EFFICACY OF STRATEGIES THAT MITIGATE CHALLENGES FACED BY WOMEN INFECTED WITH HIV/AIDS IN MAJENGO URBAN INFORMAL SETTLEMENT, NYERI COUNTY, KENYA.

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DECLARATION

I confirm that this thesis is my original work and has not been presented to any other university or institution for an award of a degree.

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We confirm that this thesis has been submitted for examination with our approval as University supervisors.

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DEDICATION

This thesis is dedicated to all the women living with HIV/AIDS in the Kenyan urban informal settlements.

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ABSTRACT

HIV and AIDS continue to devastate the world, particularly Africa and sub-Saharan Africa. The infection patterns rates are different for men and women because of biology, physiology, socially constructed gender norms, roles, unequal power relations and social-economic inequalities. This study investigates the efficacy of interventions strategies mitigating the challenges faced by women with HIV / AIDS living in an informal urban settlement in Nyeri County. The study applied the theory of social-economic factors, which show that economic factors greatly influence an individual's sexual behaviour. The study design used was a descriptive study that utilised both qualitative and quantitative data. The study's purpose was to find out how effective were the strategies that have been put in place to alleviate challenges faced by women living with HIV and AIDS in Majengo urban informal settlement in Nyeri county. This was also to assess knowledge and use of preventive measures against sexually transmitted infections and HIV among women living with HIV and AIDS. Besides, the study identified practices among the women living with HIV and AIDS, which were risk factors for the transmission of HIV, and identified appropriate strategies to help reduce further spread of the virus. The study collected information using structured questionnaires. In addition, in-depth interviews were conducted, and a focus group discussion held with participants. Descriptive methods of analysis were used for data analysis. The study found out that the success of the HIV and AIDS intervention strategies in the community and among individuals depends largely on the success of various programmes. Majority of the respondents, 63.8% felt there was a need to have more gender-responsive strategies and improve on what is provided by the government and other stakeholders. The respondents noted that the essential thing was to maintain their health. The study recommends that more gender intervention strategies should be used on women, and especially those who live in informal settlements. The government and other stakeholders in the health sector should strive to improve the infrastructure of health facilities within and surrounding the informal urban settlements.

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ABBREVIATIONS AND ACRONYMS

AGYW	Adolescent Girls and Young Women
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ART	Antiretroviral Treatment / Therapy
ARV	Anti-Retroviral Drugs
CD4	Cluster differential 4
HAART	Highly Active Anti-Retroviral Therapy
HCT	HIV Counselling and Testing
HIV	Human Immunodeficiency Virus
IDUs	Injecting Drug Users
KAIS	Kenya AIDS Indicator Survey
KNBS	Kenya National Bureau of Statistics
MOH	Ministry of Health
NACC	National AIDS Control Council
NASCOP	National AIDS and STIs Control Programme
PBFW	Pregnant and Breast Feeding Women
PEPFAR	United States Government Interagency Plan for AIDS Relief
PLWAIDS	Persons Living With AIDS
PMTCT	Prevention of Mother-To-Child Transmission
STDs	Sexually Transmitted Diseases
STIs	Sexually Transmitted Infections
UNAIDS	Joint United Nations Program on HIV/AIDS
UNICEF	United Nations Children Fund
WFP	World Food Programme
WLHIV	Women Living with HIV

CHAPTER ONE

INTRODUCTION

1.1.Background of the Study

HIV and AIDS continues to be a major global public health issue with an estimated 39 million lives lost so far as a result of HIV related infections and an estimated 36 million people living with HIV (Avert, 2021a; Pandey & Galvani, 2019; WHO, 2021). A global survey on the burden of HIV has revealed that the disease continues to have a devastating health effect globally to become the second cause of morbidity for young people aged between 25 - 49 years (Pandey & Galvani, 2019). HIV and AIDS as yet have no known cure or vaccine and in the absence of these, preventing further spread of the pandemic, minimising its impact and providing a caring and compassionate environment for those infected are important intervention strategies (Pandey & Galvani, 2019; WHO, 2021). Consequently, there are several concerted efforts at international and national levels to respond to HIV/AIDS. As a result, intervention strategies have steadily increased, and by the year 2019, 68% of adults and 53% of children were under the treatment of Ant-Retroviral drugs meant to enhance their lives (Ministry of Health, 2020; WHO, 2021). This paper investigated the efficacy of some of the strategies faced by women infected with HIV in informal urban settlements in Nyeri County, Kenya.

It is estimated that ove 67% of people infected with HIV (25.7 million) are in the Sub Sharan Africa (WHO, 2021). Even though HIV is prevalent among the general population, most of the infections are occring among special groups especially women.

Young women are particularly at high risk and account for 48% of new global infections and 59% of new infections in sub-Saharan (UNAIDS, 2019). It is estimated that 1.5 million Kenyans are infected with HIV; with 4.5% prevalence rates among adults between the ages of 15-49 years; and 75% of the adults on antiretroviral treatment (Avert, 2021b; UNAIDS, 2019). The AIDS pandemic is taking on an unusually heavy toll on the populations in East and Southern Africa (Avert, 2021c; Ministry of Health, 2020; UNAIDS 2019). The lopsided burden of HIV is quite evident in Sub Saharan Africa as it accounts for more than 54% of the global infections yet the region only contains 6.2% of the worlds population and over 800,000 new infections (UNAIDS, 2019).

HIV prevalence and interventions including in Kenya has taken a gender perspective including among young women and males in which the rate of infection among females has more than doubled that of the young men (UNAIDS 2019). Women are particularly at a disadvanatage due to the patriarchal nature of the African society which segregates women denying them access to crucial resources and due to the reproductive role associated with women's body (Ambert & Msimang, 2004; Berger, 2004; Hawkins, Mussà & Abuxahama, 2005; Wango, 2001). This is summarised in the Kenya AIDS Strategic Framework 2020/2021 to 2024/2025 (Ministry of Health, 2020:11)

> *Incremental gains towards gender equality have fallen short of improving educational and economic opportunities for women and girls. For this reason, women and girls remain disproportionately affected by poverty, violence and injustice that make them vulnerable to HIV. Unequal gender norms deny women and girls the ability to make their own choices about health care. Domestic work along with caregiving responsibilities curtail their freedom to enter and remain in the labour force on terms that suit their needs. This ultimately impacts women's economic independence, security, decision making and control. KASF II will prioritize efforts that build synergies with other development agendas that seek to empower women and girls thus reducing their vulnerability to HIV.*

The inclusion of gender concerns in the Kenya strategic plan is to highlight the importance of both treatment and other intervention strategies. This study focused on women living with HIV/AIDS.

The disparity in the increased number of girls and women infected and affected by HIV can be attributed to several factors particularly the high prevealnce of commercial sex and age inappropriate relationships with older men (UNICEF, 2019). Due to the high disparity young women, in particular, continue to bear a disproportionate burden of HIV (Wango, 2001). The impact of the HIV/AIDS pandemic is not just a health issue but developmental with poverty reduction and economic growth being affected by it. This is because of the way HIV and AIDS affect other facets such as education and gender, and development (Wango, 2001). North Africa, for instance, has one of the lowest HIV prevalence rates in the world, this is primarily attributed to the Islam faith that has influenced morals, and values of the locals discouraged extra-marital sexual relations, and influenced government policies (Nyindo, 2005). The result of this is the infection rates have been at a negligible level, unlike in sub-Saharan Africa, where prevalence rates stand at 6.8 per cent (UNAIDS, 2019).

In 2018 Kenya was ranked as having the third larget HIV pandemic globally with 1.6 million HIV infections with 900,000 being women (UNAIDS, 2019). The late 1990s saw the HIV prevalence rates in Kenya peak to 14 per cent. These numbers had since dropped to about 7.4 per cent in 2007 and to around 4.5 per cent adult prevalence rate in 2019 (NACC, 2019). The HIV epidemic in Kenya affects all categories of the population. Overall, the risk of infection is higher amomg urban populations with an infection rate of 7.2%) compared to 6.0% of rural inhabitants (NASCOP, 2009).

Nonetheless, there are substancial disparities in HIV/AIDS prevalence among slum dwellers in urban areas. There HIV/AIDS pevalance rates are particulary high among slum dwellers in comparison to non-slum dwellers in urban areas. A national survey conducted by NASCOP (2009) among two slums in Nairobi County revealed an estimated HIV/AIDS prevalence rate of 12% considerably higher than that of Nairobi at 7.0% and the national average (7.1%).

The high mortality rates in the country associated with HIV/AIDS continues to burden households while at the same time causinf strain on the national health systems (Ministry of Health, 2007; 2008; 2014; 2015; 2016; 2018; 2020). HIV affect many people in all groups, depending on several variables such as age, education, and location. The rates of HIV infection are particularly high among women compared to men due to women biological physiology and cultural gender norms that result in unequal power relations that out women at a disadvantaged position compared to men (WHO, 2016). HIV prevalence rates are high among women compared to men due to the socially perpetuated inequalities with women. Gender based economic and social inequalities are responsible for these rates. The gender inequalities disadvantage women in terms of making decisions regarding their health making them more vulnerable and at high risk of HIV infections (NACC, 2016).

Although the effects of HIV/AIDS are widespread in Kenya, informal settlements record an almost twice-adult HIV prevalence rate than the national rate (Patterson, 2011). According to the 2018 Kenya AIDS response progress report, Nyeri County had a 4.3% HIV prevalence rate with women in the county accounting for 6.3 per cent according to the Kenya HIV estimates of 2017 this indicating that the women are more vulnerable to HIV infection.

Access to information on health, treatment, protection and prevention interventions is not the same for women and men (ref). Subsequently, women and girls are significantly affected by HIV and thus there is a great need to integrate gender consideration in HIV intervention programs (WHO, 2016). Even though various interventions such as the PMTCT services and provision of ARVs have enhanced testing and treatment among females, more focused programmes targeting women are still needed. Provision of regular counselling and testing to all clients seeking medical services in hopsitals helps to highten HIV awareness among the general populationand particularly women visiting hospitals or taking children to the clinics. These methods enhance the lives of those living and infected with HIV and AIDS, though its prevalence remains significantly higher among women living within the impoverished areas and among individuals with lower economic status. This research aimed at finding out why the infection rates were not reduced significantly despite the implementation of various strategies.

1.2.Statement of the Problem

Despite various attempts to provide several strategies of curbing HIV and AIDS in numerous settings, HIV incidences remain high, particularly in sub-Saharan Africa. This is a worrying trend, especially among the most vulnerable groups such as girls and women, young people and other often-secluded groups such as the heterosexuals. HIV disproportionately affects women and girls reflecting underlying gender inequalities among various communities. Even then, a high prevalence of HIV and AIDS is especially predominant among the economically disadvantaged population.

The acquisition and transmission rates of STIs and HIV are high among women living in informal urban settlements. It is admissible that there are insights into the interactions

between the dual epidemic of HIV and gender in developing countries and in sub-Saharan Africa. A key strategy for preventing HIV is targeting the vulnerable populations, particularly girls and women, principally in the informal settlements. However, the implementation of various strategies would also require evidence-based interventions amended to local circumstances. This study investigates why HIV incidences have not reduced significantly despite the implementation of various strategies that are supposed to mitigate the challenges faced by HIV positive women living in informal urban settlements of Majengo, Nyeri County.

1.3.Objectives of the Study

1. To identify strategies put in place to mitigate the challenges faced by women living with HIV and AIDS in Majengo urban informal settlement in Nyeri.
2. To assess the effectiveness of strategies the government has made available to be adopted by women living with HIV and AIDS in Majengo informal settlement in Nyeri.
3. To identify the challenges encountered in the implementation of the available strategies within the informal settlement.
4. To suggest appropriate strategies to women living with HIV and AIDS in informal urban settlements.

1.4.Research Questions

1. What are the strategies put in place to mitigate challenges faced by women living with HIV and AIDS in Majengo urban informal settlement?

2. How effective are the strategies adopted by women living with HIV and AIDS in Majengo informal settlement in Nyeri?
3. What challenges are encountered in the implementation of the available strategies within the informal settlement?
4. What strategies would be appropriate to women living with HIV and AIDS in the informal urban settlement?

1.5.Justification and Significance of the Study

Despite the fact that various intervention strategies being put in place to alleviate the suffering of women infected and living with HIV/AIDS, women, especially in informal urban settlements, continue to face various challenges. This study evaluated the efficacy of the strategies that have been put in place to mitigate the challenges faced by women living infected and affected by HIV/AIDS in the informal settlement. The study will benefit the health care providers, as it will help them focus on the implementation of strategies adapted to the local circumstances and address the conditions of the informal settlements. The findings of the study further will add to the body of knowledge that exists in this field and will be a source of information for other researchers.

1.6.Scope and Limitations of the Study

This study investigated the effectiveness of strategies aimed at mitigating challenges faced by HIV positive women in informal urban settlements. The study was confined to women in Majengo urban informal settlement in Nyeri County who were infected with HIV and AIDS. The study took cognisance of fact that girls and women are highly susceptible to HIV/AIDS, although this study focused primarily on women in informal urban settlements.

Additionally, males, especially in informal urban settlements, also face several challenges, but this was beyond the scope of this study.

1.7.Operational Definition of Terms

Efficacy	Efficacy refers to the effectiveness of the intervention programmes aimed at curbing HIV among the women in informal urban settlements. Efficacy does not mean that the programmes are not effective but refers to the extent of effectiveness in dealing with the issues at hand (such as mitigating HIV among females in informal urban settlements).
HIV intervention strategies	This refers to various mitigation strategies aimed at curbing the HIV/AIDS epidemic that include HIV counselling and testing as well as the use of anti-retroviral drugs.
Poor	Lacking in several things such as social, health, education and economic amenities. People in informal urban settlements often lack in several amenities.
Poverty	This refers to the general scarcity of resources, including general infrastructure among the population that leads to increased and multifaceted concepts including social, economic, health and other concerns such as HIV/AIDS.
Slum	A slum refers to a highly populated urban resident that consists of closely parked and poorly constructed houses inhabited by ‘impoverished people ’ (Wikipedia definition).

Urban informal settlement	These are settlements in urban areas that are marked by poor and inadequate infrastructure including difficulty in accessing safe and clean water, health, education, sanitation facilities and additional amenities such as lighting (electricity). The houses are poorly structured in quality, often leading to overcrowding.

CHAPTER TWO

LITERATURE REVIEW

2.0. Introduction

In this study, literature review includes HIV and AIDS; women and HIV and AIDS; and intervention strategies.

2.1. Women and HIV and AIDS

The World Health Organization estimates that Africa aacounts for 67% of people infected with HIV (World Health Organisation, 2020). But while HIV is prevalent even among the general population in the African region, the highest rates of infections are among key populations such as girls and women and other vulnerable groups. As a result, HIV infection predominantly affects women and young girls more than males, and in certain instances, the female acquires the HV infection at least between 5 -7 years earlier than men (Ministry of Health, 2020; Wathula, 2016). The World Health Organisation (2003; 2013; 2020) has continuously highlighted the role of gender and HIV / AIDS and need for making gender an integral part of HIV/AIDS programmes (WHO, 2003:1). The disparity in HIV prevalence rates between men and women can be attributed to the the low social economic status of women whch renders them dependent on men and gender-based violence (WHO, 2013). Urban informal settlements strain its dwellers due to poor economic, social and political decline leading to ill-health, poor infrastructure and this leads to high infection and transmission of HIV / AIDS in poor urban households (Ministry of Health, 2020; Wathula, 2016).

It is estimated that women account for 55% of new HIV infections on the African continent (WHO, 2006). An analysis conducted by UNICEF (2017) estimated that over 5 million young people aged between 0-19 years in Sub-Saharan Africa would be infected with HIV out of which two- thirds will be girls or young women. The vast majority of women with HIV infection worldwide are from the most disadvantaged poorest sectors of the society and are therefore often least able to advocate for themselves (Ref). The infections occur earlier on in the life of women than the men as well as more frequently. Young women between the ages of 15 - 25 years account for a greater percentage of new HIV infections in Sub-Saharan Africa due to poverty and gender inequality (UNAIDS, 2018). According to Nyindo (2005), the low status of women in society, drought, and hunger are the major risk factors for HIV infection and AIDS in Africa,

Gender based violence and gender inequalities in combination with physiological factors place women and grils in Eastern and Southern at high risk of HIV infection (UNAIDS, 2018). This is because a woman who is economically deprived compared to the male finds it hard convince to her partner to abstain from sex with other partners, use a condom, or protect herself from infection (Gupta, 2000; Nyindo, 2005; Wango, 2000).

The feminization of poverty has led to a lot of unsafe sex and an increased exchange of sex for money, food or shelter (Gupta, 2000). This, in turn, creates an unfortunate positive relationship between HIV prevalence and poverty that has led to more women being at high risk of being infected with HIV than males since women are disadvantaged in terms of access to property and control of resources (Ministry of Health, 2010; UNAIDS, 2013). Women are also seen as the flight path of HIV/AIDS given that they are primarily the ones who have undertake mandatory testing partuclarly during pregnancy or regular visits to

hospitals when taking the child for clinic or when unwell (Ministry of Health, 2020). Women's biological nature increases their risk of contracting HIV and other STIs than men (Gupta, 2000).

In the more patriarchal societies, males are perceived as more superior and in command of the females and this, in turn, leads to significant and gender power inequalities that render females more vulnerable to HIV infection (Gupta, 2000; Wango, 2000). In addition, the social allocation of gender roles creates unique challenges for women affecting their ability to safeguard themselves from HIV/AIDS infections and its devastating effects (Ministry of Education, 2007; Ojowi, 2008; Tong, 2009). A study carried out in the Kibera urban informal settlements by Ojowi (2008) suggested that low-income levels among the majority of the women contributed significantly to the high number of women who sought delivery services from traditional birth attendants. This further increases the risk of transmitting the virus to the child and even the birth attendants who are highly regarded in the more urban informal settlements. The study further concluded that the low education levels among the slum women lead to high levels of unemployment or low wages, thus risking their lives as they sought cheaper places of delivery of their children. Education and economic status were included in the study, and participants asked about both their education and economic status (Appendix I).The status of girls and women and HIV /AIDS promotes the Kenya strategic framework (Ministry of Health, 2020:19) to provide gender aggregated statistics as demonstrated in the table below:

Table 2.1. Status of HIV Epidemic in Kenya, 2020

	Children (0 – 14)	Adolescent girls young women	Females 15+	Males 15+	Adults 15+

Prevalence	0.57%	1.96%	6.12%	3.53%	4.76%
New HIV infections	6,806	10,422	21,502	13,108	34,610
Treatment coverage	70%	76%	85%	73%	80%
AIDS related deaths	4,333	2,604	7,255	9,317	6,572

HIV/AIDS has a lot of social-economic political effects as it causes a lot of setbacks to girl's and women, including their education (Ministry of Education, 2007). For example, the prevalence rate for females aged 15 years (6.12%) and above is almost double that of males (3.53%). Girls are more readily taken from school when family resources are low or when there is a need for a caregiver in the home. In some tragic circumstances, girls are encouraged to undertake sexual activity in order to help support families that are struggling with the economic hardships that accompany HIV/AIDS. In other cases, a girls education may be sacrificed on the altar of early marriage often in order to establish with another family union that would serve as a cushion for the social and economic effects of sickness on the household. Kibui (1998) in a study of Majengo urban informal settlements of Nyeri, suggested that women have little knowledge about HIV virus than their male counterparts as evident from their lack of preventive measures, especially during sex. Therefore, aspects of HIV testing were included in this study.

The traditional role of girls and females, boys males with females as providers of support and caregivers for the sick and old, and hence caring for persons living with and affected by HIV makes them carry most of HIV/AIDS burden (Ministry of Education, 2007). Even uninfected women are affected by HIV in a family; for example, women widowed by AIDS are often rejected and stripped of their belongings. Barriers faced by women, including family responsibilities, restricted access to and control over resources, lack of

independence in decision making power, and restricted mobility services prevent them from accessing HIV prevention and treatment.

Other vulnerabilities to HIV infection among women are harmful traditional cultural practices including early marriage, wife cleansing, wife inheritance, and female genital mutilation. The vulnerable of women to HIV/AIDS is also rooted in male dominance and women's subordinate position (Ambert, C. and Msimang, S. (2004). Berger, J. (2004). Hawkins, K., Mussà, F. and Abuxahama, S. (2005). Women and girls fear being jilted; they are not assertive as far as preventive measures are concerned and are often economically dependent on the men (Wango, 2001). HIV transmission can also occur due to the abuse of a woman from an intimate partner in the form of marital rape. HIV infection among one in seven young women in South Africa was a result of intimate partner violence (UNAIDS, 2013).

Sexual violence perpetuated by military personnel with high HIV prevalence rates particularly during conflicts, increases the risk of infection among women. Illiteracy among women also makes them unable to bargain effectively with men who put them at great risk in sexual encounters.

Illiteracy also makes it difficult for women to find jobs which reduces their bargaining power and leads to them having sexual relationships for economic survival. Incest between fathers and daughters in Kenya due to belief that sexually intimate with a virgin girl reduces the viral load also adds to infection in young girls in Kenya with HIV (Amuyunzu-Nyamongo et al., 2007).

Studies have shown that poverty in urban slum settlements may lead its dwellers to residents to engage in risky behaviour for economic benefits (Madise et al., 2010; Odutolu,

2003). A study conducted by Madise et al. (2010) revealed that HIV prevalence rates of 12% among slums dweller compared to 5% and 6% in non-slum town and rural areas of Nairobi. The study further indicated that in the informal urban settlements, the gap of HIV prevalence among men and women was narrower than in other areas. Kenya's annual population growth rate stands at 2.9 per cent according to the figure released by the KNBS for the year 2000-2009. The fertility rate per woman was indicated to be 4.9 children which translate to a high population in very limited physical space that does not increase as the population increases (UNICEF, 2010). The urban areas in Kenya host around 35% of the country's total population, and beyond half of these reside in informal urban settlements (UN-HABITAT, 2007).

HIV/AIDS is not a random event and gets worse for slum dwellers whose sexual health is limited by economic deprivation. The surrounding economic, political, and social environment profoundly affects the spread of the virus as it happens whenever people are struggling against adverse conditions such as poverty, oppression and discrimination (Piwoz et al., 2002).

Dodoo et al., 2003) reported that the high HIV infection rates among slum residents resulted from introduction to sex at an early age, numerous sexual partners, and the minimal use of protection during sex.

Informal settlements experience severe overcrowding, poor sanitation, and lack of general infrastructure. Congestion and poor sanitation contribute to negative health outcomes for informal settlement dwellers (Zulu et al., 2011). The informal settlements are entirely built on government-owned land and are therefore not formally recognized. This means basic service provided by the government is excluded, which means any such services offered

like health facilities, running water, or lavatories are provided by private companies (Amnesty international, 2009).

There are few educational institutions within informal settlements which lack the necessary infrastructure to provide quality education. Lack of education and socio-economic opportunities makes poverty a cyclic problem in the informal settlements, and over time, it becomes a huge problem (UN-Habitat, 2011). The deplorable conditions of the informal settlements make the problems of the HIV positive women aggravate and even if they are provided with intervention strategies, they may not be successful as they focus on the improvement of their livelihoods and families at the expense of their own health. Informal settlements residents have deplorable housing conditions.

The adult HIV prevalence rate in urban informal settlements areas is twice the adult prevalence rate of Kenya which is 6.9 per cent (NASCOP &MOH, 2006). A study by Ziraba (2018), showed that HIV prevalence among young women and girls of adolescent age is generally higher in slum settlements. Kabiru et al. (2010) reports sexual debut among women in the informal settlement starts as early as 15 years.

Urban informal settlements have high levels of unemployment and crime, and poor social and environmental conditions. The high rates of unemployment in the informal settlements makes the women look for other means of earning a livelihood which is by selling their bodies either to fellow informal settlement dwellers or by going to the street at night. They might not be in a position to use protection against Sexually Transmitted Diseases (STDs) because of the hostility of their customers who normally refuse to have protected sexual intercourse. This results in the women contracting the virus or other STDs. Sometimes the women normally send their daughters in the neighbourhood to trade their bodies in

exchange for money for feeding the family. The young girls are also at risk while walking alone in the informal settlements at night since they can be raped and infected with the virus or at times their attackers may end up killing them.

2.2. Strategies of Preventing the Spread of HIV

There are several strategies aimed at HIV and AIDS prevention. Additionally, HIV and AIDS in developing countries found at south of the Sahara have various perspectives, and hence it is essential that the review of literature focus on gender and human rights as well as strategies that address specific groups such as women in informal urban settlements.

2.2.1. HIV Counseling and Testing

HIV counselling and testing (HCT) is among the most widely accepted and integral components in the treatment and prevention of HIV / AIDS. The strategy is adopted within the human rights that bestows the confidentiality of client information and other issues (Sweat et al., 2000; World Health Organization, 2003). Studies carried out on HIV testing and treatment in Kenya indicate that women and girls particularly those in informal urban settlements of Nairobi are highly vulnerable to HIV (Kabiru et al., 2010). This is because of the social and psychological issues related to HIV testing, prevention and treatment, especially the gender biases that have been discussed at length in the previous section.

2.2.2. Anti-Retroviral Therapy

Although AIDS does not have a cure currently, its progression from HIV infection can be delayed using highly active antiretroviral therapy (HAART). The therapy involves the comprehensive management of HIV treatment, care and support. It helps in lowering rates of transmission within populations as well as reducing morbidity and mortality (Geoff et al., 2002) The ARV when used consistently and effectively suppresses the replication of

HIV which gradually increases the CD4 T- lymphocyte. This slows disease progression even when HIV infection is advanced (Maenza and Flexner, 1998). The ARVs do not eradicate the HIV virus from the body (Pallela et al., 1998). However, the survival of persons infected with HIV is prolonged, and the quality of their lives improved as opportunistic infections are reduced, and the onset of AIDS is delayed (Clay, 2005). The ARV aims at reducing the HIV viral load to minimal levels for long as possible, restoring and/or preserving immunity of the infected persons to avoid opportunistic infections. It reduction of the transmission of HIV and its related sickness and death (Wood et al., 2003). Zidovudine (AZT) which is the first drug against HIV, was introduced in 1987. In 1995, the American Food and Drug Administration accepted the first protease and the main action regarding an efficient HIV therapy step towards an efficient HIV therapy was taken at the end of that year when treatment transformed from dual to triple therapy, what is referred to as the highly active antiretroviral treatment (HAART) in this report ART. Because HIV virus cannot be eradicated by ART, suppressing the viral persistently through continued daily consumption of ARVs is important in order for the drugs to be efficient in the long-term and to evade development of resistance. The major aim of ART is the suppression of replication of the viral to levels that are immeasurable(which are commonly referred to as a viral load < 50 copies/ml of blood for the purpose of reduction and avoidance of further weakening of CD$ cells and activation of chronic immune, allowing reformation of the immune system and continued (Silvestri et al., 2003).

The use of antiretroviral therapy has been considered to be effective though there remains a great percentage of people who do not have access to the therapy. In a report by the NACC (2015) about 897,644 people infected with HIV were on treatment regime since.

This has been occasioned by the increase of treatment sites. A study carried out in Nairobi by Gitimu (2005) found that the high cost of drugs and the difficulty in accessing health facilities were the main reasons for non-usage of ARVs. In providing strategies that are going to ease the challenges of women infected with HIV, there needs to be a continuous way of working with and empowering the women who are affected and delivering techniques that will be efficient

It is estimated that 19.5 million people infected with HIV hasd access to antiretroviral treatment in 2016 (UNAIDS, 2017). Antiretroviral drugs do not eradicate the Human Immune deficiency Virus (HIV) from the body. Instead, they suppress viral replication, boost immunity to halt the progression of the disease, enabling a better quality life. When ART is interrupted or withdrawn, viral replication occurs, and the drug-resistant virus may develop, this is associated with low CD4 counts, leading to increased morbidity and mortality rates (Nakiyemba et al., 2006).

In the year 2016 Kenya emerged as the second among countries in Sub-Saharan Africa to fully approve the regulation of the pre-exposure prophylaxis (PrEp) that utilizes ARVs for protecting HIV negative person against HIV afore possible contact with the virus (Avert, 2017). In order to ensure full benefit from ART, strict adherence is required as this is a major challenge to AIDS care. Support for adherence to ART treatment is important with an adherence assessment done during visits to the health facility. Homeless people livin positively and marginalized households experience food insecurity which increases the probability of them having lower CD4 (T-cell) counts, lack of adherence to medication and inability to completely suppress HIV replication (Weisner et al., 2009). Additionally food insecurity and residential uncertainty are highly linked to poor adherence to medication,

inconsistent health care and difficulty in accessing health care services and negative attitudes toward health care staff (Surratt et al., 2014). The strengthening of compliance principles to the patient is also done by community support personnel, continuous treatment supporters, and continuous involvement of relatives and friends (Gill et al., 2005).

2.2.2. Prevention of Mother to Child Transmission

This is done in the antenatal clinics where HIV positive mothers receive an antiretroviral regimen for preventing the transmission of HIV to their babies. These services were initiated in Kenya in the year 2000 in established health facilities. The U.S Government Interagency Plan for AIDS Relief (PEPFAR) aims to support pregnant women with PPTCT services and lessen MTCT in 15 focus countries. The PPTCT interventions include HIV counselling and testing for pregnant mothers; provision of short term ARV prophylaxis for mother and infant, and antiretroviral treatment (ART) for expectant mothers; microeconomic activities; training and support for infant feeding; and family planning services and nutrition care for women infected HIV (U.S Government interagency website. 2007). Current estimates indicate a tremendous improvement in the uptake of ART among pregnant women at 93 per cent (UNAIDS 2018). However, for the there to be 100 per cent coverage, there is a need for early diagnosis and increased access to the ARV drugs.

Bwisa (2009) in a study of Kibera urban informal settlements in Nairobi found that the pregnant women who due to the long distances to the delivery points risk transmitting the virus to their unborn babies during delivery at their homes thus could not access the PMTCT services. The study found that among the married women, there was a difficulty in the uptake of PPTCT services; however, the higher the education levels, the higher the number of those enrolled for PPTCT services. UNAIDS (2017) shows that 76 per cent of

all pregnant women that are HIV infected obtained treatment so as to prevent their babies from transmitting HIV.

Low-income levels among the majority of the women in the Kibera informal settlement may have contributed to the higher number of women who sought delivery services from traditional birth attendants, therefore, risking the transmission of the virus to the child (Ojowi, 2008). In a study done in Uganda in 2007, the reluctance by women to be tested for HIV, failure to disclose HIV status, incomplete follow up of participants, and challenges with infant feeding for mothers who are HIV positive were found to be the main challenges health workers were facing while implementing the PMTCT Programme. Long distances to the health facilities were cited as a hindrance of the PMTCT programme and the uptake of prophylaxis in the Kibera slums Bwisa (2009). Ojowi (2008) found out that the low-income levels among the women living in the Kibera informal settlement were making the expectant women seek delivery from the traditional birth attendants; therefore risking transmission to the infants.

Difficulties experienced by women from low income households during the prenatal, during birth and post-natal period puts them at high risk of HIV infection and complications. These women are may not be able to access prenatal care that would facilitate their access to HIV testing. Such women are alo likely yo experience food insecurity which affects their health and that of the infant; adherence to HIV medication and breastfeeding practices (Young, Wheeler, McCoy, & Weiser, 2014).

2.2.3. Comprehensive Care for HIV and AIDS

Comprehensive care comprises of prevention, clinical care and support, and non-clinical care and support and is aimed at averting the further infections. Since HIV and AIDS is a

lifelong battle, individuals, families and households that are affected by HIV should be provided with support so they can be able to effectively cope. Comprehensive care, therefore, should include access to all aspects of legal, social, media and other kinds of support needed. Behaviour change communication is a core component here since it advocates for behaviour change among the individuals at high risk of contracting the disease. This can be done through the media and the community health workers. The same can be advocated for in education institutions.

The curriculum for both primary and secondary schools in Kenya includes AIDS education since its inception in 1999 (UNGASS, 2006). This helps to deliver education campaigns to create nationwide awareness of AIDS.

To curb further spread to other non-infected individuals and to reduce re-infection, condoms should be made available and accessible. Free voluntary counselling and testing services are usually provided to individuals to encourage them to know their HIV status. Behaviour change in preventing and controlling of HIV/AIDS in the Kenya military has successfully been achieved through HIV counselling and testing (Elmi, 2012). Counselling and testing should be made available in all health facilities, which will enable patients to be offered an HIV test without having to ask for a test (UNGASS, 2010).

Clinical care and support should focus on nursing and psychological care, medical management of complex AIDS signs and symptoms, and management of opportunistic infections and HIV related illness including the preventive therapies (UNAIDS, 2001; World Bank, 1997). Non-clinical care and support are mainly done by trained community health volunteers who are trained by health experts to provide care for the individuals affected by AIDS in their homes. The community health workers normally offer home-

based care by visiting the individuals in their homes. The people living with HIV are taught on their nutritional needs and also on the need to maintain proper hygiene in order to prevent them from being infected by other opportunistic infections.

2.2.4. Protection under the Bill of Rights

For a long time, women have been viewed as marginalized in society and had been disadvantaged by some laws and practices by some communities. They were discriminated when it came to the ownership of property access to education and employment opportunities. However, the current constitution of Kenya has now empowered women.

The Kenyan Constitution (Republic of Kenya, 2010) chapter four on the bill of rights article 27(3) outlaws the discrimination of individuals based on their HIV status and gives both men and women equal rights to economic, political, cultural and social opportunities. Article 40 (1) subject to article 65 guarantees every citizen the right to acquire and own property.

Article 56 (b) mandates the state to establish affirmative action programmes to give reserve economic and educational opportunities to marginalized groups who had been discriminated in the past (Republic of Kenya, 2010). However, despite this provision, the girl child has, in most cases, been left behind when it comes to education facilities. There should therefore be effective protection of the rights of women who are most affected by the pandemic. The Kenya HIV and AIDS prevention and control Act 2006, provide the legal framework for providing care and support to people who are infected or are at risk of being infected with HIV (KASF,2018).

2.3. Other Intervention Strategies to Curb HIV/AIDS in Kenya: Prevention Programmes

HIV/AIDS intervention strategies should be aimed at all levels and involve people in the public and private sectors, civil organizations and community-based organizations. These interventions should focus on holistic approaches aimed at prevention, care and social support (MOH, 2005). Intensifying HIV prevention and enhancing treatment has been a major focus in addressing HIV/AIDS. AIDS has no cure; thus, prevention of HIV infections to avoid the social impact of the HIV pandemic, disease, and premature death is of great significance. Although there has been some progress on access to ARV therapy, the possibilities for treatment in poor countries are still limited.

HIV prevention must be embedded in the social context of the people. This applies to both preventions targeted at groups exposed to risk as well as the general population (Piot and Coll-seck, 2011).

HIV and AIDS programmes are as complex as the pandemic itself. The programmes aim to prevent the transmission of HIV by addressing cultural, religious, political and economic aspects, and mitigating the consequences of AIDS through care support and treatment (World Bank, 1997). There are HIV and AIDS programmes that promote and invest in women's empowerment and gender equality. HIV and AIDS programmes should speak against damaging gender norms like those that motivate men to have multiple sexual partners or older men to have sexual relations with underage girls. Appropriate HIV and AIDS education addressing gender norms like sexual responsibility and safer sexual decisions should be given to young people.

In the implementation of the PTMTC programme, family planning should be a key component to promote the health of HIV positive women. Programmes that address violence against women should be implemented, and the women taught about safer sex

negotiations. Additionally, life skills training should be offered for women who experience or fear violence so that they can learn how to safely disclose their HIV status. Comprehensive medical and legal services should be provided to victims of sexual violence. In line with this, counties should enforce, strengthen and develop laws that punish violence against women. Men should also be increasingly involved in programmes that offer community-based care and support. The programmes should also make the society aware of the inheritance rights of women and the need to keep girls in school in order to empower the women.

Finally, microfinance and micro-credit programmes, skills training, and other income-generating activities that promote economic opportunities for women should be expanded.

2.4. Structural interventions

Structural interventions refers to the physical, sociocultural, organizational, economic, legal aspects of the environment that act as an impediment or facilitate efforts to reduce the increased prevalence of HIV/AIDS (Ostin, 2008). They seek to change the social-economic political and environmental factors that influence vulnerability to HIV. The success of other strategies is enhanced when HIV prevention strategies address the wider structures that influence an individual such gender, age, wealth and power. To achieve maximum results in the reduction of risk and vulnerability to HIV infection, Artazcoz et al. 2001, notes that the HIV prevention approaches should target the root cause that puts an individuals at high risk HIV infection. These strategies should be complemented by other prevention and treatment options.

2.5 Gender-responsive strategies

Though gender is an important an component in structural interventions, certain communities tend to have higher levels of gender disparities, and this is often the case of the more traditional largely patrichal communities. This situation is likely to escale when the communities have fewer resources, such as in urban informal settlments. Gender in this study was conceptualised with the social systems approach.

2.5.1 Approaches that aim to change Gender Norms

Gender norms refers to the social expectations in terms of the responsibilities and behaviours that are considered to be appropriate for a particular gender (women/ girls and men/boys) within a specific communities or culture (U.S. department of health, 2016). These norms assign unique roles to women/girls and men/boys. Th eallocation of these roles largely influences access to information; essential opportunites such as education and employment; and resources such as income and wealth. Activities that aim to change gender norms should be incorporated as a preventive strategy. The activities should be peer based discussions, education at the community level and mass media campaigns through local language and setting on gender equality (Gay et al. 2010).

2.5.2. Violence against women.

Community-based projects that involve men and women should be adopted to address the violence meted on women. Through the forums, gender-equitable relationships would result in decreased violence, and the creation of micro-finance programs should be integrated with the training of HIV gender and violence(U.S. Department of Health, 2016.

2.5.3. Promoting women's employment, income and livelihood opportunities.

There should be many programmes that should address economic dependence on women's poverty. These programs should aim at increasing employment, microfinance opportunities

and encouraging the growth of womens small income generating activities. An increase in such activities will lead to a reduction in the behaviour among women (CDC, 2012).

2.5.4. Education

Increased education levels for girls would translate to the retention of girls in school for a longer period, thus helping in reducing the risk of HIV (Gay, 2010).

The education curriculum taught should aim to encourage life skills or complement basic education with life skills that would enable girls to make the right decisions and avoid risky behaviours.

2.6. Theoretical Framework: Social systems structural theory

This study adopted the social structure model. Social structure refers to the arrangement and social interaction in society (Daniel & Brosziewski, 2009; Jackson, 1985; Parsons, 1951). The social structure, therefore, includes the general organization of social institutions that comprises the patterns in social relations. Karl Marx, for instance, referred to the economic structure of society and argued that it affects the social setting. Herbert Spencer argued that society is comprised of interdependent parts that together form a structure, while Emile Durkheim agreed that the parts are interdependent and the interdependency imposes certain structures on members and institutions. In all, social structure is identified by features of the social system, and they, in turn, are interrelated and have an influence on the functioning of the social structure and the activities of members of the society. HIV epidemic is a social problem and affects the individual and society. Thus, it is Merton who argues that the social structure consists of normative

patterns as well as inequalities in power and status, and thus for women infected with HIV, the issues are albeit different.

Latkin et al. (2010) social systems model aims to structure various factors influencing the prevention of HIV/AIDS. It puts emphasis on the social nature and dynamics of HIV-related behaviours that in turn influence the structural factors. Social systems include six structural dimensions, that is: resources, science & technology,formal means of social control, informal means of social control, social interconnectedness and settings.

The choice of this model was significant in that HIV prevention, detection and treatments, as well as social-economic status, including the gender component, are essential structural factors. These six dimensions in HIV prevention and treatment are conceptualized in terms of (a) the inherent complexity; and, (b) the interrelatedness. Therefore, the model argues that HIV/AIDS interventions should primarily focus on the levels and dimensions such as applicable in urban informal settlements. This includes the setting and changes in the social systems as well as their components. For example, for women living with HIV, the structural factors include HIV / AIDS prevention, testing and facilities as outlined in the Kenya AIDS strategic plan (Ministry of Health, 2020). Latikin et al (2010|:2) emphises on the structural influence of behaviour particularly in regard to HIV /AIDS:

> *It is clear that insufficient attention to structural influences on behavior has hampered efforts to end the HIV epidemic. HIV incidence is greater where structural factors like poverty, stigma, or lack of services impede individuals from protecting themselves.4,5 Incidence is also greater where structural factors such as movement of populations encourage or even force persons to engage in risk behaviors.4,6,7 Thus, without examining distal levels of influences on behaviors, it is difficult to understand how and under what circumstances individuals can (and conversely cannot) change their behaviors.*

In that case, the study investigated the structural system of women living in the informal urban settlement, and the analysis used this structural framework. Structural interventions including HIV interventions impact on public health (Latkin et al., 2010). Prevailing conceptions therefore affect the outcome of interventions and hence there is a need to assess the efficacy of the available strategies that have been put in place like in Majengo. In this study, the strategies are the independent variables. The challenges that the women face in their day to day lives in informal settlements are the moderating factors that interfere with intervention strategies. The behavior of women living with HIV/AIDS serves as a barometer of efficacy.

It is important to note that the challenges in the informal settlement influence the behaviour of the women and would lead to the use or nonuse of the provided strategies. Subsequently, the use of the provided strategies would lead to improved health care. Overall, too many challenges would hinder the women from using the provided services would lead to poor health of the women,

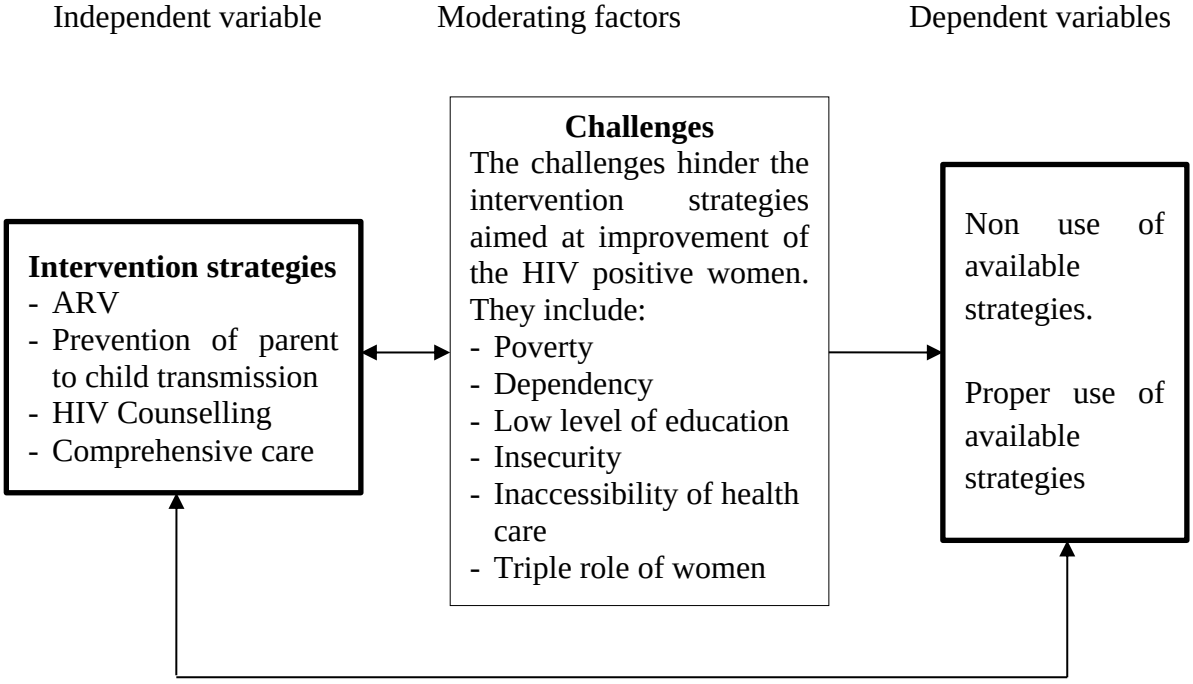


Figure 2.1: Conceptual Framework on Factors That Lead to Non-Improvement of the Status of Women Infected With HIV

The Latkin et al. (2010) model provides an effective approach of alinetating the various structural interventions for direct and interceded effects of various factors affecting the women infected with HIV in urban informal settlement.

2.5. Conclusion

Gender inequalities contribute significantly to HIV and AIDS in more traditional societies. They include cultural practices such as early marriages, wife inheritance, gender and sexual violence, and high attrition among girls in school to take care of ailing parents or relatives (Ministry of Health, 2015, 2016; Wango, 2001). Additionally, gender factors tend to limit effective HIV prevention. The Kenya AIDS Strategic Framework (KASF) 2014/15 - 2018/19 (Ministry of Health, 2016) takes into consideration gender factors. This is the tactical guide to Kenya's response to HIV at the national and county levels. The Strategic Framework changes the approach to the management of the national response by adopting evidence and results-based multisectoral strategies and hence this study. The Strategic Framework has also adopted gender mainstreaming and human rights approach planning. The rights-based and gender transformative approaches should include various strategies on protection and promotion of the rights of individuals that are socially excluded, such as girls and women, the vulnerable and marginalized. This study takes cognisant of women in informal urban settlements.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0.Introduction

This chapter presents the research methodology used to gather the information needed for the study. The section explores various elements of the research design: location of the study, description of the study population, sampling procedure, methods of data collection, and the ethical considerations.

3.1.Research Design

The research design used was descriptive since it was considered appropriate in observing the study subjects in their natural environment without any form of manipulation (Creswell, 2002; Dawson, 2009; Mugenda & Mugenda, 2003; Walliman, 2010). This design assisted in exploring both quantitative and qualitative data (Creswell, 2002; Walliman, 2010). Additionally, the study sought to gather information from the participants on the effectiveness of implemented strategies aimed at improving their livelihood. Primary and secondary data were collected for the study. Primary data was obtained using questionnaires while secondary data was obtained from already published information including journals, theses, books and HIV/AIDS publications including national and Nyeri country reports (Kenya AIDS Indicator Survey, 2007; 2013; NASCOP, 2009; 2014; Nyeri County Strategic Plan, 2005; Ministry of Health, 2018; 2020).

3.2.Location of Study

Kenya has several informal settlements, especially in Nairobi (Kibra, Mathare, Mukuru kwa Njenga) and in Nyeri, Majengo is the most prominent. These informal settlements are

known for cheap housing in relation to the high populations in these towns (. Various scholars have investigated the poverty particular in Africa and the cities, as well as the deployable conditions exhibited in informal urban settlements (Howard, Killick, Kayizzi-Mugerwa, & Marie-Angelique, 2001). Urban informal settlements exhibit a high incidence of criminal activity including juvenile delinquency, illicit brews, poorly contracted and contracted shanties, lack of adequate water and electricity, poor disposal systems and for the purpose of this study high incidents of HIV / AIDS (Kabiru et al. 2011; Nyaruiya, 2017; Taylor & Maithya, 2011).

Nyeri County is among the 47 counties in Kenya. The headquarters of the county are in Nyeri town. Majengo is an informal urban settlement in Nyeri with an area of about 6.5 square kilometres and an estimated population of 25,018 people that is 13,353 males and 11,665 females (Kenya National Bureau of Statistics, 2009). Nyeri is a commercial centre with several industries, flower farms, ranches and coffee estates. Persons working in these sectors often seek for cheap and affordable housing within the informal settlements. To supplement their income, the migrant workers will engage in sexual trade that will lead to high rates of HIV infection. Informal settlements are known to have higher rates of HIV (Patterson, 2011). The effects of HIV are more devastating to those living within the informal settlement because they have to contend with the upsurge in the cost of living yet they are unable to match due to low income.

3.3.Target Population

This study targeted HIV positive women living in Majengo, Nyeri town in Nyeri County. This is because several studies conducted especially in Nairobi informal settlements among young people (Kabiru et al., 2011) and on sexual behaviour in Nyeri (Nyaruiya, 2017)

reveal that there are several factors affecting HIV/AIDS, especially among females. The study targeted HIV positive women in Majengo slums, Nyeri.

3.4.Sample Selection

Sampling is the process of selecting a small number of subjects or objects from a study population which contains elements that represent the characteristics of the entire group (Creswell, 2008). The study used a non-probability sampling approach called purposive sampling, in which the researcher targeted HIV-positive women in Majengo. All the study participants for the questionnaire, interview and focus group discussion were recruited using the snowball sampling. The researcher was introduced to a woman infected with HIV by a social worker who was based at a health facility located near the informal settlement. The woman participant introduced and recruited her colleagues who were had interest in participating in the study. Similarly, the participant's friend identified a friend, and subsequently, the friend identified another friend to take part in the interview and in the focus group discussion. This ensured confidentiality and at the same time, allowed the participants to engage in the research. To limit friendship bias, each of the research participants was only allowed to recruit a maximum of five (5) participants.

The sample had a total of 60 participants who represented 10 per cent of the target population which turned out to be an adequate sample for the purpose of the study.

The number 60 was also taken to be the percentage of infected women in the informal settlement versus the prevalence rate of women infected with HIV in the county.

3.5.Research Instruments

The study made use of a research questionnaire, interview schedule and a focus group discussion (Appendices 1 – 3).

The research questionnaire (Appendix I) consisted of open and close-ended questions in order to capture both qualitative and quantitative information and thus enable each participant to give their own opinion. The questionnaire was constructed in such a way that all objectives to be accomplished were captured. The items in the questionnaire were based on each variable to enable participants to find their way around with ease and ease coding during analysis (Mugenda & Mugenda, 1999).

In addition to the questionnaire, the participants were also interviewed, and some of them held a focus group discussion with the researcher. The interview schedule (Appendix II) was a follow up of issues raised in the questionnaire. The researcher used semi-structured questions in the interview guide. The focus group discussion (Appendix III) was a follow up of the issues in the questionnaire and interview in order to correlate information obtained from the participants. This ensured a comprehensive study.

3.6.Data Collection Techniques

Data was collected through an interactive process between the researcher and participants through the use of questionnaires, interview schedule and a focus group discussion. Primary data was gathered directly from participants first using through the questionnaires. Thereafter, the researcher interviewed some of the participants and later held a focus group discussion with five participants.

HIV / AIDS is a sensitive topic, and since the women are living with HIV, there was a need for them to be handled with a lot of empathy (Wango, 2015). Each of the sessions, especially the initial contacts, involved creating a good relationship and then explaining the purpose of the study. The researcher will then go through the testing procedures

(questionnaire, interview and discussions). The participants were required to fill in the questionnaire, and the later two following sessions dwelt on the comprehensive interviews. The researcher carefully listened to the narration by the participants. The last session involved checking the transcript. The whole study lasted five months, that is from May to September 2017.

There are several programmes on HIV/AIDS in Kenya and in Nyeri, and hence secondary data was collected from published material and electronically stored information. These include the Kenya AIDS Strategic Framework I and II implemented in 2018/2019 to 2022/2023 and 2020/2021 to 2024/2025 (Ministry of Health, 2018; 2020). These are significant in that the Ministry of Health emphasizes on 'evidence-based HIV response' in accordance with the Constitution (Republic of Kenya, 2010) and hence the national and county government plans.

3.7.Validity and Reliability of Research Instruments

Validity refers to the extent to which a research instrument actually measures what it purports to measure, in terms of accuracy and effectiveness of inferences mde on the basis of the research findings (Mugenda & Mugenda, 2003; Nachmias & Nachmias (1996). The researcher pre-tested the research instruments tools on sampled participants from Kibera informal settlement in Nairobi whose data did not form part of the study. This was to ensure that the research items were aligned to the study objectives and hence valid. As a result, the research instruments were attuned accordingly, including adding the part of probing and other items that required adjustment. The pre-test ensured that the research instruments were aligned to HIV issues relating particularly to women in informal urban settlements. The responses obtained during the pre-test were then used to calculate the reliability

coefficient and the reliability measured using Cronbach's Alpha Coefficient (Gable & Wolf, 2003).

3.8.Data Analysis

Data was screened at the end of each day to ensure completeness, consistency and reliability before being entered into the computer. All data gathered was checked to select relevant information. Immediately on the day of the interview, all the transcripts were done, and member checking technique was applied in ensuring the interpretive validity (Creswell, 2008). The study used descriptive techniques of data analysis. Data were categorized by themes, tabulated reports and percentages. The technique mainly frequency distribution that was helpful in making a summary of the collected data into a more meaningful form.

3.9.Ethical Considerations

Permission for conducting of the research was obtained from the National Council of Science and Technology to undertake the research in the form of research permits (Appendix VI - V). The board of postgraduate studies of Kenyatta University issued an authorization letter to carry out the research. All the research instruments emphasized on anonymity and confidentiality of information in order to encourage respondents to participate in the study.

Participants were also duly informed that all the information obtained from the study would only be handled by the researcher and only applied for the purpose of academics. The identity of the participants was kept anonymous during the course of the study and in the report. Code numbers were used to protect confidentiality. The participants were not forced to provide information and were allowed to participate at their own discretion and could

pull out from the study without penalty. All participants were requested to sign consent forms indicating their willingness to provide information on the study. They were also asked for consent for tape recording and given assurance that the information would be kept confidential.

Sharing of information on HIV and AIDS is critical as the persons are highly stigmatised (Madise et al., 2008; Nzioka, 2000; Wango, 2015). The researcher, therefore, used a research assistant in the form of a social worker who was a resident in the area and who was able to identify a participant who in turn introduced others to the researcher. The social worker was also sworn to confidentiality in order to protect the clients. Due to the confidentiality of the information that was provided by the participants, the researcher relied on the information participants provided. However, the researcher triangulated the information using an interview schedule and focus group discussions to ensure the validity of information used in the analysis.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

4.0. Introduction

The study examined the effectiveness of strategies that mitigate challenges experienced by HIV positive women in Majengo urban informal settlement, Nyeri County. This chapter outlines the research findings and data analysis based on the four research objectives. Descriptive statistics were used for data analysis purposes.

4.1. Response Rate

The study involved 60 participants; thus, 60 questionnaires were distributed to the participants. All the questionnaires issued were returned with a 100% return rate which is recommendable for the study. However, two questionnaires were discarded during the process of data editing since they were incomplete. This gave a response rate of 97.6%, which was deemed sufficient for data analysis.

4.2. Background Information on Research Participants

Participants were asked to include their age, occupation, number of children, marital status, education level, and monthly income in order to obtain background information for the study (estimate). Additionally, the study was interested in finding out whether the participants were brought up in Majengo area, and whether the house where they reside in is rented or self-owned. The results are as shown in Table 4.1.

Table 4.1: Characteristics of Research Participants

		Number	Percentage
Age	15 - 25 years	2	3.4%
	26 - 35 years	16	27.6%
	36 - 45years	27	46.6%
	46 - 55 years	9	15.5%
	56 years and over	4	6.9%
	Total	58	100.0%
Occupation	Employed	20	34.5%
	Not employed	13	22.4%
	Business (self-employed)	25	43.1%
	Total	58	100.0%
Number of Children	1 - 3 children	43	74.1%
	4 – 7 children	12	20.7%
	8 - 10 children	3	5.2%
	Total	58	100.0%
Marital Status	Single	19	32.8%
	Married	22	37.9%
	Divorced	6	10.3%
	Separated	11	19.0%
	Total	58	100.0%
Level of Education	No schooling	0	0.0%
	Primary Level	35	60.3%
	Secondary Level	13	22.4%
	Tertiary Level	10	17.3%
	Total	58	100.0%
Monthly Income	1,000 – 3,000	15	25.9%
	3,000 – 5,000	14	24.1%
	5,000 and above	29	50.0%
	Total	45	100.0%

The participants were asked to indicate the category that represented their age among five categories. Almost a half (46.6%) of the participants were in the 36 – 45 years category while the majority were in the 26 - 45 years category (74.2%). The high number of participants aged 26 - 45 years could be attributed to this being the age bracket with most women being sexually active, which makes them more susceptible to contracting HIV and AIDS.

The few numbers of participants aged 15 - 25 years (3.4%) could be attributed to the unwillingness of participants in this age group to divulge information about their HIV status as they feared being victimized by their peers. Thus, the low number of years can be attributed to the fact that the study involved self-disclosure of HIV status through the snowballing method and thus does not statistically reveal infection among the youth estimated at (Ministry of Health, 2020).

Most of the participants (43.1%) were in business while others (34.5%) were employed, and a few (22.4%) stated they were not employed (self-employed). Chapter Four of the Constitution of Kenya (Republic of Kenya, 2010) on the bill of rights Article 27 (3) empowers women by noting that both women and men are entitled to equal treatment including equality in accessing opportunities in political, economic, cultural and social spheres. Women in informal settlements have also benefited from Uwezo Fund as well as Women Fund. These are initiatives by the Government of Kenya to increase the numbers of women entrepreneurs in the country. Women in informal settlements have benefited from these initiatives, which could have resulted in a higher number of participants with businesses.

An overwhelming number of research participants (74.1%) had a maximum of three children, while only a few of the participants (25.9%) had many children to reach over 11 children. It seems that more HIV-positive women are conscious of the importance of preventing mother-to-child transmission and are therefore more interested in using family planning, which may result in less pregnancies and children.

Additionally, other programmes such as the uptake of prophylaxis and low-income levels among the women living in the informal settlement could have made HIV positive women desire to have fewer children.

When asked to provide information about their marital status, most of the participants (37.9%) stated they were married, while almost a third (29.3%) were either divorced or separated another significant one in three (32.8%) stated they were single. The lack of STI preventive measures, especially during sex between married couples could have led to a higher number of married participants. Besides, almost one in three participants (32.8%) were single, which could imply that the women were engaging in sexual activity in order to help support families that are struggling with economic hardships. The highly patriarchal system and the social-cultural, economic context could have affected the women and their sexual activity in various ways, and this should be an area of intensive investigation in future research on HIV and sexuality among females and particularly in informal urban settlements.

While the participants have been to school, the majority (60.3%) had only primary school level of education with only a few (17.3%) who had a tertiary level of education. This was in agreement with a study by Ojowi (2008) who concluded that there were low levels of education among the slum women and this could lead to their high levels of unemployment and/or low wages thus risking their lives as they sought cheaper places of delivery of their children. Kibui (1998) in a study in Majengo urban informal settlements of Nyeri found out that women had little knowledge about HIV implying that they lacked preventive measures mainly during sex, thus making them more susceptible to infection. At the same

time, their prospects in life are inhibited by their generally lower access to education, and the limits placed on the type of education they receive.

It was noted that only half of the participants (50.0%) had a monthly income of Kshs. 5,000 and above (this translates to $ 50 which is $ 2 a day), while the rest of the participants earned completely below a dollar (25.9% between Kshs. 1,000 - 3.000 per and 24.1 between 3,000 – 5,000 a month). This even seemingly higher wage of Kenya Shillings 5,000 ($ 50) could be attributed to an increased minimum wage in Kenya, which means most of the participants who are employed receive considerably better wages. Additionally, businesses have been empowered by the provision of capital through the Uwezo Fund and Women Fund, which increases the income capabilities of the businesses.

There were 22 participants in this study who indicated that they were married. Further inquiry was made about the occupation of their spouses. Almost half of the spouses to the married participants were employed (45.4%) with a significant percentage who were not employed (30.4%) and a few who reported that they had their own business or were self-employed (18.2%).

Table 4.2: Distribution by Occupation of Spouse for Married Participants

	Number	Percentage
Employed	10	45.4%
Not employed	4	18.2%
Business	8	36.4%
Total	22	100.0%

This further reinforces the poor economic status of these women despite the fact that they were infected with HIV and had children.

The study further investigated whether the research participants were brought up in Majengo area and whether their residence is rented or owned.

Table 4.3: Distribution by Participants' Upbringing and Residence Type

		Number	Percentage
Participants Brought up in Majengo Area	Yes	43	74.1%
	No	15	25.9%
	Total	58	100.0%
Residence of Participants	Rented	52	89.7%
	Owned	6	10.3%
	Total	58	100.0%

An overwhelming majority of the participants (74.1%) were brought up the Majengo area. It is possible that the women could have had a family early and in turn were unable to move to other areas due to stigmatisation, poor education (which could perhaps raise their income levels), and lack of finances. Also, most of the participants (89.7%) lived in a rented house, and only a few (10.3%) lived in their own homestead. The economic circumstances could have contributed to a vicious cycle of poverty in which the females could either have been married early or had children, thus perpetuating the social, economic degradation of poverty in these informal settlements.

4.3.Knowledge of HIV Status

The study sought to find out various aspects on the participants' knowledge of their HIV status including when they learnt they about their HIV status, how and when they learnt about their HIV status or took a HIV test. The results are shown in Table 4.4.

Table 4.4: Participants knowledge of and awareness of HIV status

		Number	Percentage
Time: When a participant learnt about their HIV status	Less than 6 months ago	3	5.2%
	6 – 12 months ago	25	43.1%
	13 - 24 months	11	19.0%
	Over two (2) years ago	19	32.7%
	Total	58	100.0%
How: What led participants to know about their HIV status	Through antenatal clinic	36	62.1%
	Voluntary testing and counselling (VCT)	22	37.9%
	Routine medical check-up	0	0.0%
	Total	58	100.0%
Reason: why participants took the HIV test	It was a marriage requirement	10	45.5%
	Symptoms that created suspicious of HIV	7	31.8%
	To get to know your status	5	22.7%
	Total	22	100.0%

Most of the participants (43.1%) learnt about their HIV status within the last six months to one year. Others learnt about their HIV status over two years ago (32.7%). Few indicated less than six months (5.2%). Most of the participants (62.1%) learnt about their HIV status at the antenatal clinic. The antenatal clinic largely requires that pregnant women take a HIV test as part of strategies to prevent mother to child infection. Therefore, the antenatal clinics can be attributed to continued campaigns on the importance of antenatal care by various stakeholders, including the free antenatal care in government facilities (Ministry of Health, 2016; 2020). It is notable that none of the participants found out about their HIV status through a routine medical check-up.

The lack of voluntary counselling and testing of HIV /AIDS though a strategy would appear to be somehow weak and failing given the results in Table 4.4. However, the lack of voluntary testing could be as a result of several reasons that could include: (1) the discrimination and stigmatization associated with HIV /AIDS; (2) lack of medical follow up; (3) lack of adequate knowledge of HIV/AIDS (given that the women had only primary level education); and, (4) lack of finances to facilitate routine medical check-ups amongst

people in informal urban settlements. These factors are attributed to the fact that out of the 22 participants who went for Voluntary Testing and Counselling (VCT), several (45.5%) of them took the HIV test as a marriage requirement, while others (31.8%) took the HIV test as they had symptoms which made them suspicious that they could have contracted the virus, and only a few (22.7%) seized the opportunity to find out their HIV status. Thus, mitigating factors must address much deeper issues among females in informal urban settlements.

4.4.Strategies to Mitigate Challenges of Women Living With HIV and AIDS

In essence, the study investigated various intervention strategies for mitigation of challenges of HIV positive women. This was important in the evalution of the effectiveness of various strategies as outlined in Table 4.5.

Table 4.5: Strategies to Mitigate Challenges of Women Living With HIV / AIDS

		Number	Percentage
Participants given Prophylaxis Drugs at Antenatal Clinic	Yes	36	100.0%
	No	0	0.0%
	Total	36	100.0%
Delivery of First Child in a Health Facility	Yes	50	86.2 %
	No	8	13.8%
	Total	58	100.0%
Knowledge by Spouse of Participants' Status for Married participants	Yes	16	72.7%
	No	6	27.3%
	Total	22	100.0%
Use of Protection Every Time Participants Have Sex (Married)	Yes	3	13.6%
	No	19	86.4%
	Total	22	100.0%
Unmarried Participants with Partners	Yes	25	69.4%
	No	11	30.6%
	Total	36	100.0%
Use of Protection Every Time Participants have sex (Partners)	Yes	9	36.0%
	No	16	64.0%
	Total	25	100.0%

It was noteworthy that all the 36 participants who found out about their status through the antenatal clinic clearly indicated that they further received the prophylaxis drugs to prevent transmission to the unborn child. The administration of prophylaxis drugs is conducted in antenatal clinics where HIV positive mothers receive the most effective antiretroviral regimen for preventing transmission of HIV to their babies (Republic of Kenya, 2020). These significant services were initiated in 2000 in all established health facilities (Republic of Kenya, 2000) and this is considered an important positive development to earlier studies conducted in Kibera urban informal settlements in Nairobi and other areas (Bwisa, 2009; Ojiwa, 2008). The study by Bwisa (2009), for example, reported that pregnant women did not access the PMTCT services, and this was attributed to the long distances to the delivery points. This, in turn, greatly risked transmitting the virus to their unborn babies during delivery at their homes. Bwisa further noted that among the married women, there was a difficulty in the uptake of PMTCT services. However, this depended on the level of education and women with higher education tended to enrol for PMTCT services. This again raises the issue of education in informal urban settlements.

Majority of respondents in the current study (86.2%) indicated that they delivered their first child in a health facility. Once more, this would be positive development contradicted earlier findings of a study in the Kibera informal settlement by Ojiwa (2008) that established low-income levels among a majority of the women may have contributed to the higher number of women who sought delivery services from traditional birth attendants, thus risking transmitting the virus to the child (Ojowi, 2008).

Also, an overwhelming majority of the 22 married participants (72.7%) indicated that their spouse was aware of their HIV status. However, there were a few married participants

whose spouse had no knowledge of their HIV status (27.3%). The female participants who had not disclosed their HIV status to their spouses could be apprehensive about doing so due to the social stigma attached to HIV and fear of being jilted by the males since they are often economically dependent on the husband (Madise et al., 2008; Nyinod, 2005; Nzioka, 2000; Wango, 2001). Nyindo (2005) also found that society is made more susceptible to HIV by the poverty levels and gender inequality since a woman that is poor, whether totally or relatively to male will not be able to maintain that her sex partner should stick to only one partner, make use of a condom or use other methods of preventing herself from transmitting the disease. This makes females highly vulnerable to HIV and AIDS (Nyindo, 2005; Ministry of Health, 2020; Wango, 2001).

In totality, there were 36 research participants who were unmarried in this study. A majority of the 36 participants (69.4%) indicated they had sexual partners while one in three (30.6%) insisted they had no partners. The married participants who had disclosed their HIV status to their spouses were asked whether they used protection every time they had sex. In response, almost all of the participants (86.4%) said they did not use protection every time they have sex with their spouse. Again, the female participants could be vulnerable due to their inability to assert themselves in the sex setting since culturally the males are the dominant figure and the woman tends to be placed in a subordinate position (Nyindo, 2005; Wango, 2001).

Similarly, the female participants who had sexual partners (25 participants) were asked to indicate whether they used protection every time they had sex. It was noted that a majority of the unmarried participants with partners (64.0%) indicated that they did not use

protection with their partners every time they had sex. This makes the gender issue highly pertinent and hence a major issue in HIV / AIDS prevention and treatment.

4.5.Challenges in Implementation of Intervention Strategies

The study investigated the major challenges in the implementation of various intervention challenges that were examined in this study. One of the major issues was an understanding of the issue of multiple sex partners. The results are displayed in Table 4.6.

Table 4.6: Challenges in Implementation of Intervention Strategies

		Number	Percentage
Sex with Another person other than Participants' Spouse or Partner in the Last 12 Months	Yes	5	15.2%
	No	28	84.8%
	Total	33	100.0%
Number of Persons Participants had Sex with who were not Spouse/Partner	1-5	3	60.0%
	Above 5	2	40.0%
	Total	5	100.0%
Reason for Sex with Another person other than Spouse/Partner (Financial Gain)	Yes	4	80.0%
	No	1	20.0%
	Total	5	100.0%
Used Protection in All Encounters with Persons Other Than Spouse or Partner	Yes	5	100.0%
	No	0	0.0%
	Total	5	100.0%

There were 33 participants who were married or had partners (22 married and 11 unmarrieds with partners). When the participants were asked whether they have had engaged in sex with another person who was not their spouse or partner in the last 12 months, an overwhelming majority (84.8%) indicated they had not.

However, some of were intimately involved with another person who was not their spouse or partner in the last 12 months though they were very few (5 participants). These participants who had sex within the last 12 months with someone else other than their spouse or partner y were asked to indicate the number of people. The responses indicated

that most of the participants (60.0%) had sex with 1 - 5 people while the rest 40.0% of them had sex with more than five people in the last 12 months (not their spouse or partner). This was a very important finding given that these women were infected with HIV, living in urban informal settlement and that they were also aware of their HIV positive status. Could this be commercialised sex (consciously or unconsciously) and thus they could have been persuaded by various circumstances to engage in sex as a way of earning income or to increase on their income?

Further inquiry indicated that most of the participants (80.0%) had sex with other people who were neither their spouse nor partner for financial gain. But Gupta (2000) noted that high poverty levels among women implies that women and girls increasingly have to exchange sex for money to meet their basic needs. Much of this sex is unsafe. These findings should be intensively investigated since in the Gupta (2000) study, all the participants who were intimately involved with persons who were not their spouse or partner indicated that they used protection in all encounters with these persons. So, was this playing safe sex in rather difficult 'financial' circumstances, and if so, this has serious implications for women in urban informal settlements.

4.6.Effectiveness of HIV and AIDS Intervention Strategies

This study sought to evaluate how effective various intervention techniques were. This was done by finding out whether the participants have been able to disclose their status to their family members or employer.

Table 4.7: Effectiveness of Intervention Strategies (Disclosure)

		Number	Percentage
	Yes	48	82.8%

Disclosure of Participants' Status to Any Family Member	No	10	17.2%
	Total	58	100.0%
Disclosure of Participants' HIV Status to employer	Yes	2	20.0%
	No	8	80.0%
	Total	10	100.0%

The respondents were asked if they have disclosed their status to any of their family members. Most of the participants (82.8%) indicated that they had informed a member of their family about their HIV status. When the participants were asked if their employer is aware of their HIV status, a majority of them (80.0%) rvealed that they had not disclosed their HIV status to their employer. This could be attributed to fear of victimization, including being fired or denied promotion.

Further, the participants who were employed and had disclosed their status to their employer (only 2 participants) were asked how their employer learnt about the participant's HIV status. Both participants indicated that they disclosed to their employer about their HIV status through sick leave. The participants had, on many occasions, asked for sick leave which made the employer query their ingenuity; thus, they disclosed their HIV status to reassure their employer that they had a genuine case.

4.6.1. Family Member HIV Status disclosed information

The study sought to find out which family members were provided with disclosure information about the status of the participants among parent, sibling and member of extended family, as shown in Table 4.8.

Table 4.8: Family Member HIV Status Disclosed To

	Yes (%)	No (%)	Total (%)
Parent	30 (62.5%)	18 (37.5%)	48 (100%)
Sibling	38 (79.2%)	10 (20.8%)	48 (100%)

Extended Family	9 (18.8%)	39 (81.2%)	48 (100%)

The respondents who had disclosed their HIV status to a family member (48 participants) were required to indicate which family member they had disclosed HIV status. Majority of the respondents had disclosed their HIV status to a sibling (79.2%) or parent (62.5%), while 18.8% of the participants had disclosed their status to a member of their extended family. Participants tend to find it easier to disclose their status to their sibling or parent possibly due to the social bond that exists in a nuclear family as well as a higher level of trust and support as opposed to an extended family.

4.6.2. HIV Status Effect on Work Attendance

The effect of the HIV status of the participants on work attendance was examined, and results presented in Table 4.9.

Table 4.9: HIV Status Effect on Work Attendance

	Number	Percentage
Yes	6	60.0%
No	4	40.0%
Total	10	100.0%

Over a half of the participants (60.0%) indicated that their HIV status affected their work attendance, while others (40.0%) indicated that their HIV status did not affect their work attendance. The people living with HIV have high nutritional needs which are sometimes not met due to the low-income level and responsibility in satisfying the needs of other family members, especially children. This could lead to the participants' getting infected by other opportunistic infections which could lead them to be away from work, thus affecting their work attendance.

4.6.3. Use of Antiretroviral Drugs

The participants were asked to indicate whether they take antiretroviral drugs and whether they take them as prescribed. The responses are as shown in Table 4.10.

Table 4.10: Use of Antiretroviral Drugs

	Yes (%)	No (%)	Not Sure (%)	Total (%)
Participants take antiretroviral drugs	58 (100%)	0	0	58 (100%)
Participants take antiretroviral drugs as prescribed	45 (77.6%)	0	13 (22.4%)	58 (100%)

All the participants indicated that they take antiretroviral drugs (ARVs). This is because ARVs lessen the HIV viral load to a low level that is even undetectable for the longest time possible, restoring and /or preserving immunological function in order to enhance immunity thus reducing opportunistic infections and reduce the HIV viral load preferably to undetectable levels for long as possible, to restore and /or preserve immunological function so as to enhance immune causing delay prevalence of AIDS, in enhancing the quality of life of an HIV positive individual, to lessen the death as well as sicknesses resulting fro HIV and to lessen the effect of transmission of HIV in the community (Clay, 2005).

Also, a majority (77.6%) of the participants took ARVs as prescribed with only a few (22.4%) of the participants indicating that they are not sure whether they take ARVs as prescribed. This could be attributed to the low education levels (most respondents had primary level of education) of the participants which could make some of them not understand the prescribed manner in which the drugs are to be taken.

4.7.Appropriate Strategies for Assisting Women Living With HIV and AIDS

The perceptions of participants on different aspects, as well as their support infrastructure, were used to examine the interventions that would be effective in assisting women living with HIV and AIDS.

4.7.1. Participants' Membership to a Support Group

The participants were required to indicate whether they belonged to a support group; results are shown in Table 4.11.

Table 4.11: Participants' Membership to a Support Group

	Number	Percentage
Yes	51	87.9%
No	7	12.1%
Total	58	100.0%

Most of the participants (87.9%) indicated that they were a member of a support group, while a few (12.1%) were not in any support group. The support groups provide moral support for the members as they share their experiences as well provide good social ground for friendships which is why they could be preferred by most participants.

4.7.2. Participants' Perception of their Information Level about HIV / AIDS

The aim of the study was to see how much the participants knew about HIV and AIDS. Participants were required to rate their knowledge level of HIV and AIDS as excellent, fair, or poor, as shown in Table 4.12.

Table 4.12: Participants' Perception of their Information level about HIV / AIDS

	Number	Percentage
Good	41	70.7%

Fair	12	20.7%
Poor	5	8.6%
Total	58	100.0%

Most of the participants (70.7%) were of the opinion that their level of information about HIV and AIDS was good, though the others though few were less optimistic (20.7% felt it was fair, and 8.6% felt it was poor). The higher numbers of participants who feel they are informed to a fair level and above could be attributed to education on HIV and AIDS in various forums on a national, county, as well as community level.

4.7.3. Perception of Participants on Implementation of Strategies

The study sought to determine if participants feel there is a need for implementing better strategies or improving on the available ones. Additionally, the participants were asked to indicate whether maintaining their health was of utmost importanance in their life. The participants' perceptions are as shown in Table 4.13.

Table 4.13: Perception of Participants on Implementation of Strategies

	Yes (%)	No (%)	Total (%)
Do you feel there is a need for implementing better strategies or improving on the available ones	37 (63.8%)	21 (36.2%)	58 (100 %)
Is maintaining your health the most important thing in your life	58 (100%)	0	58 (100 %)

More than half of the participants (63.8%) felt that there is a need for implementing better strategies or improving on the available ones, while a few (36.2%) of them felt there was no need. All the participants agreed that maintaining their health is the most important thing in their life. This was prorpoably because the women must continue to attend to household duties, provide care, and generate income which would be adversely affected if they do not prioritize maintaining their health.

4.7.4. Source of Participants' information about HIV and its preventive measures

The study sought to know where participants obtained information about HIV and preventive measures amongst community health workers, media, health facility and support group.

Table 4.14: Source of Participants' information about HIV and its Preventive Measures

	Yes (%)	No (%)	Total (%)
Community health workers	42 (72.4%)	16 (27.6%)	58 (100%)
Media	25 (43.1%)	33 (56.9%)	58 (100%)
Health facility	37 (63.8%)	21 (36.2%)	58 (100%)
Support group	51 (87.9%)	7 (12.1%)	58 (100%)

Majority of the participants (72.4%) acquired information about HIV and its preventive measures from community health workers. According to UNGASS (2006), non-clinical care and support are mainly done by community health volunteers trained by health experts to provide care for persons affected by AIDS in their homes. This is also incorporated in the Ministry of Health (2015) Strategic Plans. The community health workers normally offer home-based care by visiting individuals at home.

Persons living with AIDS (PLWAIDS) are taught on improved nutrition and also on the need to maintain proper hygiene in order to prevent them from getting infected by other opportunistic infections.

Less than a half of the participants (43.1%) obtained information about HIV and preventive measures from the media. This lowered percentage among the participants could imply that the media does not focus, or provide adequate support on comprehensive care of individuals, families and households that are affected by HIV, or that the participants do

not have access to various aspects of media that addresses their lifelong battle with HIV and AIDS. Behaviour change communication is a core component here since it advocates for behaviour change among the individuals at a higher risk of contracting the disease and can be done through various media networks (UNGASS, 2006).

Over than half of the respondents (63.8%) indicated that they obtained information about HIV and its preventive measures from the health facility. The Ministry of Health (205; 2016) is keen on several programmes to promote HIV and AIDS awareness. Participants are taught how to adhere to principles of treatment through continuous treatment supporters as well as an adherence assessment whenever there is a visit to the health facility (Gill et al., 2005). Additionally, the health facility ensures the continuous involvement of relatives, friends, and community support personnel. Slums in urban areas are characterized by severe overcrowding, poor sanitation, and lack of general infrastructure. Thus, poor status of sanitation and high population density contribute to undesirable health outcomes for informal settlement dwellers (Zulu et al., 2011).

Finally, a majority of participants (87.9%) get information about HIV and its preventive measures from support groups, and this is very interesting since peers would be a major source of information.

4.8.Conclusion

The success of the HIV/AIDS intervention strategies in the society and among individuals depends largely on the success of various programmes such as HIV counselling and testing, antiretroviral therapy (ART), support groups and others aimed at comprehensive care. These factors rely on individual factors, including the patient's personality characteristics but other factors such as gender and human rights, are highly significant. The focus on

women in informal urban settlements demonstrates the need for improved knowledge, skills and abilities related to both HIV and AIDS as well as the concurrence of adaptive intervention strategies.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0. Introduction

The aim of this study was to see how effective interventions are at reducing the challenges faced by HIV and AIDS-positive women in Majengo, Nyeri County.

This chapter includes a rundown of the observations, conclusions, recommendations, and study suggestions.

5.1.Summary of Findings

Most of the participants (74.2%) were aged 26 - 45 years. While a cumulative majority of participants (77.6%) stated that they were employed or in business with half of them (50.0%) having a monthly income of Kshs. 5,000 and above, the low income reflected the poor social-economic status of the women. Yet most of the research participants (74.1%) had a maximum of three children. There were a higher number of married participants followed by single, separated and divorced in that order. None of the research participants had not been to school, although most of them (60.3%) had a primary school level of education. These demographic characteristics portray a highly difficult life for these women infected with HIV and living in an informal urban settlement. Therefore, although there are several mitigating factors to address HIV and AIDS in Kenya and even among vulnerable population such as girls and women, the situation requires constant review. The study findings are summarized below in accordance with objectives of the study.

5.1.1. Strategies to Mitigate Challenges of Women Living With HIV and AIDS

All the 36 participants (100.0%) who found out about their status through the antenatal clinic indicated that they received the prophylaxis drugs to prevent transmission to the

unborn child at the clinic. Additionally, majority of the respondents (86.2%) indicated that they delivered their first child in a health facility. Almost three-quarters of the married participants (72.7%) indicated that their spouse knows their HIV status. However, most of these participants (86.4%) do not use protection every time they have sex with their spouse. This was the same case with unmarried participants with partners (69.4%) as most of them (64.0%) indicated that they did not use protection with their partners every time they had sex.

5.1.2. Challenges in Implementation of Intervention Strategies

Only a few participants (15.2%) indicated they had sex with person who was not their spouse or partner in the last 12 months. Most of these participants (60.0%) had sex with 1 - 5 people in the last 12 months (not their spouse or partner). The reason for most of these participants (80.0%) having sex with other people who were neither their spouse nor partner was for financial gain. However, it is worth noting that all the participants (100.0%) who had sex with persons who were not their spouse or partner indicated that they used protection in all encounters with these persons.

5.1.3. Effectiveness of Intervention Strategies

In the context of the disclosure, most of the participants (82.8%) indicated that they had made their status known to a member of their family. Ranking the number of participants who disclosed their HIV status to the family from highest to lowest, the study found that participants disclosed their status more often to a sibling, parent, and a member of their extended family. Only 20.0% of the participants had disclosed their status to their employer who got to learn about these participants' status through sick leave. All the participants

(100.0%) indicated that they took anti-retroviral drugs. Additionally, a majority (77.6%) of participants take ARVs as prescribed.

5.1.4. Appropriate Strategies for Assisting Women Living With HIV and AIDS

A cumulative percentage (91.4%) felt that they were minimally and fairly informed about HIV and AIDS with a majority (72.4%) indicating that community workers were their source of information about HIV and its preventive measures. Participants who got information about HIV and its preventive measures from the media were not as overwhelming (43.1%), while a majority (63.8%) indicated that they got information about HIV and its preventive measures from the health facility. This is aligned to the Kenya HIV Strategic framework (Ministry of Health 2020:10) that reported that "an estimated 6,696 HIV positive pregnant women did not access treatment for their health and that of their unborn and newborns in 2019". This implied a more multi-faceted approach to mitigate the challenges facing women living with HIV.

Most of the participants (87.9%) indicated that they were a member of a support group. This was supported by a large number of participants (87.9%) who indicated they obtained information about HIV and its preventive measures from support groups. More than half of the participants (63.8%) felt that there is a need for implementing better strategies or improving on the available ones. All the participants agreed that maintaining their health was essential in their life. The findings of this study are in line with Kabiru et al. (2011:12), who concludes that:

> *Specifically, the higher level of testing among females compared to males during prenatal care suggests that routine testing may be a viable option for increasing testing coverage among males as well. In addition, the finding that the decision to test may not always be driven by one's level of sexual risktaking underscores the*

> *need for programs that focus on enabling young people to accurately assess their levels of risk.*

This is true for young people, as well as women and hence a need for improved programmes that focus on viable intervention strategies that focus on women, particularly in urban slums. Recommendations made in this study are aligned with these findings.

5.2.Conclusion

The study concludes that numerous interventions, such as the provision of knowledge and antenatal clinics, are critical for addressing the challenges faced by HIV positive women in Majengo urban informal settlement, Nyeri County. Participants are also given prophylaxis drugs at antenatal clinics, which help to prevent transmitting the HIV virus to the unborn child. These strategies are summarized in the Kenya Strategic framework (Ministry of Health, 2020:9) as follows:

> *The existing high impact and quality interventions including condom programming, Voluntary Medical Male Circumcision (VMMC), prevention and treatment of Sexually Transmitted Infections, Pre-Exposure Prophylaxis (PrEP), HIV testing and treatment, elimination of Mother-to-Child Transmission (eMTCT), keeping girls in schools, elimination of all forms of gender related violence, ending HIV related stigma and discrimination will need to be expanded to scale*.

However, the study found that the majority of HIV-positive women in Majengo have sex with people who aren't their spouses or partners for financial gain. Although the participants insisted that they used protection in all encounters with these persons, it is evident that interventions such as those outlined by the Ministry of Health may not be as effective.

Another conclusion of the study was that repondents who had disclosed their status to family members preferred disclosing to a sibling, parent, and a member of their extended family in that order. However, participants did not find it necessary to disclose their HIV

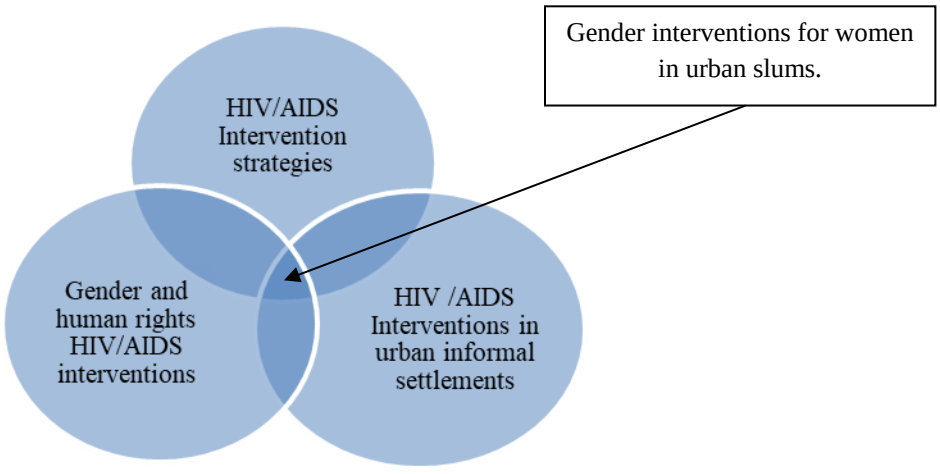
status to their employer. Although this is attributed to stigma and discrimination (Madise et al., 2008; Nzioka, 2000; Wango, 2015), this is an area that would require further investigation and addressed in the overall strategic framework as well as in context.

Finally, the study concluded that support groups are the main source of information about HIV and its preventive measures followed by community workers, health facility, and media in that order.

5.3. Recommendations

This study incorporates HIV intervention strategies and gender, and further investigated intervention strategies among women in informal urban settlements. This is because as demonstrated in the review of literature, HIV interventions strategies need to take in gender and human rights as well as the circumstances and context such as women in informal urban settlements. This can be demonstrated as follows:

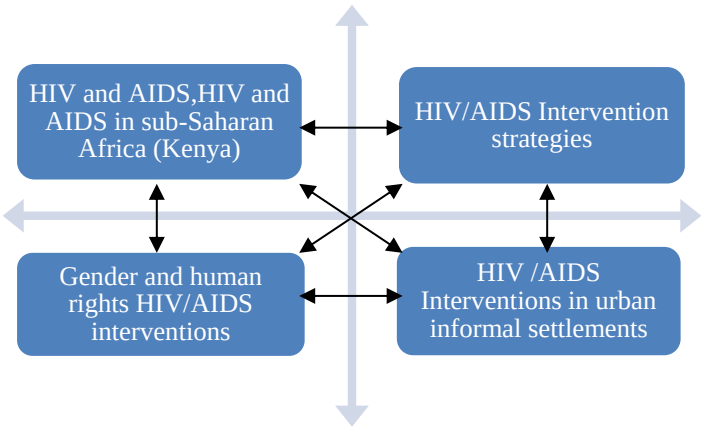
Figure 5.1. HIV/AIDS Interventions in Sub-Saharan Africa incorporating Gender



The study, therefore, recommends gender intervention strategies such as more enforcement of PMTCT interventions including HIV counselling and testing in clinics providng antenatal services, provision of combination short-course antiretroviral (ARV) prophylaxis

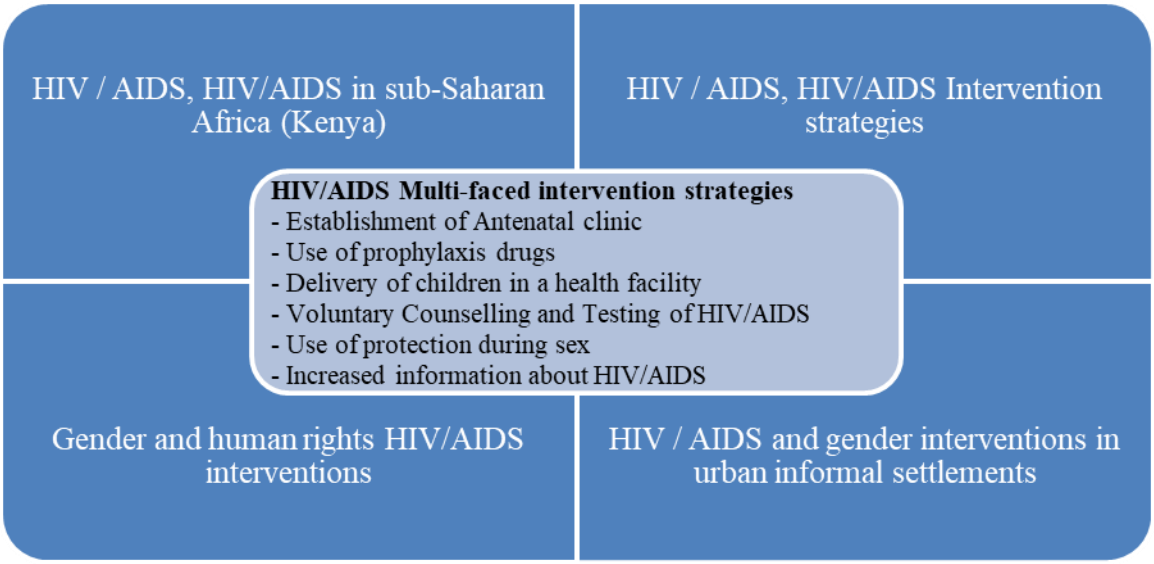
for parent and child, and antiretroviral treatment (ART) for eligible parents. Additionally, HIV positive women living in slums in urban areas should be able to acess family planning services as a strategy for promoting the health of HIV positive women. It is imperative that the influence to enhanced interventions be mediated by changes in social economic and political factors, including medication adherence, the willingness to access proper health care, improved interaction with health care providers (including social workers), and other positive health-promoting behaviours among individuals and within communities as well as among social groups such as women in informal urban settlements. This is illustrated in Figure 5.2.

Figure 5.2. HIV / AIDS and enhanced Intervention programmes that incorporates gender and human rights



The two-way arrow illustrates the need for HIV /AIDS, including in sub-Saharan Africa, to take in interventions as a result of the intensity of infection in the region. Additionally, gender and human rights and interventions in specific circumstances, such as women in informal urban settlements, are important components. All of these aspects interact with each other. This culminates in specific interventions as follows:

Figure 5.3. HIV / AIDS Intervention Programmes Characteristics and Context



The study recommends that the government and concerned stakeholders in the health sector should improve the infrastructure of health facilities within and surrounding the informal urban settlements. This will ensure that these facilities are accessible, affordable and well equipped, which will encourage more HIV positive women living to deliver at the health facilities.

The health care providers should be well informed through continuous training so that they can give updated information about HIV and its preventive measures. This will help the health care providers find strategies for HIV positive women that are adapted to local circumstances of the informal settlements. The support groups should be empowered through vocations, skills training and other income-generating activities, which will protect and promote the economic capability of the women infected with HIV and AIDS.

This will reduce the dependency of HIV positive women on their spouses, partners, as well as other men who might want to take advantage of their low financial status.

In light of the above, modest approaches must include dissemination of relevant information and implementation of policy guidelines (Ministry of Health, 2015). In

addition, policy guidelines must be developed for mainstreaming of human rights, gender and other vulnerable groups such as the youth, children, persons living with HIV (PLHIV), displaced persons. Thus, it is suggested that government and others adopt a sector-wide approach to HIV and AIDS programming across sectors.

5.4. Suggestions for Further Studies

Despite the fact that HIV infection is very common in Sub-Saharan Africa, Kenya and in informal urban settlements, it would appear that various intervention strategies are not as focused. The study suggests further examination of various strategies, especially aspects such as social psychological and economic influences on the infection rate of HIV potive women in informal urban settlements. Further studies should be carried out to determine the efficacy of various interventions strategies targeting women in order to assess the level of risk and in turn increase awareness of valuable aspects such as HIV testing in order for them to take up testing and treatment services. Additionally there need to investigate the incorporation of other programs, such as family planning methods, among HIV-positive women living in Kenya's informal urban settlements. Overall, the Ministry of Health should conduct a survey of the Kenya AIDS Strategic Framework in order to align it with the needs of the people, especially the gender concerns of both males and females and this should include adolescent girls and young women.

REFERENCES

Ambert, C., & Msimang, S. (2004). The Tyranny of the Result: A retrospective and a way forward on Gender, HIV and Aids in Development. Consultants report to the UNISRID.

Ambert, Jassey & Thomas (2007). HIV, Aids and urban development issues in sub-Saharan Africa Beyond sex and medicines: Why getting the basics right is part of the response!

Amuyunzu-Nyamongo, M., Okeng'o, L., Wagura, A., & Mwenzwa, E. (2007). Putting on a Brave face: The experiences of women living with HIV and AIDS in informal settlements of Nairobi. Kenya AIDS Care 19 suppl1: s 25-34.

Ainsworth, M. & Toekul, W. (2000). Breaking silence; setting realistic priorities for AIDS control in less developed countries. Lancet 356 WA 36-40.

Avert, the Global information and education on HIV and AIDS (2021a). HIV and AIDS in Kenya. https://www.avert.org/global-hiv-and-aids-statistics, downloaded on 24th January 2021.

Avert, the Global information and education on HIV and AIDS (2021b). HIV and AIDS in Kenya. https://www.avert.org/professionals/hiv-around-world/sub-saharan-africa/kenya, downloaded on 24th January 2021.

Barnett, T. & Whiteside, M. (2006). AIDS in the Twenty-First Century, Disease and Globalization. New York: Palgrave Macmillan.

Basavanthappa, B. T. (2003). Nursing Research. New Delhi: Jaypee Brothers Medical Publishers.

Berger, J. (2004). Re-sexualising the epidemic: desire, risk and HIV prevention. Development Update: 5(3):45-67. Interfund, Braamfontein.

Brockerhoff, M. & Brennan, E. (1998). The poverty of Cities in Developing Regions. Population and Development Review, Vol 24 (1) March. 75 - 114.

Bwisa, D. M. (2009). Barriers to the uptake of Prevention of Mother-To Child Transmission (PMTCT) of HIV interventions among women in Kibera slum, Kenya. Unpublished master thesis, Kenyatta University.

Centre for Disease Control (2012). Internal Medicine and Emergency Medicine Physicians lack accurate Knowledge of Current CDC HIV Testing recommendation and infrequently offer HIV testing of providers of AIDS care

Clay, P. G. (2005). The complete HIV/AIDS resource. Supplement introduction. Available at www.thebody.com/content/treat/art877.html

Creswell, J. W. (2008). Research design: Qualitative, quantitative and mixed methods approaches. (3rd ed.). London: Sage.

Daniel, B. L. & Brosziewski, A. (2009). *Observing Society* : *Meaning, Communication, and Social Systems*. Cambria Press.

Dawson, C. (2009). Introduction to Research Methods. Oxford.

Elmi, M. Y. (2012). The Effects of HIV Testing and Counselling on Behaviour Change in the Prevention of HIV among the Military population in Kenya. Unpublished PhD Thesis. Kenyatta University.

Geoff, P., Garnett. B., Nicholas. C., & Grassly, R. M. A., (2002). Antiretroviral therapy to treat and prevent HIV/AIDS in resource poor settings. Department of infectious disease epidemiology. Faculty of medicine. Imperial college of science, technology and medicine at London University.

Gitihu, P. K. (2016). An analysis of Gender inclusiveness in selected poverty reduction projects in Majengo Slums, Nyeri County, Kenya. Kenyatta University, Master Thesis.

Gitimu, A. M. (2005). Factors influencing the use of Anti-retroviral drugs in the Prevention of Mother- to Child Transmission of HIV in Nairobi. Unpublished Master Thesis. Kenyatta University.

Republic of Kenya (1999).
Kenya Gazette, Legal Notice NO. 170 of 1999.

Gupta, J. (2000). Gender Sexuality and HIV/AIDS; Plenary address prepared for the XIIIth International AIDS conference organized by the International Centre for Research on Women Durban South Africa.

Hawkins, K., Mussà, F. and Abuxahama, S. (2005). Milking the Cow' – Young women's constructions of identity, gender, power and risk in transactional and cross-generational sexual relationships: Maputo, Mozambique. The Implications for Behaviour Change Interventions, Options. Consultancy Services and Populations Services International (PSI), Mozambique.

HIV and AIDS Profile Nyeri County (2013). HIV and AIDS response in my county my responsibility-"Together we can get to zero". NASCOP and UNAIDS.

Howard, W., Killick, T., Kayizzi-Mugerwa, S., & Marie-Angelique, S. (2001). African Poverty at the Millennium : Causes, Complexities, and Challenges. Washington, DC: World Bank.

Hurbley, J. (1995). The AIDS handbook. China: Macmillan.

Jackson, M. (1985). Social Systems Theory and Practice: The Need for a Critical Approach". *International Journal of General Systems.* 10 (2–3): 135 - 151

Kabiru, C. W (2010). Transition into first sex among adolescents in slum and non-slum communities in Kenya.

Kabiru, C.W., Beguy, D., Crichton, J., & Zulu, E.M. (2011). HIV/AIDS among youth in urban informal (slum) settlements in Kenya: What are the correlates of and motivations for HIV testing? BMC Public Health, 1 – 12, DOI: 10.1186/1471-2458-11-685.

Kamaara, E. K. (2005). Gender youth sexuality and HIV/AIDS: A Kenyan experience. Eldoret: AMECEA.

Kenya AIDS Indicator Survey (2007). Data on HIV prevalence according to regions in Kenya. Nairobi: National AIDS Control Council.

Kenya AIDS Indicator Survey (2013). A Preliminary Report. Nairobi: National AIDS Control Council.

Kibui, M. (1998). Factors contributing to HIV and AIDS infection in Majengo Urban informal settlements of Nyeri Municipality of Nyeri District. Unpublished Dissertation. K.M.T.C.

Latkin, C., Weeks, M .R., Glasman, L., Galletly, C. & Albarracin, D. (2010). A dynamic social systems model for considering structural factors in HIV prevention and detection. AIDS Behaviour, 14 (Suppl 2): 222 – 238. DOI: 10.1007/s10461-010-9804-y.

Luchters, S., Chersich, M. F., Rinyiru, Barasa, M., King'ola, N. Mandaliya, K., Bosire, W., Wambugu, S., Mwarogo, P. & Temmerman, M. (2008). Impact of five years of peer-mediated interventions on sexual behaviour and sexually transmitted infections among female sex workers in Mombasa, Kenya. BioMed Central, 8. 143.

Madise, J. N., Zibara, K. A., Inungu. J., Khamadi, S. A., Ezeh. A., Zulu. M. E., KebasoJ., Okoth. V., Mwau. M. (2008). Are Slum Dwellers at heightened risk of HIV infection than other urban residents? Evidence from a population based HIV prevalence surveys in Kenya. Health and Place 18,1144-1152.

Mahajan, A. P., Sayles, J. N., Patel, V. A., Remien, R. H., Sawires, S. R., Ortiz, D. J., et al. (2008). Stigma in the HIV / AIDS epidemic: a review of the literature and recommendations for the way forward. *AIDS*; 22 2: S67 - S79.

Ministry of Health and UNICEF (2006). Assessment of Maternal Nutrition interventions by the Ministry of Health in Nairobi; Kwale and Garissa districts in Kenya. Draft. Nairobi: MOH.

Ministry of Health (2007). Kenya National Guidelines on Nutrition and HIV/AIDS. Nairobi: MOH.

Ministry of Health (2014). Kenya AIDS Response Progress Report 2014: Progress towards Zero. Nairobi: Ministry of Health.

Ministry of Health (2015). Kenya AIDS Strategic Framework 2014/2015 - 2018/2019. Nairobi: Ministry of Health.

Ministry of Health (2016). Kenya Aids Response Progress Report 2016. Nairobi: Ministry of Health.

Ministry of Health (2018). Kenya Health Sector Strategic Plan (KHSSP) of 2018/2019 – 2022/2023. Nairobi: Ministry of Health.

Ministry of Health (2020). The Kenya AIDS Strategic Framework (KASF II) (2020/2021 – 2024/2025). Nairobi: Ministry of Health.

Ministry of Medical Services and Ministry Health and Sanitation (2009). Clinical Management and Referral Guidelines - Volume III: Clinical Guidelines for Management and Referral of Common Conditions at Levels 4 – 6 : Hospitals. Nairobi: Ministry of Medical Services and Ministry of Public Health and Sanitation, and World Health Organization.

Ministry of Public Health and Sanitation (2008). National Guidelines for HIV Testing and Counselling in Kenya. Nairobi: Ministry of Public Health and Sanitation.

Mugenda, O. M. & Mugenda, A. G. (1999). Research Methods; Quantitative and Qualitative approaches. Nairobi: Acts Press.

Murphy, P. & Barr, S. (2005). The Role of Nutrition in fat Deposition and fat Atrophy in Patients with HIV; Nutrition in Clinical Care Vol. 8 31-36.

Murray, C. J., & Lopez, A.D. (1997). Alternative projections of mortality and disability by cause 1990–2020: Global Burden of Disease Study. Lancet, 349:1498 - 1504.

Mutisya.E., Yarime. M. (2011). Understanding the Grassroots, Dynamics of Slums in Nairobi: The Dilemma of Kibera Informal Settlement, International Journal of Engineering, management, and Applied Sciences and Technology, 2(2).

National AIDS and STI Control Programme (2009). Kenya AIDS Indicator Survey 2007: Final Report. Nairobi: National AIDS and STI Control Programme.

National AIDS and STI Control Programme (2014). Kenya AIDS Indicator Survey 2012: Final Report. Nairobi: National AIDS and STI Control Programme.

NACC,(2016). Kenya HIV County profiles 2016 . Retrieved fromhttps://nacc.or.ke/wp-content/uploads/2016/12/Kenya-HIV-County-Profiles-2016.pdf

Nyeri District Strategic Plan [2005 - 2010]. National coordination agency for population and development. Nyeri Country Government and Ministry of Planning and National Development.

Nyindo, M. (2005). Complementary factors contributing to the rapid spread of HIV-1 in sub- Saharan Africa. A review. East African medical journal, 82 (1) 40-46.

Nzioka, C. (2000). The social meanings of death from HIV/AIDS: An African interpretative view. Culture, Health & Sexuality, 2 (1), 1 - 14.

Otaala, B. (2003). HIV/AIDS; Government leaders in Namibia responding to the HIV/AIDS epidemic. Namibia: University of Namibia Press.

Odutolu, O. (2003). Convergence of Behaviour Models for AIDS risk reduction in sub-Saharan Africa. International journal of health planning and management vol 20 issue 3(pg 239-252)

Ojowi, A. L. (2008). Barriers to Safe Obstetric Practices in Prevention of Mother to Child Transmission in Kibera urban informal settlements, Nairobi, Kenya. Unpublished master thesis. Kenyatta University.

Pandey, A. & Galvani, A. (2019). The global burden of HIV and prospects for control, *The Lancet*, 6 (12), e809-e811.

Patella F. J., Delaney K. M., Moorman A. C., Loveless M. O., Fuhrer. J. & Satten. G. A (1998). Declining morbidity and mortality among patients with advanced human immunodeficiency virus infection. New England journal of medicine med:1998:338;853-860.

Patterson, H. (2011). HIV/AIDS in the slums of Kenya: intervening through effectively utilizing volunteers. Published thesis. University of Pittsburgh.

Parsons, T. (1951). *The Social System.* Routledge

Piwoz, E. G., & Elizabeth A. P. (2000). The Challenges to Intimacy and Sexual Relationships for gay men in HIV zero -discordant relationships: a pilot study, journal of marital and family therapy 27(4) 419 - 431.

Republic of Kenya (2001). Ministry of Health; Access to HIV related drugs (1st Ed.) Nairobi: Ministry of Health.

Republic of Kenya (2005c). Adherence to Antiretroviral Therapy in Adults. A Guide for Trainers. Nairobi: Ministry of Health. Nairobi: Government Printer.

Republic of Kenya (2007). Kenya Vision 2030: A globally competitive and prosperous Kenya, Nairobi: Ministry of Planning and National Development and the National Economic and Social Council (NESC).

Republic of Kenya (2008b). Home and Community Based Care in Kenya. Nairobi: National AIDS/STD Control Programme, Ministry of Health.

Republic of Kenya (2009). Kenya National AIDS Strategic Plan, 2009/10 – 2012/13: Delivering on Universal Access to Services. Nairobi: National AIDS Control Council, Ministry of Health, Kenya.

Republic of Kenya (2010). The New Constitution of Kenya, 2010. Nairobi: Government Printer.

Silvestri, G. & Feinberg, M. B. (2003). Turnover of Lymphocytes and Conceptual Paradigms in HIV infection: The journal of clinical investigation 4, 276.

Skeggs. B. (1997). Situating the Production of Feminist Ethnography, in Maynard and J. Purvis (Eds), Researching women's lives from perspective. London: Taylor and Francis.

Stanley .A., Madhvan. P., (1999). Current concepts in human immunodeficiency virus infection and AIDS. Clinical and diagnostic laboratory immunology, 6: 295-305.

Sweat, M., Gregorich, S., Sangiwa, G., Furlonge, C., Balmer, D., Kamenga, C., Grinstead, O., & Coates, T. (2000). Cost-effectiveness of voluntary HIV-1 Counselling and testing in reducing sexual transmission of HIV-1 in Kenya and Tanzania. AIDS 2000, 356:113-121.

Surratt. H. L (2014). HIV Stigma among substance abusing people living with HIV/AIDS: Implication for HIV treatment. AIDS Patient care and STDS .28

Taylor, W. & Maithya, H. (2007). "Urban Families under pressure in Kenya and the impact of HIV/AIDS." University of Birmingham, International DevelopmentDepartment, U.K.

UNAIDS (1999). Gender and HIV/AIDS: Taking stock of research and programmes. Geneva, UNAIDS.

UNAIDS (2003). A history of the HIV/AIDS Epidemic with Emphasis on Africa. http://www.un.org/esa/population/publications/adultmort/UNAIDS_WHOPaper2.pdf

UNAIDS (2012). Global AIDS epidemic update.
http://www.unaids.org/en/resources/documents/2012/20121120_UNAIDS_Global_Report 2012

UNAIDS(2002).AIDSepidemicupdate.
http://data.unaids.org/pub/report/2002/brglobal_aids_report_en_pdf_red_en.pdf

UNAIDS(2013).Global Summary of the AIDS pandemic report retrieved from http://files.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2013/gr2013/UNAIDS_Global_Report_2013_en.pdf

UNAIDS(2018).UNAIDSData2108.
https://www.unaids.org/sites/default/file/media_asset/unaids-data-2018_en.pdf.

UNAIDS (2017).'Ending AIDS: Progress towards 90-90-90 targets, retrieved from http://www.unaids.org/en/resources/documents/2017/20170720_Global_AIDS_update_2017

UNAIDS (2017) .Fact sheet 2017.
Retrieved from https://www.compassion.com/multimedia/unaids-fact-sheet.pdf

UNGASS(2012). Country progress report-Kenya retrieved from http://www.aidsdatahub.org/taxonomy/term/512?page=10

UNDP(2002). HIV/AIDS and poverty reduction strategies. Retrieved from Policy note. https://hivhealthclearinghouse.unesco.org/library/documents/hivaids-and-poverty-reduction-strategies-policy-note

United Nations programme on HIV disease and AIDS (2008). Report on the global AIDS epidemic. UNAIDS Geneva: August 2008, pg 217,220-231

UNAIDS (2013). Report on the Global AIDS epidemic, fact sheet. U.S. Center for Disease Control and retrieved from Prevention http//www.unais.org/en/resources/presscontre/pressreleaseandstatementarchive/2013/ September/20130923prunga/.

UN-Habitat (2011). Kenya slum upgrading project (KESUP) Retrieved from; http://www.unhabitat.org/content.asp?cid=668&catid=206&typeid=13

Walliman, N. (2010). Research Methods: The Basics. London: Routledge.

Wanjama, L. N., Kimani, E. N., & Lodiaga, M. J. (2007). HIV and AIDS The pandemic. Nairobi: The Jomo Kenyatta foundation Nairobi.

Wango, G. M. (2001). The Vulnerability of Girls and Women to HIV /AIDS in Kenya. Unpublished Paper.

Wango, G. M. (2015). Psychological Counselling in Kenya: A Contemporary Review of the Developing World. Nairobi: Kenya Literature Bureau.

Wathula. J. (2016). Gender inequality dynamics in the prevention of a heterosexual HIV epidemic in sub-Saharan Africa. Afr J AIDS Res (AJAR). 2016;15(1):55-66.

Weisner. M.C, Satre.D.D, Tsai.A.L (2009). Mortality After diagnosis of psychiatric disorders and co-occurring substance use disorders Among HIV infected patients AIDS Patients care and STDS. Vol 24:111

World Bank (1997). Public expenditure management handbook. Washington DC: World Bank. WHO 2005. Consultation on nutrition and HIV/AIDS in Africa; South Africa: Durban.

Wood E, Hogg R,S. Yip .B .(2003). Effect of medication adherence on the survival of HIV-infected adults who start highly active antiretroviral therapy. Ann int.med 39:810-816.

World Food Programme (2001). Food Assistance for People Living with HIV/AIDS. 28th session of the sub-committee on nutrition, Nairobi Kenya.

World Health Organisation (2003). Integrating Gender into HIV / AIDS Programmes: A Review Paper. Geneva: World Health Organisation

World Health Organization (2003). The Right to Know: New Approaches to HIV Testing and Counseling. Geneva: World Health Organization.

World Health Organization (2006). HIV and Infant Feeding: Technical Consultation on Prevention of HIV infections in pregnant women, mothers and their infants; consensus statement. Geneva: World Health Organization Press.

World Health Organization (2021). HIV /AIDS. https://www.who.int/news-room/fact-sheets/detail/hiv-aids, downloaded, 25th January 2021.

Ziraba.A, Orindi.B, Muuo.S, Floyd.S, Isolde.J.O, Mumah.J, Njoroge.P, Kabiru.C.W(2018) : Understanding HIV risks among adolescents girls and young women in informal settlements of Nairobi Kenya: Lessons for dreams

Zulu.e E. M., Dodo, F., and Ezeh. A. (2003). 'Urbanization, Poverty and Sex: Roots of risky sexual behaviour in the Slum Settlements in Nairobi, Kenya. Blackwell Publishing: Malden MA: pp167-174.

APPENDIX 1: QUESTIONNAIRE FOR RESEARCH PARTICIPANTS

Dear participants,

The aim of this questionnaire is to gather information on the effectiveness of various interventions that have been implemented to mitigate the challenges faced by HIV and AIDS positive women living in Majengo informal urban settlement.

All the information obtained will be treated with strict confidentiality and will only be used for the purpose of research.

Tick t the appropriate answer where choices are provided and give information where spaces are provided.

1. Age (Tick [√])
   - (a) 15 - 25 years [ ]
   - (b) 26 -35 years [ ]
   - (c) 36 - 45 years [ ]
   - (d) 46 - 55 years [ ]
   - (e) 56 years and over [ ]
2. Occupation (Tick [√])
   - (a) Employed [ ]
   - (b) Not Employed [ ]
   - (c) Business (self employed) [ ]
   - (d) Any other (specify) ……
3. Number of Children (Tick [√])
   - (a) None [ ]
   - (b) 1 - 3 children [ ]
   - (c) 4 - 7 children [ ]
   - (d) 8 - 10 children [ ]
   - (e) Over 11 children [ ]

4. Marital status (Tick [√])

(a) Single [ ]

(b) Married [ ]

(c) Divorced [ ]

(d) Separated [ ]

Occupation of Spouse if Married (Tick [√]

(a) Employed [ ]

(b) Not Employed [ ]

(c) Business (self employed) [ ]

5. Level of Education (Tick [√]

(a) No schooling [ ]

(b) Primary level [ ]

(c) Secondary level [ ]

(d) Tertiary level [ ]

6. Income per month (Tick [√])

(a) 1,000 – 3,000 [ ]

(b) 3,000 – 5,000 [ ]

(c) 5,000 and above [ ]

7. Were you brought up in Majengo area? (Tick [√]) Yes [ ] No [ ]

If Yes, do your parents still reside here? (Tick [√]) Yes [ ] No [ ]

If No, when did you settle in the area……

How long have you been here

…….

8. Is the house where you reside rented or owned…. …….

How many people live with you? Children …… Adults

……

If the house where you reside is rented, would you consider the cost of renting it high? (Tick [√]) Yes [ ] No [ ]

9. When did you learn about your HIV status? (Tick [√])

(a) Less than 6 months ago [ ]

(b) 6 – 12 months ago [ ]

(c) 13 - 24 months [ ]

(d) Over two (2) years ago [ ]

10. How did you get to learn about your HIV status? (Tick [√])

(a) Through antenatal clinic [ ]

(b) Voluntary testing and counselling (VCT) [ ]

(c) Routine medical check-up [ ]

(d) Any other (specify) ……

11. If it was through antenatal clinic did use receive the prophylaxis drugs to prevent transmission to the unborn child? Yes [ ] No [ ]

12. Did you deliver your child in a health facility? Yes [ ] No [ ]

If No, state the reasons ……

.....

.....

.....

13. Why did you take a HIV Test? (Tick [√])

(a) It was a marriage requirement [ ]

(b) Symptoms made you suspicious you had contracted the virus [ ]

(c) To get to know your status [ ]

(d) Other reason/s ……

14. If you are married, does your spouse know your status? (Tick [√])

Yes [ ] No [ ]

If Yes, do you and your spouse use protection every time you have sex? (Tick [√])

Yes [ ] No [ ]

If No, explain ……

If you are NOT married, do you have a partner (Tick [√]) Yes [ ] No [ ]

If Yes, do you use protection every time you have sex? (Tick [√]) Yes [ ] No [ ]

If No, explain why……

16. Have you had sex with another person other than your spouse or partner in the last 12 months? (Tick[√]) Yes [ ] No [ ]

If Yes, how many different partners? ……..

What made you have sex? Financial gain Yes [ ] No [ ]

Did you use protection in all these encounters? (Tick [√]) Yes [ ]

No [ ] If No, explain why …….

17. Have you disclosed your status to any member of your family? (Tick [√])

Yes [ ] No [ ]

If Yes, who? ..... Reason .....

If No, why do you find it difficult to disclose your status .....……

…….....

.....

18. If you are employed does your employer know your HIV status? (Tick [√])

Yes [ ] No [ ]

If Yes, how did the employer obtain the information ……..

Does your status affect your work attendance? (Tick [√]) Yes [ ] No [ ]

Explain .....

19. Do you take antiretroviral drugs? (Tick [√]) Yes [ ] No [ ]

If Yes, where do you get the drugs from……...

How far is the collection point of the drugs from where you live.....

Do you take the antiretroviral drugs as prescribed? (Tick [√])

Yes [ ] No [ ] I'm not sure [ ]

If No, state the reason why .....

20. Do you belong to any support group (Tick [√]) Yes [ ] No [ ]

If yes above what kind of support do they offer?

.....

.....

.....

.....

21. In your own view, how well are you informed about HIV and AIDS

Good [ ] Fair [ ] Poor [ ]

22. Do you feel there is a need for implementing better strategies or improving on the available ones? Yes [ ] No [ ]

If Yes, suggest what you think would be more appropriate.

.....

.....

.....

.....

23. Is maintaining your health the most important thing in your life? (Tick [√])

Yes [ ] No [ ]

If No, state what else is important ……

24. Where do you get information about HIV and its preventive measures? (Tick [√])

(a) Community health workers [ ]

(b) Media [ ]

(c) Health facility [ ]

(d) Support group [ ]

(e) Any other (specify)

……..

25. Any other comments

.....

.....

.....

.....

Thank you for taking part in this study

APPENDIX II: INTERVIEW SCHEDULE

The purpose of this study is to obtain information on the effectiveness of various interventions that have been implemented to mitigate the challenges faced by HIV and AIDS positive women living in Majengo informal urban settlement. All the information obtained will be treated with strict confidentiality and will only be used for the purpose of research.

1. What are the major challenges facing women infected with HIV and AIDS in Majengo? (probe for all factors including social-economic etc.).
2. Do you think ART is helping to change the behaviour of people living in Majengo urban informal settlements? (probe for various methods).
3. Which factors do you think contribute to irresponsible sexual behaviour among the affected and infected people with HIV and AIDS in Majengo urban informal settlements? (probe for specific and general factors).
4. What factors do you think influence condom use among PLWAIDS in Majengo? (probe for general and specific).
5. What contributes to the high prevalence of HIV in Majengo? (probe for factors that participants feel are essential and have been or should be highlighted).
6. Suggest some of the measures that can be put in place to help curb the spread of HIV among women in Majengo.
7. Any other comments.

THANK YOU FOR TAKING PART IN THIS STUDY

APPENDIX II1: FOCUS GROUP DISCUSSION QUESTIONS

The purpose of this study is to obtain information on the effectiveness of various interventions that have been implemented to mitigate the challenges faced by HIV and AIDS positive women living in Majengo informal urban settlement. All the information obtained will be treated with strict confidentiality and will only be used for the purpose of research.

1. What are the major challenges facing women infected with HIV and AIDS in Majengo? (probe for all factors including social-economic etc.).
2. Do you think ART is helping to change the behaviour of people living with HIV and AIDS in Majengo urban informal settlements? (find out the similarities and differences).
3. Which factors do you think contribute to irresponsible sexual behaviour among the affected and infected people with HIV and AIDS in Majengo urban informal settlements? (probe for why among them as a group and as individuals).
4. What factors do you think influence condom use among with HIV and AIDS in Majengo? (probe for various factors that participants feel are significant).
5. What contributes to the high prevalence of HIV in Majengo? (probe for factors that research participants feel are essential whether they have been highlighted or left out now or in the past).
6. Suggest some of the measures that can be put in place to help curb the spread of HIV among women in Majengo. (find out the extent they feel a strategy is effective).
7. Any other comments.

THANK YOU FOR TAKING PART IN THIS STUDY.

APPENDIX IV: RESEARCH AUTHORIZATION LETTER

THIS IS TO CERTIFY THAT:
MISS. SARAH WANJIKU WANJIRU
of KENYATTA UNIVERSITY, 82-10105
Naromoru,has been permitted to
conduct research in *Nyeri County*

on the topic: *EFFICACY OF STRATEGIES THAT MITIGATE CHALLENGES FACED BY WOMEN INFECTED WITH HIV AND AIDS IN MAJENGO URBAN INFORMAL SETTLEMENT,NYERI COUNTY*

for the period ending:
24th March,2018

.....
Applicant's Signature

Permit No : NACOSTI/P/17/97631/16250
Date Of Issue : 24th March,2017
Fee Recieved :Ksh 1000

.....
Director General
National Commission for Science,
Technology & Innovation

CONDITIONS

1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.
2. Government Officer will not be interviewed without prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2) hard copies and one (1) soft copy of your final report.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice

REPUBLIC OF KENYA

National Commission for Science, Technology and Innovation

RESEACH CLEARANCE PERMIT

Serial No.A 13357

CONDITIONS: see back page

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

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Email:dg@nacosti.go.ke
Website: www.nacosti.go.ke
when replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/17/97631/16250**

Date: **24th March, 2017**

Sarah Wanjiku Wanjiru
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Efficacy of strategies that mitigate challenges faced by women infected with HIV and AIDs in Majengo Urban Informal Settlement, Nyeri County,"*** I am pleased to inform you that you have been authorized to undertake research in **Nyeri County** for the period ending **24th March, 2018.**

You are advised to report to **the County Commissioner, the County Director of Education and the County Director of Health Services, Nyeri County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nyeri County.

The County Director of Education
Nyeri County.

APPENDIX V: MINISTRY OF INTERIOR AND CO-ORDINATION OF NATIONAL GOVERNMENT RESEARCH AUTHORIZATION

THE PRESIDENCY

MINISTRY OF INTERIOR AND CO-ORDINATION OF NATIONAL GOVERNMENT

Telephone: 061 2030619/20
Fax: 061 2032089
E-mail: nyericountycommissioner@yahoo.com
When replying please quote

COUNTY COMMISSIONER
NYERI COUNTY
P.O. Box 33-10100
NYERI

REF: NYC/ADM I/57 VOL. V/106

24th July, 2017

Sarah W. Wanjiru
P.O. Box 82-10105
NAROMORU

RE: RESEARCH AUTHORIZATION

Reference is made to your letter dated 24th July, 2017 on the above subject.

Approval is hereby granted to carry out a research on ***"Efficacy of strategies that mitigate challenges faced by women infected with HIV and AIDS in Majengo Urban Informal Settlement, in Nyeri County".***

The period of study ends on 24th March, 2018.

F. Mwangi
For: County Commissioner
NYERI COUNTY

APPENDIX VI: COUNTY RESEARCH AUTHORIZATION LETTER

MINISTRY OF EDUCATION SCIENCE & TECHNOLOGY
STATE DEPARTMENT OF EDUCATION

E-Mail –centralpde@gmail.com
Telephone: Nyeri (061) 2030619
When replying please quote

OFFICE OF THE COUNTY
DIRECTOR OF EDUCATION
P.O. Box 80 - 10100,
NYERI

CDE/NYI/GEN/23/VOL.II/149

24th July, 2017

Sarah Wanjiku Wanjiru
Kenyatta University
P.O. Box 43844-00100
NAIROBI

RE: RESEARCH AUTHORIZATION

Reference is made to Secretary National Commission for Science, Technology and Innovation letter Ref. NACOSTI/P/17/97631/16250 of 24th March, 2017 on the above subject.

Kindly note that you have been authorized to carry out research on *"**Efficacy of strategies that mitigate challenges faced by women infected with HIV and AIDs in Majengo Urban Informal Settlement,*** Nyeri County" for a period ending **24th March, 2018.**

KABORA I. M.
For: COUNTY DIRECTOR OF EDUCATION
NYERI COUNTY

cc

National Commission for Science
Technology and Innovation
P. O. Box 30623 – 00100
NAIROBI