

## PREVALENCE OF HIV/AIDS AMONG YOUTHS AGED 15-35 AT BUSHENYI HEALTH CENTER IV, BUSHENYI DISTRICT. A CROSS-SECTIONAL STUDY.

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Page | 1 **ABSTRACT.**

### Background:

The Study aims to investigate the prevalence of HIV/AIDS among youths aged 15 to 35 at Bushenyi Health Center IV, Bushenyi district.

### Methodology:

The study used a cross-sectional study design. Participants were selected using a random sampling method and a sample of 84 participants was obtained. The study used a questionnaire that contained closed-ended questions. Data was examined, categorized, and presented in summarized separate graphs, frequency tables, percentages, and measurements of the mean using Microsoft Excel 2013 using a computer.

### Results:

The prevalence of HIV/aids among youths aged 15-35 at Bushenyi Health Center IV was 36(49%). majority 38(51%) of the youths were HIV negative while minority 36(49%) were HIV positive. majority 74(88.1%) of the youths had tested for HIV/AIDS while the minority 10(11.9%) had never tested. Most of the youths 25(33.9%) had tested 3 time, followed by 21(28%) tested 2 times, 15(20.1%) tested 4 times and above and least 13(17.6%) had tested once. For the risk factors, the majority 72(85.7%) of youth had sexual intercourse before while the minority 12(14.3%) had never. The majority 39(54.2%) never used condoms, 20(27%) used condoms for sometimes while the minority 13(18%) always used condoms. Lastly, the majority 47(56%) had more than one partner, followed by 25(29.7%) had only one partner while the minority 12(14.3%) had none.

### Conclusion:

The knowledge of HIV among the youths was slightly low. The sexually active age was mostly affected (15-22 years). The general prevalence of HIV among the youth in Bushenyi H/C IV was 9.5% among the youths who were sampled. The prevalence was slightly higher in female youths (6%) as compared to males who had (3.5%).

### Recommendation:

Mass education should be given to the youths on issues concerning the risk factors for HIV, the infected youths should be introduced to ART clinics as early as possible.

**Keywords:** *Acquired Immunodeficiency Syndrome, Human Immune Virus, Antiretroviral Therapy clinic, Bushenyi Health Center IV, Bushenyi District*

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### BACKGROUND OF THE STUDY.

Despite the general decline in new HIV infections in sub-Saharan Africa in 2003 the region was responsible for 72% of all new HIV infections globally (Richardson M *et al*, 2017). Clinical manifestations of HIV may include dry cough, fatigue, abdominal pain, vomiting, etc. The HIV epidemic remains a serious public health problem globally and especially in sub-Saharan Africa. An estimated 4.2 million people living with HIV globally are youth and the burden is highest among females. Adolescents and young

people (youth) represent a growing share of people living with HIV worldwide. In 2020 alone, 410,000 (194,000-690,000) young people between the ages of 10 to 24 were newly infected with HIV. The youth are especially vulnerable in this respect as they have limited or no historical knowledge of HIV In generalized epidemics, many youths living with HIV acquired the infection prenatally (during pregnancy, birth, or breastfeeding) where mothers were not enrolled in prevention of mother-to-child transmission programs. Among all the countries worldwide, those in sub-Saharan Africa have the highest rates of HIV,

the countries with the highest rates of HIV include; Eswatin, Lesotho, and Botswana. In 2021, Eswatin had El the highest prevalence of HIV with a rate of almost 28%, Lesotho at 20.9%, Botswana at 18.6%, South Africa at 18.3%, Namibia at 11.8% Zimbabwe at 11.6%, Zambia at 10.8%, Malawi 7.7%, Equatorial Guinea 6.9%, Uganda 5.2%, Tanzania 4.5%, Kenya 4%, Congo 3.8%. There is a concern about an increase in risky sexual behaviors such as multiple sexual partners and a decline in condom use among youth in many South Saharan African countries (UNAID *et al*, 2016).

Several reasons have been advanced for this increase in risky sexual behaviors including a reduced focus on primary HIV prevention in the era of anti-retroviral therapy scale-up. In SSA, approximately 36.6% of those in need of treatment can access ART compared to 2% in 2003(UNAIDS, 2016). However, this improvement is not equitable as the most vulnerable and high-risk groups remain grossly underserved. People living in fishing communities are among such highly risky groups that have not received adequate attention Youth in Uganda contribute more than 50% of the total population and are thus an important population to target in HIV prevention given this high HIV prevalence in Uganda including fishing communities among the key population groups that were recommended for test and treatment in the revised guidelines in 2013 but it is not clear if this policy shift has yielded the desired outcomes in terms of improved access to HIV treatment among this population and especially the young people (Mafigiri *et al*, 2017). Fishing is an important commercial enterprise and a means of survival for many Ugandans. Uganda has several lakes including Lake Victoria (largest lake), lake Kyoga, lake George, lake Albert, lake Edward, etc, and several large rivers including the river Nile all of which have fishing communities and landing sites. The district has continued to experience high HIV rates at 12% compared to the national average of 7.3% (Mafigiri *et al*, 2017). Rakai has the largest fishing community population with identifiable high-risk behaviors and limited access to health services as described in other fishing communities. Youths at Bushenyi HCIV, especially females have much higher HIV prevalence than youth in the general population. However, most studies conducted at Bushenyi HCIV have focused on risky sexual behaviors among adults and not much on access to HIV prevention and care services, especially among youth. The objective of my study at Bushenyi HCIV is to document HCIV prevalences, risky sexual behaviors, and access to HIV prevention and treatment services among youth in Bushenyi HCIV and neighboring communities.

The Study aims to investigate the prevalence of HIV/AIDS among youths aged 15 to 35 at Bushenyi Health Center IV, Bushenyi district

## **METHODOLOGY.**

### **Study design.**

The study used a cross-sectional study design on youth aged 15-35 attending healthcare services at Bushenyi HC IV. It was to enable the dependent and independent variables to be assessed at the same time and there will be no follow-up of the study participants.

### **Study area.**

The study was conducted at Bushenyi HC IV in Bushenyi district which borders Rubirizi district to the northwest, Buhwenju district to the northeast Sheema district to the east, Mitooma district to the south, and Rukungiri district to the west.

### **Study population.**

The study population consisted of youths aged 15-35 attending healthcare services at Bushenyi Health Center IV.

### **Sample size determination.**

The sample size of participants voluntarily involved in the study was determined using the Keish and Leslie (1965) method of sample size determination with the formula;

$$n = Z^2PQ$$

d<sup>2</sup>

Where; n =Sample size required

Z= Constant normal standard variation corresponding to 95% confidence interval (1.96)

P = Prevalence attribute of HIV/AIDS from a recent similar research study.

(Estimated prevalence as stated by MOH and UPHIA 2020 was 5.8% Uganda)

$$Q = (1-P)$$

d=Error allowed [desired level of precision at a percentage of 5%] =0.005

$$n = \frac{(1.96)^2 (0.058) (1-0.058)}{(0.05)^2}$$

=83.9 which approximates to 84 participants.

=84 participants.

Therefore 84 respondents participated in the study.

### **Sampling technique.**

The study participants were selected using a random sampling method where respondents were randomly picked. This was done till the required number of respondents was reached.

### **Data collection method.**

In the study, the researcher used a questionnaire that contained closed-ended questions. The questions were designed by the researcher to elicit information from the respondents.

### **Data collection tool.**

The researcher used a questionnaire that consisted of closed and open-ended questions.

### **Data collection procedure.**

Interviews were employed in this process and all risings were recorded in questionnaire form.

### **Study variables.**

#### **Independent variables.**

These include the factors that increase the risk of HIV/AIDs among youths aged 15-35, like sexual behaviors, education, and cultural practices.

#### **Dependent variable.**

The dependent variable for my study is the HIV status of respondents.

### **Quality control.**

Pre-testing of the data collection tools was done before the actual data collection by conducting a pilot study. The purpose of the pre-test was to ensure the following;

#### **Validity.**

This was done by checking how well the results correspond to established theories and other measures of the same concept by setting questions according to the research objectives.

#### **Reliability.**

This was done by checking the consistency of results across time, across different observers, and across parts of the test itself to ensure the method of data collection yielded related results from those achieved during the pre-testing stage.

### **Data analysis and presentation.**

The questionnaires were collected from the respondents after filling in their views and counted to ensure that all were returned and checked for completion. Data was grouped, tallied, and processed so that information obtained from the raw data was analyzed. The results were examined, categorized, and presented in summarized separate graphs, frequency tables, percentages, and measurements of the mean using Microsoft Excel 2013 using a computer.

### **Inclusion and exclusion criteria.**

#### **Inclusion criteria.**

All youths ranging from 15-35 years who consented and voluntarily accepted to participate in the study.

#### **Exclusion criteria.**

Individuals above 35 years were not included in the study. Individuals below 15 years were not considered to be part of the study.

### **Ethical considerations.**

To ensure that ethical issues were observed, the study was submitted to the research and ethical Committee of SFRASH for approval, and thereafter introduction letter from the school was taken to the management of Bushenyi HC IV which was granted authorization for a pre-test of questionnaires and permission and authority for data collection. Informed consent of participants was also sought before engaging them in the study and filled voluntarily and total confidentiality was observed. In addition, other ethical considerations like privacy were highly applied and sample codes were availed to avoid display of patients' identities to unauthorized persons.

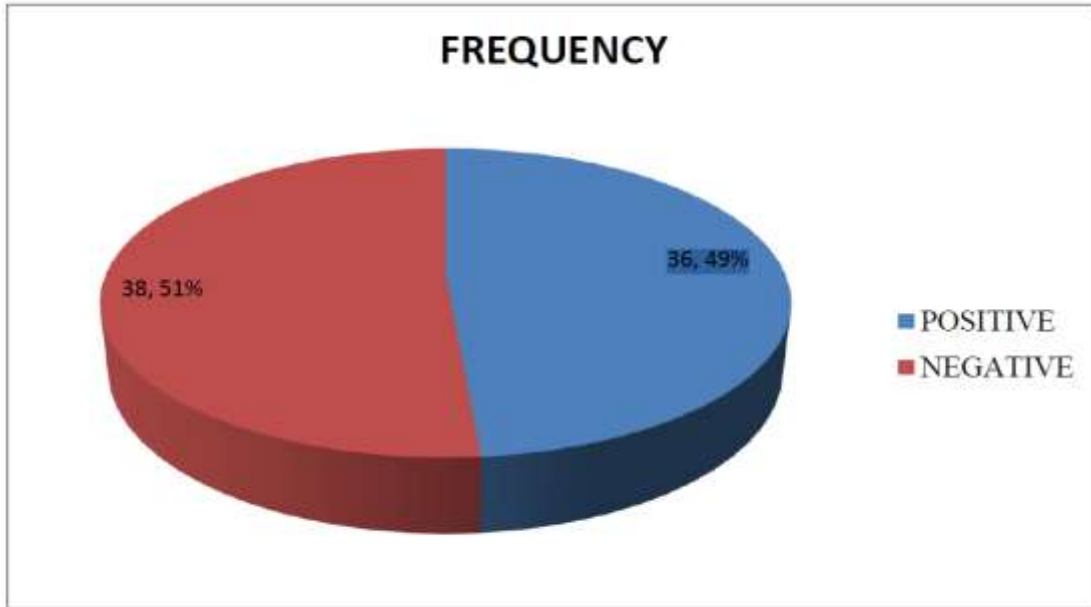
### **Study limitations.**

The researcher may encounter time constraints in the course of the study balancing the research study and other demanding works and to overcome these limitations, the researcher drafted a timetable and a work plan that was strictly followed.

## **RESULTS.**

### **Socio-demographic information among the youth aged 15-35 years at Bushenyi Health Center IV, Bushenyi district.**

**Figure 1: A pie chart showing the HIV status of the youths. (n=74)**



From figure 1, the majority 38(51%) of the youths were HIV negative while the minority 36 (49%) were HIV positive.

**Table 1: Showing the socio-demographic information among the youth aged 15-35 years.**

VARIABLES	RESPONSES	FREQUENCY	PERCENTAGE
SEX	Female	53	63.1%
	Male	31	36.9%
AGE	15-19	9	10.7%
	20-24	21	25%
	25-29	31	36.9%
	30-35	23	27.4%
MARITAL STATUS	Single	25	29.8%
	Married	21	25%
	Divorced	10	11.9%
	Cohabiting	28	33.3%
EDUCATIONAL LEVEL	None/primary	22	26.2%
	Secondary	35	41.7%
	Tertiary/graduated	27	32.1%
EMPLOYMENT STATUS	Unemployed	37	44%
	Student	25	30%
	Employed	22	26%

*Source: primary data, 2023*

From table 1, the majority 53(63.1%) of the youths were females while the minority 31(36.9%) were males. The majority 31(36.9%) of the youths were aged 25-29 years, followed by 23(27.4%) aged 30-35 years, followed by 21(25%) while the minority 9(10.7%). The majority 28(33.3%) were cohabiting, followed by 25(29.8%) were single, followed by 21(25%) were married while minority 10(11.9%) were divorced. Most of the respondents 35(41.7%) had a secondary level, followed by 27(32.1%)

had tertiary/graduate, and a minority 22(26.2%) had none/primary level. Finally, the majority 37(44%) were unemployed, 25(29.8%) were student and lastly minority 22(26.2%) were employed.

**Prevalence of HIV/AIDS among the youth aged 15-35 years at Bushenyi health center IV.**

**Table 2: Showing the knowledge about HIV/AIDS**

VARIABLES	RESPONSES	FREQUENCY	PERCENTAGES
Ever heard about HIV/AIDS.	YES	84	100%
	NO	00	0%
HIV/AIDS transmission (if yes from above)	Having unprotected sex with someone with the virus.	32	38%
	Sharing sharp objects with infected people	19	23%
	Pricking the skin with unsterized objects	16	19%
	Handling body fluids of infected people e.g blood and sexual fluids.	17	20%
Prevention of the virus	Having protected sex	43	51.2%
	Not sharing sharp objects.	12	14.3%
	Putting on gloves when handling body fluids of infected person	10	11.9%
	Using only sterile objects to cut nails	19	22.6%

*Source: primary data, 2023*

From table 2, all the youths (100%) responded that they had ever heard of HIV/AIDS. Among them the majority 32(38%) responded that HIV is transmitted through having unprotected sex with someone with the virus, followed by 19(23%) who replied sharing sharp objects with infected people, followed by 17(20%) who responded handling body fluids of infected people e.g. blood and sexual fluids while the minority 16(19%) replied pricking the skin with

unsterilized objects. Finally, the majority of the respondents 43(51.2%) mentioned having protective sex as a preventive measure for HIV, followed by 19(22.6%) who mentioned using only sterile objects to cut nails, followed by 12(14.5%) who mentioned not sharing sharp objects while the minority 10 (11.9%) mentioned putting on gloves when handling body fluids of an infected person.

**Table 3: Showing information on HIV/AIDS among youths.**

VARIABLES	RESPONSE	FREQUENCY	PERCENTAGE
Ever been tested for HIV/AIDS	YES	74	88.1%
	NO	10	11.9%
If yes, how many times.	1 time	13	17.6%
	2 times	21	28.4%
	3 times	25	33.9%
	4 times and above	15	20.2%

Source: primary source, 2023

From table 3, the majority 74(88.1%) of the youths had tested for HIV/AIDS while the minority 10(11.9%) had never tested. Most of the youths 25(33.9%) had tested 3 time, followed by 21(28%) tested 2 times, 15(20.1%) tested 4 times and above and least 13(17.6%) had tested once. the majority 38(51%) of the youths were HIV negative while minority 36(49%) were HIV positive.

**The risk factors of HIV/AIDS among the youth aged 15-35 at Bushenyi health center IV.**

**Behavioral risk factors associated with HIV/AIDS.**

**Table 4: Showing information on sexual intercourse.**

VARIABLES	RESPONSES	FREQUENCY	PERCENTAGES
Ever had sexual intercourse	Yes	72	85.7%
	No	12	14.3%
Use of condoms (if yes from above)	Never	39	54.2%
	Sometimes	20	27.8%
	Always	13	18.0%
Number of sexual partners	None	12	14.3%
	Only one	25	29.7%
	More than one	47	56.0%

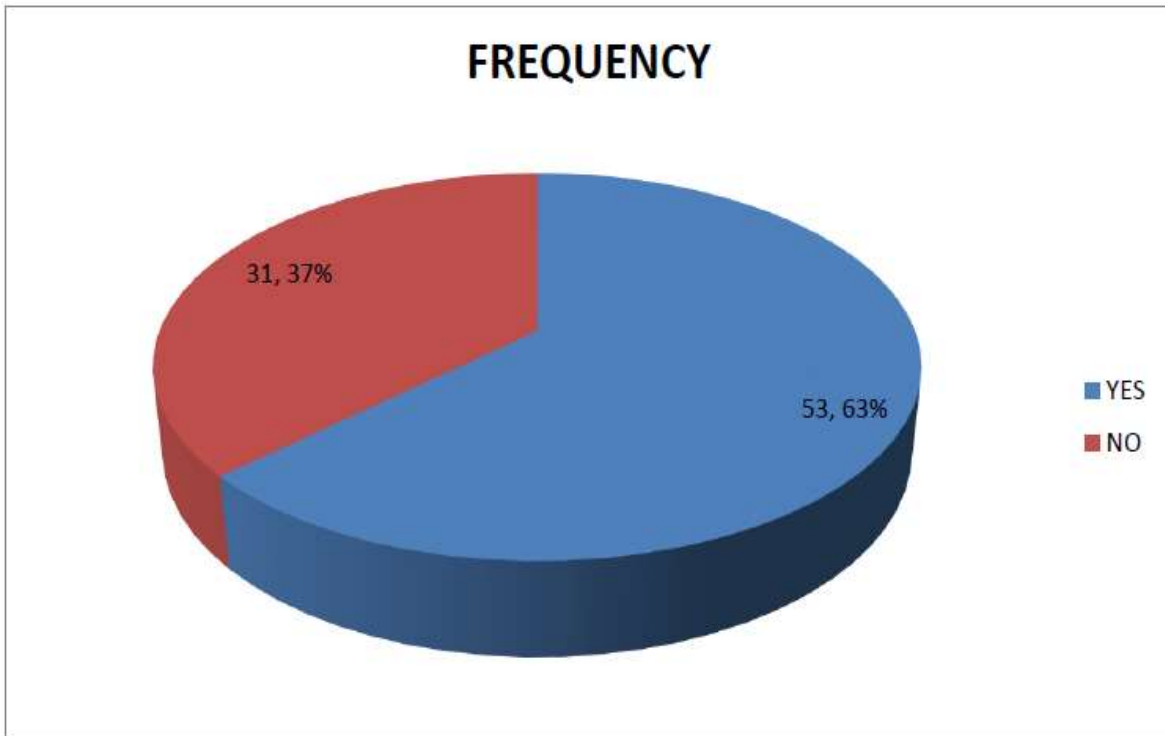
Source: primary data, 2023

From table 4, the majority 72(85.7%) of youth had sexual intercourse before while the minority 12(14.3%) had never. The majority 39(54.2%) never used condoms, followed by 20(27%) who used condoms for some time while the

minority 13(18%) always used condoms. Lastly, most of the youths 47(56%) had more than one partner, followed by 25(29.7%) had only one partner while the minority 12(14.3%) had none.

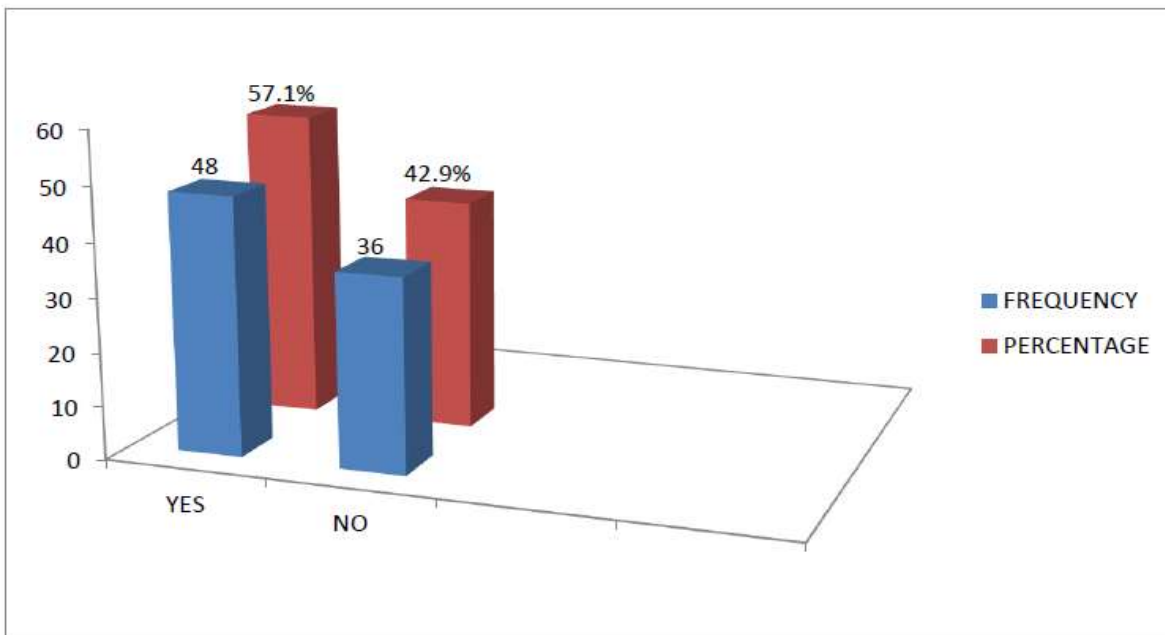


**Figure 2: A pie chart showing smoking or use of drugs (N=84)**



From figure 2, the majority 53(63%) of the youths used to smoke or use drugs while the minority 31(37%) did not use any.

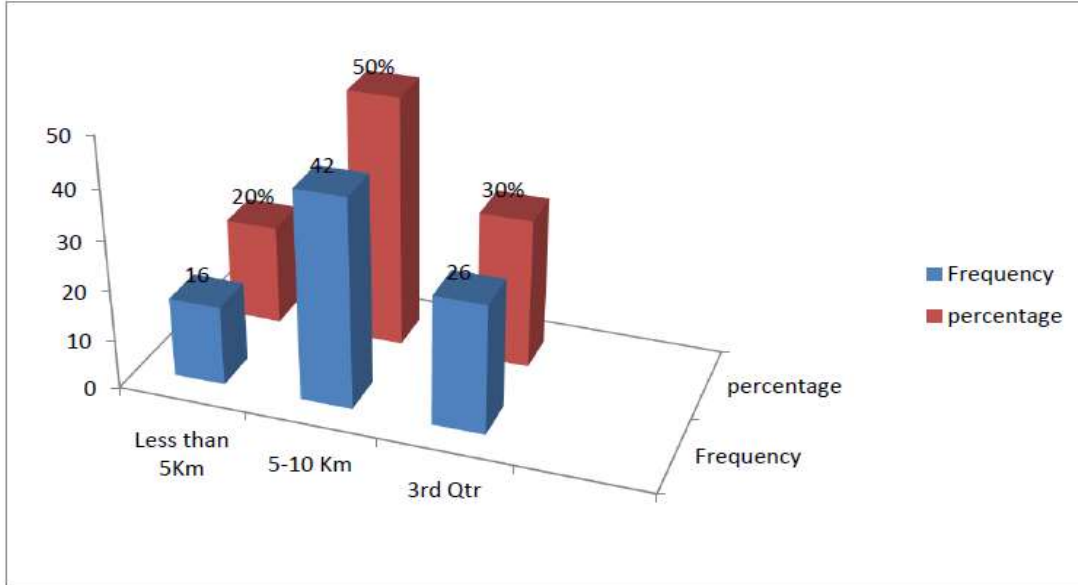
**Figure 3: A bar graph showing taking alcohol (N=84)**



From figure 3, the majority 48(57%) took alcohol while the minority 36(42.9%) didn't take alcohol.

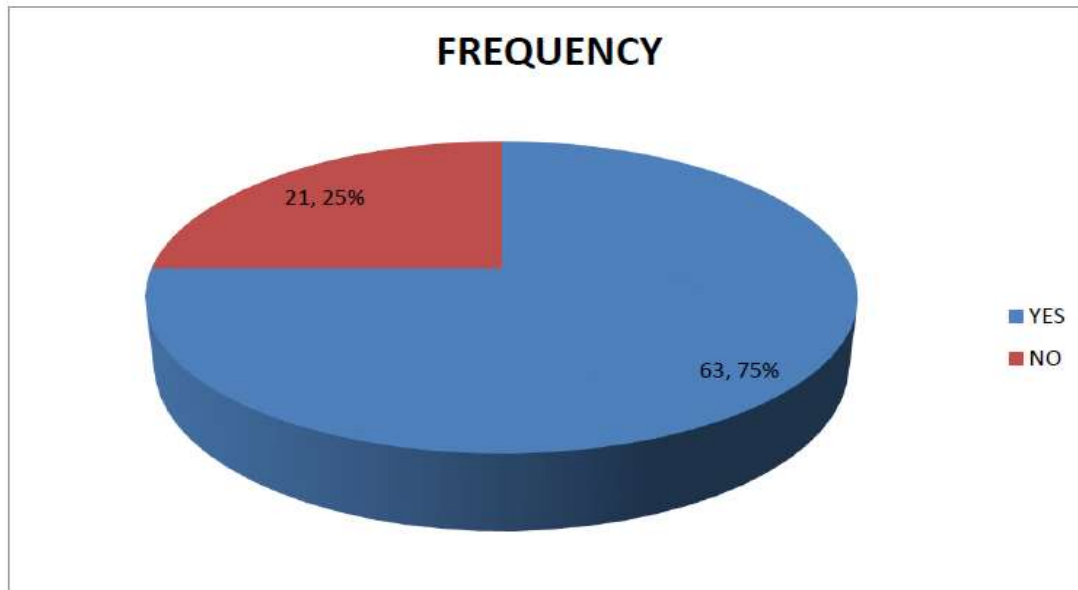
**Health-related factors associated with HIV/AIDS.**

**Figure 4: A bar graph showing the distance from a nearby health center to a place of residence. (N=84)**



From Figure 4, the majority 42(50%) of the youths had a distance of less than 5Km from their homes to a health center, followed by 26(30%) with more than 10 Km while the minority 16(20%) had a distance of 5-10Km.

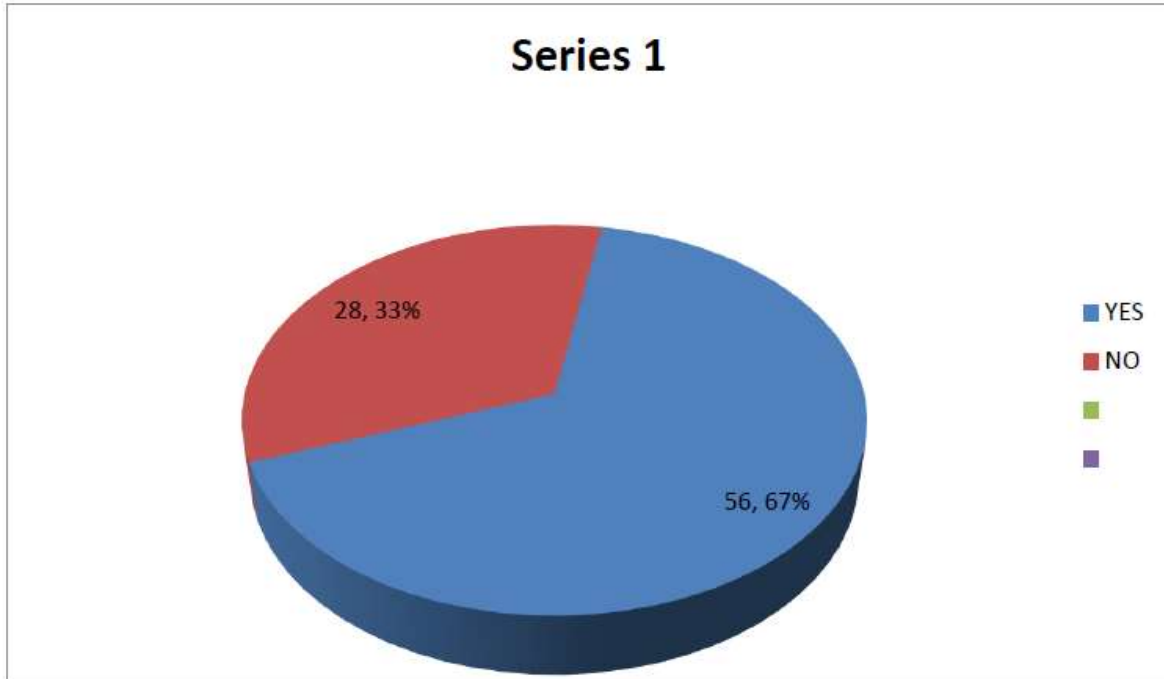
**Figure 5: A pie chart showing HIV testing guidance and counseling services in health facilities. (N=84)**



From figure 5, the majority 63(75%) mentioned yes, there was free HIV guidance and counseling at health centers while the minority 21(25%) responded no.



**Figure 6: A bar graph showing the perception of HIV testing services as youth-friendly (N=84%)**



From figure 6, the majority 56(66.7%) of the youths mentioned yes, the perceived HIV testing guidance and counseling services as youth friendly while the minority 28(33.3%) mentioned no.

## DISCUSSION.

### The socio-demographic information.

The data analysis and interpretation revealed that the majority 53 (63.1%) of the youths were females. This could be because the local culture in the Bushenyi district might prioritize the education and upbringing of girls, leading to a higher female population seeking healthcare services. The majority 31 (36.9%) of the youths were aged 25-29 years. This could be because this age group often includes young adults who are more independent, possibly seeking healthcare services for family planning or maternal health. These findings disagree with this. The majority 28 (33.3%) were cohabiting. This could be because cohabiting couples may be more likely to visit a health center together for various reasons, such as family planning or prenatal care. Most of the respondents 35 (41.7%) had a secondary level of education. This could be because individuals with a secondary education level may be more informed about their health and healthcare options, leading them to visit health centers. The majority 37 (44%) were

unemployed. This could be because unemployment might provide them with more free time to access healthcare services, as opposed to those with full-time jobs who may find it challenging to visit the health center during working hours.

### The prevalence of HIV/AIDs among the youth aged 15-35 years at Bushenyi health center IV, Bushenyi district.

The data analysis and interpretation revealed that the majority all the youths (100%) responded that they had ever heard of HIV/AIDS. This could be because of the extensive awareness campaigns, school programs, and media coverage regarding HIV/AIDS, ensuring that virtually all youths are informed about this health issue. majority 32 (38%) responded that HIV is transmitted through having unprotected sex with someone with the virus. This could be because safe sex practices and the modes of HIV transmission have been emphasized in educational and awareness programs, making unprotected sexual contact a common knowledge factor among the youth. The majority of the respondents 43 (51.2%) mentioned having protected sex as a preventive measure for HIV. This could be because of comprehensive health education campaigns highlighting the importance of using protection during sexual activities to

prevent HIV transmission. The majority 74 (88.1%) of the youths had tested for HIV/AIDS. This could be because of the widespread availability of HIV testing services, campaigns promoting HIV testing, and an increased awareness of the importance of knowing one's HIV status in recent years. Most of the youths, 25 (33.9%), had tested three times. This could be because regular HIV testing is promoted to track one's health status over time, especially among individuals who may be at higher risk due to factors such as multiple sexual partners or other behaviors that increase the risk of HIV transmission. The majority, 38 (51%), of the youths were HIV-negative. This could be because regular testing and preventive measures have been effective in reducing HIV transmission among this group, leading to a significant number of them maintaining a negative status.

### **Behavioral risk factors associated with HIV/AIDS.**

The data analysis and interpretation revealed that the majority, 72 (85.7%), of youth had sexual intercourse before. This could be because of increased sexual curiosity and experimentation during the youth years, often driven by hormonal changes and peer influences. The majority, 39 (54.2%), never used condoms. This could be due to various reasons, such as a lack of awareness about safe sex practices, discomfort when using condoms, or misplaced trust in their sexual partners. Most of the youths, 47 (56%), had more than one sexual partner. This could be attributed to factors like a lack of awareness about the risks associated with multiple sexual partners, changing relationships, and social norms regarding sexual behavior. The majority, 53 (63%), of the youths used to smoke or use drugs. This could be due to peer pressure, stress, curiosity, or lack of awareness about the health risks associated with smoking or drug use. The majority, 48 (57%), took alcohol. This could be because alcohol is easily accessible, and its consumption is often considered a part of social activities and gatherings, especially among young adults. Additionally, it may be linked to cultural or social norms and experimentation during youth.

### **Health-related factors associated with HIV/AIDS.**

The data analysis and interpretation revealed that the majority 42 (50%) of the youths had a distance of less than 5 km from their homes to the health center. This could be because; proximity to the health center reduces the travel time and transportation costs, making it more convenient for youths to access healthcare services. The majority 63 (75%) mentioned yes, there was free HIV guidance and counseling at the health center. This could be because the availability of free HIV guidance and

counseling services at the health center makes it more accessible and affordable for youths, encouraging them to seek these services. The majority 56 (66.7%) of the youths mentioned yes, that they perceived HIV testing guidance and counseling services as youth-friendly. This could be because Youth-friendly services are designed to meet the specific needs and preferences of young people, creating a welcoming environment that encourages them to seek HIV testing and counseling. These factors collectively contribute to improved access to HIV testing and counseling services among the youth, making it more likely for them to utilize these services when needed.

### **CONCLUSION.**

The knowledge of HIV among the youths was slightly low, there is a need for urgent intervention. The sexually active age was mostly affected (15-22 years). The general prevalence of HIV among the youth in Bushenyi H/C IV was 9.5% among the youths who were sampled. The prevalence was slightly higher in female youths (6%) as compared to males who had (3.5%). There is a need for immediate response, most of the youths who had HIV were the ones who involved themselves in alcoholism at a young age followed by having multiple partners. In addition, marital status, level of education, and gender of the respondents had a significant association with HIV infection in the study. The youths had inadequate knowledge about HIV infection how it's transmitted and its associated risk factors. Consumption of alcohol, having multiple sex partners, and drug abuse, were the associated risk factors.

### **RECOMMENDATION.**

The selling of alcohol to the youths especially those below 18 years should be eliminated in town streets and the village in general. Mass education should be given to the youths on issues concerning the risk factors for HIV, the infected youths should be introduced to art clinics as early as possible, and news adverts should always be published on radio stations to keep updating and reminding the youths on the rightful measures. Notices should be pinned everywhere around towns, schools, and villages to keep the youths aware of HIV infection. Married people should also be given guidance and counseling continuously to reduce their rate of getting the infection. The Ministry of Health should continue maintaining the programs of circumcision to reduce the chances of the youths who go for unprotected sex, supplying condoms to public places mostly bars, betting centers, and so on

### **ACKNOWLEDGMENT.**

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inspiration and encouragement. Special Thanks to my Supervisor Mr Milton Ssenkayi for guiding me through till the completion of this research project.

**LIST OF ABBREVIATIONS.**

Page | 11 **AIDS:** Acquired Immunodeficiency Syndrome  
**HIV:** Human Immune Virus  
**SSA:** Sub-Saharan Africa viii  
**ART:** Antiretroviral Therapy

**SOURCE OF FUNDING.**

No Source of funding

**CONFLICT OF INTEREST.**

No Conflict of interest

**Author Biography.**

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