

**SOCIO- ECONOMIC FACTORS INFLUENCING WELFARE OF HIV-POSITIVE  
WOMEN IN MANYATTA SLUMS, KISUMU COUNTY**

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**A Thesis Submitted to the Graduate School in Partial Fulfilment of the  
Requirements for the Master of Arts Degree in Gender and Development Studies of  
Egerton University**

**EGERTON UNIVERSITY**

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## DECLARATION AND RECOMMENDATION

### Declaration

This thesis is my original work and has not been presented in this University or any other for the award of a degree.

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### Recommendation

This thesis has been submitted with our approval as University Supervisors.

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## **DEDICATION**

I would like to dedicate this work to my loving husband Mr. Tony Ngaila, My daughters Tonia and Talya Ngaila. A special feeling of gratitude to my caring parents Mr and Mrs Lugalia to whom my education to them is such a pride and an accomplishment. Their prayers, support and unfailing love took me throughout this period.

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## **ABSTRACT**

Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) have been in existence for more than forty years and women account for nearly half of the 40 million People Living with HIV/AIDS (PLWHAs). HIV/AIDS has devastating challenges on the infected women, and it is worse if they are staying in the slums. HIV/AIDS has economic implications on the infected and her family. Earlier studies done in Kenya have largely concentrated on transmission and prevention of HIV. However, there are limited studies that have been conducted on socio-economic challenges faced by women living with HIV in slums especially those living in Manyatta slums, more detailed information is required on low income earning women living with HIV and how socio-cultural and economic challenges affect them. The study aimed to determine the socio-cultural and economic factors affecting welfare of HIV-positive women in Manyatta slums, Kisumu County. The specific objectives included; determining the socio-cultural challenges of women living with HIV, assessing the economic situation of women living with HIV as well as examining access to services by women living with HIV in Manyatta Slums, Kisumu County. The study used descriptive research design and out of the target a population of 1100 women living with HIV in Manyatta slums, 110 were sampled using purposive sampling technique. The respondents who included key informants were served with questionnaires for quantitative data, while Focus Group Discussion were used for qualitative data. The Quantitative data was analysed using descriptive statistics being facilitated by the Statistical Packages for Social Sciences (SPSS) version 22 for windows. Qualitative data was analysed using thematic content analysis. The findings of the study are; statistical significance in understanding socio- cultural and economic factors that affect WLWHA, most of the women living with HIV-Positive reached only primary school (80.9%), age of 26-30years (43.6%), too high cost of transport to health facilities (mean of 3.48) and nutrition cost was too high as well. The findings of this study illuminate the socio-cultural and economic factors that hinder adherence to ART among WLWHA. The findings of this study would be useful to the guidance and counselling professionals for the improvement of their helping relationship with women living with HIV-Positive.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

AIDS	Acquired Immune Deficiency Syndrome.
ANOVA	Analysis of Variance
CP	Control Population.
FSW	Female Sex Workers.
GDP	Gross Domestic Product
GoK	Government of Kenya
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome.
KDHS	Kenya Demographic Health Surveys
KNBS	Kenya National Bureau of Statistics
NACC	National AIDS Control Council
NSDC	National Syndemic Disease Council
NASCOP	National AIDS and STI Control Program
PLWHA	People living with HIV.
RR	Relative Risk.
SPSS	Statistical Package for the Social Sciences
STIs	Sexually Transmitted Infections
UN	United Nations
UNDP	United Nations Development program
UNON	United Nations Office in Nairobi
US	United States.
WLWHA	Women living with HIV/AIDS
WHO	World Health Organization
WTO	World Trade Organization

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

Human Immunodeficiency Virus (HIV) remains a public health issue that has affected communities worldwide. Women are the greatest growing population infected with HIV according to global HIV statistics. Globally 44% of all new infections are among women and girls and in sub-Saharan Africa, women and girls account for 62% of new HIV infection (UNAIDS, 2023). The burden of disease on women is even more challenging in many countries due to gender inequality. Women face challenges to access reproductive health services upon disclosure of their HIV status. In addition, they might transfer HIV to their children due to economic challenges, stigma, lack of proper services in health care provision during childbirth.

The study further indicates that, good number new HIV infections in women are from heterosexual contact (84%). An estimated 88% of women who are living with HIV are diagnosed, but only 32% have the virus under control. The lack of a cure has caused an increased fear of AIDS among many people, which has resulted in serious stigma and discrimination against WLWHA. These facts threaten the psychological well-being of WLWHA. Studies conducted in China revealed that nearly half of WLWHA suffered from anxiety disorders and that 20–32% of WLWHA were affected by depressive disorders (UNAIDS, 2017). According to a study in Peru, poverty and low socioeconomic status contribute significantly to depression in impoverished women living with HIV/AIDS (WLWHA) (Wu *et al.*, 2009). Dageid and Duckert (2008) found that poverty, gender inequality and the unequal distribution of resources place a heavy burden on women living with HIV.

A complex interaction of material, social, cultural and behavioural factors shape the nature, process and outcome of the epidemic in Africa. However, too many partners and unprotected sex appear to be at the core of the problem, Even if exceptionally effective prevention, treatment and care programmes take hold immediately, the scale of the crisis means that the human and socio-economic toll will remain significant for many generations (Ile-Ife, 2004).

In sub-Saharan Africa, 59% of adults with HIV are women (UNAIDS/WHO, 2006). For instance, among the reported cases in Egypt, the ratio of females who live with HIV to males is (1:4) (GARPR, 2014). This is unexpected as the global ratio is around (1:1). One of

the authoritative explanations is that women have less access to testing services. Women with HIV-Positive in Egypt are more likely to face stigma and discrimination due to cultural misconceptions (Brown *et al.*, 2003; Glaser & Strauss, 1967). The HIV is misperceived to be indicator for unacceptable sexual activities, women who live with HIV in Upper Egypt struggle to keep their status secret and some of them prefer to die rather than inform their status. In South Africa as well as other sub-Saharan African countries, most HIV- positive women live in poverty, are therefore not regularly employed, and are dependent on others for financial assistance (Amunyunzu-Nyanmango *et al.*, 2007; Gilbert & Walker, 2002). As a result, money and employment remains a great source of concern for many WLWHA (Nyanzi-Wakoli *et al.*, 2009; Olley, 2006).

Ghana, a sub-Saharan African country has about 250,232 WLWHA the HIV virus with an estimated 11, 356 new infection recorded in 2017; there were about 9, 248 HIV/AIDS related deaths recorded that year (UNAIDS, 2017; GAC. 2017). And stigma which is one of the aspect of the socio-psychological perspective of HIV/AIDS is arguably one of the most important components in minimizing the spread of the disease and its impact on the lives of those infected, and most significantly affected (Crocker & Major, 1989; Okoronkwo *et al.*, 2013; Sayles *et al.*, 2009).

A study by Gillette *et al.* 2023 found that Accidental HIV disclosure and subsequent stigma were identified as a risk of research participation; some viewed the creation of community through research as a benefit. Further high proportion of undergraduate students still have stigmatizing behaviours toward people living with HIV (Brown *et al.*, 2003). These stigmatizing behaviours are associated with certain individual characteristics (Ogbureke, 2017).

In Kenya, the number of women infected is twice that of men and women account for 60% of the entire PLWHA (Ngwenyi, 2012; NASCOP, 2016). In the year 2007, 24.5% of people in Kenya tested HIV positive, whereby 34.8% were women whereas 16.5% were men (NACC, 2017). This alarming trend is caused by the vulnerability of women to HIV. The rates of HIV infection among women and girls are a cause for deep concern, but when combined with the workload that women take the situation becomes challenging. Poverty and HIV have turned the care burden for women into a crisis with far-reaching social, health and economic consequences (NACC, 2006). Low- income earning women are the most hit and the problem is magnified if the woman is the breadwinner and more so in a female- headed household. Absenteeism from work due to poor health makes the affected households poorer

than they would have been without HIV/AIDS. Households experience the immediate impact of HIV/ AIDS because families are the main caregivers for the sick and suffer AIDS- related financial hardships (PRB, 2006).

The vicious cycle of HIV/AIDS and poverty reduces resources to invest in health and education of children and therefore increases the risk of the other members of the household acquiring HIV infection (UNAIDS 2006). During the period of illness, they may face challenges like stigma, discrimination, isolation, fear, depression, and are attacked by opportunistic diseases (Emlet, 2007). Challenges faced may also include the loss of income and the cost of the care and treatment for the infected family member can impoverish households (PRB, 2006). Although many studies have been conducted on challenges facing WLWHA, there is insufficient formal study that has been conducted on socio-economic challenges facing WLWHA in Manyatta slums. Therefore, it is against this background that the research was carried out to investigate Socio-cultural and economic challenges that impact on the well-being of women living with HIV/AIDS. A case of Manyatta slums in Kisumu County. Earlier studies that have been done in Kenya have largely concentrated on transmission and prevention on HIV/AIDS (NACC, 2015).

## **1.2 Statement of Problem**

The national HIV prevalence among adults is estimated at 3.7% translating into 1.4 million persons who are over 15 years and living with HIV. Prevalence is highest in Homabay-15.2%, Kisumu 14.5%, Siaya 13.2%, and Migori 9.7%. Gender disparities are also observed with women having higher prevalence (5.3percent) than men (2.6 %). This shows that Kenya is one of the four HIV ‘high burden’ countries in Africa and women are more vulnerable to HIV infection than men in the County. In Kisumu County, the region is among the top 4 counties leading in HIV prevalence in Kenya. According to the Kenya HIV Estimates 2022, HIV prevalence in Kisumu is 4 times higher than the national prevalence at 14.5%. HIV/AIDS has economic implications on the infected woman and her family, and it becomes more challenging if the infected low- income earning woman is staying in the slum area like Manyatta slums. However, there are limited studies that have been conducted on socio-economic challenges faced by WLWHA in slums especially those living in Manyatta slums. More detailed information is required on low income earning WLWHA and socio-economic challenges they are facing while living with the virus. This information is to provide the basis for advocacy, mitigation policies and the design of effective interventions.

This study therefore is aimed at establishing the socio-economic factors affecting welfare of HIV-Positive Women in Manyatta Slums in Kisumu County.

### **1.3 Objectives of the study**

#### **1.3.1 General objective**

Determine the socio-cultural and economic factors affecting welfare of HIV-positive women in Manyatta slums, Kisumu County.

#### **1.3.2 Specific objectives**

- i) To determine the socio-cultural challenges of women living with HIV in Manyatta Slums, in Kisumu County.
- ii) To assess the economic situation of women living with HIV in Manyatta Slums, in Kisumu County.
- iii) To examine the access to services by women living with HIV in Manyatta Slums, in Kisumu County.

### **1.4 Research Questions**

This study was guided by the following research questions:

- i) What are the socio-cultural challenges of women living with HIV in Manyatta Slums, in Kisumu County?
- ii) What is the economic situation of women living with HIV in Manyatta Slums, in Kisumu County?
- iii) What are the ways of accessing to services by women living with HIV in Manyatta Slums, in Kisumu County?

### **1.5 Justification of the Study**

The results of the study would be useful to the government of Kenya and Non-Governmental Organizations in coming up with key strategies for the treatment and care for women with HIV/AIDS. The Ministry of Health and other organizations will be able to come up with effective strategies for protection of the rights of WLWHA, Stigma reduction programs, encouraging WLWHA whose rights have been violated to seek legal redress through the justice system and in prevention of new infections among women. The results of this study might be useful to the guidance and counselling professionals for the improvement of their helping relationship with WLWHA. It will be useful for the government of Kenya to come up with ways that assist in reducing infection and provide information to women to enable them to use these tools correctly. The study is also invaluable to the government through the ministry of health as it might be useful in getting an insight on how to foster the

development and sustenance of healthcare management organizations, in line with Vision 2030 that supports accessible, affordable and convenient health care. Scholars will find the study useful as it acts as a foundation for further knowledge as they seek to improve welfare of HIV infected women.

### **1.6 Scope and the Study**

The study was confined to investigating socio cultural and economic challenges affecting WLWHA in Manyatta slums in Kisumu County. Geographically, it was limited to Manyatta slums, living out other areas in Kisumu County.

### **1.7 Limitation of the Study**

There are myriad of challenges facing WLWHA. However, the study only focused on socio cultural and economic challenges faced by WLWHA. The study took for six months, ending October 2019.

These limitations were; language barrier, time and financial resources. These challenges were overcome by using local volunteers in order to enhance the trust of respondents hence their willingness to respond. This also solved the problem of language barrier as the extension staff understood the local language.

The findings of the study were limited to Manyatta slums only. There were some seropositive clients who were reluctant at first to give any information due to stigma, denial, disclose, grief and shame that the scourge is associated with. Also, some of these PLWAs had full-blown AIDS and were so ill with the same or opportunistic infections that they were not able to answer all the items in the questionnaire. To address this limitation, the information sought from any available relative who was in good health. There was also a potential limitation of the sensitivity of the respondents who feared that a stranger may use the information given against them. However, with the assistance of the leaders of the Home-Based Care centres, there were responses obtained. Besides, the respondents were clarified that that purpose of the study was for purely for academic consumption and be treated with utmost confidentiality.

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

**AIDS:** In this research study AIDS is locally referred to as “*chira*” to refer to the wastng disease of having failed to observe cultural norms in the society. It is also a fatal disease caused by HIV which destroys the body’s ability to fight off infection and diseases which may ultimately lead to death.

**Antiretroviral (ARVs):** In this research study ARVS refers to Drugs that reduce the levels of HIV in the blood stream.

**At Risk:** In this study, the term risk was used to mean the probability that a person may acquire HIV infection.

**Boda-boda:** In this research study boda-boda refers to a motorbike which is used as a cheap means of transport.

**Discrimination:** Discrimination in this study was used to refer to the unfair treatment of one person or group, usually because of prejudice, about race, ethnicity, age, religion, or gender. In this research it refers to the unfair treatment of the PLWHAs by the community members because of their HIV status,

**HIV:** Human immunodeficiency virus (**HIV**) in this study used to refer to a subgroup of retrovirus that causes **HIV** infection and over time acquired immunodeficiency syndrome (AIDS).

**Stigma:** In this research, stigma refers to the shame or disgrace to PLHIV who are socially unacceptable in the community

**Nutrition:** In this study, nutrition means a process of accessing and utilizing nutrients from food for growth, development, and overall health of the HIV positive women in the study area

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This section reviews the existing literature on the socio-cultural and economic factors affecting welfare of HIV-positive women by focusing on global, international, national and study locality scope. This study further draws on previous works carried out by other research works and it relates it to the present study. The section also looked on Theoretical Framework and Conceptual Framework.

#### **2.2 Prevalence of HIV among Women**

On International Women's Day, UNAIDS recognized the contribution of, and celebrating, activists and organizations working for gender equality and women's empowerment in rural and urban areas. Women's engagement and leadership are critical to ensuring success toward the Sustainable Development Goals. UNAIDS is highlighting that women continue to bear the brunt of the HIV epidemic (UNAIDS, 2018). According to the report, there are 1.4 million Kenyans living with HIV in 2023, with 57% coming from 10 counties, namely; Homabay 15.2%, Kisumu 14.5%, Migori 9.7%, Siaya 13.2% and Kisumu 4.4%.

In sub-Saharan Africa, young women are twice as likely to become infected with HIV as their male counterparts. In sub-Saharan Africa, three out of four new HIV infections among 15–19-year-olds, are among young women, and seven out of 10 young women do not have comprehensive knowledge about HIV. Approximately 6900 adolescent girls and young women aged 15–24 years are newly infected with HIV every week around the world (Colebrook-Claude, 2019; NACC, 2018,).

In Kenya, around 1.4 million people between the ages of 15 and 49 are estimated to be living with HIV (NSDCC 2022). Although there has been a decrease in the prevalence of HIV, there are variations within the country. Some regions experience higher HIV prevalence than others across different sexes. HIV epidemic in Kenya varies by county. Counties in Nyanza region demonstrating a higher prevalence than the national while North Eastern had the lowest HIV prevalence of 1%.

Kisumu is the headquarters of Nyanza province and is now a county under the new constitution. Kisumu town has the one of the highest HIV prevalence 14.5% in Kenya, according to NSDCC (2023), around 23% are women aged between 15 and 19 years compared to 3.5% of the young men. Kisumu is largely a fishing area, with the population

living near the shores of Lake Victoria bearing the weight of HIV epidemic (Mojola, 2011). A study by Cohen *et al.* (2009) found that 25% of the women and 16% of the men living in Kisumu are HIV positive. The population living near Lake Victoria beaches has the highest incidences of new infections (UNAIDS, 2008). More than 19,000 men work around that Lake as fishermen, boat owners, net-makers, boat repairers, and fish brokers. About 25.6% of the Kisumu fishermen are HIV positive (Kwena *et al.*, 2010).

### **2.3 Socio-cultural position of women living with HIV-Positive**

Life for HIV infected women is never easy; they manifest profound physical and psychological consequences (De Bruyn, 2012). Women bear a ‘triple jeopardy’ impact of HIV/AIDS: as person infected with HIV, as mothers of child, and as carers of partners, parents, or orphans with AIDS. Women living with HIV/AIDS (WLHA) are at particularly high risk of living a painful, shameful life of exclusion (Buzy & Gayle, 1996). Millions have been rejected from their family, friends and partners, thousands have lost their lives and thousands have been unable to live their life. Despite the burden of disease, the world is paying less attention to the issues raised by WLHA. Their voices remain unheard (Campbell, 2009). Since it was first identified, HIV/AIDS has been linked with ‘sexual misbehaviour’ and ‘promiscuity’ contributing to the high level of stigma and Discrimination associated with it. Women are often even more susceptible to the stigma associated with HIV/AIDS and are frequently referred to as ‘vectors’, ‘diseased’ and ‘prostitutes’ (Cullinane, 2017; Pickering, 1997).

#### **2.3.1 Discrimination among the women living with HIV-Positive**

Discrimination for women can dispirit them from seeking vital medical and psychological care they need during the illness. HIV stigma in women is associated with rejection from friends and family, society, feelings of uncertainty and loss, low self-esteem, fear, anxiety, depression and even suicidal ideation (Sayles *et al.*, 2009). Crossley (1998) in a meta-synthesis of 93 reports of research studies, examined the issue of stigma and discrimination in WLWHA. While only 16 of 93 reports reviewed were specifically focused on stigma, their study revealed that for women, living with HIV/AIDS meant living with panic, and the painful effects of stigmatization and discrimination including social rejection, denial, even violence within family and community. The rejection and discrimination extend to treatment by health care professionals. The study also highlighted that women are facing higher levels of discrimination from society just because they are women. They carry the burden of increasingly looking after relatives who are ill but may contract HIV themselves.

Slightly more women than men are HIV infected, from 12 years onwards, because they're more vulnerable to HIV than men. This is mainly because of biological reasons, and because in many African societies women (are supposed) have no means to defend themselves against the sexual forces of (adulterous) husbands and other men (Cereal, 2013; Engudu 2011; Mac Fadden, 2012; Schoepf *et al.*, 2011).

### **2.3.2 Myths and belief on HIV-Positive life**

Rasing (1995) says that young girls are even more at risk, since they have no means to defend themselves against forceful sex. *Human Rights Watch* (2002) reports that the number of cases in which male relatives and men who were not related to the girl have forceful sex with a young girl was increasing. One of the reasons for the increase was from the myth that one can cure himself from HIV by having sex with a young girl preferably a virgin. Young boys, but to seem to be the victim of the myth but to a much lesser extent. The strong influence of socio- cultural environment may explain the observed inconsistency between what Kenyan people claim to know and beliefs and risk-taking behaviour associated with increased risk of HIV/AIDS infection (Campbell & Patrician, 2020). Certain cultural beliefs in (wife inheritance) Kenya have encouraged the epidemic for instance, when a married man dies, this widow must cleanse herself of his spirit by having sexual intercourse with one of her late husband's brothers or other male relatives (Okebiro, 2016).). This traditional belief about purification, while slowly dying out, was particularly dangerous in spreading HIV infection if the husband died of AIDS and his widow was HIV positive, she might infect his brother or other male relative who may in turn infect his wife and future children

### **2.4 Socio-Economic Challenges facing Women Living with HIV-Positive**

With an estimated number of 40 million, India is the home to the largest number of widows in the world. Widows are often subjected to deep societal, cultural, psychological, and economic deprivation in the name of traditions. Deep seated patriarchal roots and unquestioned customs place widows at a defenceless position. They are often disdained, stigmatized, abused, and marginalized from the mainstream. A diagnosis of HIV further exacerbates the challenges of widowhood as now these HIV positive widows battle dual marginalization: being a widow and suffering from HIV (Sayles *et al.*, 2009). Diagnosis of HIV coupled with cultural factors which look down upon widows add on to already existing inferior status of widows. Paucity of literature related to HIV positive widows led to the conception of the present study (Bhosle, 2004).

HIV-Positive is a challenge and a problem in Kenya in particular (Kata, 2011). Many people are infected with this disease and most of them are not powerful economically. The available evidence shows that AIDS epidemic is having an enormous effect on household, which come in various forms: increased medical and health expenditures and decreased income (DiMatteo, 2004). The result is a loss of savings, assets, and property in the affected households because HIV/AIDS imposes significant additional costs. This is magnified when the infected person is the bread winner. Absenteeism from work due to poor health as the disease progresses affects households and they become poorer than they would be without HIV/AIDS (Chuma & Molyneux, 2009).

Problems of sexually transmitted Infections (STIs) is among the socio-cultural problems faced by women due to risky sexual behavior *viz*, having multiple sexual partners as well as having sex without protection (Achen *et al.*, 2021; Hindin & Fatusi 2009; Morris & Rushwan 2015) . These hurdles are related to socio-cultural issues associated with sexuality as well as disparity existing in sexually and reproductive health of girls including early marriages, STIs prevalence among others (Starrs *et al.*, 2018). Often, these problems are linked to socio-cultural issues associated with sexuality and result in disparities in SRH of adolescent girls such as early marriages, sexually transmitted infections (STIs) prevalence, and rate of adolescent pregnancies (Starrs *et al.*, 2018).

#### **2.4.1 Poverty**

About 56% of the population in Kenya lies below the poverty line, subsisting on less than one dollar per person per day. The Human Immunodeficiency Virus and AIDS pushes affected households deeper into poverty. The vicious cycle of HIV/AIDS and poverty reduces resources, depleting the country of human capital in both the present and the next generation. Children who are in the affected households lack basic needs because of the poverty and HIV/AIDS related illnesses (Muindi, 2013; Pontali *et al.*, 2003).

A study by Richard *et al.* (2017) elaborates that, poverty and education have long been related with HIV/AIDS. Poor economic situation of the infected people prevents women with HIV/AIDS have access to benefits such as hospitals and good diet (Balabanova *et al.*, 2006). The situation is bad especially for women because they are a key person to their families. Richard *et al.* (2017) further states that, when a woman is sick, all family members become sick. Women with HIV/AIDS lack access to health care and preventive education which increases the chances of transmission to their children, families, and their partners.

Adino. (2020) found that poverty, stigma and lack of social support hindered PLWHA's adherence to ART in Siaya County. The findings showed that most of PLWHA did not afford the costs of medication for opportunistic infections, transport to health facilities and nutritious diet, all of which are important for successful adherence to ART.

#### **2.4.2 Cost on Expenditure among the people living with HIV-Positive**

Every woman with HIV/AIDS needs support from the society (Bowleg *et al.*, 2010). Even though a woman may be well financially but in one way or another she needs support from other people. Women with HIV/AIDS need affordable transport to and from the hospitals. Lack of affordable transport can increase frustration to women with HIV/AIDS. On the other hand, those with HIV/AIDS and have children, sometimes may not have any source of funds to cater for their children (Caetano and Clark, 2013). This situation makes them feel bad because their children want to eat while they cannot afford to provide them with proper food (Vogenthaler *et al.*, 2010). Furthermore, women need to access their medication (ARVs) from time to time, however, this may not be the case due to lack of affordable transport to and from the hospital (Caetano & Clark, 2013).

Costs associated with adherence to ART including the cost of treating opportunistic infections, transport to health facilities and nutrition hinder PLWHA's adherence to ART. Therefore non-adherence to treatment had negative socio-economic impacts on PLWHA in Siaya County (Adino, 2020).

#### **2.5 Accessibility of Services Facing Women Living With HIV**

The World Health Organization (WHO) estimates that nearly 10% of the world's population or 650 million people in the world today are living with disabilities (UN, 2010). Arguably, approximately 5% of the world population is made up of women with disabilities and hence inaccessibility of services. These women face multiple challenges due to the intersection of gender and disability. The number of persons with disabilities in the developing countries especially those in Africa is growing at an alarming rate due to various factors including civil war, violent crime, unhealthy living conditions, lack of access to essential services such as health care, knowledge gaps on disability, its causes, prevention, and treatment among other factors (UN,2010).

Accessibility challenges faced by WLWHA are mainly non-biomedical. Biomedical factors include disease characteristics and therapy related factors (Gill *et al.*, 2005; Ivers *et al.*, 2005; Maskew *et al.*, 2007). Disease characteristics include staging of HIV infection and presence of prior-opportunistic infections which are assessed in the form of symptoms and

illness status. Symptoms and disease progression has been associated with decreased adherence (Spire *et al.*, 2012). The therapy related factors include complexity of the therapy, scheduling demands, medication accommodation, side-effects and cognitive demand. Adherence to medication tends to decrease when the amount of medication per day is high (Chesney, 2010; Stringer *et al.*, 2006). Medications which are too demanding in terms of interruption of work, daily routine, lifestyle, coinciding with travel or have food restrictions like being taken on an empty stomach contribute to poor adherence (Beckwith *et al.*, 2005; Weiser *et al.*, 2013). The anticipation and fear of side-effects also have an impact on adherence. Poor adherence has also been associated with WLWHA's desire to avoid embarrassing side-effects such as sweating (Burgos, 2016). Demands exerted by the drugs on the mind, for instance, forgetfulness and treatment fatigue, are also known to reduce adherence levels among patients (Uldall *et al.*, 2014). The social and economic conditions influencing the lifestyle of HIV-infected drug users embodies a challenge for prevention and treatment of wasting (Campa *et al.*, 2005).

Non-biomedical factors affecting WLWHA's adherence to ART which were the focus of this study, include cost of drugs and laboratory tests for opportunistic infections, cost of transport to health facilities, cost of nutrition, stigmatization, cultural and religious beliefs and social support from health care-providers, family members and support groups (Eccles & Wigfield, 2002; Liamputtong *et al.*, 2009). A study that evaluated adherence to ART among 125 WLWHA in the University of Benin Teaching Hospital, Benin City revealed that adherence was dependent on educational level of WLWHA, poor financial status, medication adverse effects, lack of confidentiality, occupational factors, and stigmatization (Erah & Arute, 2008). Aday and Andersen (2017) differentiate between potential access (the presence of adequate health care systems to cater for the needs of patients) and realized access (the actual utilization of the health care system). On their part, Penchansky and Thomas (1981) summarize a set of more specific dimensions which describe the fit between the patient and the health care system. The dimensions thus included availability, accessibility. Accommodation, availability and acceptability.

## **2.6 Cost of Treatment of Opportunistic Infections**

Enabling factors in treatment access and retention include the means such as financial resources and health insurance required to access treatment. A study conducted by Howell and Trenholm (2007) found that health insurance coverage of undocumented children in Santa Clara County, USA, was associated with significant improvements in children's health

status. In another study evaluating barriers to antiretroviral adherence for PLWHA in Botswana, Audi *et al.* (2021) and Weiser *et al.* (2013) found that one of the principal barriers to adherence was financial constraints. Based on logistic regression, if cost were removed as a barrier, adherence was predicted to increase from 54% to 74% (*ibid.*). A study conducted in Kampala, Uganda by Byakika-Tusiime *et al.* (2005) established that inability to purchase and secure a stable supply of drugs was a major barrier to adherence to ART. Thirty-two per cent of the total respondents reported missing at least 5% of their medications in the previous three days before the study, while 40 % missed at least one dose of the ARVs in the previous three-month period before the study (Byakika-Tusiime *et al.*, 2009).

Quinn and Kumar (2014) argue that economic inequality within countries is what drives the spread of the HIV pandemic and other infectious diseases. They demonstrated that structural issues such as poverty could have a far more profound effect on the health behaviour of people than the impact of receiving health care information. They coined the term “structural violence” to explain how poor people are structurally prone to disease and detrimental life outcomes. To access treatment, a PLWHA had to take into account, microeconomic considerations such as the cost of drugs. The notion of economic burden has its roots in the discipline of health economics. While the concept of economic burden is relatively new in the study of antiretroviral therapy, in the past it has been researched when studying short-lived illnesses such as malaria in poor households (Maqutu *et al.*, 2010; Mellins *et al.*, 2004; Molassiotis *et al.*, 2002; Russell, 2016).

The result of a study conducted in Senegal by Desclaux (2013) suggest that inability of PLWHA to cater for the cost of drugs to treat opportunistic infections remains a major barrier to ART adherence. The Health Reform Foundation of Nigeria (HERFON, 2007) further contends that lack of financial resources for expensive laboratory testing also impacts negatively on adherence to ART. A national survey conducted in the USA among PLWHA enrolled in care by Keruly *et al.* (2002) found that medical insurance was a particularly important correlate of receipt of ART. PLWHA with commercial or private insurance were most likely to receive ART; PLWHA who were insured by a public insurer (e.g., Medicaid or Medicare) were less likely to receive ART while those with no insurance were least likely to receive ART (Nwauche *et al.*, 2006). Medications cost money and may stretch an already meagre budget of PLWHA in resource-poor countries where many people live below the poverty line and there is often no medical insurance or disability pension for PLWHA (Hardon *et al.*, 2006). Background studies from Botswana, Senegal, Cote d’Ivoire and Uganda

revealed that, overall, PLWHA's economic situation interfered with their abilities to take up and adhere to ART (Byakiika-Tusiime *et al.*, 2009; Lanieceet *et al.*, 2013; Laurent *et al.*, 2002; Weiser *et al.*, 2013). Accessing ART involves costs and sacrifices, and WLWHA have to make critical choices between medication expenses and domestic maintenance owing to the fact that HIV and AIDS-related morbidity and mortality have the potential of eroding the household's ability to cope with such costs (Johannessen *et al.*, 2008; Niehaus, 2010). Niehaus further posits that the professional class generally have employer-funded group health insurance which covers extended hospital stays, home health care, and expensive medications. According to Niehaus, people without insurance or with poor quality insurance tend to rely on government and community-based support mechanisms.

Zachariah *et al.* (2006) study on Risk factors for high early mortality in patients on antiretroviral treatment in a rural district of Malawi used adults to start on antiretroviral treatment (ART) in a rural district hospital to determine the cumulative proportion of deaths that occur within 3 and 6 months of starting ART, and to identify risk factors that may be associated with such mortality (Wagner, 2002; Weidle, 2006). The study found that individuals that were severely malnourished [body mass index (BMI) < 16.0 kg/m<sup>2</sup>] had a six times higher risk of dying in the first 3 months than those with a normal nutritional status.

A meta-analysis of various published literature focusing on ART programs in resource-limited settings revealed that when medications were provided free-of-charge, there was a higher probability of achieving adherence and undetectable viral loads<sup>15</sup> compared to situations where PLWHA were required to pay for treatment (Ivers *et al.*, 2015; Nakanjako *et al.*, 2009). Indeed, Lanièce *et al.* (2003) found that financial difficulty was the leading cause of treatment interruption among PLWHA in an ART program in Senegal. The study also showed that there was a significant increase in adherence when the cost of ARVs was reduced. In 2004, poor households in India spent 82 % of their income on HIV treatment related services (UNAIDS, 2014). Many poor patients in Kilifi, Kenya, were found to depend on shopkeepers to offer them credit to help them meet the direct and indirect costs of illness including purchasing drugs. Households with low incomes experienced a lot of difficulties in accessing health care and when they did, they often spent relatively more of their income on treatment than households with high income (Chuma & Molyneux, 2009).

A study by Holstad *et al.* (2012) was assessing the efficacy of a group intervention using motivational interviewing (MI) to promote adherence to antiretroviral therapy (ART) and use of risk reduction behaviors (RRB) among HIV-infected women in Nigeria. The study

found that in comparison with the control group, MI participants reported significantly higher levels of adherence to ART, higher knowledge of HIV, higher use of condoms/protection during sexual encounters and decision-making not to have sex when no protection was available (Holstad *et al.*, 2012).

## **2.7 Cost of Transport to Health Facilities as a challenge faced by WLHIV**

The cost of transportation to health facility has been identified as a potential barrier to adherence to ART in Sub-Saharan Africa (Tuller *et al.*, 2010). Adherence to clinical appointments and drug refills are determined by personal factors which Andersen (1995) identifies as income, travel time and waiting time at the clinic. Income levels of WLWHA determine whether they can afford the transport cost to the health facility. Illness influences livelihood security among the poor. The economic burden of illness entails both direct and indirect costs. Direct costs refer to household expenditure linked to seeking treatment, including non-medical expenses such as transport. The indirect costs refer to the loss of household productive time for WLWHA and caregivers, and the decrease in wage and profit due to the inability to work (Russell, 2004). Several studies have linked cost of transport to health facilities with patient's non-adherence to treatment, for example, Onwujekwe *et al.* (2005); Russell (2015) and UNAIDS (2011). Agbonyitor (2009) contends that poor PLWHA are not able to raise money for transport to the clinics for medical check-ups or for drug refills.

Similarly, Rosen *et al.* (2017) conducted a study in South Africa whose findings revealed that transport cost to health facilities remains a major barrier to adherence to ART even after the cost of ARVs had been removed to make them available to most WLWHA. Transportation costs may have negative implications on adherence especially among the low-income group of WLWHA. For example, Ssewaya (2011) contends that even when antiretroviral drugs are provided free, WLWHA still suffer a wide range of costs. He observed that some WLWHA from the rural settings skipped pharmacy refills due to transport problems. Poverty has been cited as the major contributor of PLWHA's inability to access money for transportation to health care facilities (Agbonyitor, 2009). Ramadhani *et al.* (2007) studied predictors of incomplete adherence, virologic failure, and antiviral drug resistance among adult WLWHA receiving antiretroviral therapy in Tanzania, and found that an increase in the cost of transport to health facilities was associated with an increase in non-adherence (Dorz *et al.*, 2003; Mathes *et al.*, 2013). Similarly, Russell (2015) posits that increase in transport to health facilities constitute a barrier to health service use especially

among the poor. This is because people who live far away from health facilities suffer greater disadvantage regarding use of health services especially if they are poor and transport is expensive. Increase in cost of transport to health facilities has not only been found to decrease utilization of health services, it is also a strong determinant of where people first seek treatment (Adeneye *et al.*, 2006; Golin, *et al.*, 2002).

The findings of a study conducted in Nigeria by Charurat *et al.* (2010) revealed that 22.9% of the respondents who were enrolled for ART were lost to follow-ups at 6 months, while 25.3% were lost to follow-ups at 12 months. Inability to pay for transport costs to the health clinic was cited by the WLWHA as the main factor which contributed to loss to follow-ups. This suggests that expansion of treatment access points of care to communities to diminish travel time may have a positive impact on adherence (Abdulrahman *et al.*, 2019). The implication of break in ART on individual health includes worsening of the WLWHA's health and well-being as a result of ensuing drug resistance (UNAIDS, 2011).

The WLWHA whose sources of income are low choose either to feed their family or to spend the little money on transportation (Rachlis *et al.*, 2011). Capacity to use health services and cost burdens differ between socio-economic groups and the poorer socio-economic status groups face a higher burden than the better-off group in relation to their ability to pay for transport costs to health facilities (Patcharanarumoln *et al.*, 2009). The results of studies conducted in Southeast Nigeria indicate that even in the context of free ARV drugs, the cost of transportation and financial constraints constitute barriers such that treatment fails to reach the poor (Uzochukwu *et al.*, 2009). In the same vein, Panos (2016) observes that even if diagnosis, drugs and tests are free, poor people may not be able to access ART because of their inability to afford cost of transport to and from the treatment centres.

## **2.8 Cost of Nutrition as a challenge faced by WLHIV**

Lack of food contributes to non-adherence to ARVs dosing schedule. For example, Ssewaya (2011) found that some WLWHA, mainly in the rural setting, failed to swallow their ARVs due to food shortage related problems. Uthman (2008) posits that undernutrition associated with HIV is a public health concern in Africa. Similarly, a demographic and health survey in eleven.

Sub-Saharan countries estimated that 10.3% of women WLWHA were undernourished (*ibid.*). The results of a survey conducted in Lusaka, Zambia, by Koethe *et al.* (2010) indicate that 9 per cent of adults who were newly initiated on ART were diagnosed

with severe malnutrition. Mortality within the first 90 days of ART was elevated among WLWHA with very low BMI while health improvements were most pronounced for those with average BMI. Failure to gain weight within the first six months after being initiated on ART was associated with a nearly tenfold increased hazard of death (Braitstein *et al.*, 2006).

Finally, a 2010 national survey in Kenya revealed that most Kenyans were faced with food scarcity such that their entire incomes were not enough to meet their food requirements (Kenya National Bureau of Statistics, 2012). Similarly, Agency for Co-operation and Research in Development (2016:7) indicates that almost a quarter (18%) of ARV users' households in Tanzania were not able to afford a balanced diet that could support ART. IRIN (2010) also contends that malnourished people cannot benefit from antiretroviral treatment as taking treatment without food can be very painful. On its part, Christian AID (2007) posits that nutritional support is vital too as food insecurity could determine whether people remain on treatment or stop.

Some medications can only be taken on a full stomach while some ARVs' side effects are reduced by having a balanced diet. A significant proportion of children in Sub-Saharan Africa are simultaneously affected by nutritional deficiencies (WHO *et al.*, 2007). The prevalence of mild and moderate malnutrition among adults living with HIV and AIDS is 15.4% and 10.3%, respectively, in Sub-Saharan Africa (Uthman, 2008) and is also elevated among young children living in AIDS-affected households (Magadi, 2011). The increased caloric requirements of WLWHA and undesirable side effects of ART which are normally worsened by malnutrition may be alleviated by providing nutritional support. Nutritional deficiencies among WLWHA in Sub-Saharan Africa is of particular concern as it is associated with declining adherence and increased drug resistance (Byron *et al.*, 2015; Laufs *et al.*, 2011). Food insufficiency and HIV and AIDS participate in a vicious cycle that heightens the vulnerability to each condition (*ibid.*) But the prevalence and correlates of food insufficiency among WLWHA is underexplored. Despite this recognition, food insufficiency remains a likely and under-appreciated barrier to HIV services and effective antiretroviral treatment (Rollins, 2007).

## **2.9 Theoretical Framework**

This study was guided by Behavioural model of health service use which is used in demonstrating how socio-economic challenges associated with living with HIV, affect WLWHA's. The study was also guided by Sweat and Denison's model of HIV and AIDS structural factors (Denison *et al.*, 2009).

### **2.9.1 Behavioural model of health service use**

Behavioural Model of Health service approach is used to demonstrate how socio-economic challenges associated with living with HIV, affect WLWHA's. The behavioural model of health service use was initially developed over forty-six years ago. In the interim it has been subjected to considerable application, reproduction, and alteration. This model was originally developed to explain health services use and had a family-level focus but was later adapted to predict the use of health care services at an individual level. This model examines relationship between predisposing, enabling and need factors in health care utilization (Andersen, 1995). The model is useful in identifying variables related to adherent medication-taking behaviors (De Smet & Erickson, 2016). Murray *et al.* (2014) used this model to study adherence predictors in older adults. On the other hand, Wekesa (2002) used the model to investigate patients' compliance with prescribed drugs in what was then Bungoma District, Western Kenya.

### **2.9.2 Sweat and Denison's model of HIV and AIDS structural factors**

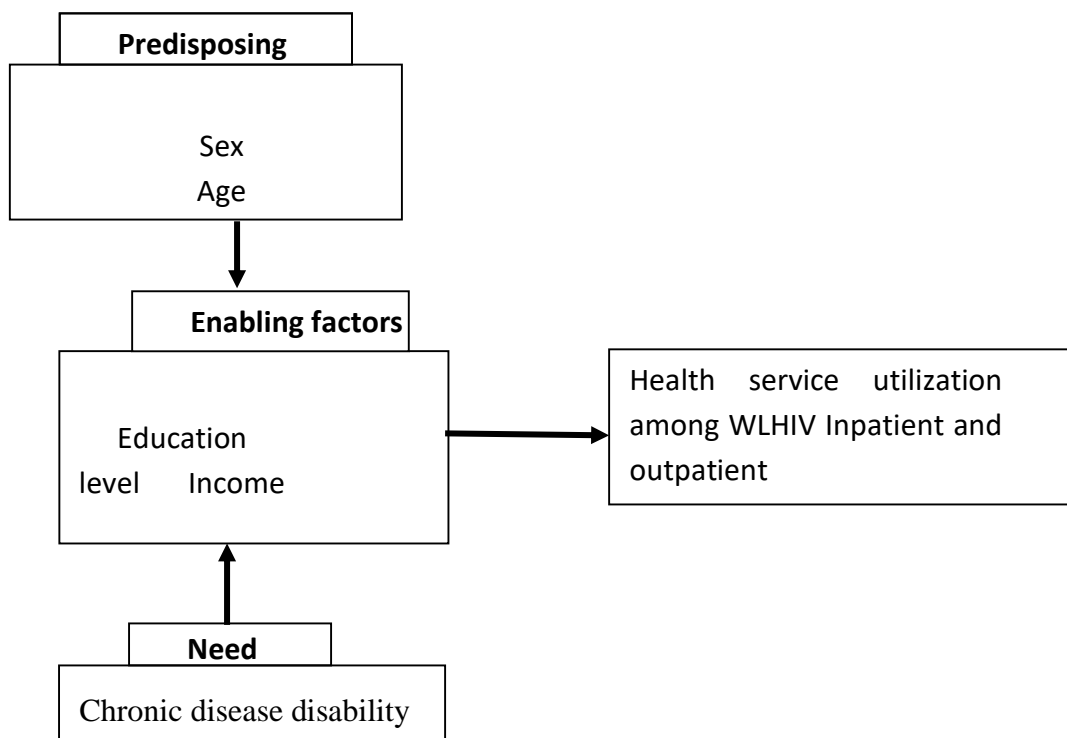
This model was used by De Smet and Erickson (2016) to examine self-reported adherence in asthma patients and concluded that adherence to asthma medications was moderately related to predisposing factors such as health belief, enabling characteristics including number of metered dose inhaler instructors, and need factors such as perceived severity of the disease.

The proponent of Sweat and Denison's model is the Health Belief Model (HBM) which is a psychological model that attempts to explain and predict health behaviours by focusing on the attitudes and beliefs of individuals (Duyan *et al.*, 2001; Glanz *et al.*, 2008). The HBM was developed in the 1950s as part of an effort by social psychologists in the United States Public Health Service to explain the lack of public participation in health screening and prevention programs (Bandura, 1986). Since then, the HBM has been adapted to explore a variety of long- and short-term health behaviors, including sexual risk behaviors and the transmission of HIV/AIDS. The key variables of the HBM are as follows (Rosenstock *et al.*, 1994).

However, HBM model has its own limitations in that most HBM-based research has incorporated only selected components of the HBM, hence doesn't test the importance of model fully; as a psychological model it leaves out other factors, *viz* environmental or economic factors, which influence health behaviours of the patients and also the model does not incorporate the influence of social norms and peer influences on people's decisions

regarding their health behaviours (Onwujekwe *et al.*, 2005; Rosenstock *et al.*, 1994). Predisposing factors are defined as those factors that exist prior to illness and they shape an individual's attitudes towards health care use. These include demographics (age, gender), social factors (education, occupation, and ethnicity), and health beliefs of patients (attitudes, values, and knowledge). Enabling factors refer to resources that promote or inhibit the health care utilization. These include personal factors (income and health insurance), and community factors (social support).

The need factors represent the individual's illness or impairment that necessitate the use of health care services. These include perceived need (perceptions of illness) and evaluated need (professional judgment about health status of patient (Andersen, 1995). Recent versions of the model have included new elements to reflect the role health care systems play in influencing access and retention. Ricketts and Goldsmith (2005) and Saurman (2016) argue that early users of this access concept attempted to create global indicators of access that focused on both process and outcomes. The process indicators include regular source of care, travel time to care, ability to get an appointment in a reasonable time, and in-office waiting time. The model is presented in the next Fig 2.1.



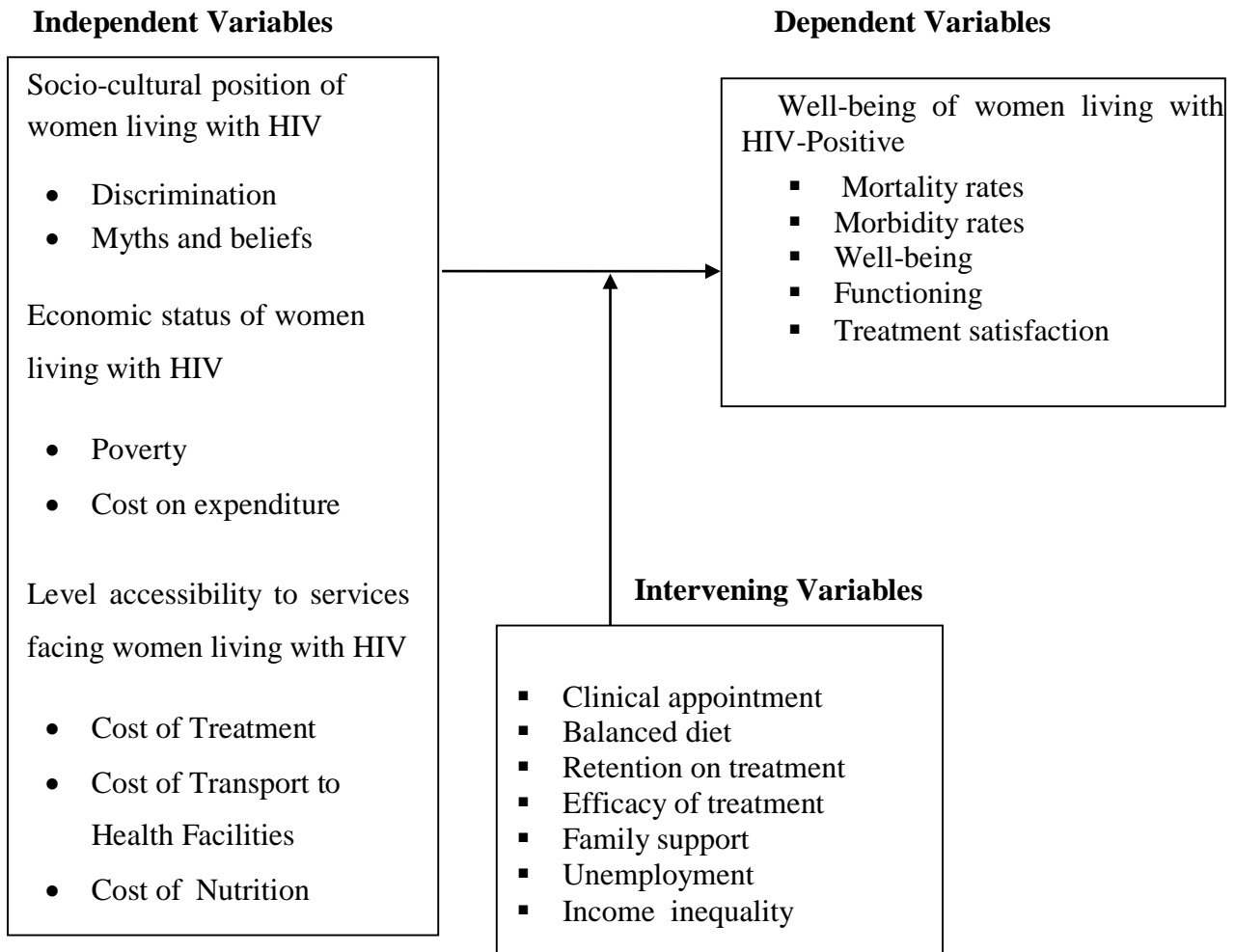
**Figure 2.1: Behavioral model of health services use among WLHIV**

Source: Andersen (1995)

According to Figure 2.1, enabling variables examined in this study were income and educational level. These variables are usually influenced by sex and the age at the top as well as chronic diseases at the beneath. Findings of the study by Owen (2003) show that specific to support were consistent with a previous study of African American WLWHA who denoted the value of receiving emotional and tangible support from family and friends. The results by Shamburger-Rousseau *et al.* (2016) further support that a lack of child care services presents as a barrier to African American WLWHA whether or not they are utilizing VR or HIV-related services. This also applies to the health service utilization among WLHIV inpatient and outpatient as indicated.

### **2.10 Conceptual Framework**

This study sought to conceptualize the independent and dependent variables as shown in Figure 2.2. Conceptual framework elucidates interactions that exist between variables within the study and indicating these relationship diagrammatically (Mugenda and Mugenda, 2003). Figure 2.2 describes the links between different Socio-cultural positions of WLWHA, Economic status of WLWHA and Level accessibility to services facing WLWHA in Manyatta shanties and factors influencing Well-being of WLWHA within the study area.



Therefore, the dependent and independent variables may be influenced by intervening variables such as Clinical appointment, Balanced diet, Retention on treatment, Efficacy of treatment, Family support, Unemployment and Income inequality/ these variables are used as intervening variables since they are beyond the control.

**Figure 2.2: Conceptual framework**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter described the methods that were utilized in the study. They included the research design, target population, sampling and sampling techniques, research instruments for data collection, Validity and reliability of instruments, data collection procedure, and data analysis techniques.

#### **3.2 Research Design**

The study adopted a cross sectional descriptive survey research design. A cross-sectional survey collects data to make inferences about a population at one point in time. Kothari (2004) described this design as a snapshot of the populations about which they gather data. Cross-sectional surveys may be repeated periodically; however, in a repeated cross-sectional descriptive survey, respondents to the survey at one point in time were not intentionally sampled again, although a respondent to one administration of the survey could be randomly selected for a subsequent one. Therefore, data was collected from the study population at one time to examine the socio- economic challenges faced by WLWHA in Manyatta slums in Kisumu County. This design was also chosen because it is applicable for collecting data on perceptions, attitudes and behaviour using questionnaires in studies which involve larger samples.

#### **3.3 Study Area**

The study was carried out in Manyatta slums in Kisumu County. The slums (informal settlements) is one of the most densely populated slums in Kisumu County with a microcosm of many of the world's most vexing issues: poverty, healthcare, severe water shortage and the spread of HIV/AIDS (Karanja, 2010).

Manyatta is a peri-urban estate neighbouring eastern outskirts of Kisumu town. It is located in what might be called colloquially as the Kisumu's "slum belt," a group of slums that have grown for decades skirting around the centre and suburbs of Kisumu since the pre-colonial period. The slum consists largely of informal semi-permanent housing for the poor, many of whom migrated from rural areas in pursuit of economic opportunities in the city. Residents living here earn relatively low incomes, yet they generally pay more than high class counterparts for basic services such as water and public transit. Residents often have no access to piped water, even though Kisumu sits on the shores of one of the world's largest bodies of fresh water (Michel *et al.*, 2016).

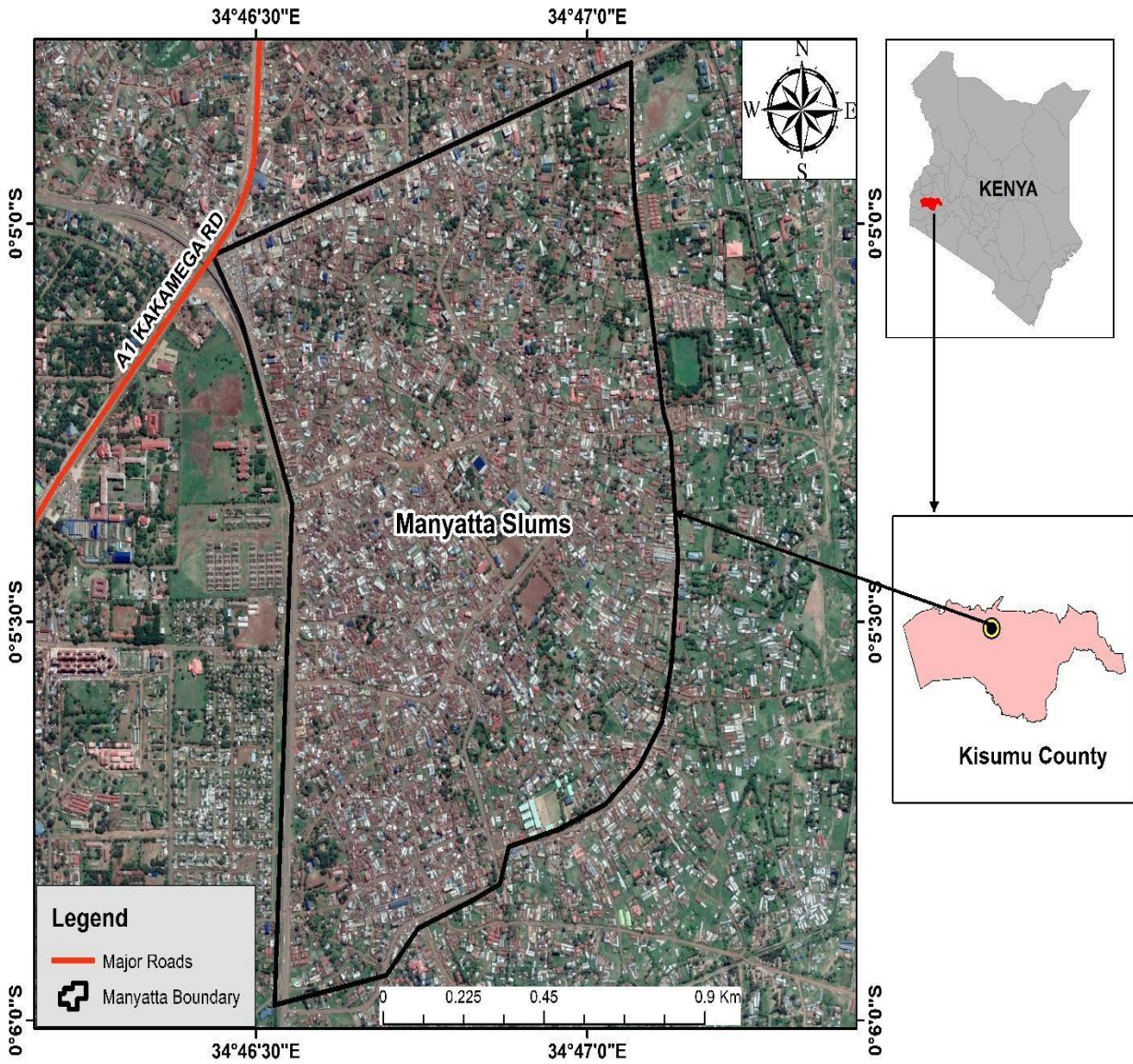


Figure 3.1: Map of Manyatta slums

Source: GIS Department, Kenyatta University (2023)

Studies revealed that the highest poverty rates in Kisumu city were in Kolwa West and East Kisumu Sub County, where Manyatta slums is located. (CBS, 2005). Manyatta slums occupies a total land area of 1.39 sq. km and with a population density of 6,200 people per sq. km. The 2009 Census found the average size of a household in Obunga has 5.9 members per household. Manyatta slums encompasses three smaller areas namely, Kondele, Manyatta A, Manyatta B (KNBS, 2019; Munala, 2009). The economic activity of the majority of households are engaged in transport, petty sales, repairs, carpentry, metalwork and other small-scale businesses

The nearest public health facility was New Nyanza General Hospital renamed as Jaramogi Oginga Odinga teaching and referral hospital, and many residents relied on that hospital and private clinics or dispensaries located in the central business area, which was 4 km away. Many households did not have electricity or access to piped water in their homes.

Manyatta slums area was selected since it was in line with the research problem, and it gave the anticipated information. Manyatta slums in Kisumu was characterized by habitats who upheld socio cultural believes and myths and the affiliated socio-economic states for the habitants it low. Primary and secondary education is provided by 706 primary schools and 173 public secondary schools, including two of the oldest secondary schools in Kenya; Maseno School. A substantial number of private institutions also exist within the county. The poverty index of Kisumu County stands at over 60% of since over two-thirds of the population lives in 'absolute poverty' which is three times the poverty index of Kenya as a country. Lack of education, information, and empowerment amongst women, compounded with cultural beliefs and passive male participation were challenges that required urgent intervention in the region (Karanja, 2010). The study area was generally cosmopolitan.

### **3.4 Target Population**

The study targeted women living with HIV-Positive in Manyatta slums in Kisumu County. These were the HIV-positive women who had joined Home Based Care organizations that dealt with HIV/AIDS positive people within Manyatta slums. According to International Community for The Relief of Starvation and Suffering (ICROSS, 2017), there were 1100 women living with HIV-Positive in Manyatta slums. This is the sample frame from which the sample size was obtained.

### **3.5 Sample Size and Sampling Procedure**

In selecting the women living with HIV in Manyatta slums, purposive sampling technique was used to select 110 WLHIV, which represent 10% of the study population. Two categories of respondents were contacted. The first category of respondents were those living with HIV-Positive. In the second category, a close relative, preferably the spouse who presumably knew all the details of the infected person was interviewed. According to Mugenda and Mugenda (2003), when the target population is known, the 10-30% of this population was adequate as a sample size. Purposive sampling was used to select the study sample because of the desired characteristics they possess. According to Creswell and Creswell (2017), a purposive sample is a non-probability sample that is selected based on characteristics of a population and the objective of the study.

### **3.6 Research Instruments**

Some of the research instruments used include; questionnaires, interview schedules, focus group discussions, and document analysis and desk top study as the instruments for the study. The study used a set of questionnaire and interview guide to collect data. According to Orodho (2005), questionnaires are considered appropriate as they have a large group of respondents and have the benefit to self-administer, anonymity and the standardization of questions to ease the data analysis procedure. The questionnaires employed both closed and open-ended questions. This nature of questions gave the respondents the freedom to decide on the form, detail and length of their answers. In addition, these questions helped to gain more insight and knowledge some of which may not be anticipated. The study also used the interview schedule for purpose of having a structured interview as well as Focus group discussions to capture attitudes and aspirations of respondents.

#### **3.6.1 Questionnaires**

Primary data was collected using semi-structured questionnaires. Burns and Grove (2010) confirmed that questionnaires were considered rich for both quantitative and qualitative research. The questionnaire was mainly composed of closed-type questions. Questionnaires were preferred as the most suitable instruments for the data collection because they allowed achievement of many respondents (or large samples) within limited time. Questionnaires were also suitable because they ensured confidentiality and thus helped to gather more candid and objective answers. The questionnaires were developed to address the objectives of the study. Kothari, C.R (2004) observes that questionnaires enable the person administering them to explain the purpose of the study and to give meaning of the items that

may not be clear. The questionnaires were administered to the 110 women living with HIV-Positive. The questionnaires were divided into different categories to address each specific research question in addition to the general question. Questionnaires were deemed suitable for the study as not only did they allow for the collection of standardized information but were also relatively inexpensive to administer and easy to analyse (Creswell & Creswell, 2014).

### **3.6.2 Focused Group Discussion**

The study also used Focus Group Discussion to obtain qualitative data. A focus group discussion (FGD) was a good way to gather people from similar backgrounds or experiences to discuss a specific topic of interest. The group of Ten (10) participants was guided by a moderator (or group facilitator) who introduced topics for discussion and helped the group to participate in a lively and natural discussion amongst themselves. Key informants and focus group interviews were audio recorded and transcribed verbatim with analysis done through thematic and content analysis.

The strength of FGD relies on allowing the participants to agree or disagree with each other so that it could provide an insight into how a group thought about an issue, about the range of opinion and ideas, and the inconsistencies and variation that existed in a particular community in terms of beliefs and their experiences and practices (Creswell & Creswell, 2017). FGDs could be used to explore the meanings of survey findings that cannot be explained statistically, the range of opinions/views on a topic of interest and to collect a wide variety of local terms.

The qualitative data was further collected through focus groups and key informants' interviews, the identified key informants and the focus groups were intended to enable realization of data saturation which was the key element in qualitative data. According to Houser (2013), this study realized data saturation with two well conducted interviews.

### **3.6.3 Interview schedules**

The interview schedule was developed with the purpose of the survey collection of information on issues that were addressed through interventions in the project. The instrument was field tested before implementation. Two sets of interview schedules were developed, one for infected persons and another for affected persons.

### **3.6.4 Desktop Review**

A desktop review was carried out to establish settlement structures and their significance within the study area. A review of areas designated (or were being considered)

for this study was carried out after obtaining research permit from National Commission for Technology, Science, and Innovation (NACOSTI) to be able to carry out data collection. Furthermore, a review of the published literature, including the Cork County Development Plan 2003-2009 was undertaken to collate data on socio economic and cultural positions of women living with HIV-Positive and their accessibility to public health services. A range of additional sources of information including scientific reports produced by, and information on the websites of the slums and other agencies were also reviewed. A full bibliography of information sources reviewed was given in the references section. The responses received from statutory and non-statutory consultees consulted directly and were also reviewed. The collation of this information, as well as examination of Ordinance Survey map allowed the study area to be highlighted prior to the field survey.

### **3.7 Pre-Testing of the Questionnaires**

Pre-testing of the questionnaires was done in some of the neighbouring areas with slums. In this case Nyalenda slums was used for pretesting. The respondents were selected, to represent 10% of the sample size as per recommendations by Mugenda (2003) who pointed that a successful pre-testing used 1% to 10% of the actual sample size. Therefore, 11 mothers living with HIV in Nyalenda slums but did not take part in the actual study were administered with questionnaires for pretesting. According to Borg and Gall (2003), pre-testing of the research instruments is essential to validity and reliability tests of the instruments for purposes of quality control. Questionnaires were self-administered to the respondents and interpretation of the response alternatives and queries were carried out to form items that bear the same meaning but were not identical. Order of response alternatives was similarly changed for questions with normal scale to assess the validity and reliability. Meanwhile, respondents' choices were evaluated for appropriateness.

The questions were verified to check whether the respondents comprehended the same way to remove redundancies and ambiguities. In addition, average time taken to complete the questionnaires was noted and the overall pilot test results discussed with the supervisors and adjustments made according to the results of the instruments review and pilot test prior to the production of the final instruments.

### **3.8 Validity of Data**

Validity of the survey was deemed of good quality when there was internal validity, construct, and external and statistical conclusion validities (Bhattacharjee, 2012). Validity is seen as the ability of a research instrument to measure what it is designed to measure (Kumar,

2009). To achieve desired degree of validity, the research instrument was formulated and piloting was conducted in the nearby shanties of Manyatta from the nearby Kisumu-county as a purposively selected sample. This was done to test effectiveness and soundness of the measuring instrument. Tools validity was done using the results of the pilot study. Through pilot study, ambiguities in the questions to be asked was done away with before the actual study is carried out. The instrument was also used to check whether the questions were suitable for the intended respondents. Thorough scrutiny of the instruments were conducted by the supervisors to determine whether the items in the instruments adequately address the objectives of the study. This was achieved by conducting a pre-test and by considering comments from my advisors and experts, and remove irrelevant items from the instrument. Reviewing the clarity of wording.

### **3.9 Reliability of Research Instruments**

The split half method was used to establish reliability of the instruments. The split half reliability artificially divides test into two halves and correlates the individual scores on the two halves. The test was administered to a group of implementing officers and later divided the items into two halves using odd and even numbers. Scores for each individual on the two halves was obtained and coefficient correlation calculated using SPSS version 2.4. To transform the split half correlation into an appropriate score reliability, estimate for the entire test, the Spearman–Brown Prophecy Formula was employed which is used to calculate the reliability when the number of items in a questionnaire is changed (De Vet *et al.*, (2017).

Reliability of the data collection tool is also measured by adapting consistency and dependability. Piloting was used to test inter-rater reliability. Internal consistency reliability was tested using Cronbach’s alpha developed by Lee Cronbach in 1951 (Bhattacharjee, 2012). This indicated the reliability and consistency of the survey questionnaire (Aziz *et al.*, 2014).

### **3.10 Data Collection Procedures**

After the validity and reliability of questionnaires was ascertained, the two research assistants trained on data collection skills. Then a letter was obtained gave authority to carry out the field research from Egerton University. The letter also introduced the researcher and the study to be undertaken. A permit to carry out the study was also obtained from the National Commission of Science, Technology, and Innovation (NACOSTI). These steps enabled in conducting the study effectively and gaining of the desired sequencing of the steps (Kothari, 2004).Data for this study was collected using questionnaires. Prior to visiting the

women under investigation, proper planning for the most appropriate timings of the respondents to fill the questionnaire were done. This ensured that, their work schedules were not affected. After administering the questionnaire, the respondents were given at least two days to respond. The researcher then visited the homes under the study on several occasions for a follow-up on the research questionnaires and collecting them.

### **3.11 Data Analysis and Presentation**

Upon completion of the data collection exercise, all completed research data was assembled, coded, summarized, and entered the computer; and analysed using the statistical package for social science (SPSS) version 24.0. Descriptive statistics were used to analyse the data. Descriptive statistics consisted of computation of sums, means, standard deviations, frequencies and percentages. The analyses were further amplified by subjecting selected results by use of graphical and tabular techniques permitting to some of the results to be presented in form of tabular matrices and pie / bar charts for clarity. Qualitative data were analysed using thematic content analysis. Qualitative data analysis provided ways of discerning, examining, comparing, and contrasting, and interpreting meaningful patterns or themes from data. Meaningfulness was determined by the objectives of the research study. Qualitative approaches to data analysis tended to focus on the descriptive or theoretical aspects of the transcript data.

### **3.12 Logistical and Ethical Consideration**

According to Bryman (2008), it is imperative to avoid causing physical or psychological harm to respondents by asking embarrassing and irrelevant questions, threatening language, or making respondents nervous. To this study, consent to carry out the research was sought from the women with HIV where the study was carried out. The nature and reason of the research was explained to the respondents and their informed permission sought. The consent form was attached to the questionnaire. At any time during the research process the respondent were at liberty to withdraw consent. No names were required to be indicated in the data collected to ensure the information obtained from the respondents was treated with utmost discretion. The rights of each individual respondent was respected by safeguard his/her personal dignity.

## **CHAPTER FOUR**

### **RESULTS**

#### **4.1 Introduction**

This section represented the research results and findings from both collected primary and secondary data. The primary data was collected from a sample of one hundred and ten research participants. Both qualitative and quantitative data was collected in this study; qualitative data was analysed by use of content analysis and quantitative data was analysed through descriptive analysis using statistical package for social sciences.

#### **4.2 Survey Results**

The survey results were from questionnaires asked to 110 participants. All participants responded willingly because the researcher was able to visit them at their place of residence to increase familiarity and convenience for them.

#### **4.3 Variables**

Independent variable: the cost of transport to health facilities, cost of treating opportunistic diseases, and the cost of nutrition. These factors influenced health service utilization among Women living with HIV-Positive in Manyatta slums.

#### **4.4 Demographic Response**

The demographic responses were measured using age, gender, level of education. This enabled in understanding and segmenting the respondents/ audience by characterizing their ages, income levels, educations as well as their geographical location.

##### **4.4.1 Age**

Based on the results of the study, the highest number of participants was aged between 26 and 30 years of age, followed by those between eighteen and forty years. The study participants targeted by this research were aged between 18 to 40 years since at this age, the responded are sexually active, therefore being vulnerable for contracting HIV-Positive. Young women of between twenty-six and thirty years recorded the majority (43.64%) of the study participants. 20% of the women were in their 30's, 13.64% were below twenty-five years, women aged between thirty five to forty recorded 11.82 % while the list group of women entailed 10.91% those were above forty years. The predominance of majority young women was attributed to aspect of early marriages and high birth rates within Manyatta slums. This information was presented in table 4.1

**Table 4.1: Age Response**

<b>Age group</b>	<b>Frequency</b>	<b>Percent</b>
18-25	15	13.6
26-30	48	43.6
31-35	22	20.0
36-40	13	11.8
Above 40	12	10.9
<b>Total</b>	<b>110</b>	<b>100.0</b>

**4.4.2 Education Level**

The highest education level attained by most of the participants was primary school level. Given the condition of the area as a low income earning as well as being slums, the areas was more likely to experience such statistics. Education was a core factor that this research investigated as it influences socio cultural and economic lifestyles of women living with HIV/AIDS in Manyatta slums.

The results in Table 4.2 indicate that majority (80.9%) of residents had reached primary followed by high school (14.5%) 2.73% had college diplomas, and 1.82% had undergraduate degrees while non-had reached postgraduate level.

**Table 4.2: Education level response**

<b>Education Level</b>	<b>Frequency</b>	<b>Percent</b>
Primary	89	80.9
High school	16	14.5
Diploma	3	2.7
Undergraduate	2	1.8
Postgraduate	0	0
<b>Total</b>	<b>110</b>	<b>100.0</b>

There were no study participants with post graduate education. Further discussions with the study respondents indicated that many of them were from extremely poor background and their parents were completely unable to raise funds for their education to further their education and that was the reason for dropouts. This information was presented in table 4.2

#### 4.4.3 Women Diagnosed with HIV

This question focused on the participants who were diagnosed with HIV to determine exactly how many of them were directly affected. More than 90% of the participants were affected by HIV. This was a sensitive question and was asked cautiously. No respondent was forced to answer but they all chose to. The information was tabulated in table 4.3

**Table 4.3: Women Diagnosed with HIV Response**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
Yes	100	90.9
No	10	9.1
Total	110	100.0

#### 4.5 Challenges faced by women living with HIV-Positive in Manyatta slums

The study sought to establish the Cost of Transport to Health Facility as a Challenge Faced by Women Living with HIV in Manyatta slums. This section provides analysis on mean and standard deviations regarding participant's response on Cost of Transport to Health Facility as a Challenge Faced by Women Living with HIV. The respondents were required to indicate the extent of their agreement or disagreement with the statements in relationship to challenges faced by Manyatta women living with HIV-positive using the Likert scale year by ticking the box that best described their answer. Where Strongly Disagree (SD), mildly disagree (MD), Disagree (D), Agree (A) and strongly agree (SA). The analysis was done using mean and standard deviation and the results were tabulated as shown below.

##### 4.5.1 Cost of Transport to Health Facility

From the results of the frequency tables based on standard deviation, it is easy to point out that most of the responses leaned toward strongly agreeing with the statements. This is shown specifically by the means where they are all above 3.48. Given that the Likert scale was between 1 and 5, with one being strongly disagree and 5 being strongly agreed, most women were agreeing. The individual statements indicate that most women agreed the cost of transport to health facilities was too high. This information was presented in Table 4.4

**Table 4.4: Cost of Transport to Health Facility Response**

<b>Description</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Distance to health facility too long and costly	110	1	5	3.78	.952
I go to health facility by foot	110	1	5	3.58	1.112
I go to health facility on boda-boda	110	1	5	3.48	1.232
Transport is unaffordable	110	1	5	3.58	1.112
Valid N (listwise)	110				

#### 4.5.2 Cost of Treatment of Opportunistic Infections

The same trend was realized when the responses for the cost of treating opportunistic disease was analysed. More women leaned towards agreeing and strongly agreeing to the statements based on the means. A good example was when the women mostly agreed that they sometimes were not able to reach their clinics in time or ever because of lack of cash. Some of these women have had to walk on foot and then have no funds for medication. A separate problem that emerged was the lack of medication in the specific hospitals to treat the diseases, and thus they had to buy them from other selling points. The government medication was subsidized and thus it had a lower cost, which could be cost friendly to the women, however, if they were sold by independent pharmacists, the prices are likely uncontrolled and definitely higher, and thus unaffordable. The information was tabulated in Table 4.5

**Table 4.5: Cost of Treatment of Opportunistic Infections Response**

<b>Description</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
I don't get to clinic because of no money	110	1	5	3.39	1.342
Medication is scarce in this facility	110	1	5	3.78	.952
I buy costly medication from pharmacy	110	1	5	3.58	1.112
Treating opportunistic diseases is costly	110	1	5	3.48	1.232

I cannot afford prescribed drugs	110	1	5	3.58	1.112
Valid N (listwise)	110				

### 4.5.3 Cost of Nutrition

The means relating to the cost of nutrition was even higher and closer to 5 than 1. Compared to the other two sections, the cost of nutrition scored the highest, indicating that more women strongly agreed that the cost of nutrition was high and that they could not afford it. HIV medication often required one to have good nutrition and proper dieting (Barfod *et al.*, 2006). Most of the women were unable to take their medication because of hunger on many occasions. This information was tabulated in Table 4.6.

**Table 4.6: Cost of Nutrition Response**

Description	N	Minimum	Maximum	Mean	Std. Deviation
lack of money to buy medicine has affected my health	110	1	5	3.77	1.029
Sometimes I do not take medication because of hunger	110	1	5	4.29	1.070
Recommended food is costly	110	1	5	4.29	1.120
I cannot afford recommended food	110	1	5	4.29	1.070
Valid N (listwise)	110				

### 4.6 Regression

The regression analysis is based on the ANOVA test, proved that many women could not afford the transport costs to clinics. This was presented in Table 4.7

**Table 4.7: ANOVA Test**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1.571	4	.393	5.485	.000 <sup>b</sup>
Residual	7.520	105	.072		
Total	9.091	109			

a. Dependent variable: diagnosed by HIV

b. Predictors: (Constant)", some of the respondents stated that, they don't get to clinic because of lack of money, Distance to health facility too long and costly, Transport was unaffordable, and they go to the facility by a boda boda (motorbike).

The cost of treating opportunistic diseases for women living with HIV-positive in Manyatta Slums was too high

**Table 4.8: Coefficients**

Model	Description	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.663	.113		5.877	.000
	Distance to health facility too long and costly	.061	.080	.203	.771	.442
	I go to health facility on boda-boda	.019	.114	.083	.170	.865
	Transport is unaffordable	.029	.077	.110	.373	.710
	I don't get to clinic because of no money	.008	.095	.035	.079	.937

The results show that women in Slums were finding it harder to treat opportunistic diseases, and thus they were at risk if they continue on the same trend.

**Table 4.9: Model Summary**

Model	R	R-Square	Adjusted R Square	Std. Error of the Estimate
1	.429 <sup>a</sup>	.184	.153	.266
Total	9.091	109		

a. Dependent Variable: Diagnosed with HIV

b. Predictors: (Constant), some respondents indicated that the lack of money to buy medicine has affected their health, treating opportunistic diseases was costly could not afford prescribed drugs and also Medication was scarce in this facility”

**Table 4.10: ANOVA B Test**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.674	4	.419	5.926	.000 <sup>b</sup>
Residual	7.417	105	.071		
Total	9.091	109			

a. Dependent Variable: diagnosed with HIV

b. Predictors: (Constant),

The respondents stated that the lack of money to buy medicine affected their health, treating opportunistic diseases was costly unable to afford prescribed drugs and Medication was scarce in the facility. From the analysis of the data indicates that women do not find the cost of nutrition a challenge.

**Table 4.11: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.211 <sup>a</sup>	.044	.026	.285

a. Predictors: (Constant), I cannot afford recommended food, recommended food is costly.

The respondents stated the recommended food is costly and with the economic situations of the women, it was not possible for them to afford the prescribed meals.

**Table 4.12: ANOVA Results**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	.403	2	.202	2.483	.088 <sup>b</sup>
Residual	8.688	107	.081		
Total	9.091	109			

a. Dependent Variable: diagnosed with HIV

b. Predictors: (Constant), A respondent said that they could not afford recommended food as it was costly.

**Table 4.13: Coefficients**

Model	Description	Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.847	.113		7.507	.000
	Recommended food is costly	3.261E-16	.082	.000	.000	1.000
	I cannot afford recommended food	.057	.086	.211	.660	.510

a.) Dependent Variable: diagnosed with HIV

H4: The high cost of transport, treatment and drugs has led to women living with HIV-positive in Manyatta. Slums to miss out on essential drugs. This meant that more women were not taking medication as well due to the fact that they were not able to get to the clinic

and pick their medication due to challenges with transport. Some of the respondents indicated that on their clinic days they need two hundred Kenyan shillings for transport and in cases where money was not available they ended up missing their clinic appointments while ARVs are drugs that are taken daily to suppress HIV.

**Table 4.14: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.415 <sup>a</sup>	.173	.149	.266

a. Predictors: (Constant), I cannot afford prescribed drugs, I don't get to clinic because of no money, Distance to health facility too long and costly drugs

**Table 4.15: ANOVA Results**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.569	3	.523	7.372	.000 <sup>b</sup>
Residual	7.522	106	.071		
Total	9.091	109			

a. Dependent Variable: diagnosed with HIV

Predictors: (Some respondents stated that, they could not afford prescribed drugs like septrin which they have to buy Some stated they do not get to the get to clinic because they do not have money and lastly some said the distance to health facility too long and costly.

**Table 4.16: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	.663	.112			5.918	.000
Distance to health facility too long and costly	.065	.076	.215		.859	.392
I dont get to clinic because of no money	.022	.040	.103		.557	.579
I cannot afford prescribed drugs	.029	.077	.113		.383	.703

a. Dependent Variable: diagnosed with HIV

The high cost of transport, treatment and drugs led to women living with HIV-Positive in Manyatta Slums to be adversely affected in their food intake and overall health

condition. In order to indicate the significant problem outcome of the effects of HIV in the settlement, the research looked at how the cost of transport and treatment was affecting their overall health condition. More women explained that they were adversely affected because they could not eat good food among other aspects.

**Table 4.17: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.471 <sup>a</sup>	.222	.200	.258

#### 4.8 Focus Group Discussion and Interview Results

a. Predictors: (Constant), I cannot afford recommended food, lack of money to buy medicine has affected my health, and Recommended food is costly stated the respondents

**Table 4.18: ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.021	3	.674	10.097	.000 <sup>b</sup>
Residual	7.070	106	.067		
Total	9.091	109			

a. Dependent Variable: diagnosed with HIV

b. Predictors: (Constant), I cannot afford recommended food, lack of money to buy medicine has affected my health, recommended food is costly

**Table 4.19: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	.817	.102			7.975	.000
lack of money to buy medicine has affected my health	.260	.053	.925		4.924	.000
Recommended food is costly	-.065	.076	-.252		-.857	.393
I cannot afford recommended food	-.100	.084	-.369		-1.181	.240

a. Dependent Variable: diagnosed with HIV

**Table 4.20: Focus group and interview results**

Theme	Excerpts	Analysis
Distance from home to health facility	Far...very long distance.... I walk a long way..... it is too far	<p>The women interviewed all agreed that they had to go a long way to get to a government clinic with good service. This was in line with the survey results where most women said that the transport costs to these health facilities were high.</p> <p>A recommendation in this case would be to bring services closer to the women, including having mobile clinics to reach them. given the high rate of poverty, increased costs of transport, and sometimes children, these women were experiencing a lot of difficulties.</p>
Means of transport	On foot... <i>matatu</i> .... <i>Boda boda</i> ...mostly I walk.....	<p>The responses varied from walking on foot to using vehicles and motorbikes(<i>bodaboda</i>). All of the responses indicated high level of socio-economic issues within the community. The inclusion of mobile clinics or a government facility closer to the settlement would eliminate the problem of distance</p>
How much do you spend on transport Failed to reach because of money	<p>It is expensive...I cannot afford... it is why I walk</p> <p>Yes....yeah.... many times... I went back home</p>	<p>This point further supports the fact that the cost of transport was too high and the facilities too far away.</p> <p>The respondents explained their plight of lacking transport money, which had consequences on their hospital appointment. Some returned home while others missed out more than once.</p>
Medication at health facility	No medication...have to	<p>The medication to treat other diseases has become a significant issue for these women,</p>

	buy elsewhere...too expensive	were unable to purchase the medication not only because they lack funds, but also because the medication was unavailable and too often costly to other facilities.
Food, nutrition, recommended	I know about it... food is sometimes scarce.... I go hungry many times,	It is recommended that a government funded program is established to help the women with essential foods to help with their health. NGOs and private donations are also encouraged. However, these are just short-term solutions, and thus long term ideas are needed. The government should provide these women with better education opportunities as well as train them on personal skills to help them start businesses. Micro finance loans are also a crucial way to boost the economic and ultimately social standings of a community.

## **CHAPTER FIVE**

### **DISCUSSION**

#### **5.1 Introduction**

This chapter discusses the findings of the study and compare them with the literature in order to see whether the outcomes are in line with what other studies suggested, or there is need for further research. This section also gives recommendations and provide useful insights.

#### **5.2 Summary of discussion**

Young women of between twenty-six and thirty years recorded most of the study participants while older women were fewer. The predominance of majority young women was attributed to aspect of early marriages and high birth rates within Manyatta slums. The demographic alignment of these region to have more young women exposed to risks of HIV were because of poverty and lack of education as the main drivers. The discussions in this section are consistent with what most studies that looked at HIV prevalence and risk factors in low-income areas found (Thomas *et al.*, 2016).

The highest education level attained by most of the participants was primary school education. Given the condition of the area as a low income earning as well as being an slums, the areas was more likely to experience such levels of education as corresponds to low income. According to Orne-Gliemann *et al.* (2015), education was an essential aspect that affects socio cultural and economic lifestyles of WLWHA in any region. Having college education and above is a factor that could help people access better jobs, have higher income, and enhance the quality of life (Poku, 2017). In the case of women from the slums, they would be able to access better clinical services, have access to transport, as well as good nutrition.

More than 90% of the participants were affected by HIV. This was a sensitive question and was asked cautiously even though all respondents chose to answer. A high rate of HIV prevalence among low-income communities is in line with literature results. According to Cluver *et al.* (2015a) people from low-income areas have access to little or no information, lack necessities, and are often marginalized when it comes to access better healthcare. Low-income settlements in areas like India and Soweto in South Africa experience similar demographics due to the mentioned reasons of lacking access to many essentials (Cluver *et al.*, 2015b).

From the results of the frequency tables based on means, it was easy to point out that most of the responses leaned toward strongly agreeing with the statements. This is shown

specifically by the means where many were above the halfway point between 1 and 5. Given that the Likert scale was between 1 and 5, with one being strongly disagree and 5 being strongly agreed, most women were agreeing. The individual statements indicated that most women agreed that the cost of transport to health facilities was too high. The same trend was realized when the responses for the cost of treating opportunistic disease was analysed.

More women leaned towards agreeing and strongly agreeing to the statements based on the means. A good example was when the women mostly agreed that they sometimes were not able to reach their clinics in time or ever because of lack of cash for transport. Some of these women have had to walk on foot since they had no funds for medication. A separate problem that emerged was the lack of medication in the specific hospitals to treat the diseases, and thus they had to buy them from other selling points. The government medication was often subsidized and thus it had a lower cost, which could be cost friendly to the women (Hargreaves *et al.*, 2016). However, if they were sold by independent pharmacists, the prices were likely uncontrolled and higher, and thus unaffordable. Medication for HIV was essential, more so, medication to treat opportunistic diseases was highly necessary (O'Laughlin, 2018). Therefore, a lack of access to medication will have consequences on patient (Casale *et al.*, 2015; Katzenstein *et al.*, 2003).

The first objective that states that the cost of transport to health facilities for women living with HIV-positive in Manyatta Slums is was found to be too high that many women could not afford the transport costs to clinics. Secondly, it was realized that the cost of treating opportunistic diseases for women living with HIV-Positive in Manyatta Slums was too high. This along with the cost of nutrition for being a significant challenge further alienated the recovery, management, and access to better lives for women living with HIV-Positive.

According to Gupta *et al.* (2015), access to drugs and food is an important part of livelihood, let alone patients with lifelong conditions such as HIV. These outcomes have led to the conclusion that women in the area under study faced socio economic and socio-cultural challenges in the form of high cost of transport, treatment and drugs. This finding means that more women were not taking medication as well as not able to afford them, and thus are adversely affected their food intake and overall health condition. The women interviewed all agreed that they have had to go a long way to get to a government clinic with good service. This is in line with the survey results where most women said that the transport costs to those health facilities were high. Many of the responses also indicated high level of socio-economic issues within the community for example lack of money for transport to the health

facilities for medication, women being unable to meet the cost of recommended foods and generally social challenges of being women and positions held in the community of being carers.

## **CHAPTER SIX**

### **CONCLUSION AND RECOMMENDATIONS**

#### **6.1 Conclusion**

From the findings, the study concludes that socio-cultural challenges, economic situation and services access by women living with HIV-Positive influence welfare of HIV-positive women in Manyatta slums, Kisumu County

#### **6.2 Recommendation**

The findings from the research study were analysed, recorded and recommendations are shown below,

- (i) To bring services closer to the women, including having mobile clinics to reach them given the high rate of poverty, increased costs of transport to the ART.
- (ii) The availability of mobile clinics or a government facility closer to the Slums would eliminate the problem of distance. The respondents explained their plight of lacking transport money for transport had consequences on their hospital appointment. Some returned home late risking their lives while others missed out more than once.
- (iii) The government and other development partners to work towards availing other medications for treating other diseases cheaper and accessible since these had become a significant issue for the women, they were unable to purchase the medication not only because they lack funds, but also because the medication is unavailable and too often costly in other facilities.
- (iv) It is recommended that a government funded program is established to help the women with essential foods to help with their health. NGOs and private donations were also encouraged. However, these were just short-term solutions, and thus long-term ideas were needed.
- (v) The government should provide the women with better education opportunities as well as train them on personal skills to help them start businesses. Micro finance loans are also a crucial way to boost the economic and ultimately social standings of the women in the community.

#### **6.3 Suggested areas for further Research**

Due to limited scope and resources for this study that could not permit achievement of all the socio-cultural and economic factors affecting welfare of HIV-positive women in

Manyatta slums, Kisumu county, it is recommended that the following area of research could bring more incite to the issue of Women living with HIV-positive:

- i) A study on socio-economic factors affecting women living with HIV on the informal settlement. This will inform programs. Donors and government to plan and allocate resources to support women.

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## APPENDICES

### Appendix A: Letter of Introduction

Dear Respondent

#### RE: DATA COLLECTION FOR RESEARCH PROJECT

I am a Masters student of Egerton University Kenya, the institute of gender and development. As a requirement, I am conducting a research on; **Socio-Cultural and Economic Factors Affecting Welfare of HIV-Positive Women in Manyatta Slums, Kisumu County**. You have been selected to participate in this study. I therefore request you to complete the attached questionnaire. Please note that this is purely an academic exercise toward attainment of the above purpose. You are here by assured that the information will be treated with the confidence required and will only be used for research purposes. Your cooperation will be highly appreciated.

Thank you for your anticipated kind response.

Yours sincerely



Fillet Lugalia

## Appendix B: Questionnaires for Women Living With HIV/AIDS (Key Informants)

### Section I: Demographic Information

i) What is your age?

18-25	
26-30	
30-35	
35-40	
40-above	

ii) What is your level of education?

Primary level	
High school	
College diploma	
Undergraduate	
Postgraduate	

iii) Duration taken since diagnosed with the HIV virus

- Less than 1 year
- 1-3 years
- More than 3 years

iv) At what age did you get married? \_\_\_\_\_ years

### Section II: Cost of Transport to Health Facility as a Challenge Faced By Women Living With HIV

Rate the following questions in the Likert scale range from strongly disagree with the statement to strongly agree with the statement on Cost of Transport to Health Facility as a Challenge Faced by Women Living with HIV in Manyatta slums., whereby **1=strongly**

disagree, 2=disagree, 3=Do not agree, 4=agree 5=Strongly agree. Please tick (√) the appropriate box

Statement	5	4	3	2	1
The distance between my home to the health facility is long, hence the cost of transport is also high.					
It takes me quite sometimes to get to the health facility by foot, hence sometimes I reach late.					
Most means of transport to the health facility is <i>bodaboda</i> and is a bit costly.					
I a month, I spend a lot of money on transport to the health facility, which is beyond my means.					
Sometimes I don't get to the health facility because I don't have enough money.					

### Section III: Cost of Treatment of Opportunistic Infections as a Challenge Faced By Women Living With HIV

Rate the following questions in the Likert scale range from strongly disagree with the statement to strongly agree with the statement on cost of treatment of opportunistic infections as a Challenge Faced by Women Living with HIV in Manyatta Slums., whereby **1=strongly disagree, 2=disagree, 3=Do not agree, 4=agree 5=Strongly agree. Please tick (√) the appropriate box**

Statement	5	4	3	2	1
Sometimes I don't get the medications prescribed by the doctor in this health facility					
Whenever I miss the prescribed drugs at the health facility, I buy them at the nearby pharmacy, which is costly					
There are many opportunistic disease, whose treatment comes with cost					
Sometimes I am unable to afford the prescribed drugs					

I have ever failed to get money for medication and this has affected my health condition					
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**Section IV: Cost Nutrition as a Challenge Faced By Women Living With HIV**

Rate the following questions in the Likert scale range from strongly disagree with the statement to strongly agree with the statement on cost of nutrition as a challenge Faced by Women Living with HIV in Manyatta Slums., whereby **1=strongly disagree, 2=disagree, 3=Do not agree, 4=agree 5=Strongly agree. Please tick (√) the appropriate box**

<b>Statement</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
Sometimes I am unable to take my drugs because of hunger					
The foods recommended by doctor for people like I on ART are very costly					
Sometimes I can't afford recommended foods by the doctor					

## **Appendix C: Focus Group Discussions Questionnaire**

### ***Cost of transport to health facility***

1. What is the distance between your homes to this health facility?
2. How long does it take you to get to this health facility by foot?
3. What means of transport do you use to get to this health facility and how much do spend on transport?
4. How much money do you spent on transport to health facility?
5. Have you ever failed to get to health facility because of lack of money for transportation?

### ***Cost of treatment of opportunistic infections***

1. Do you always get the medications prescribed by the doctor in this health facility?
2. Where else do you buy the prescribed drug?
3. What were you suffering from the last time you visited your nearest health facility?
4. How many times have you been admitted in a health facility since initiation of ART?
5. How much have you spent on medication in the last one year?
6. Do you always afford to pay for all the medications prescribed to you by the doctor?
7. If you ever failed to get money for medication, how did that affect your health condition?

### ***Cost of nutrition***

1. Do you know some of the foods that are recommended for people on ART?
2. Can you afford the recommended foods?

**Appendix D: University Introductory Letter to NACOSTI**

**EGERTON**

Tel: P/lot: 254-51-2217620  
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**UNIVERSITY**

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**OFFICE OF THE DIRECTOR GRADUATE SCHOOL**

Ref:..... **GM11/14508/15**

Date:..... **11<sup>th</sup> July, 2019**

The Director General  
National Commission for Science Technology and Innovation,  
P. O. Box 30623-00100  
**NAIROBI.**

Dear Sir,

**RE: REQUEST FOR RESEARCH PERMIT – MS. FILLET DARIZU  
LUGALIA REG. NO. GM11/14508/15**

This is to introduce and confirm to you that the above named student is in the Department of Women, Gender & Development Studies, Faculty of Arts, Egerton University.

She is a bona-fide registered M.A student in this University. Her research topic is “Socio-Cultural and Economic Challenges that Impact on the Well Being of Women Living with HIV/AIDS. A Case of Manyatta Informal Settlement in Kisumu County.”

She is at the stage of collecting field data. Please issue her with a research permit to enable her undertake the studies.

Your kind assistance to her will be highly appreciated.

Yours faithfully,

Handwritten signature of Dr. S. P. Nyalala.

**Dr. S. P. Nyalala**

**DEPUTY DIRECTOR, BOARD OF POSTGRADUATE STUDIES**

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*“Transforming Lives Through Quality Education”*

## Appendix E: Research Permit

 REPUBLIC OF KENYA	 <b>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY &amp; INNOVATION</b>
Ref No: <b>266735</b>	Date of Issue: <b>19/August/2019</b>
<b>RESEARCH LICENSE</b>	
	
<b>This is to Certify that Miss. FILLET LUGALIA of Egerton University, has been licensed to conduct research in Kisumu on the topic: socio-cultural and economic challenges that impact on the well being of women living with HIV/AIDS. A case of manyatta informal settlement in Kisumu county for the period ending : 19/August/2020.</b>	
License No: <b>NACOSTI/P/19/962</b>	
Applicant Identification Number <b>266735</b>	 Director General <b>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY &amp; INNOVATION</b>
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## Appendix F: Publication



<http://www.ijssit.com>

### SOCIO-CULTURAL CHALLENGES OF WOMEN LIVING WITH HIV IN MANYATTA INFORMAL SETTLEMENT KISUMU COUNTY, KENYA

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**Abstract:** The study focused on establishing the socio-cultural challenges of women living with HIV in Manyatta informal settlement (shanties) in Kisumu County. Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) have been in existence for more than twenty years and women account for nearly half of the 40 million People Living with HIV/AIDS (PLWHAs). Earlier studies done in Kenya have largely concentrated on transmission and prevention of HIV/AIDS (NACC, 2015). However, there are limited studies that have been conducted on socio-economic challenges faced by women living with HIV in an informal settlement among communities living in Manyatta informal settlement in Kisumu County. The objective of the study was to determine the socio-cultural challenges of women living with HIV in Manyatta Informal Settlement, in Kisumu County. The study used descriptive research design and 110 respondents were sampled using purposive sampling technique. The respondents including key informants were served with questionnaires for quantitative data, while Focus Group Discussion were used for qualitative data. Data was analysed using descriptive statistics using Statistical Packages for Social Sciences (SPSS). Qualitative data was analysed using thematic content analysis. The analysed data or findings were presented in tables and graphs. The study found statistical significance in understanding socio-cultural and economic factors that impact on WLWHA. The findings of this study illuminate the socio-cultural and economic actions that hinder adherence to ART among WLWHA. The findings of this study would be useful to the guidance and counselling professionals for the improvement of their helping relationship with women living with HIV/AIDS.

**Keywords:** HIV/AIDS, Manyatta, Informal Settlement

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