

**FACTORS CONTRIBUTING TO RISING HIV AIDS CASES AMONG YOUTHS AGED 15-25 YEARS IN  
KAPKATET WARD, BURETI SUB COUNTY, KENYA**

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**DECLARATION AND APPROVAL**

We declare that this research thesis is our original work and has not been presented before in this or any other institution for the conferment of degree.

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I confirm as a supervisor, that this research thesis has been conducted based on the ethical guidelines and is their original work.

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## ABSTRACT

HIV/AIDS has become a major public health concern, particularly among young people and it continues to be a significant public health challenge globally. According to UNAIDS (2020), The area of the study was Kapkatet constituency ward. The study population comprised of 80 youths aged 15-25 years at Kapkatet Ward who met the inclusion criteria. Simple Random Sampling was adopted in this study. Structured questionnaires were used for data collection. Descriptive data were analyzed using percentages and frequency tables. Binary Logistic Regression analysis was conducted to determine the association between factors and outcome variables. All the study participants (100%) were aware of HIV/AIDS. 66.3% reported having only one sexual partner, while 33.8% reported having more than two. Regarding condom use, 55.0% reported using condoms, while 45.0% reported not using them. Majority of the study participants, 87.5% had ever been tested for HIV/AIDS. The prevalence of HIV/AIDS among the study participants who had been tested was 4.3%. The results showed that among participants aged 15-17, none were found to be HIV-positive. In the age group of 18-20, one participant (4.76%) tested positive for HIV/AIDS. Similarly, in the age groups of 21-23 and 24-25, one participant (3.70%) and one participant (12.50%) respectively were found to be HIV-positive. Female, two (6.25%) were found to be HIV-positive, while among male participants, one (2.08%) tested positive for HIV/AIDS. The p-value for gender was 0.013, indicating a statistically significant difference in HIV prevalence between females and males, with a higher prevalence observed among females. Age, gender and education level were statistically significant relationship between age and HIV/AIDS. The study findings indicate a high level of

knowledge about HIV/AIDS among the study participants, suggesting a general awareness of the disease and its impact. However, there are areas for improvement, particularly regarding knowledge of transmission routes and symptoms. Efforts should be made to overcome these barriers and ensure the availability of accurate information and resources to promote safe sexual behaviors and prevent HIV/AIDS. In conclusion, addressing the complex interplay of cultural, social, and educational factors is crucial for effective HIV/AIDS prevention and control.

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## CHAPTER ONE: INTRODUCTION

### 1.1 Background of The Study

HIV/AIDS has become a major public health concern, particularly among young people and it continues to be a significant public health challenge globally, and Kenya is no exception. According to UNAIDS Global AIDS Update 2020, the number of new HIV infections among youths has decreased by 56% globally since 2000, but progress has been uneven. According to UNAIDS (2020), there were approximately 38 million people living with HIV/AIDS globally in 2019. Out of this, over two-thirds were living in sub-Saharan Africa, where young people account for over 60% of new HIV infections. In 2019, there were approximately 1.7 million new HIV infections among young people globally, representing an increase of over 6% compared to 2018 (UNAIDS 2020).

In the sub-Saharan Africa region, Kenya is ranked sixth in terms of the number of people living with HIV/AIDS (UNAIDS 2020). In East and Southern Africa, where Kenya is located, young people accounted for 31% of new HIV infections in 2019. The number of people living with HIV/AIDS in Kenya increased from 1.6 million in 2018 to 1.7 million in 2019. The number of new infections among young people in Kenya increased by over 8% in the same period (NASCO, 2019). The region has the highest HIV prevalence rate globally, and Kenya is among the countries with the highest number of new HIV infections. According to UNAIDS 2020, sub-Saharan Africa, the region with the highest HIV burden, young people accounted for 25% of new HIV infections.

In Kenya, the number of young people aged 15-24 years living with HIV/AIDS increased from approximately 600,000 in 2018 to 650,000 in 2019 (NASCO, 2019). According to the same report, the HIV prevalence among young people aged 15-24 years in Kenya is 7.2% which

is higher compared to the national HIV prevalence of 5.6% (NAS COP, 2019). In 2020, according to NAS COP, (2020) estimates that young people aged 15-24 years old accounted for 45% of new HIV infections. Furthermore, this report revealed that young women are disproportionately affected, accounting for 70% of new infections among young people.

The rise in HIV AIDS cases among youths in Kenya has far-reaching effects on individuals and the larger community. According to a study by the Kenya Medical Research Institute (KEMRI), young people living with HIV AIDS often experience stigma and discrimination, which can lead to a decrease in their quality of life and psychological well-being (KEMRI, 2017). Additionally, the increasing number of young people living with HIV AIDS places a strain on the healthcare system as well as on the families and communities that care for them (NACC, 2019). The rise in HIV AIDS cases among youths also has economic implications, as those living with the disease are often unable to work and support themselves and their families (NACC, 2019). This, in turn, leads to a decrease in the overall productivity and economic development of the country.

This increase in HIV AIDS cases among youths is attributed to various factors, including behavioral, cultural, and societal factors. Cultural and societal factors also play a significant role in the rise of HIV AIDS cases among youths in Kenya. Stigma and discrimination against those living with HIV AIDS, as well as limited access to education and information on HIV AIDS, contribute to the spread of the disease (NACC, 2019). In addition, traditional cultural practices such as female genital mutilation (FGM) and early forced marriages increase the vulnerability of young girls to HIV AIDS (UN CEF, 2019).

In conclusion, the rising HIV AIDS cases among young people in Kenya is a major public health concern. Despite numerous efforts to prevent and control the spread of HIV AIDS,

the number of new infections among young people continues to rise. There is limited information on factors that are contributing to the rise of HIV/AIDS among youths and general population in Kenya and specifically in Kapkatet ward in Kericho county. Understanding the factors contributing to the rising HIV/AIDS cases among young people in Kapkatet Ward in Kericho county is crucial in developing effective interventions to prevent and control the spread of HIV/AIDS. This research proposal aims to investigate the factors contributing to the rising HIV/AIDS cases among youths in Kapkatet ward, Bureti subcounty, Kenya.

## **1.2 Problem Statement**

HIV/AIDS remains a significant public health concern in Kenya, with young people aged 15-24 years being particularly vulnerable to infection. In Kapkatet Ward, Bureti Sub County, Kenya, the HIV/AIDS prevalence among youths in this age group has been on the rise, despite various efforts to curb the spread of the disease (National AIDS Control Council, 2019).

The increase in HIV/AIDS cases among youths aged 15-25, Kenya is a problem due to the potential impact on the health and well-being of individuals within this age group. HIV/AIDS infection can lead to various health complications, including opportunistic infections, cancers, and ultimately, death. Additionally, HIV/AIDS can have a significant social and economic impact on individuals, families, and communities, including loss of income, stigma, and discrimination (UNAIDS, 2020).

A study conducted by the Kenya National AIDS Control Council (NACC) in 2022 reported a significant increase in HIV/AIDS cases among young people aged 15-25 years in Bureti Sub County, specifically in Kapkatet Ward. The study documented a 25% rise in new infections within this age group compared to the previous year, indicating a growing public

health crisis (NACC, 2022). Similarly, another study conducted in 2021 by Mburu et al. (2021), that focused on the prevalence of HIV/AIDS among adolescents and young adults in Kenya, revealed a higher incidence of new infections among individuals aged 15-25 years compared to other age groups. The study also emphasized the need for targeted interventions to address the unique challenges faced by young people in preventing HIV transmission (Mburu et al., 2021). The increase may be attributed to various factors, including limited access to sexual and reproductive health education and services, cultural and social norms that discourage open discussion of sexuality, and high rates of unprotected sex and multiple sexual partners (Wamoyi et al., 2011).

The decision to focus specifically on youths aged 15-25 years in this study is based on several important considerations such as due to reported peak age of infection, vulnerability and special need especially reproductive. According to World Health Organization, (2019), the age group of 15-25 years is considered the peak period for new HIV infections globally. Young people in this age range often engage in their first sexual experiences, including casual or multiple partnerships, which increase their risk of exposure to HIV. According to UNAIDS (2019) research has shown that individuals within this age bracket are particularly vulnerable to HIV/AIDS due to a combination of biological, psychological, and socio-cultural factors. They may engage in risky behaviors, such as unprotected sexual activity, experimentation with drugs, and limited access to comprehensive sexual education (UNAIDS, 2019). Furthermore, adolescents and young adults have unique needs and challenges regarding HIV prevention and treatment. They may face barriers related to stigma, discrimination, lack of access to healthcare services, and limited knowledge about the disease. Tailored interventions are necessary to address these specific needs and mitigate the spread of HIV/AIDS (UNICEF, 2018).

While it is important to address the HIV/AIDS epidemic comprehensively, focusing on a specific age group allows for a more targeted and effective approach to intervention. By concentrating resources and efforts on youths aged 15-25, it becomes possible to tailor prevention programs, awareness campaigns, and healthcare services to their specific needs, concerns, and risk factors. Moreover, limited resources and time constraints often require researchers to narrow their focus to a particular population to generate meaningful and actionable results. Understanding the factors that contribute to HIV/AIDS transmission among young people is essential in developing effective interventions aimed at reducing the spread of the disease. Additionally, the study may inform policy and program development, leading to better targeting of resources and interventions aimed at reducing HIV/AIDS transmission rates among young people in Kapkatet Ward, Bureti Sub County, Kenya (National AIDS Control Council, 2019; UNAIDS, 2020; Wamoyi et al., 2011).

### **1.3 Objectives**

#### **1.3.1 Broad Objective**

#### **1.4.2 Specific Objectives**

Kapkatet ward, Bureti sub county, Kenya.

- ii. To determine socio-demographic factors associated with rising of HIV/AIDS cases among youths aged 15-25 years in Kapkatet ward, Bureti sub county, Kenya.
- iii. To explore knowledge on risk behaviors associated with HIV/AIDS among youths aged 15-25 years in Kapkatet ward, Bureti sub county, Kenya.

among youths aged 15-25 years in Kapkatet ward, Bureti sub county, Kenya.

### **1.5 Research Questions**

among youths aged 15-25 years in Kapkatet ward, Bureti sub county, Kenya?

ii. What are some of socio-demographic factors associated with rising of HIV/AIDS cases among youths aged 15-25 years in Kapkatet ward, Bureti sub county, Kenya?

iii. How is knowledge on risk behaviors influence with HIV/AIDS among youths aged 15-25 years in Kapkatet ward, Bureti sub county, Kenya?

among youths aged 15-25 years in Kapkatet ward, Bureti sub county, Kenya?

### **1.6 Justification**

The study provides a critical look into how social cultural and economic factors and how also youths engage in risky behaviors. Thus, study is simply therefore not only of public health concerns but also one that has implications on gender and development of young Kenyans. Hence the study provides an extra value to HIV/AIDS prevention programs and relevant future studies which seek to challenge harmful social cultural behaviors that accelerate HIV vulnerability among the young individuals.

### **1.7 Significance of The Study**

This study's findings help in determining the demographic characteristics of the youths and address their various gender roles. Through the study, the youths will be educated on the risk behaviors which lead to acquisition of HIV/AIDS and how to avoid them. It also addresses the

sociocultural and economic factors which influence the spread of HIV/AIDS among youths. To the researchers, the investigation uncovers critical areas in the HIV/AIDS prevention and control measures that many researchers could not explore. Thus, a new method for HIV/AIDS prevention and control may be arrived at.



## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter contains reviewed literature based on local and international publications around HIV, the knowledge on risk behaviors to acquiring HIV/AIDS among youths and the social cultural and economic factors influencing rise in HIV/AIDS cases and the demographic characteristics of the youths. In addition to that previous researches on HIV/AIDS and local reports from NGOs and recent Ministry of health policy documents have been used in this research.

### **2.2 HIV/AIDS Prevalence**

According to UNAIDS, in 2020, approximately 1.5 million young people aged 15-25 years were living with HIV globally, with over 85% of these living in sub-Saharan Africa. In the same year, an estimated 160,000 young people aged 15-25 years acquired HIV in sub-Saharan Africa alone (UNAIDS, 2020). In many countries, including those in sub-Saharan Africa, young people aged 15-25 years are at high risk of HIV/AIDS infection due to various factors, including limited access to sexual and reproductive health education and services, high rates of unprotected sex, multiple sexual partners, and low condom use (Kene et al., 2021).

Kenya has a generalized HIV epidemic with a rampancy among 15-49 years old approximated to be 5.9% in the 2015 and 4.9% in 2018 (National AIDS Control Council (NACC, 2020). In 2017, Kenya was ranked 3<sup>rd</sup> among eastern and southern African countries in the estimated number of new HIV infections among adults aged 15 years and above (UNAIDS, 2019)). According to the Kenya HIV Estimates Report 2018, geospatial variation of HIV prevalence is wide ranging from 21% in Siaya County to lowest 0.4% in Wajir County and approximated 52,000 new infections across all ages. It may not be true that most of the newly

diagnosed HIV infected persons are in the highest-burden counties since geographic disparities may exist within larger health planning geographic units. Moreover, there is the possibility of existing pockets of hyper-epidemics in low burden counties and regions. In Kericho County, Kenya, HIV/AIDS infection is a significant public health concern, particularly among young people aged 15-25 years (Ngeno et al., 2021). According to the 2018 Kenya HIV estimates report, the national HIV prevalence among adults aged 15-49 years was 4.9% while the prevalence among young people aged 15-24 years was 2.7% (National AIDS and STI Control Programme (NAS COP), 2018). However, there are significant regional variations in HIV prevalence, with some counties, including Kericho, having higher rates of HIV infection than the national average.

According to the Kenya HIV County Profiles 2019, the HIV prevalence in Kericho County is estimated to be 5.5% higher than the national average (National AIDS and STI Control Programme (NAS COP), 2019)). Among young people aged 15-24 years, the HIV prevalence in Kericho County is estimated to be 2.7% similar to the national average (Ministry of Health, 2021). However, there are significant gender disparities in HIV prevalence, with young women aged 15-24 years being more affected than young men. The HIV prevalence among young women in Kericho County is estimated to be 4.4% while the prevalence among young men is estimated to be 1.0% (KDHS, 2022). Several factors contribute to the high rates of HIV/AIDS infection among young people in Kericho County. These include limited access to sexual and reproductive health education and services, low condom use, early sexual debut, and multiple sexual partnerships. Additionally, there is a significant stigma associated with HIV/AIDS, which discourages many young people from accessing HIV testing and treatment services (UNAIDS, 2018).

A study conducted by Mburu et al. (2021) examined the prevalence of HIV/AIDS among adolescents and young adults in Kenya, but did not specifically address the situation in Kapkatet Ward, Bureti Sub County. This study identified several factors contributing to HIV transmission among young people, such as limited access to comprehensive sexual education, stigma, and discrimination. Another study by NACC (2022) reported an increase in HIV/AIDS cases among young people in Bureti Sub County, including Kapkatet Ward. A literature review conducted by UNAIDS (2019) provided a global perspective on HIV/AIDS among young people, but did not focus on the specific context of Kapkatet Ward, Bureti Sub County. There is a research gap regarding the local dynamics, socio-cultural factors, and unique challenges faced by young people in this specific geographical area.

### **2.3 Socio-demographic factors associated with HIV/AIDS**

Kapkatet Ward is characterized by a very youthful population, most of the mtransiting from childhood to adulthood. This transition carries a very deep impact for their current and future sexual and reproductive health and well-being (Lloyd, 2005). Gender and sexuality are significant factors in the sexual transmission of HIV/AIDS and despite HIV being a biological entity responsive to medical interventions the epidemic continues to expand, largely due to the failure to tackle societal conditions that increases HIV risk and vulnerability (Mann, et al., 1996).

A study by Dinkelmann et al. (2020) conducted in South Africa examined the age differentials in HIV infection rates among young people. The research findings indicated that older adolescents (aged 20-24) had a higher risk of HIV infection compared to younger adolescents (aged 15-19). This suggests that as young people transition into adulthood, their HIV risk may increase due to various factors, including engaging in riskier sexual behaviors. Similarly, a study conducted by Mmari et al. (2018) in Tanzania and Malawi explored age

differences in HIV knowledge and sexual behaviors among adolescents. The results revealed that older adolescents (aged 20-24) were more likely to have misconceptions about HIV transmission and engage in risky sexual behaviors compared to younger adolescents (aged 15-19). These findings indicate the need for targeted interventions tailored to the specific age groups to address knowledge gaps and promote safer sexual practices. Furthermore, a study by Li et al. (2021) conducted in China investigated the association between age and HIV testing behaviors among young men who have sex with men (MSM). The research findings showed that younger MSM (aged 15-19) were less likely to undergo HIV testing compared to older MSM (aged 20-25). This suggests that age-related factors, such as limited autonomy, lack of awareness, and barriers to accessing healthcare services, may influence HIV testing behaviors among young people. Older adolescents and young adults tend to be at higher risk due to factors such as engaging in riskier sexual behaviors, having misconceptions about HIV, and facing barriers to HIV testing. Understanding these age-related dynamics is crucial for developing targeted prevention strategies, comprehensive sexual education programs, and improving access to healthcare services for different age groups within the 15-25 age range.

Features of development characterize youth's sexual behavior and risk which can differ by gender, ethnicity, geography, socioeconomic status as well as their relation to traditions and norms (Marston, et al., 2006). These social factors differ in their manifestation, intensity, and impact within Kenyan regions for example in rural areas or regarding girls with less education. The actuality of sexual abuse cannot be left out when dealing with young people, for example cases of age disparity between partners for instance an older male partner marrying a younger girl and gender difference in social norms and early marriages for girls increase the possibility of sexual abuse. Young people also experience pressure to become sex workers as the sole option of

meeting ends meet for their families ( WHO 2002). Sex workers chances of acquiring HIV AIDS, STIs and pregnancy are increased.

Gender disparities in different sectors, such as health and education amongst boys and girls continue to be profound. In low and middle-income countries, girls are 19% less likely than boys to be in school and girl's education has been associated with vulnerabilities to HIV acquisition ( UNDP, 2007; Hargreaves, et al. 2006). It is very clear that girls who finish primary education are more than twice as likely to use condoms, while girls who complete secondary education are between four and seven times more likely to use condoms, and are less likely to be infected with HIV ( Hargreaves, et al., 2006). It is alarming that Kenyan girls they been denied equal educational opportunities especially in communities such as Kisigis where early marriages and female genital mutilation practices still exist.

Traditional expectations associated with masculinity and male sexual behavior also heighten the risk of infection amongst men and the harmful characteristics of some gender norms emphasizes the significance of involving men and boys in any action towards behavior change (ICRW 2007). Common male roles call for men and boys to be resilient, combative, sexually dominant, and risk taking are often associated with behaviors that enhances men's risk of HIV infection. Such behaviors include a high number of sexual partners, use of drugs or alcohol, and refusal to seek medical care for sexually transmitted infections (ICRW 2007; WHO 2007). HIV prevalence has increased significantly amongst youths with no education, such patterns could indicate that those who are most likely to acquire HIV infection may lack the education and resources to protect themselves from infection. Young adults who have no education show much lower levels of knowledge of HIV AIDS prevention methods than those with some education ( KNBS, 2010a).

## **2.4 Knowledge on Risk Behaviors of Acquiring HIV/AIDS**

Young people are particularly vulnerable to HIV infection because of the physical, psychological, social and economic attributes of adolescence. Young adults are also at risk as a result of high risky sexual behaviors, attitudes, and constraints of societies in which they grow up. It has been demonstrated that increased knowledge about AIDS is not a predictor for behavioral change. Although knowledge about the disease is a prerequisite for change. Despite the youths having knowledge of HIV/AIDS and the risks behaviors of acquiring the disease, this has not been translated into comprehensive knowledge and safe sexual behaviors. This has health implication for propagation of HIV/AIDS disease prevention and policy formulation. In addition, despite high general knowledge and perceived risks of acquiring HIV/AIDS available through social media which is dominantly rampant among the youths currently, the infections tend to remain high. Effectiveness gaps in the integrated health programs should be addressed and targeted interventions focused on holistic prevention at individual level through information, risk awareness and skill development should be combined with the interventions targeting individual behavior.

In this essence, there is need to gather information on the basic knowledge of the youths concerning on the risks behaviors of acquiring HIV/AIDS. Hence one of the objectives of this study is to explore knowledge on risk behaviors to acquiring HIV/AIDS among youths aged 15-25 years in Kapkatet Ward, Bureti Constituency –Kenya. Questions are to be asked to assess the respondent's knowledge about the HIV/AIDS. One set of questions to assess the knowledge of definition and causation of HIV/AIDS. The second set contains questions assessing the modes of AIDS virus transmission and the third being AIDS symptoms and preventive measures.

## 2.5 Cultural Factors Influencing the Rise of HIV/AIDS

Previous studies have revealed that there are several cultural factors that contribute to the increase of HIV/AIDS among youths aged 15-25 years. These include gender norms, stigma and discrimination, and lack of comprehensive sexual education. Gender norms play a significant role in the spread of HIV/AIDS among young people. In many cultures, traditional gender roles and expectations may limit young women's ability to negotiate safer sex practices, leading to higher rates of unprotected sex and therefore increased HIV transmission. A study conducted in rural South Africa found that gender norms and power dynamics in sexual relationships contributed to HIV risk for young women. The study suggested that interventions that challenge gender norms and promote gender equity could help reduce HIV transmission rates among young people (Pettifor et al., 2018).

Stigma and discrimination towards people living with HIV/AIDS can also contribute to the spread of the disease. Fear of discrimination may prevent young people from getting tested or accessing HIV prevention and treatment services. A study conducted in Ghana found that HIV/AIDS-related stigma and discrimination were key factors that prevented young people from accessing HIV testing and counseling services (Doku, 2015).

Finally, lack of comprehensive sexual education can also contribute to the spread of HIV/AIDS among young people. In many cultures, discussions about sex and sexuality are considered taboo and are not openly discussed. This can lead to misinformation and myths about HIV/AIDS, as well as a lack of knowledge about how to protect oneself from the virus. A study conducted in Tanzania found that young people who received comprehensive sexual education were more likely to have accurate knowledge about HIV transmission and prevention (Mhoro et al., 2015).

In conclusion, cultural factors such as gender norms, stigma and discrimination, and lack of comprehensive sexual education contribute to the spread of HIV/AIDS among young people. Addressing these cultural factors through targeted interventions and education programs can help reduce the transmission rates of HIV/AIDS among this population.

## **2.6 Occasions and Ceremonies - 'Tumin'**

There are many known occasions accompanied with ceremonies among the Kipsigis which promote the spread of HIV/AIDS. To wet (1979) found out that alcohol drink - 'naiywek' was meant for ceremonies as well as for helping as a labor wage for villagers during harvest seasons. Adultery, rape and fornication would take place under the intoxication of "busaa" (local brew). The incidents of such sexual activities were not supposed to be reported. The Kipsigis believe that any event done during the influence of alcohol and in particular in ceremonies is forgivable. The practice and belief can spread the various sexually transmitted infections. Ayayo & Muniywa (2000) expressed the dangers of alcoholism in the dreaded HIV/AIDS era that abuse of alcohol often leads to abuse of sex, and HIV/AIDS infections.

## **2.7 Pre-Marital Sex Among Boys and Girls**

Every society observe variety of sexual practices and norms. Some African societies regard sex as the most important factor in marriage and therefore a prize is placed on virginity. Girls on marriage are expected to be virgins and are rewarded consequently. The preservation of virginity among the Kipsigis was a great victory and honor. Boys would sleep with their sweet hearts without intercourse. In modern times virginity is rare and boy/girl friendship do not preserve their virginity while promiscuous society have been stated to promote the spread of HIV/AIDS. In present times, most of these cultural practices are dying out, while the youths have become more vulnerable to HIV/AIDS infection. The preservation of virginity has almost



died among the youth. Lovers are shy to take pre-marital HIV/AIDS tests; while young couples are avoiding church weddings for fear of having to face HIV tests. A nervous flight has been triggered by regulations imposed by several churches requiring couples to be screened for HIV, the deadly virus that causes Aids, before being allowed.

## **2.8 Theoretical Framework**

The study will adopt the Human Belief Model theory. The Health Belief Model (HBM) is a theoretical framework that can be used to explain why some individuals engage in health-promoting behaviors while others do not. The model suggests that people's beliefs about the perceived threat of a health condition, as well as their perceived susceptibility and severity of the condition, influence their likelihood of engaging in health-promoting behaviors (Rosenstock, 1974). Additionally, the model suggests that perceived benefits and barriers to engaging in health-promoting behaviors, as well as cues to action, can also influence behavior change.

In the context of HIV/AIDS infection rates among youths aged 15-25 in Kapkatet ward, Bureti sub county, Kenya, the HBM could be used to understand the factors contributing to the increase in HIV/AIDS cases. For example, the perceived threat of HIV/AIDS infection may be low among some youths, which could lead to a lower likelihood of engaging in health-promoting behaviors such as condom use and HIV testing. Similarly, perceived barriers such as stigma and discrimination associated with HIV/AIDS may discourage some youths from seeking health services and engaging in health-promoting behaviors.

Some of the constructs of the Health Belief Model that could be relevant to understanding the factors contributing to the increase in HIV/AIDS cases among youths aged 15-25 in Kapkatet ward, Bureti sub county, Kenya includes:

1. Perceived susceptibility: This refers to an individual's belief about their likelihood of contracting a particular health condition. In the case of HIV/AIDS, youths who believe that they are at high risk of contracting the virus may be more likely to engage in health-promoting behaviors such as condom use and HIV testing.
2. Perceived severity: This refers to an individual's belief about the seriousness of a particular health condition. In the case of HIV/AIDS, youths who believe that the condition is severe and could have serious consequences may be more likely to engage in health-promoting behaviors such as condom use and HIV testing.
3. Perceived benefits: This refers to an individual's belief about the positive outcomes associated with engaging in health-promoting behaviors. In the case of HIV/AIDS, youths who believe that engaging in behaviors such as condom use and HIV testing will reduce their risk of infection may be more likely to engage in these behaviors.
4. Perceived barriers: This refers to an individual's belief about the obstacles or challenges associated with engaging in health-promoting behaviors. In the case of HIV/AIDS, youths who perceive stigma and discrimination associated with HIV/AIDS may be less likely to seek health services and engage in health-promoting behaviors.

## **2.9 Conceptual Framework**

The conceptual framework of this study is based on the demographic, socio-economic and health behaviors of youths that contribute to the increased HIV/AIDS cases. The demographic and socio-economic factors are the underlying determinants while the behaviors are the proximate determinants which lead to increased HIV/AIDS cases among the youths in Kapkatet ward. Moderating factors refer to variables that can influence the relationship between

the independent variables and the dependent variable. Moderating variables in the study include; availability and accessibility of healthcare services and peer pressure. The availability and accessibility of healthcare services, including HIV testing, counseling, and treatment, can moderate the relationship between the independent variables and HIV/AIDS cases. Limited access to healthcare services may hinder early diagnosis, treatment, and prevention efforts. The influence of peers and social networks can moderate the impact of socio-demographic factors, knowledge on risk behaviors, and cultural factors on HIV/AIDS cases. This is illustrated in the figure below

**Independent Variables**

**Sociodemographic factors**

- Age
- Sex
- Religion
- Marital Status
- Educational status
- Employment Status

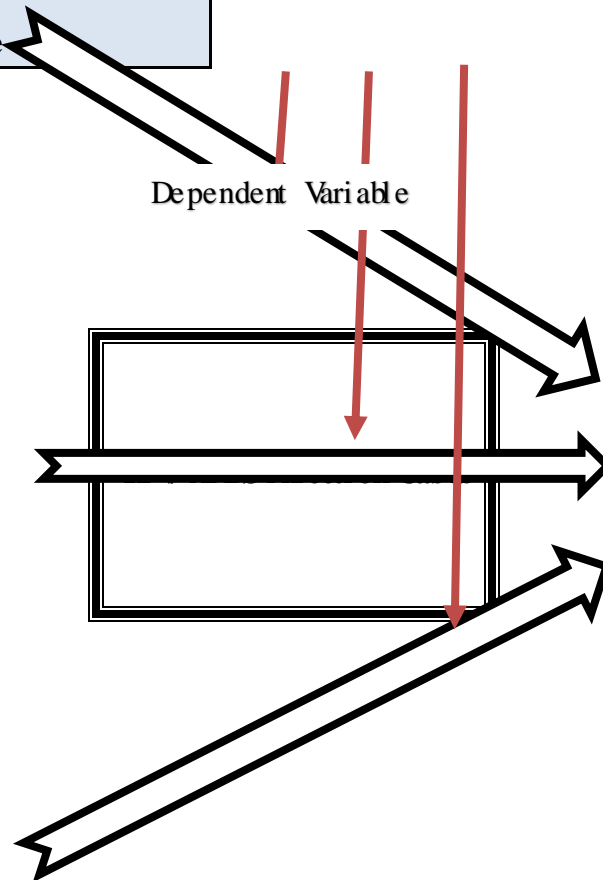
**Knowledge on Risk behaviours**

- Source of information
- General Knowledge on HIV/AIDS, symptoms, transmission & prevention
- Number of sex partners
- Regular and appropriate use of condoms

**Cultural Factors**

- Cultural practices
- Gender norms
- Stigma and discrimination
- Comprehensive sexual education

- Availability and Accessibility of Healthcare Services
- Peer Influence



## Moderating Variables

*Figure : Conceptual framework*

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter deals with the research methods to be adopted in conducting the study. They are organized under the following sub-headings: Research design, Area of study, Population of the study, Sample and sampling techniques, Instruments for data collection, Validity of the instrument, Reliability of the instrument, Method of data collection and Method of data analysis.

### **3.2 Research Design**

This study adopted the cross-sectional study design. Cross-sectional research design is the systematic collection and presentation of data to give clear picture of a particular situation. It involved the systematic collection of information and aims to discover and describe new facts about a situation, people, activities, or events. Its main purposes include observing, describing and documenting all aspects of a situation as it naturally occurs. The design was therefore appropriate for this study as it tends to obtain data from the youths of age 15-25 years of Kapkatet ward about their view on the rising cases of HIV/AIDS.

### **3.3 Area of The Study**

The area of the study was Kapkatet constituency ward. Kapkatet ward is located in Kericho county, Bureti sub-county and Bureti constituency.

### **3.4 Population of The Study**

The target population in this study comprised of all eligible youths aged 15-25 years at Kapkatet Ward.

### **3.5 Inclusion and Exclusion Criteria**

#### **3.5.1 Inclusion Criteria**

1. Those who gave formal consent will be included in the study.
2. Those who were resident of Kapkatet Sub-County for more than 6 months.
3. Must be aged 15-25 years.

#### **3.5.2 Exclusion Criteria**

1. Youths aged 15-25 years who do not give consent
2. Youths aged 15-25 years who are severely ill or mentally challenged hence unable to give logical responses.

### **3.6 Sample size determination**

Fisher's formula was used in sample determination. The prevalence of HIV/AIDS in Kapkatet is unknown, the study assumed to be a proportion of 50%. It also used a 5% margin of error and 95% confidence level.

Where;

$n$  = desired sample size (if the target population is greater than 10,000).

$z$  = the standard normal deviate at the required confidence level (1.96).

$p$  = the proportion in the target population estimated to have characteristics being measured;

$q = 1-p$ .

$d$  = the level of statistical significance set; 0.05

Therefore;

$$= 384$$

Since the entire population (N) was less than 10,000, the required sample size was smaller. Hence the final sample estimate (nf) was adjusted by using Fisher's adjustment formula:

Where;

nf = the desired sample size (if the target population is less than 10,000)

n = the desired sample size (when the target population is more than 10,000)

N = the estimate of the population size = 100

$$nf = 80$$

**Therefore, the total final sample size to be used will be 80.**

### **3.7 Sample and Sampling Techniques**

Simple Random Sampling was adopted in this study. Each unit has the chance to be selected. It involved one stage selection. It also allows the researcher access to the study population.



### **3.8 Instruments for Data Collection**

The main instruments for data collection were structured questionnaires. Structured questionnaires enabled collection of data based on key areas targeted. Moreover, structured questionnaires have been widely used in pertinent studies.

#### **3.8.1 Validity of The Instruments**

This is said to be the judgment regarding the degree to which components of the research reflected theory, concept or variable under study (Streiner & Norman, 1996). The instruments were given to the supervisor as regards the content measured in the department of Nursing for validation.

#### **3.8.2 Reliability of The Instrument**

The test-retest reliability method is one of the simplest ways of testing the stability and reliability of an instrument over time. Test-retest approach was adopted in establishing the reliability of the instrument. A pre-test was conducted in Cheplanget ward. A pre-test involved 20 participants from Cheplanget Ward using developed structured questionnaires. This provided insights that facilitated rectification of areas where flaws were identified.

### **3.9 Method of data analysis**

Data collected were analyzed using Statistical Package for Social Sciences (SPSS) version 20.0. Descriptive statistics were summarized using percentages, means and frequency tables. The purpose of descriptive statistics in quantitative analysis is to enable the researchers to meaningfully describe a distribution of score or measurement using a few indices or statistics. Chi-square test was conducted to establish the association between variables. Binary Logistic Regression was conducted to determine the association between factors and outcome variables.

The odds ratios, 95 % confidence interval and p-values were used to summarize these results. All the statistical tests were significant at 0.05 and at 95 % confidence interval.

### **3.10 Ethical Consideration**

The research ensured confidentiality, individual's information was considered private and undisclosed. Fidelity also was guaranteed and the researchers were truthful to the respondents. Beneficence was ensured and the research was for the benefit of the respondents. The respondents had guarantee for the autonomy for decision making and were free to participate or withdraw from the research. The proposal was submitted to Institutional Research Committee for review and approval; approval number ISERC/2023/0011.

## CHAPTER FOUR: FINDINGS

The response rate was 100 %

Table : Soci o-demographic characteristics of study participants

<b>Variable</b>	<b>Frequency</b>	<b>Percent age</b>
<b>Age (in Years)</b>		
15- 17	24	30.0
18- 20	21	26.3
21- 23	27	33.7
24- 25	8	10.0
<b>Gender</b>		
Male	48	60.0
Female	32	40.0
<b>Education level</b>		
No Formal Education	0	0.0
Primary education	5	6.3
Secondary education	30	37.5
Tertiary education	45	56.2
<b>Religion</b>		
Roman Catholic	35	43.8
Traditionalist	0	0.0
Protestant	40	50.0
Muslim	2	2.5
Non-believers	3	3.7

Among the age groups, 30.0% were aged 15-17, 26.3% were aged 18-20, 33.7% were aged 21-23, and 10.0% were aged 24-25. In terms of gender, 60.0% of the participants were male and 40.0% were female. Regarding education level, none had formal education, 6.3% had primary education, 37.5% had secondary education, and the majority, 56.2% had tertiary education. In

terms of religion, 43.8% identified as Roman Catholic, none as traditionalists, 50.0% as Protestant, 2.5% as Muslim and 3.7% as non-believers.

### HIV/AIDS Awareness

Table : Knowledge and its association with HIV/AIDS among youths

Variable	Frequency	Percentage	OR	p- Value
<b>Know HIV/AIDS</b>				
Yes	80	100.0	-	-
No	0	0.0	-	-
<b>Source of information</b>				
Friends	48	60.0	ref	ref
Radio	38	47.5		
Television	23	28.8		
Newspaper	8	10.0		
School	71	88.8		
Church	33	41.3		
<b>Knowledge on Transmission</b>				
High	33	41.2	ref	ref
Moderate	39	48.8	1.52	0.036
Low	8	10.0	<b>2.41</b>	<b>0.008</b>
<b>Knowledge on symptoms</b>				
High	27	33.8	ref	Ref
Moderate	41	51.2	1.20	0.089
Low	12	15.0	<b>1.73</b>	<b>0.045</b>
<b>Knowledge on prevention</b>				
High	37	46.2	Ref	Ref
Moderate	40	50.0	1.29	0.372
Low	3	3.8	<b>2.08</b>	<b>0.017</b>
<b>Cure</b>				
Yes	23	28.8	ref	ref

No	57	71.2	0.78	0.783
<b>Know Someone with confirmed HIV positive</b>				
Yes	47	58.8	ref	ref
No	33	41.2	<b>1.29</b>	<b>0.003</b>
<b>Vulnerability to HIV</b>				
Yes	31	38.8	ref	ref
No	38	47.5	1.02	0.157
Don't know	11	13.7	1.21	0.198
<b>Sexual partners</b>				
One	53	66.3	ref	ref
More than two	27	33.8	<b>2.56</b>	0.001
<b>Condom use</b>				
Yes	44	55.0	ref	ref
No	36	45.0	<b>2.01</b>	<b>0.027</b>

*NB: High knowledge- 75% or more; 50-74% - moderate; below 50% - Low; ref- reference category; OR- Odds Ratio*

All the study participants (100%) were aware of HIV/AIDS. Regarding the sources of information, 60.0% acquired information from friends, 47.5% from radio, 28.8% from television, 10.0% from newspapers, 88.8% from school, and 41.3% from church. In terms of knowledge on transmission, 41.2% had a high level of knowledge, 48.8% had a moderate level, and 10.0% had a low level. For knowledge on symptoms, 33.8% had a high level, 51.2% had a moderate level, and 15.0% had a low level. Regarding knowledge on prevention, 46.2% had a high level, 50.0% had a moderate level, and 3.8% had a low level. When asked about a cure for HIV, 28.8% believed there was a cure, while 71.2% believed there was not. Additionally, 58.8% of the participants knew someone with a confirmed HIV-positive status. In terms of vulnerability to HIV, 38.8% considered themselves vulnerable, 47.5% did not consider themselves vulnerable,

and 13.7% were unsure. When asked about sexual partners, 66.3% reported having only one sexual partner, while 33.8% reported having more than two. Regarding condom use, 55.0% reported using condoms, while 45.0% reported not using them.

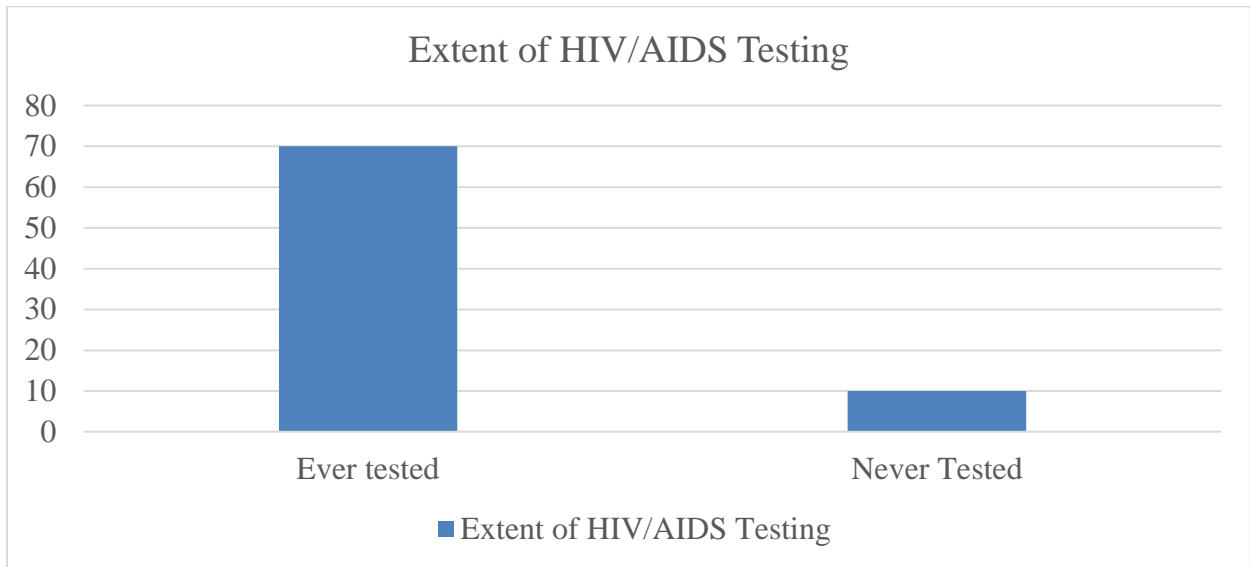


Figure: Prevalence of HIV/AIDS testing among the youth aged 15-25 years

**HIV/AIDS Prevalence**

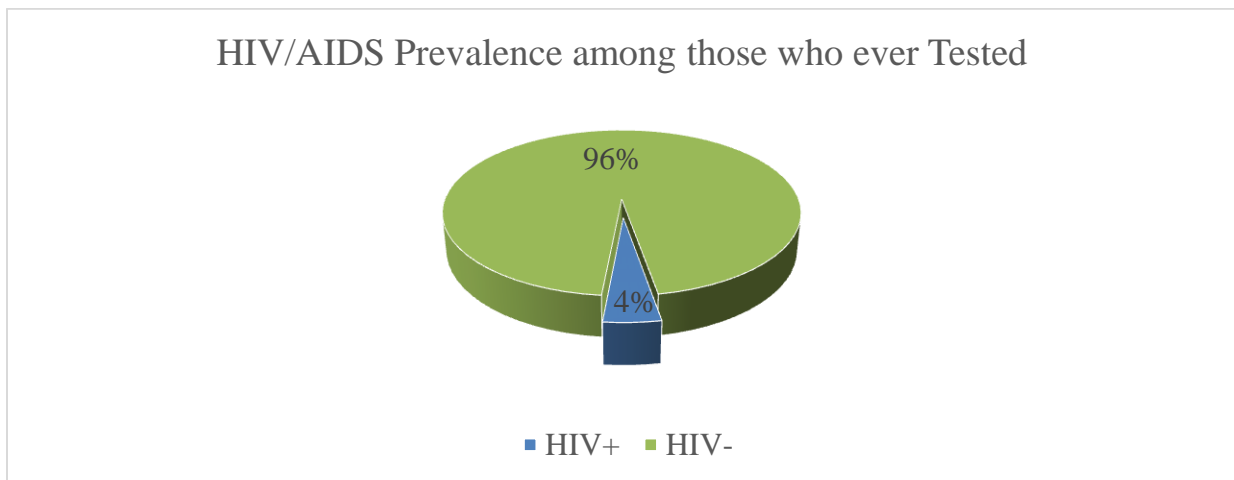


Figure: HIV/AIDS prevalence among youth aged 15-25 years

Table : Prevalence by age and gender

<b>Variable</b>	<b>Prevalence Frequency ( %)</b>	<b>P- value</b>
<b>Age (in Years)</b>		<b>0.081</b>
15-17	0 (0.0)	
18-20	1 (4.76)	
21-23	1 (3.70)	
24-25	1 (12.50)	
<b>Gender</b>		<b>0.013</b>
Female	2 (6.25)	
Male	1 (2.08)	

Majority of the study participants, 87.5% had ever been tested for HIV/AIDS (Figure 2). The prevalence of HIV/AIDS among the study participants who had been tested was 4.3% (Figure 3). The results showed that among participants aged 15-17, none were found to be HIV-positive. In the age group of 18-20, one participant (4.76%) tested positive for HIV/AIDS. Similarly, in the age groups of 21-23 and 24-25, one participant (3.70%) and one participant (12.50%) respectively were found to be HIV-positive. However, the p-value for age was 0.081, indicating that the difference in HIV prevalence across different age groups was not statistically significant. In terms of gender, among female participants, two (6.25%) were found to be HIV-positive, while among male participants, one (2.08%) tested positive for HIV/AIDS. The p-value for gender was 0.013, indicating a statistically significant difference in HIV prevalence between females and males, with a higher prevalence observed among females.

## Association between socio-demographic factors and HIV/AIDS

Table : Binomial logistic regression analysis of sociodemographic factors and HIV/AIDS

Variable	OR	P-value
<b>Age (in Years)</b>		
15-17	ref	ref
18-20	1.36	0.637
21-23	1.87	0.016
24-25	<b>2.46</b>	<b>0.031</b>
<b>Gender</b>		
Male	ref	Ref
Female	<b>2.12</b>	<b>0.001</b>
<b>Education level</b>		
Tertiary education	ref	ref
No Formal Education	-	-
Primary education	<b>1.79</b>	<b>0.027</b>
Secondary education	1.42	0.238
<b>Religion</b>		
Roman Catholic	ref	ref
Traditionalist	-	-
Protestant	1.75	0.372
Muslim	1.58	0.062
Non-believers	1.62	0.829

N B n = 70

In terms of age, the analysis indicates that there is a statistically significant relationship between age and HIV/AIDS. Specifically, participants in the age range of 18-20 years had 1.36 times



higher odds of HIV/AIDS compared to those in the age range of 15-17 years. Moreover, participants in the age range of 21-23 years had 1.87 times higher odds of HIV/AIDS, and participants in the age range of 24-25 years had 2.46 times higher odds of HIV/AIDS when compared to the reference group of 15-17 years. These findings suggest that older individuals within the 18-25 age range may be more vulnerable to contracting HIV/AIDS in this particular population.

Furthermore, the analysis demonstrates a significant association between gender and HIV/AIDS. The results indicate that female participants had 2.12 times higher odds of HIV/AIDS compared to their male counterparts. This suggests that females in the study population may face increased vulnerability to HIV/AIDS transmission.

In terms of education level, the analysis shows a significant association with HIV/AIDS. Participants with tertiary education were used as the reference group. The results indicate that participants with primary education had 1.79 times higher odds of HIV/AIDS, while those with secondary education had 1.42 times higher odds. This implies that lower levels of education may be associated with an increased risk of HIV/AIDS transmission in this population.

Additionally, the analysis examined the relationship between religion and HIV/AIDS. No particular religious group was used as the reference category, and traditionalists were excluded due to having zero frequency. The findings show that participants who identified as Roman Catholic had 1.75 times higher odds of HIV/AIDS, while Protestants had 1.58 times higher odds, and Muslims had 1.62 times higher odds. However, these associations did not reach statistical significance.

## Cultural factors

Table : Cultural factors associated with HIV AIDS

Variable	Frequency	Percentage
<b>Cultural practices contributing to the rise in HIV AIDS cases</b>		
Yes	69	86.2
No	7	7.8
No sure	4	5
<b>Specific cultural practices contributing to the rise in HIV AIDS cases</b>	(n = 69)	
Traditional circumcision	62	89.9
Inheritance of widows by male relatives	30	43.5
Polygamy	28	40.6
<b>Role of gender norms in the rise of HIV AIDS cases among youths</b>	(n = 80)	
Yes	69	86.2
No	7	8.8
Not sure	4	5
<b>Gender norms contributing to the rise in HIV AIDS cases</b>	(n = 69)	
Unequal power dynamics between males and females	38	55.0
Social expectations of males to engage in risky sexual behaviors	35	50.1
Limited agency for females in negotiating safe sex	51	73.9
Gender-based violence	58	84.0
<b>Observation of stigma and discrimination towards people living with HIV AIDS</b>	(n =80)	
Yes	65	81.2
No	7	8.8
Not Sure	8	10

<b>Types of stigmas and discrimination observed</b>	(n=65)	
Fear of disclosure and rejection	53	81.5
Social exclusion and isolation	46	70.8
Denial of healthcare and support services	37	56.9
<b>Availability of comprehensive sexual education</b>	(n=80)	
Yes	2	2.5
No	78	97.5
<b>Reasons for lacking or insufficient comprehensive sexual education</b>	(n=78)	
Cultural taboos and resistance to discussing sexual matters	58	74.4
Limited resources and funding for sexual education programs	63	80.8
Lack of trained educators or facilitators	50	64.1
Religious or moral objections to comprehensive sexual education	61	78.2

According to the findings, 86.2% of participants acknowledged the presence of cultural practices contributing to HIV/AIDS cases. Specific practices mentioned include traditional circumcision (89.9%), inheritance of widows by male relatives (43.5%), and polygamy (40.6%). Gender norms also play a role, with 86.2% of participants recognizing their influence. Unequal power dynamics between males and females (55.0%), social expectations of risky sexual behaviors for males (50.1%), limited agency for females in negotiating safe sex (73.9%), and gender-based violence (84.0%) were identified as contributors to the rise in HIV/AIDS cases.

Stigma and discrimination towards people living with HIV/AIDS were observed by 81.2% of participants. Types of stigmas and discrimination included fear of disclosure and rejection (81.5%), social exclusion and isolation (70.8%), and denial of healthcare and support services (56.9%). Furthermore, comprehensive sexual education was reported to be lacking by 97.5% of participants. Reasons cited for the lack or insufficiency of sexual education included

cultural taboos and resistance to discussing sexual matters (74.4%), limited resources and funding (80.8%), lack of trained educators (64.1%), and religious or moral objections (78.2%).

## CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

### 5.1 Discussion

Knowledge of HIV/AIDS was found to be high among all study participants (100%). This suggests a general awareness of the disease and its impact. The findings align with previous research highlighting the widespread knowledge of HIV/AIDS among various populations (Duggan et al., 2018; Mmbaga et al., 2019). Regarding sources of information, the study found that the majority of participants acquired knowledge from friends (60.0%), followed by radio (47.5%) and television (28.8%). These findings indicate the importance of interpersonal networks and mass media as channels for disseminating information about HIV/AIDS (Akins et al., 2016; Hoque et al., 2019). Schools were also significant sources of information, with 88.8% of participants obtaining knowledge from this educational setting. The role of schools in HIV/AIDS education has been recognized as crucial in disseminating accurate and comprehensive information to young people (UNESCO, 2018).

In terms of knowledge on transmission, 41.2% of participants had a high level of knowledge, while 48.8% had a moderate level, and 10.0% had a low level. These findings suggest room for improvement in enhancing the understanding of HIV/AIDS transmission routes among certain segments of the population. Similar studies have shown mixed results regarding knowledge on transmission, indicating the need for targeted educational campaigns and interventions (Aggarwal et al., 2019; Azage et al., 2018). The study also assessed participants' knowledge of symptoms related to HIV/AIDS. Findings revealed that 33.8% had a high level of knowledge, 51.2% had a moderate level, and 15.0% had a low level. These results imply that a substantial proportion of participants possessed a moderate to high level of knowledge about symptoms. However, the presence of individuals with low knowledge emphasizes the need for

continued education and awareness efforts to ensure early detection and timely access to healthcare services (Genberg et al., 2018; Kalichman et al., 2019).

In terms of knowledge on prevention, 46.2% of participants had a high level of knowledge, 50.0% had a moderate level, and 3.8% had a low level. These findings indicate a generally good understanding of preventive measures against HIV/AIDS. However, the presence of individuals with a low level of knowledge underscores the importance of comprehensive prevention programs that address misconceptions and promote evidence-based strategies (Pittiglio et al., 2020; Shrestha et al., 2019). When asked about the existence of a cure for HIV, 28.8% of participants believed there was a cure, while 71.2% believed there was not. These findings reflect the widespread recognition that HIV does not currently have a cure. However, it is essential to address misconceptions and promote accurate information to prevent false beliefs that might impact healthcare-seeking behavior and adherence to treatment (van den Berg et al., 2017; Warsame et al., 2018). The study revealed that 58.8% of participants knew someone with a confirmed HIV-positive status. This finding highlights the prevalence of HIV/AIDS within participants' social networks. Knowledge of someone living with HIV can contribute to increased awareness and understanding of the disease (Nyblade et al., 2020).

In terms of personal vulnerability to HIV, 38.8% of participants considered themselves vulnerable, while 47.5% did not consider themselves vulnerable, and 13.7% were unsure. These results suggest a mix of perceptions regarding personal risk. Individual risk perception can influence preventive behaviors and the uptake of HIV testing and counseling services (Li et al., 2020). Regarding sexual behavior, 66.3% of participants reported having only one sexual partner, while 33.8% reported having more than two. These findings indicate variations in sexual practices within the study population. The presence of multiple sexual partners increases the

potential for HIV transmission, emphasizing the importance of promoting safer sex practices and regular testing (Habtamu et al., 2021; Sharma et al., 2019). When asked about condom use, 55.0% of participants reported using condoms, while 45.0% reported not using them. These findings suggest a considerable portion of the population engaging in unprotected sexual activities. Promoting consistent and correct condom use is crucial in reducing the risk of HIV transmission (Kumi-Kyereme et al., 2018; Mantell et al., 2019). The study found that a significant proportion of the participants had been tested for HIV/AIDS, with 87.5% reporting ever having been tested. This suggests a positive trend in HIV testing uptake among the study population. HIV testing is crucial for early detection, treatment initiation, and prevention efforts (Mokwena et al., 2020). Among the participants who had been tested, the prevalence of HIV/AIDS was found to be 4.3%. This indicates that a portion of the study population tested positive for HIV/AIDS. The prevalence rate provides important information about the burden of HIV within the study population and can inform public health strategies and interventions (UNAIDS, 2021).

When examining HIV prevalence across different age groups, the study found that none of the participants aged 15-17 tested positive for HIV/AIDS. However, in the age groups of 18-20, 21-23, and 24-25, one participant in each group (4.76%, 3.70%, and 12.50% respectively) tested positive. Although these percentages indicate some variability in HIV prevalence across age groups, the p-value of 0.081 suggests that this difference is not statistically significant. It is important to note that the sample size within each age group may have influenced the statistical significance of the findings (Aragon et al., 2020). In terms of gender, the study revealed a statistically significant difference in HIV prevalence between females and males. Among female participants, 6.25% tested positive for HIV/AIDS, while among male participants, 2.08% tested

positive. The p-value of 0.013 indicates that the difference in HIV prevalence between females and males is statistically significant. This finding highlights the importance of gender-specific HIV prevention and testing strategies, as well as the need to address gender disparities in accessing healthcare services (UNAIDS, 2021; Wirtz et al., 2020).

The analysis revealed a statistically significant relationship between age and HIV/AIDS, indicating that older individuals within the 18-25 age range are more vulnerable to HIV/AIDS compared to younger individuals (15-17 years). This finding aligns with previous research that has highlighted the increased risk of HIV/AIDS among young adults (Aragon et al., 2020). It underscores the importance of targeted interventions and comprehensive sexual education programs that address the unique needs and risk factors faced by young adults in relation to HIV/AIDS (UNESCO, 2018).

The study also found a significant association between gender and HIV/AIDS, with females having higher odds of HIV/AIDS compared to males. This aligns with global trends where young women and girls are disproportionately affected by HIV/AIDS (UNAIDS, 2021). Gender-based disparities in power dynamics, social norms, and access to resources contribute to the increased vulnerability of women to HIV transmission (Wirtz et al., 2020). Addressing these gender-specific factors through gender-transformative approaches and ensuring access to comprehensive sexual and reproductive health services are crucial for HIV/AIDS prevention and control efforts. Regarding education level, the analysis revealed a significant association with HIV/AIDS. Participants with lower levels of education, such as primary and secondary education, had higher odds of HIV/AIDS compared to those with tertiary education. This finding highlights the importance of education as a protective factor against HIV/AIDS transmission. Comprehensive sexual education programs that provide accurate information and empower



individuals with the knowledge and skills to protect themselves from HIV/AIDS are crucial, particularly for those with limited educational opportunities (Mrbaga et al., 2019).

Cultural practices were recognized by a significant proportion of participants as contributing to HIV/AIDS cases. Traditional circumcision, inheritance of widows by male relatives, and polygamy were specifically mentioned. These practices may increase the risk of HIV transmission due to factors such as inadequate infection control measures during circumcision rituals, unequal power dynamics in relationships, and multiple sexual partnerships associated with polygamous relationships (Abebe et al., 2020). Gender norms and unequal power dynamics were identified as important factors in the spread of HIV/AIDS. Social expectations of risky sexual behaviors for males, limited agency for females in negotiating safe sex, and gender-based violence were recognized as contributors. These factors highlight the need for addressing gender inequalities, promoting gender equity, and empowering women and girls to protect themselves from HIV/AIDS (UNAIDS, 2021; Wrtz et al., 2020).

Stigma and discrimination towards people living with HIV/AIDS were observed by a majority of participants. Fear of disclosure and rejection, social exclusion and isolation, and denial of healthcare and support services were reported types of stigma and discrimination. These findings emphasize the importance of addressing HIV-related stigma through awareness campaigns, education, and supportive policies to create an enabling environment for people living with HIV/AIDS (Nyblade et al., 2019). The study also revealed a perceived lack of comprehensive sexual education, with participants citing cultural taboos, limited resources and funding, lack of trained educators, and religious or moral objections as barriers. Comprehensive sexual education is crucial in providing accurate information about HIV/AIDS, promoting safe sexual behaviors, and challenging harmful cultural beliefs and practices (UNESCO 2018).

## 5.2 Conclusion

The study findings indicate a high level of knowledge about HIV/AIDS among the study participants, suggesting a general awareness of the disease and its impact. However, there are areas for improvement, particularly regarding knowledge of transmission routes and symptoms. Comprehensive sexual education programs should address these gaps and promote accurate information. The prevalence of HIV/AIDS within the study population was found to be 4.3% highlighting the ongoing burden of the disease. Targeted interventions should be developed to address specific vulnerabilities, such as gender disparities and age-related risk factors. Gender-transformative approaches and equitable access to healthcare services are crucial for reducing the impact of HIV/AIDS on women and girls.

Cultural practices, gender norms, stigma, and discrimination were identified as significant contributors to the spread of HIV/AIDS. Addressing these factors requires a comprehensive approach that includes promoting gender equity, challenging harmful cultural beliefs, and reducing HIV-related stigma through awareness campaigns and supportive policies. The study also highlighted the perceived lack of comprehensive sexual education, with various barriers cited. Efforts should be made to overcome these barriers and ensure the availability of accurate information and resources to promote safe sexual behaviors and prevent HIV/AIDS. In conclusion, addressing the complex interplay of cultural, social, and educational factors is crucial for effective HIV/AIDS prevention and control. A comprehensive approach that includes comprehensive sexual education, gender equity, stigma reduction, and targeted interventions based on age and gender vulnerabilities is needed to reduce the burden of HIV/AIDS and improve the overall well-being of affected populations.

### 5.3 Recommendations

Based on the findings of this study, the following recommendations were made in order to reduce the rise of HIV/AIDS prevalence and incidence among the youths and general community;

1. Strengthen comprehensive sexual education programs: Develop and implement comprehensive sexual education programs that provide accurate and age-appropriate information on HIV/AIDS transmission, prevention, and safe sexual behaviors. These programs should address cultural taboos and resistance to discussing sexual matters, involve trained educators, and ensure access to necessary resources and funding.
2. Promote gender equity and empowerment: Implement gender-transformative approaches that challenge gender norms and inequalities contributing to HIV/AIDS transmission. Empower women and girls with knowledge, skills, and agency to negotiate safe sex, address unequal power dynamics, and prevent gender-based violence. Provide support services for survivors of gender-based violence and ensure access to reproductive and sexual health services.
3. Reduce HIV-related stigma and discrimination: Launch awareness campaigns to challenge HIV-related stigma and discrimination. Educate the public about the realities of living with HIV/AIDS, promote empathy and inclusivity, and ensure that people living with HIV/AIDS have access to healthcare services and support networks. Implement policies and regulations that protect the rights of individuals living with HIV/AIDS and prevent discrimination.
4. Enhance HIV testing and counseling services: Increase access to and uptake of HIV testing and counseling services. Conduct targeted outreach programs to reach vulnerable populations and promote regular testing. Provide confidential and non-judgmental counseling services to support individuals in making informed decisions about their sexual health and encourage early detection and timely access to treatment and care.

5. Collaborate with community leaders and organizations: Engage community leaders, religious leaders, and local organizations in HIV/AIDS prevention and control efforts. Foster partnerships to address cultural practices that contribute to HIV/AIDS transmission and promote community-based initiatives that raise awareness, provide support, and advocate for effective HIV/AIDS prevention strategies. These collaborations can help bridge gaps in knowledge and resources and ensure the sustainability of interventions.

#### **5.4 Limitations of the study**

The study was carried out in the health facility (Kapkatet Hospital) hence the findings might not be generalizable if those who don't attend the hospital have varying characteristics. Furthermore, the study relied on self-reported data, hence might be subjected to social desirability biasness, as some of the study participants might not accept, they are positive, in order to be viewed superior. Mediating variables might have also posed effect on the findings, affecting association, even though it was controlled by use of logistic regression analysis. However, this study aimed to provide significant and relevant findings that reflect the true situation or status among youths aged 25-25 years.

#### **5.5 Further study**

A further study should be carried out to assess the factors significantly contribute to higher prevalence of HIV/AIDS among females compared to male counterparts. Furthermore, to provide feasible recommendation that can be put in place to lower the prevalence among the females.

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## APPENDICES

### Appendix A Study Area



## Appendix B Work Plan

Week 1	Week 2-3	Week 4	Week 5-8	Week 9	Week 10
Identification of research topic.	Proposal writing	Study population and identification.	Questionnaires and data collection	Data entry, storage and analysis.	Discussions

### Appendix C Study Budget

ITEMS	PRICE
Printing proposal and questionnaires	1000/=
<b>RESEARCH PROJECT</b>	
Stationery	200/=
Lunch	200*5= 1000/=
Total	<b>2200/=</b>



## **Appendix D Study Consent Form**

*Study Title: Factors Contributing to Rising HIV/AIDS Cases Among Youths Aged 15-25 Years In Kapkatet Ward, Bureti Sub County, Kenya.*

Name of Principal Investigator: Willand Kipkorir Co Investigators: Emmah Chepngetich, Fani d Cheron, Mercy Chepkirui, Dennis Ngige Arisi Name of Organization: University of Kabiranga

### **Part I: Information Sheet**

#### **Introduction:**

You are being asked to take part in a research study. This information is provided to tell you about the study. Please read this form carefully. You will be given a chance to ask questions. If you decide to be in the study, you will be given a copy of this consent form for your records.

Taking part in this research study is voluntary. You may choose not to take part in the study. You could still receive other treatments. Saying no will not affect your rights to health care or services. You are also free to withdraw from this study at any time. If after data collection you choose to quit, you can request that the information provided by you be destroyed under supervision and thus not used in the research study. You will be notified if new information becomes available about the risks or benefits of this research. Then you can decide if you want to stay in the study.

#### **Purpose of the study:**

The purpose of the study is to find out whether factors such as socio-demographic factors, knowledge on risk factors and cultural factors that contribute to the rising HIV/AIDS cases among youths aged 15-25 years in Kapkatet Ward, Bureti Sub County, Kenya.

#### **Type of Research Project/Intervention:**

This research study will involve conducting interviews/surveys using structured questionnaires to gather information on factors contributing to rising HIV/AIDS cases among youths aged 15-25

years. Your participation will contribute to a better understanding of the factors contributing to the rising HIV/AIDS cases and help inform future interventions and strategies.

**Why have I been identified to Participate in this study?**

You have been identified to participate in this study because you fall within the target age group (15-25 years) and reside in Kapkatet Ward, Bureti Sub County. Your experiences and insights are valuable in understanding the factors influencing HIV/AIDS cases among youths in this area.

**How long will the study last?**

Your participation in this study will last for approximately 3 weeks. This includes the time required for data collection, analysis, and report writing.

**What will happen to me during the study?**

**A Study Procedures:**

As part of this study, you will be asked to participate in responding or completing structured questionnaires. These activities will involve answering questions related to Factors Contributing to Rising HIV/AIDS Cases Among Youths Aged 15-25 Years. The interviews/surveys will be conducted in a confidential and supportive environment.

**B Potential Questions and Discussion Topics:**

During the interviews/focus group discussions/surveys, you may be asked questions about your knowledge and perceptions of HIV/AIDS, sexual behaviors, access to healthcare services, and other factors related to HIV/AIDS transmission and prevention. It is important to provide honest and accurate responses to the best of your knowledge.

**What side effects or risks can I expect from being in the study?**

The risks associated with participating in this study are minimal. However, discussing topics related to HIV/AIDS may evoke emotional or psychological discomfort. If you feel distressed during the interviews or discussions, support will be provided, and you have the right to skip any question or withdraw from the study at any time without any negative consequences.

**Are there benefits to taking part in the study?**

By participating in this study, you may not directly benefit personally. However, your involvement will contribute to a better understanding of the factors contributing to the rising HIV/AIDS cases among youths in your community. The findings of this study may help develop targeted interventions and programs to prevent and reduce HIV/AIDS transmission in the future.

**Reimbursements:**

For this study, there will be no token of appreciation for your participation.

**Who do I call if I have questions about the study?**

If you have any questions about the study, you can contact the Principal Investigator, Will and Kipkorir, at nurk00262019@students.kabianga.ac.ke. For any concerns regarding your rights as a research subject, you may contact the Institutional Review Ethics Committee (IREC) at Tel. No. 0202172665 or Email: uokiERC@kabianga.ac.ke. IREC is responsible for reviewing studies for safety and protecting the rights of study subjects.

**Will the information I provide be kept private?**

All reasonable efforts will be made to keep your personal and protected information private and confidential. Your participation in this study implies your authorization for the use and sharing of your personal information as described below.

As part of the study, the research team may share the results of your interviews/surveys. These results may be shared with the following groups:

- The National Bioethics Committee
- The Institutional Review and Ethics Committee

These groups have their own policies and guidelines to ensure the privacy and confidentiality of your personal information.

The study results will be retained in your research record for at least six years after the study is completed. At that time, the research information not already in your medical record will be securely destroyed. Any research information entered into your medical record will be kept indefinitely.

Unless otherwise indicated, this permission to use or share your personal information does not have an expiration date. If you decide to withdraw your permission, please contact the Principal Investigator in writing to inform them of your withdrawal. The mailing address is nurk00262019@students.kabanga.ac.ke. After receiving your withdrawal request, further collection of any information about you will be stopped. However, any health information collected before this withdrawal may continue to be used for reporting and research quality purposes.

You have the right to see and copy your personal information related to the research study for as long as the study doctor or research institution holds this information. However, to ensure the scientific quality of the research study, you will not be able to review some of your research information until after the research study has been completed.

Your treatment, payment, or enrollment in any health plans or eligibility for benefits will not be affected if you decide not to take part. You will receive a copy of this form after it is signed.

Part II: Consent of Subject:

I have read or have had read to me the description of the research study. The investigator or his/her representative has explained the study to me and has answered all of the questions I have at this time. I have been told of the potential risks, discomforts, and side effects, as well as the possible benefits (if any) of the study. I freely volunteer to take part in this study.

Name of Participant (Witness to print if the subject is unable to write)	Signature of subject/thumbprint	Date & Time

Name of Representative/Witness	Relationship to Subject

Name of person Obtaining Consent	Signature of person	Date

Obtaining Consent

\_\_\_\_\_  
Printed name of Investigator

\_\_\_\_\_  
Signature of Investigator

\_\_\_\_\_  
Date

## **Appendix E Study Questionnaire**

### **Title: FACTORS CONTRIBUTING TO RISING HIV AIDS CASES AMONG YOUTHS AGED 15-25 YEARS IN KAPKATET WARD, BURETI SUB COUNTY, KENYA**

This questionnaire is designed to gather general information on HIV AIDS knowledge, cultural practices and sexual behaviour. Confidentiality and research ethics will be maintained in dealing with your responses. Please indicate the correct option as honestly and correctly as possible by putting a tick ( ) on any of the provided options. For the item that requires your opinion, please fill in the blank spaces provided ( ). You are requested to attempt all the items.

#### **A SOCIO-DEMOGRAPHIC CHARACTERISTICS**

A1. How old are you (years)

1)  15-17                      3)  18-20

2)  21-23                      4)  24-25

A2. What is your gender?

1)  Male                      2)  Female

A3. What is your educational level

1)  No education            2)  Primary Education    3)  Secondary Education    4)  Tertiary Education

A4. What is your religion?

1)  Roman Catholic              2)  Traditionalist

3)  Protestant                      4)  Non-believer

5)  Muslim                              6)  Other (specify)

## B HIV AIDS KNOWLEDGE

B1. What is AIDS?

B2. What is HIV?

B3. In what ways does a person get AIDS? (tick all that apply)

1) Sharing clothing with an infected person [ Yes ] [ No ] [ Don't Know ]

2) Witchcraft [ Yes ] [ No ] [ Don't Know ]

3) Sleeping in the same room with a person [ Yes ] [ No ] [ Don't Know ]

Suffering from AIDS [ Yes ] [ No ] [ Don't Know ]

4) Having sex with an HIV infected person [ Yes ] [ No ] [ Don't Know ]

5) Being bitten by mosquitoes, bedbugs which

have bitten a person previously suffered from AIDS [ Yes ] [ No ] [ Don't Know ]

6) Being in the same room as a person with AIDS [ Yes ] [ No ] [ Don't Know ]

7) By coughing and sneezing [ Yes ] [ No ] [ Don't Know ]

8) Sharing utensils with someone who is HIV positive [ Yes ] [ No ] [ Don't Know ]

9) Using unsterilized needles and syringes which have

been previously used by infected person [ Yes ] [ No ] [ Don't Know ]

10) Poor health and bad nutrition [ Yes ] [ No ] [ Don't Know ]

11) Receiving blood which has been infected [ Yes ] [ No ] [ Don't Know ]

12) A woman who has AIDS virus can pass it to the baby [ Yes ] [ No ] [ Don't Know ]

13) Sharing toilets [ Yes] [ No] [ Don't Know]

14) Other (specify)

**B4. From what sources have you learnt about Aids? (tick all that apply)**

1)  Friends                      6)  Leaflets/pamphlets

2)  Radio                      7)  community

c)  Television                      8)  Meetings

3)  Posters                      9)  Newspapers

4)  Drinking place                      10)  School

5)  Church/ mosque                      11)  Other (specify)

**B5. Does a person with HIV Infection have characteristics which can be used to identify him/her?**

Yes     No

If no, how can you tell who has HIV?

**B6. If a person contracts the virus that show up?**

1)  Less than a week

2)  At least one month

3)  At least three months

**AIDS, how long will it be before the signs**

4)  At least six months



5)  At least one year

6)  At least five to ten years

**B7. What are some of the signs, which show that a person is suffering from AIDS?**

1) Diarrhea for more than one month  Yes  No  Don't Know

2) Fever for more than one month  Yes  No  Don't Know

3) Pus discharge for more than one month  Yes  No  Don't Know

4) Vomiting for more than one month  Yes  No  Don't Know

5) Visible rash  Yes  No  Don't Know

6) Cough for more than one month  Yes  No  Don't Know

7) Others (specify)

**B8. Can AIDS be cured? 1 2 3**

Yes  No  Don't Know

**B9. If yes, do you think that AIDS can be cured by a:**

1)  Doctor  Others (specify)

2)  Herbalist

**B10. Can the spread of HIV be prevented by:**

1 2 3

1) Eating good food  Yes  No  Don't Know

2) Always using condoms during sex  Yes  No  Don't Know

3) Having sex with only one person/partner [ Yes] [ No] [ Don't Know]

4) Having a few boyfriends (2-4) [ Yes] [ No] [ Don't Know]

5) Avoiding casual sex [Yes] [ No] [ Don't Know]

6) Use of protective witchcraft medical person [ Yes] [ No] [ Don't Know]

7) Avoid injections by unqualified medical person [ Yes] [ No] [ Don't Know]

B11. Do you think that there are people in your area with AIDS or HIV infection? [ Yes]  
[ No] [ Don't Know]

B12. Have you ever seen anyone with AIDS? [Yes] [ No] [ Don't Know]

B13. Have you ever tested for HIV AIDS? [ Yes] [ No ]

B14. If yes, what was the results? [ HIV Positive] [ HIV negative]

B15. Do you think that you could get AIDS? [ Yes] [ No] [ Don't Know]

2) Why?

3) Are you doing anything to protect yourself against AIDS? [ Yes] [ No] [ Don't Know]

d) If yes, what:

## C CONDOM USE

C1. Have you ever heard or do you know anything about a condom?

1) [ ] Yes 2 [ ] No

C2. What was your source of information on condom? (Tick all that apply)

1) [ ] Parents/ Guardians          6) [ ] Radio

2) [ ] Relatives                      7) [ ] Doctor

- 3)  Teachers                      8)  Family planning clinic
- 4)  Friends                              9)  Women's group
- 5)  Books/ Magazines              10)  Others (specify)

C3. Have you ever used a condom during sex?

- 1)  Yes              2)  No

C4. Why do you use a condom?

- 1)  To avoid infection with STDs and AIDS
- 2)  To avoid pregnancy
- 3)  To experiment it
- 4)  Others (specify)

C5. How often do you use a condom?

- 1)  Always              3)  Sometimes
- 2)  Frequently      4)  Rarely

(b) Explain your answer

C6. What has been your experience of using condoms?

C7. When you use a condom who suggests its use?

- 1)  Me                      3)  Any of us
- 2)  My partner      4)  Other (specify)

C8. Who provides it?

1)  Me

2)  My partner

3)  Any of us

4)  Other (specify)

C9. Has your sex partner ever refused to use a condom?

1)  Yes

3)  Other (specify)

2)  No (if no skip to question)

C10. Where can one get/buy condoms?

1)  Shop/ Drugs shop

2)  Hospital/ Health Centre

3)  Private clinic

4)  Family Planning Clinic

## **D SEXUAL BEHAVIOUR**

D1 How many regular partners have you had in your life?

Number of regular partner (s)

D2 How many regular partners do you have now?

Number of regular partner (s)

D3 Does your partner have any other sexual partner (s) apart from you?

- 1)  Yes
- 2)  No
- 3)  Do not know
- 4)  Other (specify)

D4. How long have you been with your current partner?

- 1)  Years
- 2)  Months
- 3)  Day(s)
- 4)  Other (specify)

D6. How long ago is it since you last had sexual relationship with any one?

- 1)  Day ago
- 2)  Weeks ago
- 3)  Months ago
- 4)  Years ago
- 5)  Other (specify)

D7. How old were you when you first had sexual intercourse?

- 1)  Age years

D8. For how long had you known this partner before having sexual intercourse?

- 1)  Day ago
- 2)  Weeks ago
- 3)  Months ago
- 4)  Years ago
- 5)  Others (specify)

D9. Would you be able to do the following with a first or a new partner:

- 1) Ask how many partners he/she has had [ Yes ] [ No ] [ Don't Know ]
- 2) Discuss using condoms before having sex [ Yes ] [ No ] [ Don't Know ]

3) Ask his/her to be tested for HIV before having sex [ Y ] [ N ] [ DK ]

D10. What do you think needs to be done to control the spread of AIDS in secondary schools?

### **E BELIEFS AND CULTURAL PRACTICES**

Note: Please select the most appropriate option for each question

**E1. Are there any cultural practices in your community that may contribute to the rise in HIV/AIDS cases among youths aged 15-25 years?**

- a) Yes
- b) No
- c) Not sure

**E2. If you answered "Yes" to the previous question, please specify the cultural practices that may contribute to the rise in HIV/AIDS cases among youths. (Select all that apply)**

- a) Traditional circumcision
- b) Multiple sexual partners as a sign of masculinity
- c) Inheritance of widows by male relatives
- d) Other (please specify) \_\_\_\_\_

**E3. Do gender norms in your community play a role in the rise of HIV/AIDS cases among youths aged 15-25 years?**

- a) Yes
- b) No

c) Not sure

**E4. If you answered "Yes" to the previous question, please select the gender norms that may contribute to the rise in HIV/AIDS cases among youths. (Select all that apply)**

a) Unequal power dynamics between males and females

b) Social expectations of males to engage in risky sexual behaviors

c) Limited agency for females in negotiating safe sex

d) Gender-based violence

e) Other (please specify) \_\_\_\_\_

**E5. Have you observed stigma and discrimination towards people living with HIV/AIDS in your community?**

a) Yes

b) No

c) Not sure

**E6. If you answered "Yes" to the previous question, please specify the types of stigma and discrimination observed. (Select all that apply)**

a) Fear of disclosure and rejection

b) Social exclusion and isolation

c) Verbal or physical abuse

d) Denial of healthcare and support services

e) Other (please specify) \_\_\_\_\_

**E7. Is comprehensive sexual education provided to youths aged 15-25 years in your community?**

- a) Yes
- b) No
- c) Not sure

**E8. If you answered "No" or "Not sure" to the previous question, please specify the reasons why comprehensive sexual education may be lacking or insufficient. (Select all that apply)**

- a) Cultural taboos and resistance to discussing sexual matters
- b) Limited resources and funding for sexual education programs
- c) Lack of trained educators or facilitators
- d) Religious or moral objections to comprehensive sexual education
- e) Other (please specify) \_\_\_\_\_