

Utilisation of HIV prevention services among young youths attending the outpatient clinic of Bweyogere Health Centre III, Wakiso District. A cross-sectional study.

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Abstract Background

In Uganda, HIV prevalence among young youths is estimated at 5.1%, contributing approximately 37% of all new HIV infections annually. The purpose of this study was to assess individual factors affecting utilisation of HIV prevention services among Young Youths attending the Outpatient Clinic at Bweyogerere Health Centre III, Wakiso District.

Methods

A descriptive cross-sectional study design employing a quantitative research method was used to collect data among 80 youth who were sampled using convenience sampling within a period of 5 days, considering 16 per day of data collection. Data were collected with a semi-structured questionnaire, coded and analysed using Microsoft Excel (2024) programs and presented in frequency tables, graphs and charts.

Results

The majority of the respondents, 67 (84%), were female, while the minority, 13 (16%), were male. 54 (68%) understood ways of preventing HIV, and 26 (32%) understood them very well. Regarding how respondents rated their risk of getting HIV, a vast majority of respondents, 67 (84%), considered themselves at low risk. In relation to whether respondents drink alcohol or use other drugs, the majority, 44 (55%), reported doing so sometimes, while the minority, 16 (20%), reported that they always do so. The majority, 47(59%), of the respondents said that their friends influenced them a lot in sexual decisions. Slightly more than half, 43(54%), of respondents mentioned that fear of results affected their decision to go for HIV testing.

Conclusion

The study concludes that most had only a partial understanding and low personal risk perception. Peer influence, fear of HIV test results, and alcohol or drug use among most respondents, inadequate counselling, and neutral attitudes of health workers were important barriers to service utilisation.

Recommendations

The Ministry of Health and District Health Office should strengthen youth-focused HIV prevention programs in Wakiso District through schools, communities, and media platforms.

Keywords: Young Youths, HIV prevention services, Bweyogerere Health Centre III, Personal risk perception

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Background

HIV prevention services refer to a range of strategies aimed at reducing the transmission of Human Immunodeficiency Virus (HIV) through behavioural, biomedical, and structural interventions (Cabecinha & Saunders, 2022). Utilisation of HIV prevention services involves a combination of individual-level behaviours and health facility-based interventions aimed at reducing the transmission of Human Immunodeficiency Virus. (Rapaport et al., 2023). These include consistent condom use, HIV testing and counselling, reduction of multiple sexual partners, adherence to preventive guidelines, availability of youth-friendly services and access to antiretroviral therapy for prevention. (El-Bassel et al., 2019).

In developed countries, HIV prevalence among young people is estimated at 0.3–0.6%, with new infections among this group attributed to strong health systems, widespread access to HIV testing, availability of condoms and pre-exposure prophylaxis (PrEP), well-established youth-friendly services, and substance abuse (20–25%), leading to earlier diagnosis, better prevention outcomes, and reduced HIV-related morbidity among youth in these settings. (Khalifa et al., 2019).

In Sub-Saharan Africa, HIV prevalence among young youth is estimated at 3.4–4.0% due to low condom use (40–60%), transactional sex (15–25%), gender power imbalances and alcohol use, stock-outs of test kits and condoms, understaffing and negative attitudes of health workers affect between 35–50% of youth accessing services leading to late

HIV testing, poor prevention uptake and increased HIV-related morbidity and mortality. (Mihretie et al., 2023).

In East Africa, HIV prevalence among young people is estimated at 2.8–3.5%, with countries such as Kenya reporting that young people account for 35–40% of new HIV infections, citing factors such as fear of HIV testing (42%), peer pressure (38%), and low adherence to preventive behaviours. (Young et al., 2023). Within DRC, HIV among young people stands at 40–53% due to limited youth-specific clinic hours, long waiting times, and inadequate counselling services, affecting nearly 40% of youths, leading to poor utilisation of HIV prevention services and sustained transmission among young populations. (Homonchuk et al., 2024). The purpose of this objective was to determine the individual-related factors affecting utilisation of HIV prevention services among young people attending the outpatient clinic of Bweyogerere Health Centre III.

METHODOLOGY

Study Design and Rationale

A descriptive cross-sectional study design. The study described the factors affecting Utilization of HIV prevention services using descriptive statistics. This design was chosen because it was easier and cheaper to carry out and compared variables at once, which enabled the study to meet the UHPAB timeline. The study employed a cross-sectional design because the study was carried out in a specific period of time without further follow-up of respondents.

Study Setting and Rationale

This study was conducted at Bweyogerere Health Centre III, located in Kira Municipality, Wakiso District, Central Region of Uganda, along the Kampala–Jinja Highway. The health facility is situated approximately 12 kilometres east of Kampala City Centre, in the eastern direction from the capital. Wakiso District borders Kampala District to the west, Mukono District to the east, Luweero District to the north, and Mpigi District to the southwest. Bweyogerere Health Centre III is a government health facility operating under Wakiso District Local Government. The facility provides outpatient department (OPD) services, maternal and child health services, and preventive care. The OPD is located within the main clinical block of the facility and serves as the first contact point for patients seeking medical care. It operates Monday to Friday from 8:00 am to 5:00 pm, with emergency services available on selected days depending on staffing. On average, the OPD receives a high daily patient turnout, including a significant proportion of young people. The OPD provides services such as general medical consultation, diagnosis and treatment of common illnesses, HIV counselling and testing (HCT), condom distribution, sexually transmitted infection (STI) screening and treatment, health education and referral services. The facility also offers antenatal care (ANC), immunisation,

family planning services and linkage to HIV care and treatment centres for clients who test positive. The health Centre is staffed by a team of qualified health workers, including clinical officers, enrolled nurses, registered nurses, midwives, laboratory personnel and support staff. On average, the facility has approximately 12 health workers actively involved in service delivery, depending on staff availability. The presence of trained personnel ensures the provision of HIV prevention services and health education to young clients attending the OPD. The facility is suitable for this study because it serves a high number of young people seeking outpatient care. Additionally, Bweyogerere has persistently reported relatively high HIV prevalence among young people compared to some rural areas.

Study Population and Rationale

The study population comprised young people attending the outpatient clinic at Bweyogerere Health Centre III during the period of data collection. This population was selected because young people are a key target group in the utilisation of HIV prevention services due to increased vulnerability related to behavioural, social and service-related challenges.

Sample Size Determination

The sample size was determined using Krejcie and Morgan's Table (1970). According to Bweyogerere Health Centre III Outpatient Clinic records of December 2025, an average of 100 young youth per month come for services. Therefore, a known definite target population (N) of 100 young youth was considered for this study. According to Krejcie and Morgan's table, a population of 100 corresponds to a sample size (S) of 80 respondents, which was adopted for this study.

Sampling Procedure and Rationale

The study used a convenience sampling method. Young clients attending the outpatient clinic during the data collection period were approached consecutively and assessed for eligibility. Those who met the inclusion criteria and consented to participate were enrolled until the required sample size of 80 respondents was achieved. This method was appropriate because of the continuous flow of young clients at the outpatient clinic and limited time for data collection.

Inclusion Criteria

Young people attending the outpatient clinic at Bweyogerere Health Centre III, Youth who voluntarily consent to participate in the study, those who read and write English, male and female Ugandans

Exclusion Criteria

Young people who were critically ill at the time of data collection and youth who consented but later failed to complete the questionnaire or withdrew from the study

Definition of Variables

The study focused on factors affecting utilisation of HIV prevention services among young people.

Independent Variables

Individual-related factors such as age, education level, HIV risk perception, stigma, peer influence, and knowledge of utilisation of HIV prevention services methods.

Health facility-related factors such as availability of utilisation of HIV prevention services, waiting time, privacy, confidentiality, attitude of health workers, and presence of youth-friendly services.

Dependent Variable

The dependent variable of the study was Utilization of HIV prevention services among young people, measured by uptake of HIV testing, condom use, HIV counselling, and prevention services.

Research Instrument and rationale

A self-administered questionnaire was used for data collection because it was appropriate for gathering information directly from respondents about their factors affecting utilisation of HIV prevention services. The questionnaire was written in English and structured according to the study objectives. Closed-ended questions were used to allow easy analysis and objective assessment of responses.

Data Collection Procedure

Upon approval of the proposal by the research supervisor and institutional research committee, permission was obtained from the in-Charge of Bweyogere Health Centre III. The purpose of the study was explained to eligible participants, and informed consent was obtained. Respondents completed the questionnaire independently, with clarification provided where necessary. Then all respondents were reminded of their right to withdraw at any time during the period of study. The respondents were assured of maximum confidentiality of all the information given, and numbers were used instead of respondents' names. Data collection took five days, enrolling

approximately 16 respondents per day until the sample size of 80 was achieved.

Data Management and Analysis

After data collection, all completed questionnaires were checked carefully to make sure they were filled in and clear. This helped to identify missing answers, unclear writing, or mistakes before data entry. Any incomplete questionnaire was corrected immediately if possible. Each questionnaire was then given a unique number. This helped the study to organise the data and avoid mixing up responses. No names were written on the questionnaires to maintain confidentiality. Data were coded and entered into the computer using Microsoft Excel (2024), and analysis was done.

Data Presentation

Then the findings were presented in frequency tables, pie charts, and bar graphs. Descriptive statistics helped to summarise and explain the information collected from respondents.

Quality Assurance Validity

Validity was ensured by designing questions that are directly linked to the study objectives. The questionnaire was reviewed by the research supervisor to ensure clarity, relevance and accuracy.

Reliability

Pretesting of the questionnaire was conducted among 8 young people attending Komambonga Health Centre IV. Necessary corrections were made to improve clarity and consistency before the main study.

Ethical Considerations

Upon the proposal's approval by my research supervisor and the institution's research committee, permission was obtained from the school administration, and an introductory letter was obtained from the Dean, School of Nursing, Mildmay Uganda School of Nursing and Midwifery. Permission was sought from Bweyogere Health Centre III before data collection. Participation was voluntary and informed consent was obtained from all respondents. Confidentiality was maintained by using numbers instead of names, and participants were informed of their right to withdraw at any time without penalty.

Results

Social demographic characteristics of the respondents

Table 1 Social demographic characteristics of the respondents n=80

Variable	Category	Frequency (n)	Percentage (%)
Age at which respondents first received guidance on utilisation of HIV prevention services	Before 15 years	39	49
	15-18 years	21	26
	After 18 years	20	25
Gender	Male	13	16
	Female	67	84
Religion	Catholic	22	28
	Protestants	41	51
	Muslims	11	14
	Born again	6	8
Current marital status	Single	17	21
	Married	20	25
	Cohabiting	42	53
	Divorced	1	1
Highest level of education	No formal education	3	4
	Primary	22	28
	Secondary	40	50
	Tertiary	15	18

Table 1 shows that nearly half of the respondents, 39 (49%), first received guidance on utilisation of HIV prevention services before 15 years, while the minority, 20 (25%), first received guidance after 18 years. Regarding gender, a vast majority of the respondents, 67 (84%), were female, while the minority, 13 (16%), were male. In relation to religion, the majority of respondents, 41 (51%), were Protestants,

while the minority, 6 (8%), were born again. Concerning current marital status, the majority of respondents, 42 (53%), were cohabiting, whereas the minority, 1 (1%), was divorced. Regarding the highest level of education, half of the respondents, 40 (50%), had attained secondary education, while the minority, 3 (4%), had no formal education.

Individual-related factors affecting utilisation of HIV prevention services among Young Youth Attending the Outpatient Clinic of Bweyogere Health Centre III, Wakiso District.

Table 2 shows the ways of preventing HIV, how respondents rate their risk of getting HIV, and whether respondents drink alcohol or use other drugs. n=80

Variable	Category	Frequency (n)	Percentage (%)
How well respondents understood ways of preventing HIV			
	Very well	26	32
	Somewhat	54	68
	Not well	-	-
How respondents rate their risk of getting HIV			
	High risk	3	4
	Low risk	67	84
	Not sure	10	13
Whether respondents drink alcohol or use other drugs			
	Yes, and I do it always	16	20
	Sometimes	44	55
	Often	20	25

Table 2 shows that the majority, 54 (68%), of respondents somewhat understood ways of preventing HIV, while the minority, 26 (32%), understood them very well. Regarding how respondents rated their risk of getting HIV, a vast majority of respondents, 67 (84%), considered themselves

at low risk, while the minority, 3 (4%), considered themselves at high risk. In relation to whether respondents drink alcohol or use other drugs, the majority, 44 (55%), reported doing so sometimes, while the minority, 16 (20%), reported that they always do so.

Figure 1 shows how much friends influence respondents' sexual decisions (n=80)

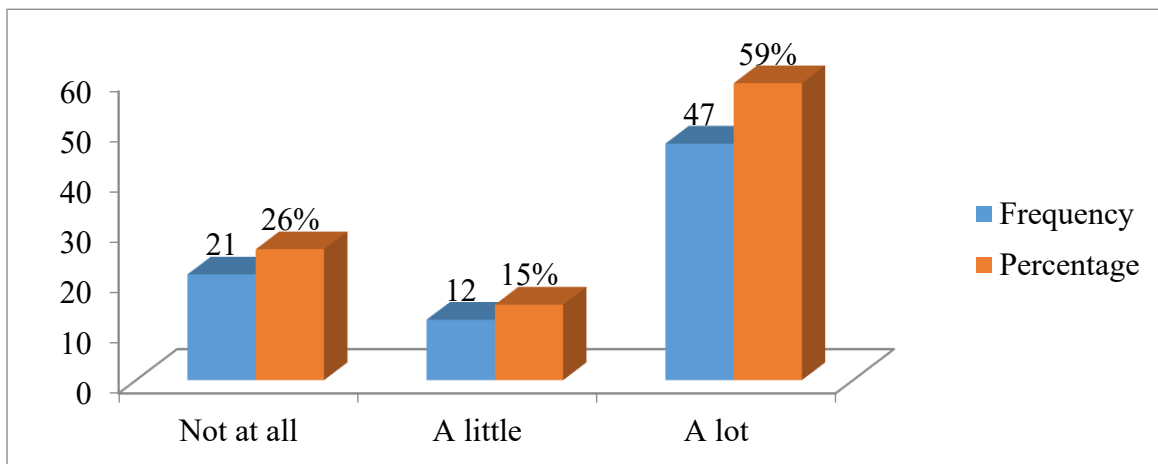
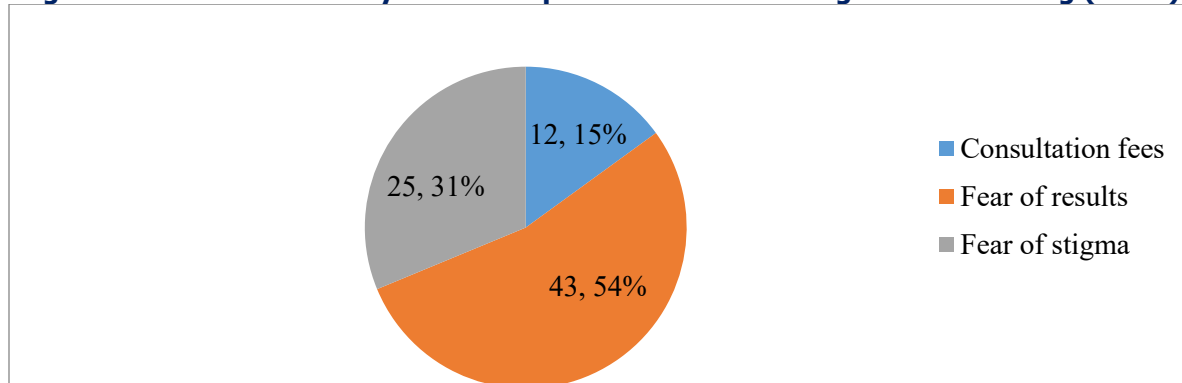


Figure 1 shows that the majority, 47(59%), of the respondents said that their friends influenced them a lot in sexual decisions, whereas the minority, 12(15%), of the respondents mentioned that a little.

Figure 2 shows what mainly affects respondents' decision to go for HIV testing (n=80)



According to the figure, slightly more than half, 43(54%) of respondents mentioned that fear of results affected their decision to go for HIV testing, and a minority, 12(15%) of respondents mentioned consultation fees.

Discussion

The majority (68%) of respondents somewhat understood ways of preventing HIV. This reflected a fair level of awareness of HIV prevention among youths but also underscored the need for continued sexual health education to improve knowledge among the remaining 32% with inadequate understanding. These study results are in

correlation with a study done in urban South Africa by Adekola & Mavhandu-Mudzusi (2023), which reported a lower proportion (31%) of poor prevention practices among youths who had received comprehensive sexual health education.

While in the field, a vast majority of respondents (84%) considered themselves at low risk of getting HIV. This suggested reduced perception of personal vulnerability among many youths while also highlighting the importance of strengthening risk awareness among the remaining 16% to encourage utilisation of HIV prevention services. These study findings agree with a study done in Japan by Ohnishi

et al. (2020) on perceived risk and utilisation of HIV prevention services, where 57% of youths believed they were not at risk of HIV infection, leading to low uptake of HIV testing and prevention services.

The study found that the majority (55%) reported that they sometimes drank alcohol or used other drugs. This pointed to the existence of behaviours that may increase exposure to HIV infection but also emphasised the need for substance abuse prevention interventions targeting the remaining 45% to promote safer lifestyles among youths. These study results agree with a study done among youths in Kampala, Uganda by Kalungi et al. (2024), where 48% of young people who used alcohol or drugs failed to use condoms, increasing their vulnerability to HIV infection.

Further findings indicated that the majority (59%) of respondents said that their friends influenced them a lot in their sexual decisions. This demonstrated the strong effect of peer influence on youths' sexual behaviours while also stressing the need for peer-led HIV prevention programs to positively guide the remaining 41% towards responsible decision-making. These study results are in agreement with a study conducted in Mwanza, Tanzania by Millanzi et al. (2023) on peer influence, which revealed that 52% of youths engaged in risky sexual behaviours due to peer pressure, including multiple sexual partners and inconsistent condom use.

According to the study findings, more than half (54%) of respondents mentioned that fear of results affected their decision to go for HIV testing. This revealed that fear and stigma remain barriers to HIV testing among youths while also underscoring the importance of strengthening counselling services for the remaining 46% to improve confidence in HIV testing and prevention services. This study finding is consistent with a study in Wakiso District, Uganda by Ssali et al. (2024) on attitudes and stigma toward HIV testing, where 46% of young youths avoided HIV testing due to fear of positive results and stigma, leading to missed opportunities for prevention counselling.

Conclusion

Individual-related factors greatly influence utilisation of HIV prevention services among youths. Although many respondents had some knowledge about HIV prevention, most had only partial understanding and low personal risk perception. Peer influence, fear of HIV test results, and alcohol or drug use among most respondents were important barriers to service utilisation.

Study Limitations

The study relied on self-reported information from respondents, which may have resulted in social desirability bias where some youths gave responses considered acceptable rather than their actual behaviours. This may have affected the accuracy of findings on alcohol use, sexual decisions and HIV testing practices.

The study was conducted at Bweyogere Health Centre III only, which limits generalisation of the findings to other health facilities or districts with different social and health service conditions.

The cross-sectional study design collected data at one point in time, making it difficult to determine long-term relationships between identified factors and utilisation of HIV prevention services among youths.

Recommendations

The Ministry of Health and District Health Office should strengthen youth-focused HIV prevention programs in Wakiso District through schools, communities, and media platforms.

The health facility management should establish dedicated youth-friendly service corners where young people can receive confidential HIV prevention services.

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May God richly bless them all.

List of Abbreviations

ANC:	Antenatal Care
ART:	Antiretroviral therapy
ESD:	Early sexual debut
HIV:	Human Immunodeficiency Virus
MOH:	Ministry of Health reports
MSP:	Multiple sexual partners:
OPD:	Outpatient services
PrEP:	Pre-Exposure Prophylaxis
TS:	Transactional sex:
UHPAB:	Uganda Health Professions Assessment Board
WHO:	World Health Organisation

Source of funding

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Conflict of interest

The author did not declare any conflict of interest

Data availability

Data are available upon request

Author contribution

Sharon Adiyao collected data and drafted the manuscript of the study

Hasifa Nansereko supervised the study

Jane Frank Nalubega supervised the study

Immaculate Naggulu Prosperia supervised the study

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