

Prevalence and Demographic Determinants of HIV Pre-Exposure and Post-Exposure Prophylaxis Use in Khwisero Sub-County, Kenya

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ABSTRACT

Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Syndrome (AIDS) continues to be a major global public health threat despite the availability of biomedical prevention strategies such as HIV PrEP and PEP. Despite their efficacy, utilization rates are low among youths aged 15–24, who account for approximately 27% of new infections globally and 33% in Kenya. While the determinants of HIV PrEP and PEP use have been studied among men who have sex with men, female sex workers, adolescent girls, and women, research focusing on young adults is limited. Guided by the Health Belief Model, this study assessed the factors that dictate the usage of HIV PrEP and PEP among the youth between the ages of 18 and 24 years in Khwisero Sub-County, Kakamega County, Kenya. This study adopted a descriptive and analytical cross-sectional research design. The target population consisted of young adults from the ages of 18 to 24. The sample size was determined using the Taro Yamane formula, which arrived at 426 participants. Data was collected using semi-structured questionnaires. The Statistical Package for Social Sciences version 26 was used to analyze quantitative data through descriptive and inferential statistics, including chi-square and logistic regression at a significance level of 0.05. The study revealed a low prevalence of PrEP (23.4%) and PEP (22.6%) utilization. Significant determinants of PrEP use included education level ($\chi^2 = 8.1$, OR = 0.21, $P = 0.04$) and religion ($\chi^2 = 5.0$, OR = 0.40, $P = 0.03$). Factors affecting PEP utilization encompassed education level ($\chi^2 = 17.76$, OR = 0.43, $P < 0.001$), marital status ($\chi^2 = 6.47$, OR = 0.33, $P = 0.04$), and living arrangement ($\chi^2 = 9.91$, OR = 1.95, $P < 0.001$). Based on these findings, it is recommended that additional levels of health education interventions and culturally appropriate campaigns be carried out in order to increase the usage of PrEP and PEP among young adults.

Keywords: Determinants, HIV/AIDS, Post Exposure Prophylaxis, Prevalence, Young Adults

I. INTRODUCTION

The Joint United Nations Programme on HIV/AIDS (UNAIDS) estimated that 844,700 people in 54 countries, took Post-Exposure Prophylaxis (PrEP) in the year 2020. Research shows that people who are single, divorced or a widow, migrant population, are younger or have multiple sexual partners are those likely to use PrEP and Post-Exposure Prophylaxis (PEP) (Zhou et al., 2022; Chan et al., 2021; Liu et al., 2022). On the other hand, races such as Asians and Blacks, use of condoms, drugs and lubes have been seen as having an inverse relationship with PrEP and PEP (Blair et al., 2022; Gordián-Arroyo et al., 2020; Wang et al., 2022).

Demographic commitment has remained one of the most influential in the utilisation of PrEP and PEP in Sub-Saharan Africa (Guure, Mbaruku, & Winani, 2022; Witte, Payne & Mbwapo, 2022). Men who have Sex with Men (MSM) and Female Sex Workers (FSWs) clients who perceived higher social support from family, actively involved in religious activities and had higher education level and having tested HIV within the last two months were more likely to use PrEP and PEP. In Kenya, although PrEP has been availed across the country from 2017 to users, it still has low utilization, with estimations of having only 14,000 users by 2018 (Masyuko et al., 2018).

Subsequently, in 2001, PEP has been availed in Kenya for particular at-risk categories (Siika et al., 2009). Age, sex and the career of the individual, in this case clients, has however been found to influence their knowledge as

well as practice of PrEP & PEP significantly. Kenyan women characteristics that influence PrEP use involve HIV positive partners, transactional sex and recent Sexually Transmitted Infections (STIs) (Bien-Gund et al., 2022). Nevertheless, PrEP and PEP services continue to be underutilised among young adults and therefore the need to come up with strategies that will encourage people to seek for the services.

The implementation of PrEP and PEP into the general medical treatment and care system is necessary for the increase of PrEP and PEP usage among patients. Existing interventions have revealed that incorporating PrEP education in the routine HIV testing and counselling services can greatly increase knowledge and use of PrEP (Adegboyega et al., 2019). Moreover, culturally tailored community-based and peer education interventions have served as useful strategies in decreasing/preventing stigma and increasing Uptake of PrEP and PEP among gay mens and other high-risk groups (Sun et al., 2023; Nwagbo et al., 2023).

It also emphasizes the critical role of socio-economic context on the choices of different forms of organisation donors have given to their beneficiaries. Among them, economic self-sufficiency and education are the cornerstones of PrEP and PEP improvement. For example, women with increased education level are more aware of and have utilized PrEP and PEP (Ampofo et al., 2020). Following this, there are costs that make it difficult for the targets to embrace these preventions, which means that while these are preventative measures, PrEP and PEP should be made affordable to the targets, that is through policies that either subsidize or provide free access to the targets (Ampofo et al., 2020).

1.1 Statement of the Problem

HIV/AIDS is still a global issue with many people affected by the disease. Even with advanced and efficient preventive measures like PrEP and PEP available and endorsed. The number of individuals who are using them is still relatively small, mainly affecting youth in Kenya. In Kenya, the adult HIV prevalence rate is currently at 3.7% with female at 5.3% and male at 2.6% (National AIDS and STI Control Program [NASCOP], 2024). This low-level use of PrEP and PEP is rather worrying given the high HIV prevalence, especially among young adults. Therefore, it is important for interventions aimed at promoting the use of these preventative measures to consider and appreciate the demographic factors described above which influence the use of the above devices. This study sought to determine the prevalence and determinants of HIV PrEP and PEP use among young adults aged 18-24 years in Khwisero Sub County of Kakamega County Kenya.

1.2 Research Objective

To determine the prevalence and demographic factors influencing the use of HIV Pre-Exposure and Post-Exposure Prophylaxis in Khwisero Sub-County, Kenya.

1.3 Research Question

What are the prevalence rates and demographic determinants of HIV Pre-Exposure Prophylaxis and Post-Exposure Prophylaxis use among young adults in Khwisero Sub-County, Kenya?

II. LITERATURE REVIEW

2.1 Theoretical Review

In this study Health Belief Model (HBM) was used to predict and explain the health behaviours concerning the Pre-Exposure Prophylaxis (PrEP) & Post-Exposure Prophylaxis (PEP) (Becker, 1974). The HBM posits that an individual's health behavior depends on their perceptions of four key areas: the chances of getting an illness, the potential consequences of the illness, and the level of protection against the disease, some of the difficulties that one may face while preventing the disease. More to that, according to the HBM, perceived cues to action refer to signs from the environment or calls to action for one to take appropriate action as suggested by the healthcare providers. Applying this model to HIV prevention provides a theoretical framework by which an understanding of the antecedents to clients' decision-making in choosing PrEP and PEP can be ascertained.

Understanding the reasons for deciding about PrEP and PEP use is facilitated by realizing the points of reference of the HBM: beliefs, perceived needs, and concerns. In meaning, similar to what Halkitis et al. (2018) and Holloway et al. (2017) demonstrated, the health belief model (HBM) has been useful in studying the HIV-related beliefs and risk perceptions affecting intentions and utilisation of PrEP. Using survey data from young adults, the findings of which were based on young adults' perceptions of HIV risk and disease consequences, the presented model highlights the factors of perceived vulnerability and risk. Through understanding these beliefs, the present study established influences on young adults' decisions regarding the uptake of preventive measures such as PrEP and PEP to guide intervention promotion for the same.

The use of the HBM to analyse PrEP and PEP use in Kenya is especially important given the country's HIV pandemic. Despite advances in HIV prevention, challenges to PrEP and PEP adoption persist. This study used the HBM framework to analyse demographic parameters such as age, gender, education level, and access to healthcare services in order to better understand Kenyan adolescent beliefs and practices about these preventative measures. The study discovered that young individuals in urban regions, who had greater access to information and healthcare, perceived more advantages and fewer barriers to PrEP and PEP than their rural counterparts. Furthermore, the study found effective signals to action, such as peer influence and healthcare professional recommendations, and emphasised cultural aspects including stigma and gender inequalities that impact HIV prevention efforts. These findings can help drive programs to increase PrEP and PEP usage among Kenyan adolescents, thereby lowering HIV transmission rates.

2.2 Empirical Review

The global HIV/AIDS pandemic has affected worldwide population to the extent of about 85.6 million people since the beginning of the epidemic, UNAIDS (2023). For the year 2030 it is expected that about ninety percent of those with HIV will have been diagnosed, initiated to ART. UNAIDS (2019) lists the following prevention approaches to HIV, and they are, education, WEIWA, human rights, condoms, circumcision, Pre-exposure prophylaxis (PrEP). Although the two prevention methods, PrEP and PEP have been confirmed to work, their offer globally and among the different ASYNCS is low because of poor awareness and poor usage.

Among the youths of Sub-Saharan Africa, new HIV infections rates are still high meaning that few youths are using PrEP and PEP. This region has recorded a recent focus on specific populations, including MSM, FSWs, the young people and women of reproductive age. Some of the barriers to the use of PrEP in South Africa are; limited access and perceived side effects of PrEP; however, perceived risk of contracting HIV influences people to initiate PrEP (Pillay et al., 2020). In Ghana religious factors have elatedly impacted on the readiness to use PrEP and PEP with higher acceptability recorded in the southern part of the country. Likewise, among the Ugandan FSWs, those, who experienced the business and sex trade shortly, had a greater recommendation for PrEP and PEP than those involved in the business for a longer duration (10 years) (Guure et al., 2022; Witte et al., 2022).

However, the use of oral PrEP was launched in Kenya in 2017 and up to the date of this analysis, only an estimated 438, 003 people have ever initiated PrEP by April 2024 (Guure, Mbaruku, & Winani, 2022). Th is much worse when it comes to establishing the proportion of youth, especially the youths aged between 18 and 24 years who are on PrEP, as cumulative data challenges complicate the process. According to the study by Cosmas et al. (2023) PrEP has started being implemented among PWID in Kenya but the level of PrEP awareness and its utilization is still low though willingness to use PrEP among study participants was very high.

There are various limitations in the use of PrEP and PEP Some of the factors include: Some barriers in South Africa are inadequate availability of these preventive strategies and some people's fears of side effects of these preventions. Nonetheless, the perceived risk of HIV infection is a chief driver that influences people to begin taking PrEP (Pillay et al. , 2020). Religious beliefs are among the essential factors that determine the willingness to use PrEP and PEP; however, a higher acceptability noted in the southern regions of Ghana than in other areas (Guure et al. , 2022). Among Ugandan FSWs, the short-term sex workers were willing to recommend more PrEP and PEP than those fully participated in the business (Witte et al. , 2022).

Several challenges characterize the use of PrEP in Kenya Among them include The efficacy of the PrEP has now been proven across the region and globally, Therefore, Kenya needs to embrace the PrEP and enhance its usage. All the same, PrEP distribution started in 2017, with approximately 438,003 people initiating PrEP by April 2024 (Guure, Mbaruku, & Winani, 2022). A major drawback is the uncertainty on the counts of youth engaging in PrEP particularly the young people of 18-24 years. Cosmas et al., 2023 revealed that even though willingness to use PrEP was high among the participants, knowledge and use of PrEP among PWID in Kenya is still low.

There are various reasons why the utilization of PrEP and PEP is still low around the world. Some of the reason include: Lack of awareness and restricted access are major challenges for such education. This indicates that as far as the application of these preventive measures is concerned there is very low education and awareness amongst many of the regions. However, barriers related to socio-economic status include poverty, lack of health facilities, and cultural perceptions that also help in decreasing the usage of PrEP and PEP.

To tackle such barriers there is a need to enhance approaches that will ensure the use of PrEP and PEP is boosted. Such measures are essential mainly for deciding on the availability and necessity of preventive measures, as well as on education and awareness of the populace about the same. Innovative strategies such as facilitators and peer education have been useful in decreasing prejudice and increasing the uptake of PrEP and PEP in risky groups (Sun et al., 2023; Nwagbo et al., 2023). In addition, the linking of the use of PrEP and PEP with other general medical services such as tests for HIV and counseling can improve on their use and uptake (Adegboyega et al., 2019).



III. METHODOLOGY

The study was carried out in the Khwisero sub-county in Kakamega County. Kakamega County is an area with well-documented high HIV incidence among youths aged between fifteen and twenty-four years. This study area's high HIV prevalence rate as compared to the other 11 sub counties in Kakamega County, made it ideal for this study. This study sought to determine the prevalence and determinants HIV PrEP and PEP use. Therefore, the study utilized a descriptive and analytical cross-sectional design to establish the extent and propellers of HIV PrEP and PEP utilization among young adults. The study population accounted for young adults residing in Khwisero Sub County. Both male and female participants within the category of young adults between the ages of 18-24 years were preferred. The population was above 10,000 hence taro Yamane’s formula was used to compute the sample size.

$$n = \frac{z^2 x p x (1 - p)}{e^2}$$

$$n = \frac{1.96^2 x 0.5 x (1-0.5)}{0.05^2} = 384$$

The study was given an attrition rate of 10% which increased questionnaire distribution to 426 to cater for the non-response rate. A purposive sampling technique was used to select Khwisero sub-county while simple random sampling was used to select the wards and the community units. Young adults of 18-24 years were selected using systematic sampling. Information was obtained through semi-administered structured questionnaires. The reliability of the research instruments was confirmed by a test-retest method of data gathering and based on a satisfactory Intraclass Correlation Coefficient (ICC) which scored 0.635.

Numerical data was summarized by tabulation in the form of frequency and percentage and inferential statistics by the use of a chi-square test and logistic regression test with the assistance of SPSS version 26. This was done with a view of establishing the prevalence and determinants of PrEP and PEP utilization. Ethical issues were strictly implemented in terms of gaining approval regarding the study’s requirements and major adherence to ethics norms in the process of the study.

IV. FINDINGS & DISCUSSIONS

4.1 Prevalence of HIV PrEP and PEP

From the findings in Figure I, 58.0% and 56.7% of the individuals were aware of PrEP and PEP respectively. However, only 23.4% and 22.6% have utilized PrEP and PEP as an intervention measure. This disparity shows the disconnect and laxity of mitigating the spread of HIV. This low prevalence of PrEP and PEP could be associated with other factors bearing in mind that Zhou et al. (2022) and Chan et al. (2021) found that young people and those with high levels of education make use of PrEP and PEP. Besides, studies have also affirmed that there was a higher rate of condom usage, and drug consumption among the youthful population (Blair et al., 2022; Gordián-Arroyo et al., 2020). This can readily explain why while a majority of the young adults possessed knowledge on the use of PrEP and PEP to prevent HIV infection, only a fifth was actually using PrEP or PEP. This finding concurs with a Kenyan study which stipulated that despite the national rollout of PrEP in 2017, uptake remains low, particularly among young adults (Masyuko et al., 2018; Bien-Gund et al., 2022). This was also attributed to social and structural barriers that made it impossible to domicile the intervention measure by the use of PrEP and PEP among young Kenyan adults.

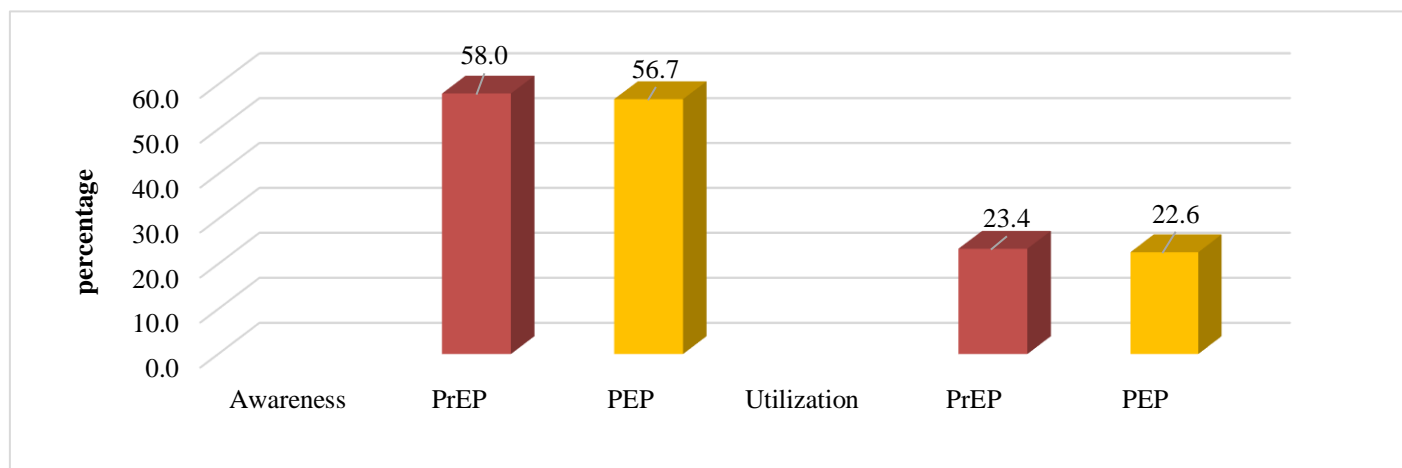


Figure I
PrEP and PEP awareness and prevalence

4.2 Influence of Demographic Determinants on HIV PrEP and PEP Use among Young Adults in Khwisero Sub-County

4.2.1 Influence of Demographic Determinants on HIV PrEP Use

Table I stipulates the association between sociodemographic variables and the usage of Pre-Exposure prophylaxis (PrEP) among young adults. It was indicated that the level of education has a significant association with PrEP use ($\chi^2 = 8.10$, $P = 0.04$). This showed that people with higher educational achievement were more likely to see the importance of using PrEP in preventing HIV transmission. This study aligns with Ajayi *et al.* (2018) study whose discovery summarizes the that higher education levels of the participants are associated with increased PrEP use.

It was further revealed that the religion of the young adults was a predictor of PrEP use ($\chi^2 = 5.0$, $P = 0.03$). This suggested that religious beliefs could influence PrEP adherence among young adults. This was corroborated by Wang *et al.* (2022) who found that religion had an impact on PrEP use. The study found that age ($\chi^2 = 0.38$, $P = 0.54$), gender ($\chi^2 = 0.12$, $P = 0.73$), marital status ($\chi^2 = 2.74$, $P = 0.26$), and living arrangement ($\chi^2 = 2.63$, $P = 0.11$) were not significant predictors of PrEP use among young adults. This finding aligns with previous studies which established that age and gender have no significant effect on PrEP use (Strauss *et al.*, 2017; Sun *et al.*, 2023), which supports the current study's conclusions that these parameters are not substantial predictors of PrEP use. Table I presents the findings.

Table 1

Chi-Square Test of Association between Demographic Factors And PrEP Use

Variable	Grouping	PrEP use		χ^2	P value
		Yes	No		
Age					
	18 to 20	44(24.9)	133(75.1)	0.38	0.54
	21 to 24	50(22.2)	175(77.8)		
Gender					
	Male	39(22.5)	134(77.5)	0.12	0.73
	Female	55(24.0)	174(76.0)		
Education					
	No education	0(0.0)	1(100)	8.10	0.04
	Primary	26(34.7)	49(65.3)		
	Secondary	48(19.4)	200(80.6)		
	Tertiary	20(25.6)	58(74.4)		
Marital status					
	Married	27(28.1)	69(71.9)	2.74	0.26
	Single	62(21.3)	229(78.7)		
	Widowed/Separated	5(33.3)	10(66.7)		
Living arrangement					
	Independent	41(27.9)	106(72.1)	2.63	0.11
	With guardian	53(20.8)	202(79.2)		
Religion					
	Christian	82(22.0)	290(78.0)	5.00	0.03
	Islam	12(40.0)	18(60.0)		

Data is in frequencies (n) and row proportions (%). Statistical significance was determined by χ^2 at $P < 0.05$.

Further tests by logistic regression showed that education level and religion influence PrEP use among young individuals. Young adults without education are 79% less likely to use PrEP compared to those with tertiary education (OR = 1.62, 95% CI = 0.85-1.03, $P = 0.04$), whereas Christians are 60% less likely to use PrEP than Muslims (OR = 0.4, 95% CI = 0.18-0.92, $P = 0.03$). These finding are similar with previous studies which established that education and and religion have significant effect on PrEP use (Ssuna *et al.*, 2022; Guure *et al.*, 2022). Age (OR = 1.34, 95% CI = 0.81-2.20, $P = 0.259$), gender (OR = 0.97, 95% CI = 0.60-1.57, $P = 0.73$), and marital status (OR = 0.6, 95% CI = 0.17-2.11, $P = 0.26$) have no significant effect on PrEP use (Strauss *et al.*, 2017; Sun *et al.*, 2023; Nwagbo *et al.*, 2023). These results are summed up in Table 2.

Table 2*Demographic Determinants of PrEP use.*

Independent		OR	95% CI	P value
Age	18 to 20	1.34	0.81-2.20	0.54
	21 to 24			
Gender	Male	0.97	0.60-1.57	0.73
	Female			
Education level	No education	1.62	0.85-1.03	0.04
	With education			
Marital status	In Marriage	0.6	0.17-2.11	0.26
	Not in Marriage			
Religion	Christian	0.4	0.18-0.92	0.03
	Islam			

OR, Odds Ratio; CI, Confidence Interval. Statistical significance was determined by the OR at $P < 0.05$.

4.2.2 Influence of Demographic Determinants on HIV PEP Use

The finding in Table III showed age ($\chi^2 = 0.25$, $P = 0.62$) and gender ($\chi^2 = 1.00$, $P = 0.32$) do not significantly predict the use of HIV Post-exposure Prophylaxis (PEP) in this study. There is no difference in PEP use between the age groups 18-20 and 21-24 years, an observation supported by Strauss *et al.* (2017). This indicated that age and gender failed to play a vital role in predicting and determining PEP uptake (Sun *et al.*, 2023).

It was revealed in Table III that the education level ($\chi^2 = 17.76$, $P < 0.001$), marital status ($\chi^2 = 6.47$, $P = 0.04$), living arrangement ($\chi^2 = 9.91$, $P < 0.001$) and religion ($\chi^2 = 10.69$, $P < 0.001$) were significant predictors of PEP usage among the young adults. From previous study by Ajayi *et al.* (2018) found that education level strongly predicts the use of PEP use. Young adults who had attained tertiary education (35.9%) embraced the use of PEP as compared to those with secondary (16.5%) and primary (28.0%) education. The married young adults from Khwisero Sub County were leading in the use of PEP (29.2%) as compared to the single young adults (19.6%). This aligns with the study by Nwagbo *et al.* (2023). Furthermore, it was established that living independently (31.3%) was associated with increased use of PEP as compared to young adults who lived with their parents or guardians (17.6%). Finally, it was established that the religion of the young adults was a predictor of the use of PEP where most Muslims (46.7%) used HIV PEP as compared to Christians (20.7%), as corroborated by Wang *et al.* (2022). Table III presents the findings.

Table 3*Chi-Square Test of Association between Demographic Factors and PEP Use*

Variable	Grouping	PEP use		χ^2	P value
		Yes n (%)	No n (%)		
	18 to 20	38(21.5)	139(78.5)	0.25	0.62
	21 to 24	53(23.6)	172(76.4)		
	Male	35(20.2)	138(79.8)	1.00	0.32
	Female	56(24.5)	173(75.5)		
	No education	1(100.0)	0(0.0)	17.76	<0.001
	Primary	21(28.0)	54(72.0)		
	Secondary	41(16.5)	207(83.5)		
	Tertiary	28(35.9)	50(64.1)		
	Married	28(29.2)	68(70.8)	6.47	0.04
	Single	57(19.6)	234(80.4)		
	Widowed/separated	6(40.0)	9(60.0)		
	Independent	46(31.3)	101(68.7)	9.91	<0.001
	With guardian	45(17.6)	210(82.4)		
	Christian	77(20.7)	295(79.3)	10.69	<0.001
	Islam	14(46.7)	16(53.3)		

Data is in frequencies (n) and row proportions (%). Statistical significance was determined by χ^2 at $P < 0.05$.

Findings in Table IV showed that age and gender do not influence the use of PEP with an OR of 0.14 for the 18 to 20 age group compared to the 21 to 40 age group (95% CI = 0.68-1.9, $P = 0.62$), male subjects were 22% less

likely to use PEP than female (OR = 0.78, 95% CI = 0.47-1.3, P = 0.32). On the other hand, education level, marital status, living arrangement and religion influenced the likelihood of using PEP. Those respondents without any secondary education level were 57% less likely to use PEP than those with tertiary education (OR = 0.43, 95% CI = 0.24-0.77, P < 0.001). Marital status was also significantly associated with PEP use whereby married respondents were less likely to use PEP than unmarried participants by 67% (OR = 0.33, 95% CI = 0.11-0.96, P = 0.04). Further, the participants living independently were almost twice as likely to use PEP rather than those living with a guardian (OR = 1.95, 95% CI = 1.09-3.52, P < 0.001). PEP utilization also varies depending on a person's religious inclination, which showed Christians were 72% less likely to use PEP than Muslims (OR = 0.28; 95% CI: 0.12-0.65, P < 0.001) (Wang *et al.*, 2022). Therefore, these findings highlight the need for specific educational and outreach programs designed to tackle these disparities and improve PEP utilization among young adults.

Table 4
Demographic Predictors of PEP Use

Variable		OR	95% CI	P value
Age	18 to 20	1.14	0.68-1.9	0.62
	21 to 40			
Gender	Male	0.78	0.47-1.3	0.32
	Female			
Education	No education	0.43	0.24-0.77	<0.001
	With education			
Marital status	In marriage	0.33	0.11-0.96	0.04
	Not in marriage			
Living arrangement	Independently	1.95	1.09-3.52	<0.001
	With guardian			
Religion	Christian	0.28	0.12-0.65	<0.001
	Muslim			

The study in Table IV shows that logistical regression between demographic factors and PEP use. It was revealed that age (OR = 1.14) and living arrangement (OR = 1.95) contributed to the increased need to use PEP among young adults. This suggested that the age of the participants had a variance of 14% in the increased use of PEP though it was rather insignificant. This was in line with the study previous study by Strauss *et al.* (2017) which stated that there was a significant difference between PEP use and the age of the participants. Living arrangements indicated a significant 95% variance in the increased usage of PEP among young adults. This was corroborated by Sun *et al.* (2023) that gender does not impact the use of PEP among adults.

On the other hand, it was revealed that gender (OR = 0.78), education (OR = 0.43), marital status (OR = 0.33) and religion (OR = 0.28) had decreasing association. This showed that male participants had 22% lower chances of using PEP as compared to female participants which were insignificant in this study. Also, it was revealed that the participants without education their proportion of not using PEP was at 57% as compared to the participants with education which was a highly significant predictor. Marital status significantly indicated that those marriage participants were 67% less likely to use PEP as compared to those who were not in marriage. Finally, Christian participants were 72% less likely to use PEP as compared to Muslim participants. The study aligned with previous studies that found that these demographic characteristics were less likely to favour the use of PEP among young adults (Ajayi *et al.* 2018; Wang *et al.*, 2022; Nwagbo *et al.* 2023).

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusions

The adherence to HIV PEP and PrEP within young adults was influenced by educational level and religious affiliation. Age, gender, marital status and living arrangement do not affect the PrEP use but predict PEP use. Being more educated and Muslim had higher PrEP and PEP utilization.

5.2 Recommendations

Based on the findings, it is recommended that there should be an enhancement of the use of HIV PEP and PrEP among young adults. There is a need for more intensified health educational interventions and culturally appropriate campaigns, which should focus on the young population.

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