SJ Insights
Vol. 2 No. 1 (2025): January 2025
https://doi.org/10.51168/insights.v2i1.19
Original article

FACTORS ASSOCIATED WITH HIV TESTING AMONG UNDERGRADUATE STUDENTS OF LIRA UNIVERSITY, A CROSS-SECTIONAL STUDY.

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ABSTRACT

Background

HIV testing is a crucial starting point for the prevention, early diagnosis, and treatment of HIV. Therefore, the study assessed the factors associated with HIV testing among undergraduate students of Lira University.

Methods

A cross-sectional study was carried out among 327 undergraduate students of Lira University located in Lira district, Northern Uganda. Ethical approval to carry out the research was requested from the Research Ethics Committee of Lira University. A stratified simple random sampling was used to select the respondents proportionate to each size of the strata representing each faculty. Data was then collected using self-administered questionnaires, and data analysis was done using SPSS version 20.

Results

On the socio-demographic characteristics, the total number of males was 164(50.2%) and females was 163(49.8%). The majority of the respondents were in the age category (20-25), the mean age was 23.56, majority of the participants were single 177(81.8%). HIV testing among Lira University students was significantly influenced by HIV knowledge (73.4% knowledgeable, cOR: 1.27–3.73, p=0.005), sexual partnerships (two or more partners, cOR: 1.96–9.87, p=0.001), family encouragement (cOR: 1.27–3.73, p=0.005), awareness of university HIV testing services (cOR: 1.16–4.19, p=0.016), peer discussions (cOR: 1.06–3.66, p=0.033), and radio information (cOR: 1.19–4.14, p=0.013).

Conclusion

HIV testing among the participants was influenced by sex with more females having tested than males, being married, having two or more sexual partners and ever talking to the male/female guardian about HIV.

Recommendations

Developing policies that mandate regular HIV testing for all students entering higher education institutions can help ensure that a larger proportion of the student population is tested regularly.

Keywords: *HIV testing, Lira University, Factors*
Submitted: 2024-10-01 Revised: 2024-11-03 Accepted: 2024-12-29
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BACKGROUND

Globally, individual and contextual factors significantly influence HIV testing uptake. Studies indicate that fear of results, stigma, and lack of awareness are primary barriers to HIV testing. For instance, in South Africa, only 52.2% of young people aged 18–24 years had undergone HIV testing, with uptake being higher among women (60.1%) compared to men (39.9%) (Peltzer & Matseke, 2013). The availability of health services also varies by location, with individuals in urban areas being three times more likely to utilize HIV counseling and testing (HCT) services than those in rural areas (Djan, 2022). Additionally, HIV-related stigma and lack of social support have been linked to lower testing rates globally, emphasizing the importance of community-based interventions (Nall et al., 2019).

In Africa, gender and age are significant determinants of HIV testing. Studies in The Gambia showed that females aged 20–24 years were most likely to have ever tested for HIV compared to their male counterparts (Sonko et al., 2022). Similarly, in Burundi, HIV testing coverage was 53.3% among young women and 35.0% among young men (Nshimirimana et al., 2022). Education and knowledge also play critical roles; individuals with higher education and comprehensive HIV knowledge were more likely to test (Adugna & Worku, 2022). Fear of stigma and discrimination continues to hinder HIV testing uptake, particularly in institutional settings such as universities in

Kenya, where a culture of stigma persists despite the establishment of HIV centers (Mwangi et al., 2014).

In East Africa, significant disparities in HIV testing exist based on gender, age, and marital status. Studies in Tanzania revealed that females were nearly twice as likely to test for HIV as males (OR=1.8; 95% CI=1.2–2.8; p=0.006) (Sanga et al., 2015). In Uganda, willingness to use HIV self-test kits was high (93%) among university students, but only 19% had used them, demonstrating a gap between intention and practice (Namande et al., 2021). Knowledge about HIV is a key factor; men with higher community literacy levels and comprehensive HIV knowledge were more likely to get tested (Adugna & Worku, 2022). However, stigma and fear remain significant barriers, with low HIV testing coverage observed among men who had never had sex or those with limited knowledge about testing services (Nall et al., 2019). In Uganda, HIV testing uptake varies significantly by demographic and behavioral factors. Studies in Wakiso District showed that 80% of young people had tested for HIV, with females having significantly higher testing rates than males (Kalibbala et al., 2022). Among university students, knowledge and access to HIV self-testing kits are high, yet utilization remains limited (Namande et al., 2021). Age is a strong determinant; participants aged 18 years or older were three times more likely to test than those younger than 18 years (Sanga et al., 2015). Sexual behavior and marital status also influence testing rates, with married individuals more likely to have ever tested (Sonko et al., 2022). Despite these advancements, stigma, fear of results, and lack of flexible clinic hours persist as barriers to consistent testing (Mugavero et al., 2011). Therefore the study assessed the factors associated with HIV testing among undergraduate students of Lira University.

METHODOLOGY

Study design

This was a cross-sectional quantitative study that was used to determine the level of HIV testing amongst undergraduate students of Lira University.

Study setting

The study was conducted at Lira University. The university trains undergraduate students in health science, management science, and education programs. Lira University consists of a total of 1378 enrolled undergraduate students i.e., 662 males and 716 females. The health science faculty consists of 421 undergraduate students (196 males and 225 females), the Education faculty has 219 undergraduate students (113 males and 106 females) and the management faculty consists of 610 undergraduate students (353 males and 257 females). The university is located in Ayere village, Barapwo parish, Lira City West Division in Lira district.

Study population

The study population was the undergraduate students of Lira University.

Sample size and sample size determination

The sample size for this study was calculated using Krejecie and Morgan's Table (1970) for a known population size. (Bukhari, 2021). Lira University had a total enrollment of 1378 undergraduate students. From Krejecie and Morgan's table, the sample size for this population was 297. Considering a non-response rate of 10%, (10/100)* (297) = 29.7~30

297+30 = 327.

Therefore, a sample size of 327 undergraduate students was considered in this study.

Sampling techniques

A stratified random sampling technique was used. The faculties acted as the different strata. Approach the different deans of faculties and heads of departments to seek permission. Then work with the class representatives of different Years of study to obtain the class lists. Participants that were obtained from each year of the study were proportionate to their size.

Then systematic sampling was used to obtain the participants from each year of study. Using the class lists, they were picked at an interval of five. Emails were then sent to selected individuals letting them know that they had been selected to participate in the study including any other necessary information.

Table 1: Showing the number of participants that were picked from each faculty and each year of study

Faculty	Frequency (Percentage)	Year of Study	Frequency (Percentage)
Education	81(24.8)	One	34(42.0)
		Two	24(29.6)
		Three	23(28.4)
Management Sciences	40(12.2)	One	15(37.5)
		Two	14(35.0)
		Three	11(27.5)
Nursing & midwifery	68(20.8)	One	22(32.4)
		Two	19(27.9)
		Three	27(39.7)
Medicine	62(19.0)	One	32(51.6)
		Two	18(29.0)
		Three	12(19.4)
Information sciences	26(8.0)	One	10(38.5)
		Two	09(34.6)
		Three	07(26.9)
Public Health	50(13.4)	One	19((38.0)
		Two	15(30.0)
		Three	16((32.0)

Eligibility criteria

Inclusion

Undergraduate students of Lira University who were present on campus during the study period voluntarily consented to take part in the study.

Exclusion

Those who were absent from the university, and those who were critically ill during the time of the study did not participate in the study. Those who did not voluntarily consent did not participate in the study.

Data collection procedure

Clearance was sought from the Lira University Research Committee then the consent forms were issued to the participants. Informed consent was then obtained from the participants and then the questionnaires were administered.

Data collection tool

Questionnaires consisting of close-ended questions adopted and modified by the Researcher were used. (Mwangi et al., 2014). The questionnaire consisted of closed-ended questions written in English. Each questionnaire consisted of three sections. The data was collected from study participants by using a structured, researcher-administered questionnaire developed from a thorough literature review. Questions were divided into three sections including socio-demographics (age, sex, religion, economic status, etc) Individual factors (knowledge about HIV, Fear for results, and attitudes. Contextual factors (social support, stigma, availability of facilities and services, policies)

Quality control

Validity

For validity, the tool that was used to collect data was reviewed by experts in the field and my supervisor. This tool was pretested among randomly selected nonstudent individuals from Barapwo village whose number was approximately 10% of the total population. Before conducting the study, research assistants who were fluent in English were trained to collect data using standard questionnaires.

Reliability

A Cronbach test was performed on the data collected from the pretest and a reliability coefficient of r=0.8 and above was considered satisfactory. And, if not satisfactory, improvements to make it reliable were considered by carrying out a pilot test with a small sample to assess how the revised scale would perform.

Study variables

Dependent variable

HIV testing was measured as a proportion.

Independent variables

Individual factors such as HIV knowledge, subjective well-being, stigma attitudes, and fear of positive results.
Contextual factors such as social support, marital status, religion, and ethnicity.

Data management

Data entry and cleaning

Data was entered into the Statistical Package for Social Sciences (SPSS 25), Data cleaning was then done using Informatics Data Cloud quality to identify missing data and then analysis was done.

Data analysis

Descriptive statistical analysis was carried out with the data that was available, univariate, bivariate, and multivariate levels of analysis were used. In univariate analysis, different proportions for categorical data were generated and presented in frequency tables, pie charts, and bar graphs since this does not show the association between the variables, bivariate analysis was then used to test the strength of association between independent and dependent variables. A bivariate logistic regression analysis was done to determine the relationship each independent variable had with the dependent variables using an odds ratio, at a significance level of P=0.05. At the multivariate level, all the bivariate analysis was included in the regression model. AOR was used as a measure of association, variables with P<0.05 were considered to influence HIV testing among the participants.

Ethical considerations

Approval

The study proposal was submitted to the Lira University Faculty of Public Health for review and clearance was sought from the Lira University Research Committee.

Administrative permission to conduct this study was sought from all relevant university authorities including the deans.

Informed consent

Written informed consent was sought from the participants. The participants were then informed that the study was purely voluntary with no monetary gains. The objectives of the study, possible benefits and risks, and the duration of the study expected to take were shared with the participants.

Confidentiality

Identifiers such as names, phone numbers, or personal addresses were not included in the questionnaires to protect the participants' privacy. Codes were used to identify participants. The hard copies of the questionnaires were kept and only accessible by the investigator.

Safety

Emotional support and counseling for emotionally unstable individuals such as those who had ever tested positive for HIV was done.

RESULTS

Individual factors influencing HIV testing among undergraduate students of Lira University.

The majority of the students 240(73.4%) were knowledgeable about HIV and 87(26.6%) not being knowledgeable. Most of the respondents had one sexual partner 167(51.5%).

Table 2 shows the individual factors influencing HIV testing among undergraduate students of Lira University

VARIABLE	CATEGORY	FREQUENCY	Recent HIV Testing		cOR (95% CI)	P- value
Individual Factors			**Below 6months**	**Above 6months**		
Knowledge of anyone with HIV	Yes	240(73.4)	168(79.6)	72(62.1)	Ref	
	No	87(26.6)	43(20.4)	44(37.9)	2.39(1.27 -3.73)	0.005*
Ever had STI	Yes	63(19.3)	44(21.0)	19(16.4)	Ref	
	No	263(80.7)	166(79.0)	97(83.6)	1.42(0.75-2.68)	0.285
Number of sexual partners	None	99(30.6)	61(29.2)	38(33.0)	Ref	
	One	167(51.5)	98(30.0)	69(60.0)	3.89(1.67-9.10)	0.002*
	Two or more	58(17.9)	50(15.4)	8(13.8)	4.40(1.96-9.87)	0.001*
Use of Condom	Never	131(41.2)	85(41.1)	46(41.4)	Ref	
	Sometimes	114(35.8)	73(35.3)	41(36.9)	1.04(0.55-1.96)	0.751
	Always	73(23.0)	49(23.7)	24(21.6)	1.20(0.57-2.10)	0.672
Ever been convinced to have sex?	Yes	156(47.9)	101(51.9)	55(47.4)	Ref	
	No	170(52.1)	109(48.1)	61(52.6)	0.81(0.50-1.32)	0.395
Take alcohol	Yes	95(29.1)	61(29.0)	34(29.3)	Ref	
	No	231(70.9)	149(71.0)	82(70.7)	0.99(0.58-1.68)	0.970

N= 327 Source: Primary data (2024)

Contextual factors influencing HIV testing among undergraduate students of Lira University.

Among the contextual factors, the following were significant; ever talked to a male/female guardian, ever been encouraged by family/friends and ever talked to peers about HIV testing (peer pressure). Respondents who had ever been encouraged by family/friends to test for HIV were most likely to have tested for HIV within the previous 6 months cOR: 1.27 - 3.73 p=0.005. The respondents who had utilized the HIV testing services at the University were most likely to have tested for HIV within the previous 6 months cOR; 95% CI; 1.99 - 3.37 p=0.009. The respondents who were aware of the availability of HIV testing services at the university were also most likely to have also tested within the same time cOR; 95% CI; 1.16 – 4.19 p=0.016, Including those whose source of information is radio cOR; 95% CI; 1.19– 4.14 p=0.013. The respondents that had ever discussed HIV testing with peers and friends had high chances of having tested for HIV within the previous 6 months cOR; 95% CI; 1.06 – 3.66 p=0.033.

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Original article

Table 3 shows the contextual factors influencing HIV testing among undergraduate students of Lira University.

VARIABLE	CATEGORY	FREQUENCY(PERCENTAGE)	Recent HIV Testing		cOR (95% CI)	P -value
Contextual factors			**Below 6months**	**Above 6months**		
Ever talked to a male/female guardian about HIV	Yes	235(71.9)	156(73.9)	79(68.1)	Ref	
	No	92(28.7)	55(26.1)	37(31.9)	1.18 (0.68-2.06)	0.555
Ever been encouraged by family/friends to test for HIV	Yes	254(77.7)	160(75.8)	94(81.0)	Ref	
	No	73(22.3)	51(24.2)	22(19.0)	0.56(0.30-1.03)	0.063
Availability of HIV testing services.	Yes	277(84.7)	188(89.1)	89(76.7)	Ref	
	No	50(15.3)	23(10.9)	27(23.3)	2.20(1.16-4.19)	0.016*
Utilization of HIV testing services,	Yes	235(72.1)	163(77.6)	72(62.1)	Ref	
	No	91(27.9)	47(22.4)	44(37.9)	2.00(1.18-3.37)	0.009*
Ever accompanied a friend to get tested for HIV?	Yes	152(46.5)	103(48.8)	49(42.2)	Ref	
	No	175(53.5)	108(51.2)	67(57.8)	1.14(0.70-0.86)	0.603
Peer influence	Yes	269(82.5)	182(86.7)	87(75.0)	Ref	
	No	57(17.5)	28(13.3)	29(25.0)	1.96(1.06-3.66)	0.033*
Sources of information about HIV	Socio media	275(84.1)	177(64.4)	98(35.6)	0.82(0.42-1.61)	0.563
	Radio	200(61.2)	140(70.0)	60(30.0)	2.22(1.19-4.14)	0.013*
	School	247(75.5)	166(67.2)	81(32.8)	1.40(0.72-2.73)	0.322
	Television	204(62.4)	133(65.2)	71(34.8)	0.58(0.29-1.16)	0.122
	Friends and Family	228(70.4)	149(65.4)	79(34.6)	0.97(0.52-1.80)	0.927

N= 327 ***Source: Primary data (2024)***

DISCUSSION

Females were 2 times more likely to test for HIV compared to the males (aOR, 2.08, 95%CI, 1.12-3.86, P=0.021). This was similar to the study that was carried out among college students in different Universities in Kentucky, where females were 1.4 times more likely than males (aOR=1.35, 95% CI 1.01 to 1.79) to have been tested for HIV (Dennison et al., 2014). This similarity could be due to better health-seeking behavior among females compared to males and also low knowledge about HIV testing and negative attitudes towards it. Men often face barriers to HIV testing due to traditional masculine norms that discourage seeking healthcare services. The expectation of strength, self-reliance, and avoidance of vulnerability can deter men from getting tested(Onyeonoro et al., 2014). This implies that there are missed opportunities for early detection, prevention, and treatment among the males

which increases their risk of acquiring adverse health problems associated with HIV.

Married respondents were 2.5 times more likely to have tested for HIV within the previous 6 months compared to those who were single (aOR, 2.54, 95%CI, 1.12-5.83, P=0.028). This was similar to the study that was carried out among University Students in Jamaica where most of the married respondents had tested for HIV(Norman & Gebre, 2005). Level HIV testing was high among the married respondents because of increased and better access to healthcare services, including HIV testing, compared to unmarried individuals. This could be due to shared spousal encouragement, or routine medical check-ups that often include HIV testing as a couple. Also being married can provide emotional and social support, which can encourage individuals to seek HIV testing(Aluzimbi et al., 2017). This implies that spouses play a crucial role in promoting health-seeking behaviors and reducing the stigma associated with HIV increasing the chances of testing for HIV among married individuals.

The study found that respondents who had one(aOR, 6.19, 95%CI, 2.11-18.10, P=0.001), and two or more partners (aOR, 7.11, 95%CI, 2.69-18.79, P=0.000), were most likely to have tested for HIV compared to those who had none. This was similar to the study that was carried out among college students in China where those who experienced the sexual behavior (OR =1.63; 95% CI: 1.16-2.29) were more likely to have tested for HIV (Liao et al., 2023). Similarly, as the number of sexual partners increased the rate of HIV testing, according to a study that was carried out among college students in Kentucky Universities (Dennison et al., 2014). Having multiple sexual partners increases the likelihood of being exposed to HIV and, therefore, the need for regular HIV testing. Individuals with more sexual partners may be more likely to engage in risky sexual behaviors, such as sex with no protection or anonymous encounters, which increase the risk of HIV contracting HIV(Uzochukwu et al., 2011). This implies that having two or more partners is a significant factor influencing individuals to seek regular HIV testing which in turn contributes to promoting safer sexual behaviors and reducing the spread of HIV within communities.

Concerning those who had ever talked to a male/female guardian (social support), the majority had tested for HIV within the previous 6 months (aOR, 0.33, 95%CI, 0.15-0.70, P=0.004), this was similar to the study that was carried out in among youth in Kenya, where social support was associated positively with testing for HIV (Wandera et al., 2020). Having ever talked to a male or female guardian about HIV among students in South Africa was also associated with an increased rate of HIV testing (Kalimbo et al., 2022). Social support is so important concerning HIV testing because it provides reinforcement and emotional support, hence encouraging one to test for HIV. It also motivates them and makes them eager to test for HIV. Emotional support helps individuals cope with the fear and anxiety associated with HIV testing(Bigala et al., 2014). This implies that through the provision of emotional support, social support reduces stigma and discrimination associated with HIV testing, making it more acceptable and less intimidating for young people, and also increases awareness about HIV and its transmission, leading to more frequent testing and earlier diagnosis.

CONCLUSION

HIV testing among the participants was influenced by sex with more females having tested than males, being married, having two or more sexual partners and ever talking to the male/female guardian about HIV.

Limitations

This study involved the use of quantitative methods to collect data hence there was no in-depth understanding of the problem using Qualitative methods of research.

Response bias whereby some participants were likely to give wrong information which would interfere with the results.

The study was limited to finding out the association between the variables, not their causations.

RECOMMENDATIONS

To the ministry of health

Campus-based HIV Testing eliminates the barriers associated with traveling long distances to health facilities and reduces the stigma often associated with HIV testing in community settings. The Ministry can collaborate with student organizations, health departments, and non-governmental organizations (NGOs) to set up these centers.

Peer Education: Peer education programs are effective in increasing awareness and promoting behavior change related to HIV testing, students who are trained as peer educators can help disseminate accurate information about HIV transmission, prevention, and testing within their communities. They can also provide emotional support and reduce the stigma surrounding HIV testing.

To the University

Raising Awareness about the importance of getting tested which can be done through educational campaigns, workshops, seminars, and informational materials distributed across campus. Collaborating with student organizations, health services, and local health authorities can help in spreading accurate information about HIV testing.

Providing Easy Access to Testing through collaboration with healthcare providers to set up regular testing clinics on campus or provide information about nearby clinics

where students can get tested confidentially and free of charge.

To the students

Take Responsibility for Your Health: Students, particularly single males, should take responsibility for their sexual health by getting tested regularly for HIV. Knowing one's status is important for early intervention and prevention.

Seek Information: Students should actively seek information about HIV testing and prevention from reliable sources such as healthcare providers, university health centers, or reputable websites. Knowledge empowers individuals to make informed decisions.

To the Community

Community Outreach Programs: Engaging community leaders and organizations in organizing outreach programs focused on HIV education and testing can help raise awareness within the community, including males.

Promote Testing as a Norm: Communities should work towards normalizing HIV testing as part of routine healthcare practices. By promoting regular testing as a norm rather than an exception, more individuals may be encouraged to get tested.

ACKNOWLEDGEMENT

I acknowledge my supervisor **MR. MUSINGUZI MARVIN** for the professional guidance, advice, and all the necessary corrections he gave me during the period of writing this research report. I am appreciative of your efforts; may almighty God bless you.

Not forgetting my coursemates, thank you for everything you did to help me finish this research report. Thank you very much.

LIST OF ABBREVIATIONS

HIV: Human Immunodeficiency Virus
AIDS: Acquired Immunodeficiency Syndrome
CDC: Centers for Disease Control and Prevention
SPSS: Statistical Package for Social Sciences
HTC: HIV Testing and Counseling
WHO: World Health Organization
NGO: Non-Governmental Organization

SOURCE OF FUNDING

The study was not funded

CONFLICT OF INTEREST

No conflict of interest declared

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REFERENCES

1. Aluzimbi, G., Lubwama, G., Muyonga, M., & Hladik, W. (2017). HIV Testing and Risk Perceptions: A Qualitative Analysis of Secondary School Students in Kampala, Uganda. *Journal of Public Health in Africa*, *8*(1), 577. https://doi.org/10.4081/jphia.2017.577
2. Bigala, P., Ayo, A. S., & Ekundayo, O. S. (2014). Influence of HIV testing on knowledge of HIV/AIDS prevention practices and transmission among undergraduate youths in North-West University, Mafikeng. *Gender and Behaviour*, *12*(2), 6286–6300. https://doi.org/10.10520/EJC163320
3. Dennison, O., Wu, Q., & Ickes, M. (2014). Prevalence of HIV Testing and Associated Risk Factors in College Students. *Journal of American College Health : J of ACH*, *62*(5), 309–318. https://doi.org/10.1080/07448481.2014.899232
4. Djan, D. (n.d.). Factors Affecting the Attitude of Young People towards HIV Testing Uptake in Rural Ghana. *Journal of HIV & Retro Virus*, *4*(2), 0–0. https://doi.org/10.21767/2471-9676.100045
5. Kalibbala, D., Mpungu, S. K., Ssuna, B., Muzeyi, W., Mberesero, H., Semitala, F. C., Katahoire, A., Armstrong-Hough, M., Kalyango, J. N., & Musiime, V. (2022). Determinants of testing for HIV among young people in Uganda. A nested, explanatory-sequential study. *PLOS Global Public Health*, *2*(12), e0000870. https://doi.org/10.1371/journal.pgph.0000870
6. Kalimbo, P., Magesa, E., Opiyo, R., & Nyawade, S. (2022). Determinants of HIV Testing Uptake among Undergraduate Students Aged 17-26 Years at the University of Nairobi, Kenya. *Global Journal of Health Science*, *14*(9), Article 9. https://doi.org/10.5539/gjhs.v14n9p41
7. Liao, S., Li, J., Liu, M., Xie, H., Lu, Y., & Jiang, Y. (2023). Acceptance and associated factors of HIV testing among college students in China: A systematic review and meta-analysis. *PLOS ONE*, *18*(4), e0284865. https://doi.org/10.1371/journal.pone.0284865

8. Mugavero, M. J., Norton, W. E., & Saag, M. S. (2011). Health Care System and Policy Factors Influencing Engagement in HIV Medical Care: Piecing Together the Fragments of a Fractured Health Care Delivery System. *Clinical Infectious Diseases*, *52*(suppl_2), S238–S246. https://doi.org/10.1093/cid/ciq048
9. Nall, A., Chenneville, T., Rodriguez, L. M., & O'Brien, J. L. (2019b). Factors Affecting HIV Testing among Youth in Kenya. *International Journal of Environmental Research and Public Health*, *16*(8), 1450. https://doi.org/10.3390/ijerph16081450
10. Namande, M., Kabami, J., Agaba, D., Asiimire, A., Natwijuka, A., Kebeyi, I., Mugumya, R., Beinempaka, F., & Muhumuza, A. (2021). Prevalence and Factors Associated With Utilization of HIV Self Testing Among Students of Universities in South Western Uganda. *Student's Journal of Health Research Africa*, *2*(12), Article 12. https://doi.org/10.51168/sjhrafrica.v2i12.67
11. Norman, L. R., & Gebre, Y. (2005). Prevalence and Correlates of HIV Testing: An Analysis of University Students in Jamaica. *Journal of the International AIDS Society*, *7*(1), 70. https://doi.org/10.1186/1758-2652-7-1-70
12. Onyeonoro, U. U., Emelumadu, O. F., Chuku, A., Kanu, O. O., Ebenebe, U. E., Onwukwe, N., Uwakeme, C., & Ndukwe, E. (2014). Knowledge and utilization of HIV counseling and testing services among students of a tertiary institution in Abia State, South East Nigeria. *Journal of HIV and Human Reproduction*, *2*(1), 8. https://doi.org/10.4103/2321-9157
13. Peltzer, K., & Matseke, G. (2013a). Determinants of HIV testing among young people aged 18 – 24 years in South Africa. *African Health Sciences*, *13*(4), 1012–1020. https://doi.org/10.4314/ahs.v13i4.22
14. Sanga, Z., Kapanda, G., Msuya, S., & Mwangi, R. (2015). Factors influencing the uptake of Voluntary HIV Counseling and Testing among secondary school students in Arusha City, Tanzania: A cross-sectional study. *BMC Public Health*, *15*(1), 452. https://doi.org/10.1186/s12889-015-1771-9
15. Abdalla, A. M., & Abusalih, H. H. (2021). Factors Affecting HIV Voluntary Counseling and Testing Uptake among Undergraduate Students of Khartoum, Sudan. *The Open AIDS Journal*, *15*(1). https://doi.org/10.2174/1874613602115010021
16. Aluzimbi, G., Lubwama, G., Muyonga, M., & Hladik, W. (2017). HIV Testing and Risk Perceptions: A Qualitative Analysis of Secondary School Students in Kampala, Uganda. *Journal of Public Health in Africa*, *8*(1), 577. https://doi.org/10.4081/jphia.2017.577
17. Bigala, P., Ayo, A. S., & Ekundayo, O. S. (2014). Influence of HIV testing on knowledge of HIV/AIDS prevention practices and transmission among undergraduate youths in North-West University, Mafikeng. *Gender and Behaviour*, *12*(2), 6286–6300. https://doi.org/10.10520/EJC163320
18. Dennison, O., Wu, Q., & Ickes, M. (2014). Prevalence of HIV Testing and Associated Risk Factors in College Students. *Journal of American College Health : J of ACH*, *62*(5), 309–318. https://doi.org/10.1080/07448481.2014.899232
19. Djan, D. (n.d.). Factors Affecting the Attitude of Young People towards HIV Testing Uptake in Rural Ghana. *Journal of HIV & Retro Virus*, *4*(2), 0–0. https://doi.org/10.21767/2471-9676.100045
20. Green, E., Murphy, E., Gryboski, K., Sweeny, K., Robbins, M., & Cohen, L. (2020). *The Health Belief Model*. 211–214. https://doi.org/10.1002/9781119057840.ch68
21. Kalibbala, D., Mpungu, S. K., Ssuna, B., Muzeyi, W., Mberesero, H., Semitala, F. C., Katahoire, A., Armstrong-Hough, M., Kalyango, J. N., & Musiime, V. (2022). Determinants of testing for HIV among young people in Uganda. A nested, explanatory-sequential study. *PLOS Global Public Health*, *2*(12), e0000870. https://doi.org/10.1371/journal.pgph.0000870
22. Kalimbo, P., Magesa, E., Opiyo, R., & Nyawade, S. (2022). Determinants of HIV Testing Uptake among Undergraduate Students Aged 17-26 Years at the University of Nairobi, Kenya. *Global Journal of Health Science*, *14*(9), Article 9. https://doi.org/10.5539/gjhs.v14n9p41
23. Liao, S., Li, J., Liu, M., Xie, H., Lu, Y., & Jiang, Y. (2023). Acceptance and associated factors of HIV testing among college students in China: A systematic review and meta-analysis. *PLOS ONE*, *18*(4), e0284865. https://doi.org/10.1371/journal.pone.0284865
24. Mugavero, M. J., Norton, W. E., & Saag, M. S. (2011). Health Care System and Policy Factors Influencing Engagement in HIV Medical Care: Piecing Together the Fragments of a Fractured Health Care Delivery System. *Clinical Infectious Diseases*, *52*(suppl_2), S238–S246. https://doi.org/10.1093/cid/ciq048
25. Mwangi, R., Ngure, P., Thiga, M., & Ngure, J. (2014). Factors Influencing the Utilization of Voluntary Counselling and Testing Services among University Students in Kenya. *Global*

Journal of Health Science, *6*(4), 84–93. https://doi.org/10.5539/gjhs.v6n4p84

26. Mwisongo, A., Mohlabane, N., Tutshana, B., & Peltzer, K. (2016). Barriers and facilitators associated with HIV testing uptake in South African health facilities offering HIV Counselling and Testing. *Health SA Gesondheid*, *21*(1), 86–95. https://doi.org/10.1016/j.hsag.2015.11.001
27. Nall, A., Chenneville, T., Rodriguez, L. M., & O'Brien, J. L. (2019a). Factors Affecting HIV Testing among Youth in Kenya. *International Journal of Environmental Research and Public Health*, *16*(8), 1450. https://doi.org/10.3390/ijerph16081450
28. Nall, A., Chenneville, T., Rodriguez, L. M., & O'Brien, J. L. (2019b). Factors Affecting HIV Testing among Youth in Kenya. *International Journal of Environmental Research and Public Health*, *16*(8), 1450. https://doi.org/10.3390/ijerph16081450
29. Namande, M., Kabami, J., Agaba, D., Asiimire, A., Natwijuka, A., Kebeyi, I., Mugumya, R., Beinempaka, F., & Muhumuza, A. (2021). Prevalence and Factors Associated With Utilization of HIV Self Testing Among Students of Universities in South Western Uganda. *Student's Journal of Health Research Africa*, *2*(12), Article 12. https://doi.org/10.51168/sjhrafrica.v2i12.67
30. Norman, L. R., & Gebre, Y. (2005). Prevalence and Correlates of HIV Testing: An Analysis of University Students in Jamaica. *Journal of the International AIDS Society*, *7*(1), 70. https://doi.org/10.1186/1758-2652-7-1-70
31. Ogaji, D. S., Oyeyemi, A. S., & Ibrahim, I. (2013). Awareness, willingness, and use of Voluntary HIV testing and counseling services by students of a university in south-south Nigeria. *Journal of Community Medicine and Primary Health Care*, *25*(2), Article 2.
32. Onyeonoro, U. U., Emelumadu, O. F., Chuku, A., Kanu, O. O., Ebenebe, U. E., Onwukwe, N., Uwakeme, C., & Ndukwe, E. (2014). Knowledge and utilization of HIV counseling and testing services among students of a tertiary institution in Abia State, South East Nigeria. *Journal of HIV and Human Reproduction*, *2*(1), 8. https://doi.org/10.4103/2321-9157
33. Peltzer, K., & Matseke, G. (2013a). Determinants of HIV testing among young people aged 18 – 24 years in South Africa. *African Health Sciences*, *13*(4), 1012–1020. https://doi.org/10.4314/ahs.v13i4.22
34. Peltzer, K., & Matseke, G. (2013b). Determinants of HIV testing among young people aged 18-24 years in South Africa. *African Health Sciences*, *13*, 1012–1020. https://doi.org/10.4314/ahs.v13i4.22
35. Rutherford, G. W., Anglemyer, A., Bagenda, D., Muyonga, M., Lindan, C. P., Barker, J. L., Johnston, L., & Hladik, W. (2014). University students and the risk of HIV and other sexually transmitted infections in Uganda: The Crane Survey. *International Journal of Adolescent Medicine and Health*, *26*(2), 209–215. https://doi.org/10.1515/ijamh-2013-0515
36. Sanga, Z., Kapanda, G., Msuya, S., & Mwangi, R. (2015). Factors influencing the uptake of Voluntary HIV Counseling and Testing among secondary school students in Arusha City, Tanzania: A cross-sectional study. *BMC Public Health*, *15*(1), 452. https://doi.org/10.1186/s12889-015-1771-9
37. Segawa, I., Bakeera-Kitaka, S., Ssebambulidde, K., Muwonge, T. R., Oriokot, L., Ojiambo, K. O., & Mujugira, A. (2022). Factors associated with HIV self-testing among female university students in Uganda: A cross-sectional study. *AIDS Research and Therapy*, *19*(1), 59. https://doi.org/10.1186/s12981-022-00484-x
38. Seidu, A.-A., Oduro, J. K., Ahinkorah, B. O., Budu, E., Appiah, F., Baatiema, L., Ameyaw, E. K., & Sambah, F. (2020). Women's healthcare decision-making capacity and HIV testing in sub-Saharan Africa: A multi-country analysis of demographic and health surveys. *BMC Public Health*, *20*(1), 1592. https://doi.org/10.1186/s12889-020-09660-y
39. Uzochukwu, B., Uguru, N., Ezeoke, U., Onwujekwe, O., & Sibeudu, T. (2011). Voluntary counseling and testing (VCT) for HIV/AIDS: A study of the knowledge, awareness, and willingness to pay for VCT among students in tertiary institutions in Enugu State Nigeria. *Health Policy*, *99*(3), 277–284. https://doi.org/10.1016/j.healthpol.2010.11.007
40. Wandera, S. O., Kwagala, B., & Maniragaba, F. (2020). Prevalence and determinants of recent HIV testing among older persons in rural Uganda: A cross-sectional study. *BMC Public Health*, *20*(1), 144. https://doi.org/10.1186/s12889-020-8193-z

SJ Insights
Vol. 2 No. 1 (2025): January 2025
https://doi.org/10.51168/insights.v2i1.19
Original article

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