the Study

Location	Population size
Muhito	100
Gakindu	80
Giathugu	100
Gikondi	120
Rutune	60
Githi	140
Total	600

Source: Ministry of Health (G.O.K) Mukurwe-ini Sub-District hospital report on population under anti retroviral drugs 2006.

3.5. Sampling Procedure and Sample Size

Proportional sampling procedure was used in selecting the required sample for this study. The population had been selected from PLHA who are affiliated to various AIDS CBOs. To maintain confidentiality the CBOs and PLHA names were not given. Table 3 indicates that the six locations had PLHA population of 600. In order to determine the sample size of the population, it was drawn from the 600 PLHA in the six administrative locations. The study adopted a formula by Kathuri and Pals (1993) for estimating a sample size, n, from a known population size N.

$$n = \frac{\chi^2 NP(1-p)}{d^2(N-1)+\chi^2 P(1-p)}$$

Where:

n = required sample size

N = the given population size, 600 in this case

P = Population proportion, assumed to be 0.50

d^2 = the degree of accuracy whose value is 0.05

χ^2 = Table value of chi-square for one degree of freedom, which is 3.841

Substituting these values in the equation, estimated sample size (n) was:

$$n = \frac{3.841 \times 600 \times 0.50\ (1 - 0.5)}{(0.05)^2\ (600 - 1) + 3.841 \times 0.5 \times (1 - 0.5)}$$

$$n = 157$$

Proportionate sampling was used in selecting the 157 PLHA from the six locations. This ensured that the sample was proportionately and adequately distributed among the six locations according to the population of each location as shown in Table 4.

Table 4

Distribution of the Sample Size

Locations	Sampled population size
Muhito	26
Gakindu	21
Giathugu	26
Gikondi	31
Rutune	16
Githi	37
Total	157

After determining the specific number of respondents to be selected from each CBO, a proportionate sample of male and female were selected. This ensured that the proportion allocated to each CBO was proportionately and adequately distribution between the gender of the respondents. Lastly, simple random sampling using random numbers table was used to select the specific number of respondents to be included in the proportion allocated to each selected CBO. The respondents corresponding to the number picked were included in the sample. However, in order to take care of attrition and possibility of

non-response cases, the study added one more respondent to the sample to give 158 respondents.

3.6 Instrumentation

The study used a questionnaire to obtain data from the respondents (PLHA). Questionnaire was designed to determine the psychological and socio-economic impact of HIV/AIDS on the people living with HIV/AIDS. The questionnaire used a five-point range Likert scale to assess psychological and socio-economic impact of HIV/AIDS on respondents.

The instrument was subjected to validation by using the researcher and research supervisor to review them. The researcher went through the instruments in relationship with the set-objectives to make sure that it contained all the necessary information. The researcher then consulted and sought opinions of the experts from the Department of Psychology and Education Foundations. In order to establish whether the questionnaire items were suitable for the study, a pilot study was done. Sixteen PLHA were selected from a CBO in Mukurwe-ini division which was 10 percent of the entire sample size. Such a pilot study using 10 percent of the population as recommended by Orodho (2004). The purpose of piloting was to allow for modification of various questions in order to rephrase, clarify and clear up any ambiguities in the questionnaire. Piloting also assisted in testing the reliability of the instrument. Cronbach reliability Coefficient Alpha of 0.7920 was obtained and assumed to reflect the internal reliability of the instruments as recommended by Mugenda and Mugenda (1999).

3.8 Data Collection Procedures

Legal permission was obtained from the Ministry of Health, Office of the President and from the University to carry out research in the Mukurwe-ini division. The researcher visited various CBOs to be acquainted with the target PLHA population. The exercise assisted the researcher in familiarising himself with the respondents, explain the importance of the study and booking appointments for data collection.

The researcher proceeded to collect data from the selected respondents after receiving permission from the Department of Psychology, Counselling and Educational Foundations of Egerton University, Ministry of Health and Office of the President. Permission was also sought from the management of the various selected community-based organizations (CBOs). The researcher visited the CBOs before hand for acquaintance with targeted respondents, especially the management. This exercise assisted the researcher in familiarizing himself with the respondents, explaining the essence of the study and booking appointments for the data collection. After familiarization, data was then collected from the respondents using the above mentioned questionnaire. For the illiterate respondents, the research personally administered the questionnaires. For literate respondents, the management was requested to assist in the distribution and collection of the questionnaires. The completed questionnaires were collected from the management within a period of one week.

3.9 Data Analysis

The data collected were processed and analyzed to facilitate answering the research questions. A computer-based programme - Statistical Package for Social Sciences (SPSS) version 11.5 for windows was used in descriptive and inferential statistics analysis. The descriptive statistics using frequencies, percentages and means which were presented in tables and cross-tabulations, were used to summarize and organize data and describe the characteristics of the sample population. Descriptive statistics were used in objectives one and two. Inferential statistics were used to make deductions and generalizations about the whole population using sample information. The inferential statistics used included chi square and t-test which were tested at $\alpha = 0.05$ significance level.

CHAPTER FOUR: RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the demographic characteristics of the respondents and a discussion of the research results. The discussion addresses the research objectives of the study which included:

(i) To determine the psychological impact of HIV/AIDS on people living with HIV/AIDS.

(ii) To establish socio-economic impact of HIV/AIDS on people living with HIV/AIDS.

(iii) To examine whether there is any gender difference in psychological impact of HIV/AIDS on people living with HIV/AIDS.

(iv) To examine whether there is any gender difference in socio-economic impact of HIV/AIDS on people living with HIV/AIDS.

The data collected were analyzed using descriptive and inferential statistics using Statistical Package for Social Sciences (SPSS) version 11.5 for windows.

4.2 Demographic Characteristics of the Respondents

This section focuses on the demographic characteristics of the sample people living with HIVAIDS in the study. The demographic characteristics covered in this section include: age, gender, marital status and number of children.

The 158 respondents were aged between 22 and 65 years with a mean age of 37.49 years. This shows that majority of the respondents were still relatively young, economically productive and in the child-bearing ages. This suggests that HIV/AIDS in the study area, targeted people who were still sexually active and economically productive. Such a group of people were likely to have young families and heavy family responsibilities and obligations to undertake. The effects of the HIV/AIDS were therefore felt by the

respondents and their families. The study involved both men and women living with HIV/AIDS as illustrated in Figure 5.

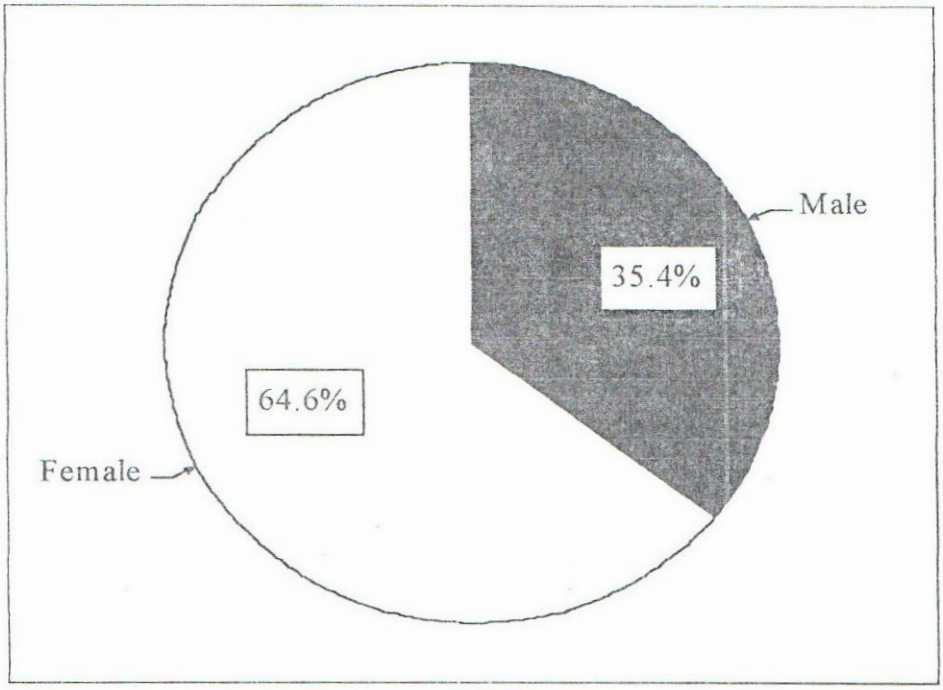


Figure 5: Gender of the People Living with HIV/AIDS

Figure 5 indicates that 64.6 percent (102) of the respondents were female, while 35.4 percent (56) were males. The observed gender imbalance was reported to be similar to the actual levels of HIV/AIDS prevalence between men and women in the study area and the country at large. Women were said to be more vulnerable to HIV/AIDS as a result of the gender stereotyping and roles that characterized the society and their biological make up. This support UNAIDS (2007) which observed that across the sub-Saharan region, women bear a disproportionate part of the HIV/AIDS burden. In this region, 57 per cent of adults with HIV/AIDS are women. Young women aged 15 to 24 years are more than three times likely to be infected with HIV/AIDS than young men. NACC (2006) states that in Kenya, females in the 15-29 years brackets and males in the 30-39 years are more vulnerable to HIV/AIDS infection with the prevalence rate among women being higher than that of men. The Kenya Demographic and Health Survey (KDHS) Report of 2003 found a prevalence rate of 9 percent in adult women and 5 percent in adult men. In

addition to age and gender of the respondents, the study established the marital status of the respondents as summarized in Figure 6.

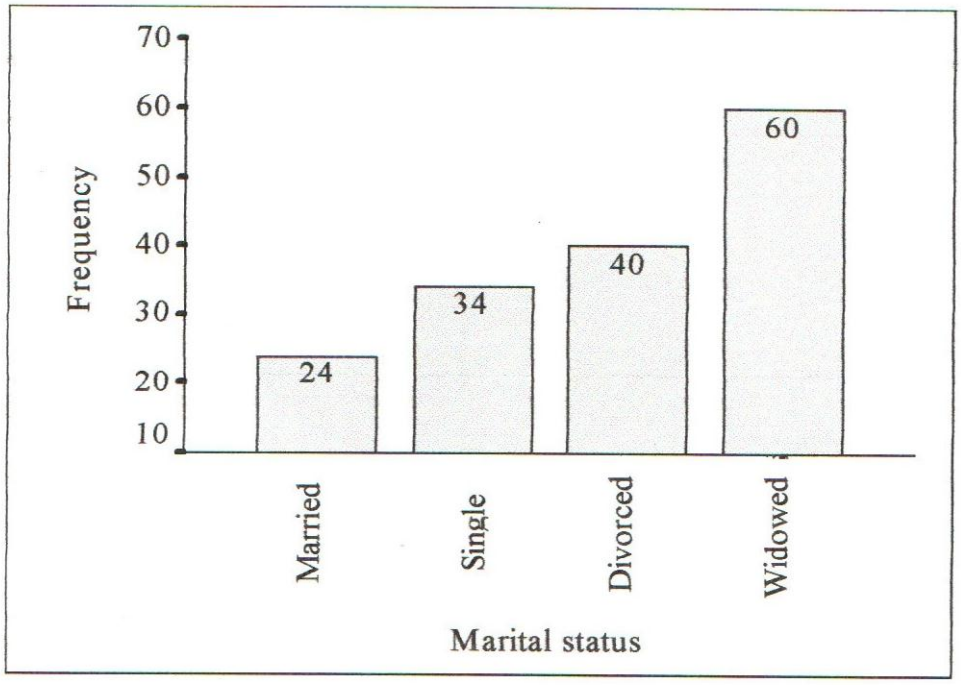


Figure 6: Marital Status of People Living with HIV/AIDS

Figure 6 indicates that respondents had different marital status including 60 (38.0 %) widowed, 40 (25.3 %) divorced, 34 (21.5 %), single and 24 (15.2 %) married. The marital status of an HIV/AIDS infected person influences the level of socio-economic and psychological impact on the individual. For example, widowed, divorced and single people living with HIV/AIDS were more likely to have more family responsibilities and obligations in addition to their HIV/AIDS economic burden compared to those who were married. Such people worry about their health conditions and the future of their children who were likely to be orphaned in case of their death However, the magnitude of the effects depend on the level of perceptions and attitudes of the society towards people with HIV/AIDS. The figure also shows that HIV/AIDS was prevalent in the society and all people were at risk regardless of their marital status. The study also sought to establish whether the respondents had children as highlighted in Figure 7.

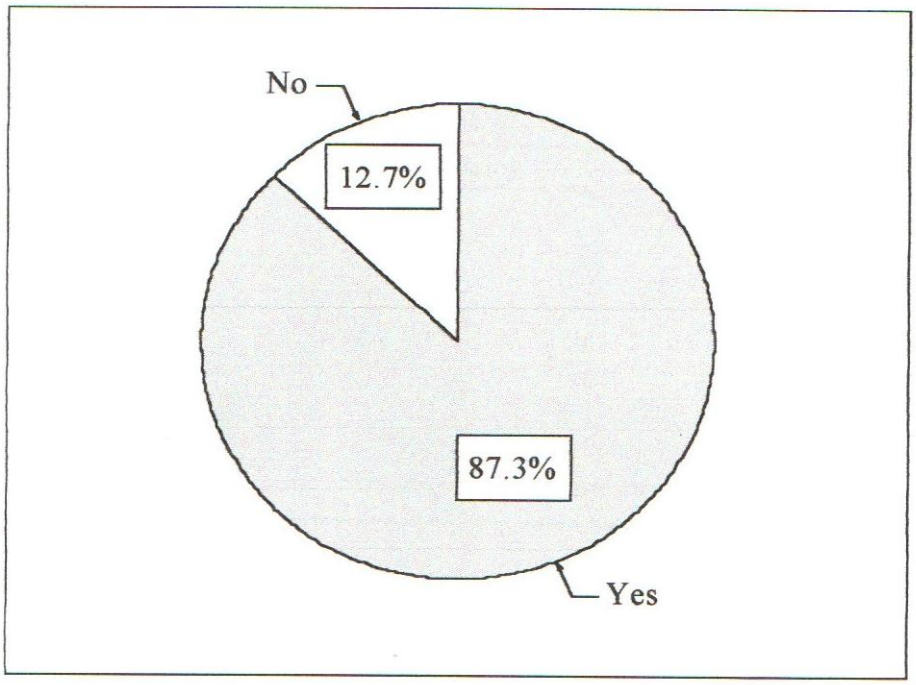


Figure 7: People Living with HIV/AIDS and had Children

Figure 7 indicates that 87.3 percent (138) of the 158 respondents had children, while only 12.7 percent (20) had none. This suggests that majority of the respondents were people with families and had family obligations and responsibilities to take care of in addition to their HIV/AIDS status. The 138 respondents varied in the number of children that they had as illustrated in Table 5.

Table 5

Number of Children of People Living with HIV/AIDS

Number of children	Frequency	Percent
1	9	6.5
2	26	18.8
3	36	26.1
4	30	21.7
5	15	10.9
6	15	10.9
7	5	3.6
8	2	1.4
Total	138	100.0

Table 5 indicates that 88.5 percent (122) of the respondents had between two and six children. The number of children that a person living with HIV/AIDS had was likely to affect his/her family obligations and responsibilities in terms of dividing the resource between HIV/AIDS medication and taking care of the children. This would in turn depend on the amount of resources available to an individual.

4.3 Psychological Impact of HIV/AIDS on PLHA

The first objective of this study sought to determine the psychological impact of HIV/AIDS among the PLHA in Mukurwe-ini division. In order to address this objective, the study assessed the level of impact of ten factors relating to various psychological aspects affecting people living with HIV/AIDS. The level of impact of each of these factors was measured on a 5-point range likert scale of 1, indicating low impact, to 5, indicating high impact, meaning the higher the score the greater the impact. The sample respondents were requested to indicate their degree of agreement or disagreement with each of the factors and how it had personally affected them. Table 6 shows the distribution of their responses.

Table 6

Psychological Impact of HIV/AIDS on PLHA

Psychological factors	Response (percent)				
	SD	D	U	A	SA
There is overwhelming mental and physical hardships when spouses loose their partners through HIV infection	2.5	3.2	27.2	15.2	51.9
AIDS orphans lack love, care and attention	6.3	8.2	36.1	28.5	20.9
Men tends to refuse to use condoms despite knowing their partners HIV status	8.2	12.0	30.4	26.6	22.8
PLHA experience stigma and discrimination	7.5	22.8	20.3	21.5	27.8
PLHA live in separate houses	24.7	28.5	3.2	14.6	29.1
AIDS orphans take drugs and other substances	12.0	28.5	35.4	14.6	9.5
PLHA are loved in the community	13.3	13.3	13.9	22.8	36.7
The health sector staff have poor attitudes and in most cases are unhelpful when serving PLHA	43.7	29.7	1.7	16.5	8.2
PLHA share utensils with others	8.2	10.1	5.7	29.1	46.8
There are no professional counsellors in the sub-district hospital	62.7	17.1	4.4	12.0	3.8

N = 158

Table 6 indicates that the sampled respondents rated six out of the ten psychological factors to have a relatively low psychological impact on people living with HIV/AIDS. It therefore indicates that majority of the people living with HIV/AIDS were not living in separate houses, majority of the orphaned children had no access to drugs; not all of them were loved in the community; staff at the health sectors had positive attitudes; they never shared utensils; the sub-strict hospital had professional counsellors. However, majority of them agreed with the first four factors indicating that they underwent overwhelming mental and physical hardships when they lost their spouses to HIV/AIDS; AIDS orphans lacked love, care and attention; men refused to use condoms despite knowing their partners HIV status; and they experienced stigma and discrimination. The establishment of being HIV/AIDS positive caused a lot of mental and physical anguish as one struggled to come to terms with the situation. This was worsened by the death of one of the spouses as a result of the disease. The children orphaned by HIV/AIDS were also stigmatized and

discriminated by the society as they lacked love, care and attention. In some cases, men ignorantly or knowingly refused to use condoms even when they were aware of the HIV status of their partners. This support UNAIDS (2000) and KIE (1999) which observed that once a person established that he/she is HIV/AIDS positive, there was a lot of psychological stress as a result of anger, fear, depression, denial, helplessness, withdrawal, isolation, despair and loss of hope. UNICEF (2003), further stated that there was trauma as a result of discovering of HIV/AIDS status and this is made worse by the shame and social stigma that accompany the disease. The society finds it harder to assign substitute parents to children orphaned by AIDS than those whose parents died from other causes, and to cover the costs of their needs.

All the above ten psychological factors interact to cumulatively influence the psychological impact of HIV/AIDS on people living with the disease. Therefore, the responses to each constituent psychological factor in Table 5 were scored on a scale of 1, indicating least level of impact, to 5, indicating highest level of psychological impact. The individual factor scores were summed up to form a psychological impact index score for each respondent. The index score varied between 10, indicating the least level of impact, and 50, indicating the highest level of psychological impact on the people living with the disease. The higher the score, the greater was the psychological impact of HIV/AIDS, and vice versa. The index score was later collapsed into three ordinal categories in order to differentiate between the levels of psychological impact of HIV/AIDS among the sampled people living with the disease. This included a score of 10-29 indicating low impact; a score of 30 (average/moderate impact); and a score of 31-50 meaning high psychological impact of HIV/AIDS. Table 7 summarizes the levels of psychological impact of HIV/AIDS on PLHA.

Table 7

Levels of Psychological Impact of HIV/AIDS on PLHA

Levels of impact	Scores	Frequency	Percent
Low	10-29	88	55.7
Average	30	14	8.9
High	31-50	56	35.4
Total		158	100.0

Table 7 indicates that on the overall 55.7 percent of the respondents recorded low level of psychological impact of HIV/AIDS among PLHA compared to 8.9 percent and 35.4 percent with average and high levels. This suggests that even though people living with HIV/AIDS encountered numerous psychological impact as a result of their status, the overall effect was relatively low. This could be attributed to the fact that the sampled respondents were people who had already recognized their status, were on ARVs and sought counselling services from various community-based organizations on how to live positively with the disease. Therefore they had accepted their status and were living positively. The low impact may also be attributed to the fact that psychological impact takes time to manifested and be detected, identified and healed. They are also caused by a combination of other factors. This makes the PLHA not to be aware of their effects immediately. This is in line with Berer (1993) and PCEA (2000) who observed that psychological stress and depression as a result of HIV/AIDS are usually high and severe on people who have not accepted their status regardless of establishing it. Such people live in denial and are not ready to come to terms with what had befallen them and this increases their psychological trauma. They fear rejection and discrimination from the society and keep the information to themselves. This is in contrast with people, like the sampled respondents, who had accepted their status and were seeking for help. Termmerman (1995) points out that accepting HIV/AIDS status, seeking for counselling services and use of ARVs help the infected person to cope with the disease and prepare for the future by changing their sexual behaviours.

4.4 Socio-Economic Impact of HIV/AIDS on PLHA

The second objective of this study sought to determine the socio-economic impact of HIV/AIDS on the PLHA in Mukurwe-ini division. In order to address this objective, the study also assessed the level of impact of nine factors relating to various socio-economic aspects affecting people living with HIV/AIDS. The level of impact of each of these factors was measured on a 5-point range likert scale of 1, indicating low impact, to 5, indicating high impact (the higher the score the greater the impact). The sample respondents were requested to indicate their degree of agreement or disagreement with each of the factors and how it had personally affected them. Table 8 shows the distribution of their responses.

Table 8

Socio-Economic Impact of HIV/AIDS on PLHA.

Socio-economic factors	Response (percent)				
	SD	D	U	A	SA
There are changes in the social system of PLHA families in adapting to HIV/AIDS	2.5	8.2	8.2	31.0	50.0
There is high poverty level and unemployment among PLHA	2.5	7.0	7.6	41.8	41.1
PLHA requires increased health cost as viral load increases	1.9	7.0	8.2	47.5	35.4
There are no HIV/AIDS workplace policies in small rural agricultural sectors	3.2	4.4	17.7	46.2	28.5
PLHA have poor health and nutrition	7.6	19.6	7.0	35.4	30.4
There is lack of community involvement in the care and support of PLHA	8.9	18.4	20.9	26.6	25.5
There is mistrust, suspicion and unwillingness to share resources with PLHA	10.8	24.7	17.1	34.2	13.3
PLHA are not economically active	20.9	27.8	5.7	24.1	21.5
There is a poor referral network to hospital for the PLHA	17.1	39.2	7.6	20.3	15.8

N = 158

Table 8 indicates that the sampled respondents rated the first seven of the nine socio-economic factors to have a higher level of impact on people living with HIV/AIDS. This had affected the social and economic status of people living with HIV/AIDS. The respondents were discriminated against and isolated from social activities and functions

in the community; their economic status had also declined as a result of high cost of the disease and lack of policy framework to guard them in their various occupations. This is in support of Kihiko (2000) and UNICEF (2003) who observed that the high economic cost of HIV/AIDS leads to a vicious poverty circle as the poor have less access to treatment and care. This also affected children as they are more vulnerable to manipulation and even forced to drop out of school, with some taking over household headship at a younger age. In seeking to adapt to the new condition, Cohen (1993) argues that orphans are frequently called upon to provide additional assistance in meeting household needs. Tarantole (2000) add that families of people living with HIV/AIDS feel the impact as soon as one of the members falls sick of the disease. This is through declined incomes as the affected person was no longer economically active, while the household's cost of living increases due to the cost of medication. Weinrech and Benn (2004) sums up that HIV/AIDS has led to a decline in economic growth in developing countries.

The responses to each constituent socio-economic factor in Table 9 were scored on a scale of 1, indicating least level of impact, to 5, indicating highest level of socio-economic impact of HIV/AIDS. The individual factor scores were summed up to form a socio-economic impact index score for each respondent. The index score varied between 9, indicating the least level of impact, and 45, indicating the highest level of socio-economic impact on the people living with the disease. The higher the score, the greater was the socio-economic impact of HIV/AIDS, and vice versa. The index score was later collapsed into three ordinal categories in order to differentiate between the levels of socio-economic impact of HIV/AIDS among the sampled people living with the disease. This included a score of 9-26 indicating low impact; a score of 27 (average/moderate impact); and a score of 28-45 meaning high socio-economic impact of HIV/AIDS. Table 9 summarizes the levels of socio-economic impact of HIV/AIDS on PLHA.

Table 9

Levels of Socio-Economic Impact of HIV/AIDS on PLHA

Levels of impact	Scores	Frequency	Percent
Low	9-26	18	11.4
Average	27	6	3.8
High	28-45	134	84.8
Total		158	100.0

Table 9 indicates that 84.8 percent of the respondents recorded high level of socio-economic impact of HIV/AIDS on PLHA compared to 11.4 percent and 3.8 percent with low and average levels. This suggests that socio-economic factors had a high impact on people living with HIV/AIDS. This may be attributed to the social and economic challenges that face people living with HIV/AIDS as they were isolated and discriminated in both social and economic arena. The high impact may also be attributed to the fact that socio-economic impact come up immediately as the society becomes aware of the health status of the PLHA. The society had developed negative attitudes and perceptions toward people infected and affected by HIV/AIDS.

4.5 Gender and Psychological Impact of HIV/AIDS on PLHA

The third objective sought to determine whether there was any gender difference in the psychological impact of HIV/AIDS on people living with the disease. The objective was based on the assumption that gender of the person living with HIV/AIDS influences their vulnerability to and extent of the psychological impact of the disease. The study started by assessing the gender difference on individual psychological factors as illustrated in Table 10.

Table 10

Psychological Impact of HIV/AIDS on PLHA by Gender

Psychological factors	Male PLHA					Female PLHA				
	Response (percent)					Response (percent)				
PLHA live in separate houses	19.6	23.2	5.4	19.6	32.1	27.5	31.4	2.0	11.8	27.5
PLHA share utensils with others	5.4	10.7	8.9	35.7	39.3	9.8	9.8	3.9	25.5	51.0
PLHA are loved in the community	5.4	19.4	14.3	26.8	33.9	17.6	9.8	13.7	9.8	17.6
AIDS orphans lack love, care and attention	1.8	3.6	28.6	46.4	19.6	8.8	10.8	40.2	18.6	21.6
PLHA experience stigma and discrimination	7.1	19.6	26.8	30.4	16.1	7.8	24.5	16.7	16.7	34.3
AIDS orphans take drugs and other substances	16.1	37.5	26.8	8.9	10.7	9.8	23.5	40.2	17.6	8.8
There are no professional counsellors in the hospital	51.8	26.8	3.6	14.5	3.6	68.6	11.8	4.9	10.8	3.9
The health sector staff have poor attitudes and in most cases are unhelpful when serving PLHA	42.9	26.8	3.6	23.2	3.6	44.1	31.4	1.0	12.7	10.8
There is overwhelming mental and physical hardships when spouses loose their partners to HIV infection	0.0	5.4	26.8	14.3	53.6	3.7	2.0	27.5	15.7	51.0
Men tends to refuse to use condoms despite knowing their partners HIV status	10.7	10.7	17.9	30.4	30.4	6.9	12.7	37.3	24.5	18.6

N = 158

Table 10 indicates that there was no major difference in the way female and male people living with HIV/AIDS rated the impact of individual psychological factors that affected them. They still rated overwhelming mental and physical hardships as a result of loss of their spouses to HIV/AIDS; AIDS orphans lacking love, care and attention; men refusing to use condoms despite knowing their partners HIV status; and experiencing stigma and discrimination above average. This suggests that both male and female people living with HIV/AIDS encountered psychological impact as a result of their status. This may be attributed to similar social attitudes and perception about people affected and infected by HIV/AIDS as a result of stigmatization, isolation and discrimination from people around them regardless of their gender.

However, in any society, the ten psychological factors of HIV/AIDS interacted and cumulatively affect people living with HIV/AIDS. Therefore, to establish whether there was a significant gender difference in the psychological impact of HIV/AIDS among PLHA, the study used the total psychological impact index score derived earlier as a cumulative score of the ten factors. Independent samples t-test and Chi square were used to determine this. The independent sample t-test was used to determine if the psychological impact index scores between two unrelated samples (male and female PLHA) differed significantly or not. For it to be used, the grouping variable: gender of the PLHA (male and female) was used as a nominal variable, while the test variable, that is, psychological impact index score was an interval variable measured in the actual scores. Table 11 summarizes the output of the t-test.

Table 11

Comparing Psychological Impact of HIV/AIDS on PLHA by Gender

Gender of the PLHA	N	Psychological impact index score mean	Std Dev.	t-value	df	Sig. (2 tailed)
Male	56	29.16	4.335	1.131	156	0.260
Female	102	28.28	4.828			

Table 11 indicates that the sampled male people living with HIV/AIDS recorded a higher psychological impact index mean score of M = 29.16 compared to M = 28.28 recorded by

female counterparts. However, since p (0.260) > 0.05 significance level, it was concluded that there was no significant gender difference in the psychological impact of HIV/AIDS between female and male people living with HIV/AIDS. This suggested that the ten psychological factors cumulatively had almost similar impact on people living with HIV/AIDS. This may be attributed to the attitude of the society toward people infected and affected by HIV/AIDS. The society had stigmatized, isolated and discriminated people infected and affected by HIV/AIDS regardless of their gender. Also all the respondents had accepted their status and were living positively using ARVs and going for counselling from community-based organizations.

The results using independent sample t-test were also corroborated by chi-square test using cross tabulation. Chi-square was used to compare the frequency of cases found in one variable in two or more unrelated samples or categories of another variable. It is preferred when dealing with variables that have been categorized, gender of people living with HIV/AIDS (male and female) and levels of psychological impact of HIV/AIDS (low, moderate/average and high). In order to calculate the Chi- square statistic, gender of the people living with HIV/AIDS was cross tabulated by their levels of psychological impact as a result of the disease. Table 12 shows a cross tabulation of levels of psychological impact of HIV/AIDS by gender of people living with HIV/AIDS.

Table 12

Level of Psychological Impact of HIV/AIDS by Gender of PLHA

Level of psychological impact		Gender of PLHA		Total
		Male	Female	
Low	Count	30	58	88
	%	53.6%	56.9%	55.7%
Average	Count	6	8	14
	%	10.8%	7.8%	8.9%
High	Count	20	36	56
	%	35.7%	35.3%	35.4%
Total		56	102	158

$\chi^2 = 0.408$ df = 2 $p = 0.815$

Table 12 suggests that there was no significant difference in the level of psychological impact of HIV/AIDS between male and female people living with HIV/AIDS. It was observed that the trend of distribution of both male and female people living with HIV/AIDS was almost similar as majority of them (53.6 percent and 56.9 percent, respectively) fell in the low impact category. This was compared to also an almost equal proportion of 35.7 percent and 35.3 percent, respectively. who were in the high psychological impact category. This was further supported by the chi-square value (0.408), since p (0.815) > 0.05 significance level indicating that there was no significant gender difference in the level of psychological impact on people living with HIV/AIDS.

4.6 Gender and Socio-Economic Impact of HIV/AIDS on PLHA

The fourth objective sought to determine whether there was any gender difference in the socio-economic impact of HIV/AIDS on people living with the disease. The objective was designed to establish whether gender of the person living with HIV/AIDS influenced their vulnerability to and extent of the socio-economic impact of the disease. The study also started by assessing the gender difference on individual socio-economic factors as illustrated in Table 13.

Table 13

Socio-Economic Impact of HIV/AIDS on PLHA by Gender

Psychological factors	Male PLHA					Female PLHA				
	Response (percent)					Response (percent)				
There is lack of community involvement in the care and support of PLHA	8.9	16.1	23.2	21.4	30.4	8.8	19.6	19.6	29.4	22.5
There is mistrust, suspicion and unwillingness to share resources with PLHA	16.1	16.1	12.5	39.3	16.1	7.8	29.4	19.6	31.4	11.8
There is a poor referral network to hospital for the PLHA	17.9	28.6	7.1	26.8	19.6	16.7	45.1	7.8	16.7	13.7
PLHA are not economically active	16.1	28.6	3.6	30.4	21.4	23.5	27.5	6/9	20.6	21.6
PLHA have poor health and nutrition	12.5	12.5	1.8	39.3	33.9	4.9	23.5	9.8	33.3	28.4
There is high poverty level and unemployment among PLHA	3.6	3.6	10.7	46.4	35.1	2.0	8.8	5.9	39.2	44.1
There are no HIV/AIDS workplace policies in small rural agricultural sectors	5.4	7.1	5.4	53.6	28.6	2.0	2.9	24.5	42.2	28.4
There are changes in the social system of PLHA families in adapting to HIV/AIDS	3.6	8.9	12.5	30.4	44.6	2.0	7.8	5.9	31.4	52.9
PLHA requires increased health cost as viral load increases	1.8	8.9	12.5	42.9	33.9	2.0	5.9	5.9	50.0	36.3

N = 158

Table 13 also indicates that there was no major difference in the way female and male people living with HIV/AIDS rated the impact of individual socio-economic factors that affected them. This suggested that female and male people living with HIV/AIDS came from the same society which had subjected them to similar treatment and prejudices about people infected and affected by HIV/AIDS. The society had not yet accepted HIV/AIDS as a disease like any other. However, the small differences in the mean scores of each factor between male and female people living with HIV/AIDS may be attributed to differences in social expectations, roles and stereotypes between male and female persons which influence their status in the society. The differences in expectations and roles influenced the extent to which a particular factor impacted on people living with HIV/AIDS.

Like psychological factors, socio-economic factors in any society also interacted and cumulatively affected people living with HIV/AIDS. Therefore, to establish whether there was a significant gender difference in the socio-economic impact of HIV/AIDS among PLHA, the study used the total socio-economic impact index score derived earlier as a cumulative score of the nine factors. Independent samples t-test and Chi square were also used to determine this. The independent sample t-test was used to determine if the psychological impact index scores between two unrelated samples (male and female PLHA) differed significantly or not. Table 14 summarizes the output of the t-test.

Table 14

Comparing Socio-Economic Impact of HIV/AIDS on PLHA by Gender

Gender of the PLHA	N	Socio-economic impact index score mean	Std Dev.	t-value	df	Sig. (2 tailed)
Male	56	32.57	5.332	.677	156	0.500
Female	102	32.04	4.367			

Table 14 indicates that the sampled male people living with HIV/AIDS recorded a higher socio-economic impact index mean score of M = 32.57 compared to M = 32.04 recorded by their female counterparts. However, since p (0.500) > 0.05 significance level, it was concluded that there was no significant gender difference in the socio-economic impact

of HIV/AIDS between female and male people living with HIV/AIDS. This suggested that the nine socio-economic factors cumulatively had almost similar impact on people living with HIV/AIDS. This may also be attributed to the general attitude of the society toward people infected and affected by HIV/AIDS. The society had stigmatized, isolated and discriminated people infected and affected by HIV/AIDS regardless of their gender. Also all the sampled respondents were people who had accepted their status and were living positively using ARVs and going for counselling from community-based organizations.

The results using independent sample t-test were also corroborated by chi-square test using cross tabulation. Chi-square was used to compare the frequency of cases found in one variable in two or more unrelated samples or categories of another variable. It is preferred when dealing with variables that have been categorized, gender of people living with HIV/AIDS (male and female) and levels of socio-economic impact of HIV/AIDS (low, moderate/average and high). Table 15 shows a cross tabulation of levels of socio-economic impact of HIV/AIDS by gender of people living with HIV/AIDS.

Table 15

Level of Socio-Economic Impact of HIV/AIDS by Gender of PLHA

Level of socio-economic impact		Gender of PLHA		Total
		Male	Female	
Low	Count	8	10	18
	%	14.3%	9.8%	11.4%
Average	Count	1	5	6
	%	1.8%	7.8%	3.8%
High	Count	47	87	134
	%	83.9%	85.3%	84.8%
Total		56	102	158

$\chi^2 = 1.570$ df = 2 $p = 0.456$

Table 15 suggests that there was no significant difference in the level of socio-economic impact of HIV/AIDS between male and female people living with HIV/AIDS. It was observed that the trend of distribution of both male and female people living with HIV/AIDS was almost similar as majority of them (83.9 percent and 85.3 percent,

respectively) falling in the high impact category. This was compared to a smaller proportion of 14.3 percent and 9.8 percent, respectively, who were in the low psychological impact category. This was further supported by the chi-square value (1.570), since p (0.815) > 0.05 significance level indicating that there was no significant gender difference in the level of socio-economic impact on people living with HIV/AIDS.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings based on the research objectives, conclusions from the findings and recommendations derived from the conclusions. It also covers suggestions for further research.

5.2 Summary

The main purpose of this study was to find out the psychological and socio–economic impact of HIV/AIDS on people living with AIDS in Mukurwe-ini division of Nyeri district. Based on the specific objectives, the following findings were established:

(i) More than half (55.7 %) of the people living with HIV/AIDS experienced low level of psychological impact as a result of the disease.

(ii) Majority (84.8 %) of the people living with HIV/AIDS experienced low level of psychological impact as a result of the disease.

(iii) There was no significant gender difference in the psychological impact of HIV/AIDS between female and male people living with HIV/AIDS. They all faced more or less the same level of psychological impact attributable to their health status.

(iv) There was no significant gender difference in the socio-economic impact of HIV/AIDS between female and male people living with HIV/AIDS. They all faced more or less the same socio-economic impact as a result of their health status.

5.3 Conclusion

Based on the summary findings, the study makes the following conclusions:

(i) The low psychological impact of HIV/AIDS on people living with HIV/AIDS was attributed to the fact that psychological factors take time to manifest and

be detected, identified and healed. They were also caused by a combination of other factors which make them hard to detect and even intervene.

(ii) There was high socio-economic impact of HIV/AIDS on people living with HIV/AIDS resulting from social stigmatization and negative attitudes that had been developed toward people infected and affected by HIV/AIDS.

(iii) People living with HIV/AIDS faced psychological and socio-economic impact of HIV/AIDS regardless of their gender.

5.4 Recommendations

In the view of the above conclusions, this study makes the following recommendations:

(i) There is need for all people living with HIV/AIDS to have access to counselling services so as to be able to necessitate positive behaviour change and reduce the impact of the disease.

(ii) There is need for the society to changes its attitude toward HIV/AIDS and demystify the social stigma associated with the disease and instead take care and assist people living with HIV/AIDS.

(iii) People living with HIV/AIDS should be treated equally regardless of their gender.

(iv) There is need for increased level of sensitization and awareness campaigns to assist in reducing stigmatization and the negative attitudes and perceptions about people living with HIV/AIDS

(v) Stakeholders in the health sectors should offer social, economic and psychological support to people living with HIV/AIDS in order to effectively fight the disease and reduce stigmatization

5.5 Suggestions for Further Research

The study suggests the following areas for further research:

(i) Attitude of people living with HIV/AIDS toward voluntary counselling and testing.

(ii) Challenges facing people living with HIV/AIDS in accessing counselling services.

(iii) Challenges facing PLHA in use of condoms and ARVs among the discordant couples.

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APPENDICES

APPENDIX A: QUESTIONNAIRE FOR PLHA

Dear respondent,

This questionnaire is designed to assess the psychological and socio-economic impact of HIV/AIDS on people living with AIDS (PLHA). The information supplied will be treated in confidentiality. The respondents are required to be as genuine as possible. There are no right or wrong answers to the statements, so answer them according to your opinion.

Section A

1. Age (in complete years) _____
2. Gender Male ☐ Female ☐
3. Marital status

   Married ☐

   Widowed ☐

   Single ☐

   Divorced/separated/abandoned ☐
4. Have you been blessed with children? Yes ☐ No ☐
5. If yes, how many? _____

Section B

Select only one response for each statement and put a (√) beside the selected responses. The selected responses are as follows: -

Strongly Agree (SA) Agree (A) Undecided (U)

Disagree (D) Strongly Disagree (SD)

1. PLHA live in their separate houses.

SA ☐ A ☐ U ☐ D ☐ SD ☐

2. PLHA share utensils with others.

SA ☐ A ☐ U ☐ D ☐ SD ☐

3. PLHA are loved in the community.

SA ☐ A ☐ U ☐ D ☐ SD ☐

4. AIDS orphans lack love, care and attention.

SA ☐ A ☐ U ☐ D ☐ SD ☐

5. PLHA experience stigma and discrimination.

SA ☐ A ☐ U ☐ D ☐ SD ☐

6. AIDS orphans take drugs and other substances.

SA ☐ A ☐ U ☐ D ☐ SD ☐

7. There is lack of community involvement in the care and support of PLHA.

SA ☐ A ☐ U ☐ D ☐ SD ☐

8. There is mistrust, suspicion and unwillingness to share resources with PLHA.

SA ☐ A ☐ U ☐ D ☐ SD ☐

9. There are no professional counsellors in the sub-district hospital.

SA ☐ A ☐ U ☐ D ☐ SD ☐

10. The health sector staff have poor attitudes and in most cases are unhelpful when serving PLHA.

SA ☐ A ☐ U ☐ D ☐ SD ☐

11. There is a poor referral network to hospital for the PLHA.

SA ☐ A ☐ U ☐ D ☐ SD ☐

12. There is overwhelming mental and physical hardships when spouses loose their partners through HIV infection.

SA ☐ A ☐ U ☐ D ☐ SD ☐

13. PLHA are not economically active.

SA ☐ A ☐ U ☐ D ☐ SD ☐

14. PLHA have poor health and nutrition.

SA ☐ A ☐ U ☐ D ☐ SD ☐

15. There is high poverty level and unemployment among PLHA.

SA ☐ A ☐ U ☐ D ☐ SD ☐

16. There are no HIV/AIDS workplace policies in small rural agricultural sectors.

SA ☐ A ☐ U ☐ D ☐ SD ☐

17. Men tends to refuse to use condoms despite knowing their partners HIV viral status.

SA ☐ A ☐ U ☐ D ☐ SD ☐

18. There is changes in the social system of PLHA families in adapting to the HIV/AIDS impact.

SA ☐ A ☐ U ☐ D ☐ SD ☐

19. PLHA requires increased health cost as viral load increases.

SA ☐ A ☐ U ☐ D ☐ SD ☐

APPENDIX B: RESEARCH PERMIT

EGERTON
Tel: 051-
62276//9/62280/-4
Fax: 051- 62213

UNIVERSITY

P.O. Box 536
Njoro, Kenya

EMAIL: regadmin@egerton.ac.ke

DEPARTMENT OF PSYCHOLOGY, COUNSELLING AN
EDUCATIONAL FOUNDATIONS

10th April 2007

TO WHOM IT MAY CONCERN

RE: GUIDANCE AND COUNSELLING STUDENT RESEARCH

The above programme is offered in our University at Master's level. In order to complete his study requirements he has to carry out a research. He is currently seeking a place to do so and have found your institution a valuable place to enhance his learning.

I wish to introduce to you ...Ngamau J. Gathogo .....registration number...EM16/1380/05..... for your kind assistance in his study

Please, accord him the help he may need in order to achieve this objective. While he is carrying out a research, he is familiar and bound by the ethical standards of collecting information, safeguard of the same, and using the findings pro-actively.

On behalf of the University, I wish you well and thank you for your partnership in the training of our students.

Sincerely,

Dr. M. Chepchieng
CHAIRMAN, DEPARTMENT OF, PSYCHOLOGY, COUNSELLING AND EDUCATIONAL FOUNDATIONS.

For: Vice-Chancellor- Egerton University

MINISTRY OF HEALTH

TELEPHONE: 0161-60003
OR 020-2032983

When replying please quote our refer
REF:

OFFICE OF THE
MEDICAL OFFICER INCHARGE
MUKURWEINI S. D. HOSPITAL
P.O. BOX 139
MUKURWEINI

Date: 26/3 2007

MR. NGAMAU GATHOGO
P. O. BOX 149
MUKURWEINI

Dear Sir

REF: APPROVAL FOR YOUR RESEARCH REQUEST

Following your request to research on the Psychological and social economic impact of HIV /AIDS on People living with AIDS in Mukurweini Division, the hospital administration has granted you permission to interview PLWHA on follow up in our CCC Unit .

We wish you the best in your studies and hope you will use the findings to improve the psychological and socio-economic conditions of the people living with AIDS.

MEDICAL OFFICER I/C
MUKURWEINI HOSPITAL

DR. MUNYUA P. M.
MEDICAL OFFICER INCHARGE
MUKURWEINI SUB-DISTRICT HOSPITAL

OFFICE OF THE PRESIDENT

Telephone:

When replying quote our reference

Ref:

MUKURWE-INI CACC
P.O.BOX 112,
MUKURWE-INI

Date: 31st March 2007

MR. NGAMAU J. GATHOGO,
P.O.BOX 149,
MUKURWE-INI

Dear Sir,

REF: APPROVAL TO CONDUCT RESEARCH AMONG THE COMMUNITY BASED ORGANISATION

Following your request to research on Psychological and Socio- Economic Impa HIV/AIDS on People Living with Aids in Mukurwe-ini Division, the Constituency Control Council has granted you the permission.

We wish you the best as you interact and carry out the research with the PLWHAs.

PETER WACHIRA

For. Co-ordinator
Mukurwe-ini Constituency Aids Control Council