

Prevalence and Association Between HIV PrEP Knowledge and Approval, and HIV Testing among Sexually Experienced Men in Côte d'Ivoire

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Abstract

Despite evidence of high interest and willingness to use PrEP by key populations behaviorally vulnerable to HIV infection, a lack of comprehensive PrEP knowledge and low HIV testing currently undermine HIV prevention efforts in Cote d'Ivoire. Given that HIV testing is the initial phase in the HIV prevention care continuum, this study examined the prevalence and association between HIV PrEP knowledge and HIV testing among sexually experienced men aged 15-59 years using the dataset from the 2021 Cote d'Ivoire Demographic and Health Survey (N=7,591). Prevalence estimates were obtained using frequencies and proportions. A multivariate logistic regression model was fitted to examine the relationship between the independent and dependent variables within the population. The findings reveal that merely 8.3% of the participants were aware of and endorsed PrEP, and 23.7% have undergone HIV testing. Yet, 83.8% of the participants reported being sexually active, with 32.8% involved in multiple sexual partnerships. Knowledge and approval of PrEP was a poor predictor of sexual activity (AOR=1.11, 95% CI=.81-1.53, p=.524), unlike HIV testing was strongly associated with higher odds of being sexually active (AOR=6.74, 95% CI=4.94-9.21, p<.001) in those who have undergone HIV testing. Knowledge of HIV test kits and anti-retroviral treatment were both strongly associated with higher odds of sexual activity and multiple sexual partnerships. To stem the tide of new HIV transmission, HIV Prevention initiatives should be prioritized among sexually active men by developing innovative approaches to scale up HIV testing and optimize comprehensive knowledge of PrEP in Cote d'Ivoire.

Keywords: *Cote d'Ivoire, HIV/AIDS, HIV PrEP, HIV Testing, Pre-exposure Prophylaxis, Sexually Experienced Men.*

Introduction

Sub-Saharan Africa accounts for about 70% (28.5 million) of the estimated 39 million people living with HIV worldwide [1, 2]. In 2015, the World Health Organization (WHO) recommended the integration of HIV pre-exposure prophylaxis (PrEP) into national HIV prevention strategies in sub-Saharan Africa [3, 4]. PrEP is a highly effective biomedical intervention drug which protects those without HIV infection from acquiring HIV [5, 6] thereby lowering the incidence of new HIV infections. Among key populations and people

behaviorally vulnerable to HIV, PrEP is particularly remarkable in reducing HIV incidence by more than 70% as demonstrated by studies in Kenya and Uganda [7-9]. In Cote d'Ivoire and many sub-Saharan African countries, willingness for and utilization of PrEP has witnessed a remarkably high reception and interest by key populations such as adolescents and young adult women, female sex workers and men who sleep with men [10-14]. Yet, implementation of PrEP in sub-Saharan countries is still inundated by many structural, community level and cultural barriers and challenges which contribute to

gross under-utilization of PrEP in the general population. Challenges hindering the implementation, initiation, and continuity of PrEP have been identified by previous research and include stigma, perceived side effects, frequent relocation of recipients, insufficient resources for regular screening and medication monitoring, and a scarcity of qualified healthcare professionals for the distribution and administration of PrEP [15, 16]. Among cis-gender heterosexual people, the low self-perceived HIV risk and the concentration of PrEP messaging around sexual and gender minority groups has also contributed to misconceptions regarding the usefulness of PrEP [17, 18].

The imperative and economically sustainable aspect of comprehensive HIV prevention initiatives lies in the increased adoption of HIV testing, especially within populations experiencing higher rates of HIV infections [19]. HIV testing plays a pivotal and cost-efficient role as the initial phase in a broader spectrum of health services, encouraging self-testing, identifying HIV negative individuals at risk for HIV and could benefit from PrEP, and also connecting individuals living with HIV to preventive, care, and treatment services [20]. Multiple studies conducted across Sub-Saharan African countries revealed that factors such as HIV knowledge, the fear of testing positive for HIV, stigma linked to HIV, the quality of healthcare provider services, confidentiality concerns, and the clinic setting were among the prevalent obstacles hindering men's engagement with HIV testing services which leads to late diagnosis of AIDS in some instances [21-23]. This underscores the need for this current study.

HIV testing is a foundation for HIV PrEP initiation considering that only individuals who test negative to HIV can benefit from PrEP which also prevents the development of resistance that may arise should PrEP be initiated after the establishment of HIV infection [24]. The reciprocal relationship

between HIV PrEP and HIV testing is reinforced by the PrEP guideline which typically stipulates a 3-monthly HIV testing while on PrEP to ensure that the individual remains sera-negative [25]. In the United States, HIV PrEP was associated with enhanced sexual self-esteem, improved sexual pleasure, reduced sexual anxiety, and increased sexual health-care utilization, but not risk compensation or increased sexual risk [26]. The connection between HIV testing and PrEP in male sexual behaviours has not been fully studied in sub-Saharan Africa.

A population-based HIV impact assessment found that there were about 4,000 new annual cases of HIV among adults aged 15-64 years, out of which 2.9% were living with HIV in Cote d'Ivoire as of 2021 [27]. Currently, the prevalence of HIV among adults in Côte d'Ivoire is 3.4%, leading to an estimated 8,356 AIDS-related deaths annually [28]. As of 2023, the estimated cumulative oral PrEP uptake was 17,971 in Cote d'Ivoire [28]. Over the past few years, Côte d'Ivoire has made remarkable strides in establishing a conducive policy and systems framework that facilitates advancements toward achieving epidemic control. The Fiscal Year (FY) 2023 vision of the U.S. President's Emergency Plan for AIDS Relief program in Côte d'Ivoire (PEPFAR-CI) also aims to address disparities among key sub-populations, enhance the effectiveness and quality of interventions, and persist in establishing resilient systems to attain the 95:95:95 targets outlined by the Joint United Nations Program on HIV/AIDS (UNAIDS) [28]. The three main thematic areas of concentration involve advocating for heightened demand and acceptability of PrEP, enhancing uptake, and providing support for its effective utilization, addressing the persisting issues of limited availability and access to PrEP.

However, these ongoing multi-level initiatives face challenges due to social and structural barriers, hindering the identification of optimal practices and opportunities for

scaling up PrEP among men. To promote the widespread uptake and consistent use of PrEP, it is important to raise community awareness significantly. This is crucial not just for reducing stigma but also for cultivating broad acceptance of PrEP within the community, and reducing new infections and transmission among key vulnerable populations, thereby enhancing its effectiveness in preventing HIV.

Purpose of the Study

Evidence suggests that individual exposure to HIV increases with an increase in sexual activity and the number of sexual partners [29]. In order to assess the awareness of HIV PrEP and HIV testing prevalence among sexually experienced men in Cote d'Ivoire, our research sought to answer the following research questions:

1. What is the prevalence and association between HIV PrEP knowledge and HIV testing among sexually experienced men aged 15 to 59 years in Cote d'Ivoire?
2. Is there an existing relationship between knowledge of HIV PrEP, testing for HIV, and being sexually active and engaging in multiple sexual partnerships among men aged 15 to 59 years in Cote d'Ivoire?

Methods

Data Source

This secondary analysis research study is based on primary data from the 2021 Côte d'Ivoire Demographic and Health Survey (DHS-CI 2021). DHS-CI 2021 was implemented by the National Institute of Statistics (INS), with technical support from Inner City Fund (ICF) and specialized structures of the Ministry of Health, Public Hygiene, and Universal Health Coverage [30]. The DHS-CI 2021 was funded by the Ivorian government, SE-CONNAPE, the U.S. government through the United States Agency for International Development (USAID), the World Bank through its Health Projects Coordination Unit, the Global Fund, UNICEF,

and the United Nations Population Fund (UNFPA) [30]. ICF provided technical assistance through the DHS Program, a project funded by USAID that offers support and technical assistance for conducting surveys in the fields of population and health in many countries around the world [30]. Data collection took place between September 2021 to December 2021. The study utilized a male questionnaire to gather information from eligible male participants aged 15 to 59, focusing on modules covering HIV Knowledge, Attitudes, and Behavior and HIV testing amongst other domains.

Sampling Design and Sample Size

This secondary study is based on a primary dataset known as the 2021 Côte d'Ivoire Demographic and Health Survey (DHS-CI 2021) [30]. Employing a stratified, two-stage cluster design, the survey utilized enumeration areas (EAs) as the first-stage sampling units. In the second stage, a complete listing of households was conducted. The interviews included for this current study were conducted with 7,591 men aged 15-59 mostly from the rural areas focusing on topics such as HIV Knowledge, Attitudes, and Behavior [30].

Measures

Dependent Variables

As the outcome variable, sexual experience such as *recent sexual activity* and *number of sexual partners* excluding spouse (multiple sexual partnership) were chosen because of their dominance in the literature and presence in the DHS-CI 2021 dataset [30]. Individual exposure to HIV increases with an increase in the number of sexual partners. The measures analyzed aim to evaluate the relationship between sexual experience and the HIV PrEP knowledge and HIV testing among men aged 15-59 years in Cote d'Ivoire. The dependent measures were obtained thus: (1) *recent sexual activity* was assessed by asking the participants: "I would like to ask you about your recent

sexual activity. When was the last time you had sexual intercourse?" (2) *multiple sexual partners* were assessed by asking, "In total, with how many different people have you had sexual intercourse with excluding your spouse?" The responses were "yes" or "no" for each outcome variable.

Independent Variables

HIV testing: this was assessed by asking the participants: "I don't want to know the results, but have you ever been tested for HIV? " This variable was coded "yes" or "no" and was used as one of the dependent variables. Recognizing the importance of remaining HIV negative while on PrEP, *HIV PrEP* knowledge was assessed by asking participants the following items: (1) Knowledge and Attitude about PrEP, "Have you heard about PrEP used to prevent someone from getting infected with HIV? Do you approve of the use of PrEP?" (2) knowledge of HIV test kit, "Have you heard about or used HIV test kits for checking if someone has HIV" (3) knowledge of ART, "Have you heard of drugs to help HIV infected people live longer?".

Sociodemographic Characteristics

The socio-demographic characteristics included the following variables: region, ethnicity, resident type, marital status, education, employment, and religion. All these were used as control variables.

Data Analysis

Data analysis was conducted using SPSS version 29.0. Univariates, represented by frequencies and proportions across various sociodemographic characteristics, were generated. A logistic regression model was applied to examine the relationship between independent and dependent variables. Initially, a multivariate logistic regression was conducted to explore associations between primary independent variables (knowledge and attitude about PrEP, knowledge of HIV test kits, knowledge of drugs for HIV-infected

individuals, i.e., ART, and history of HIV testing) and the dependent variable (recent sexual activity). In Model 2, logistic regression was used to assess the association between the same independent variables and the dependent variable (number of sexual partners excluding spouse). Both models included controls for sociodemographic characteristics. The results from the two models were synthesized and consolidated into a single table since the independent variables remained consistent across both analyses. The significance level for determining statistical significance in this study was set at a *p*-value of 0.05, while confidence interval was set at 95%.

Ethical Considerations

This nationwide survey was conducted from September 8, 2021, to December 30, 2021, throughout urban and rural regions across all 14 administrative districts in Cote d'Ivoire [30]. The Ivorian Government, with the support of development partners conducted the 2021 Demographic and Health Survey (DHS-CI 2021) to gather social indicators of health. It achieved national representativeness by involving a randomly chosen sample of 15,093 households identified in 539 enumeration areas based on the 2021 General Population and Housing Census [30]. The data collection during the field phase included face-to-face interviews, observations, and various tests like kitchen salt tests, bacteriological tests for drinking water, blood tests, and anthropometric measurements. Technical assistance was provided by the Inner City Fund International (ICF) through The DHS Program, which is funded by USAID [30]. Based on The DHS Program's standard Demographic and Health Survey (DHS-7) questionnaires, questionnaires were modified to address population and health issues specific to Cote d'Ivoire. The survey protocol underwent scrutiny and approval from the National Institute of Statistics (NIS), and the ICF Institutional Review Board. Authorization to employ the CDHS data for this

current research was obtained from the Department of Health and Human Services (DHS) Inner City Fund International (ICF), securing approval on November 27th, 2023. The research participant datasets do not contain any personal identities.

Results

Descriptive Characteristics of the Participants

Table 1 contains the descriptive characteristics of the participants. The total sample size included 7591 men from Cote d'Ivoire aged 15 to 59 years. The participants were distributed across different regions of the country, with the highest representation in the

Montagnes (9.1%), followed by Sassandra-Marahone (8.7%), and Abidjan (8.4%) while Zanzan (5.8%) had the lowest representation. A majority of the participants were drawn from rural areas (51.9%), were aged 15-24 (33.0%), never married (42.2%), practiced Islam (47.4%), currently working (82.7%), and had a primary school education or higher (59.7%). Furthermore, most of the participants had never tested for HIV (76.3%), were sexually active (83.8%), and never heard of HIV PrEP (91.3%). However, 51.5% had knowledge of anti-retroviral treatment (ART) while 32.9% maintained at least one or more sexual partners excluding their spouses (multiple sexual partnerships).

Table 1. Descriptive Characteristics of the Participants (n=7591)

Variables	N	%
Region		
Abidjan	636	8.4
Yamoussoukro	489	6.4
Bas Sassandra	595	7.8
Comoe	458	6.0
Denguele	537	7.1
Goh-Djiboua	545	7.2
Lacs	475	6.3
Lagunes	568	7.5
Montagnes	691	9.1
Sassandra-Marahoue	659	8.7
Savanes	465	6.1
Vallee du Bandama	472	6.2
Woroba	557	7.3
Zanzan	444	5.8
Resident type		
Urban	3649	48.1
Rural	3942	51.9
Age group (years)		
15 – 24	2501	33.0
25 – 34	1894	25.0
35 – 49	2430	32.0
50 – 59	766	10.1
Marital status		
Married	2847	37.5
Never married	3204	42.2

Living with partner	1299	17.1
Others	241	20.3
Highest level of education		
No education	3056	40.3
Primary and Higher	4535	59.7
Employment status		
Not working	1311	17.3
Currently working	6280	82.7
Religion		
Christian	2729	36.0
Muslim	3601	47.4
Others	1261	16.6
Ever tested for HIV		
Yes	1799	23.7
No	5792	76.3
Recent sexual activity		
Never had sex	1233	16.2
Sexually active	6358	83.8
Number of sexual partners excluding spouse		
None	5094	67.1
One or more	2497	32.9
Knowledge of HIV PrEP and Approval		
Haven't heard about PrEP	6360	88.4
Heard about PrEP/Approve	599	8.3
Heard about PrEP/Disapprove	239	3.3
Knowledge of HIV test kit		
Never Heard of HIV test kit	6575	91.3
Heard of HIV test kit	623	8.7
Knowledge of Anti-retroviral Treatment		
No	3489	48.5
Yes	3709	51.5

Relationship Between HIV PrEP, HIV Test Kit, Anti-retroviral Treatment, HIV Testing, and Recent Sexual Activity and Multiple Sexual Partnerships

Table 2 shows the Logistic regression results of the association between recent sexual

activity (model 1) and multiple sex partners (model 2). In model 1, there was a statistically significant association between knowledge of HIV test kit (AOR=1.9, 95% CI=1.26-2.99, $p<.002$), anti-retroviral treatment ART (AOR=2.11, 95% CI=1.81-2.45, $p<.001$), and ever tested for HIV (AOR=6.74, 95% CI=4.94-

9.21, $p < .001$), with recent sexual activity. However, knowledge/attitude about HIV PrEP (heard and approve AOR=1.11, 95% CI=.81-1.53, $p = .524$; heard and disapprove AOR=1.5, 95% CI=.90-2.65, $p = .117$) was not significantly associated with recent sexual activity compared to participants who have not heard about HIV PrEP. Therefore, participants who possessed knowledge of HIV test kit, ART, and have tested for HIV had higher odds of sexual activity, compared to those who did not.

Model 2 shows that approval of PrEP (AOR=.082, 95% CI=.68-.99, $p = .035$), knowledge of HIV test kit (AOR=1.36, 95% CI=1.14-1.62, $p < .001$), and ART (AOR=1.49, 95% CI=1.34-1.66, $p < .001$) were significantly associated with having multiple sex partnerships. Conversely, disapproval of HIV PrEP and having tested for HIV were not significantly associated with the participants number of sexual partners, excluding their spouses. However, there were significantly higher odds that participants who knew about

HIV test kit, and ART would engage in sex with multiple partners, compared to those who were unaware of either HIV test kit, or ART. Those who disapproved of HIV PrEP and had tested for HIV possessed higher odds of engaging in sex with multiple sexual partners excluding their spouse, compared to those who approved of HIV PrEP and have not tested for HIV (model 2).

Conclusively, while there was no significant association between knowledge of HIV PrEP and recent sexual activity, there were higher odds that both approval and disapproval of HIV PrEP (knowledge of HIV PrEP) will result in sexual activity compared to those without HIV PrEP knowledge in this demographic. Also, there were higher odds that participants who possessed knowledge of HIV PrEP will engage in multiple sexual partnerships (one or more) excluding their spouse, compared to those without HIV PrEP knowledge in this demographic.

Table 2. Logistic Regression Results Showing Knowledge of HIV PrEP, HIV Test Kit, Anti-retroviral Treatment, HIV Testing, Associated with Recent Sexual Activity and Multiple Sexual Partnerships Excluding Spouse

Variables	Model 1	Model 2
	Recent sexual activity	Multiple sex partners
	AOR (95% C.I)	AOR (95% CI)
<i>Knowledge/Attitude about PrEP</i>		
Haven't heard	Ref	Ref
Heard about PrEP and approve	1.11 (.81 – 1.53)	.82 (.68 - .99) *
Heard about PrEP, disapprove	1.50 (.90 – 2.65)	1.10 (.84 – 1.44)
<i>Knowledge of HIV test kit</i>		
No	Ref	Ref
Yes	1.9 (1.26 – 2.99) **	1.36 (1.14 – 1.62) ***
<i>Knowledge of ART</i>		
No	Ref	Ref
Yes	2.11 (1.81 – 2.45) ***	1.49 (1.34 -1.66) ***
<i>Ever tested for HIV</i>		
No	Ref	Ref
Yes	6.74 (4.94 – 9.21) ***	1.07 (.95 – 1.20)

*=p<.05, **=p<.01, ***=p<.001. PrEP = Pre-Exposure Prophylaxis, ART = Anti-Retroviral Treatment, AOR = Adjusted Odd Ratio, CI = Confidence Intervals, Model 1 = Recent sexual activity is analyzed as an outcome variable, and Model 2= Multiple sex partners is analyzed as an outcome.

Discussion

In this study, we examined the prevalence and association between HIV PrEP knowledge, HIV PrEP approval and HIV testing among sexually experienced men aged 15-59 years in Cote d'Ivoire. The participants were mostly rural dwellers, aged 15-34 years, never married, possessed primary education or higher, currently working, and belonged to the Islamic religion. Additionally, a majority of men had never tested for HIV, never heard of HIV PrEP or HIV test kit for self-testing but were overwhelmingly sexually active and aware of the existence of anti-retroviral treatment (ART). Hence, this study makes a significant contribution to the existing literature of HIV PrEP and approval or acceptability, HIV testing and sexual experience, specifically for men in Cote d'Ivoire.

The first noteworthy finding indicated that majority of the participants were composed of young men aged 15-34 years, never tested for HIV, never knew of the existence of HIV PrEP and HIV test kits for self-testing yet were sexually active with a significant portion engaging in multiple sexual partnerships. This finding is a clear indication of the prevailing HIV prevention gap and lack of access in this population, and the prospective role of HIV prevention education in stemming the tide of new HIV infections in Cote d'Ivoire. Previous studies conducted among similar demographics of men in sub-Saharan Africa, reported findings consistent with our current study [9, 31-33]. There is compelling evidence that young people attain sexual maturity before developing mental and emotional maturity or even the social skills to properly evaluate their sexual choices [34, 35]. Given our majority sexually active sample of young men who have never tested for HIV, and the overwhelming lack of HIV PrEP knowledge in our sample, there is a crucial need

for drastic comprehensive HIV PrEP and testing educational campaign in Cote d'Ivoire. Similar calls for HIV PrEP and HIV testing awareness raising campaigns are also evident in studies conducted among sexual and gender minority groups in west African countries such as Burkina Faso, Côte d'Ivoire, Mali, Togo and Benin [12, 13, 36]. Consistent with evidence, some of the major concerns negatively impacting HIV PrEP and HIV testing among similar demographics worldwide has been the low self-perceived HIV risk, close association of PrEP with actual HIV infection or homosexuality, and disassociating PrEP from heterosexuals [12, 37-40]. Therefore, it is imperative to prioritize/incentivize HIV PrEP uptake, testing and sexuality education specifically targeting the misconceptions evident in the literature, coupled with utilizing peer social networks of youths with similar sexual experiences as the target populations during HIV PrEP and testing campaigns. Community and school level structures should be engaged meaningfully in designing, executing, and evaluating enlightenment campaigns coupled with the ongoing efforts at integrating HIV PrEP services into public healthcare services.

Secondly, we found that HIV testing is strongly associated with higher odds of engaging in sexual activity but not for multiple sexual partnerships, compared to participants that never tested for HIV. This finding suggests that being tested for HIV was a significant predictor of sexual activity but not engagement in multiple sexual partnerships. On the contrary, HIV PrEP knowledge was not associated with either sexual activity and multiple sexual partnerships; but a minor association existed among men who have heard and approve of HIV PrEP and multiple sexual partnership only. This finding also indicates that while HIV testing may serve as both

preventive and protective measure for those already tested, HIV PrEP was not an important consideration in this demographic owing to the gross lack of knowledge about PrEP. This finding is consistent with previous studies that suggests that HIV PrEP was not intended as a risk compensation for increased sexual risk and HIV testing can be conducted by unlicensed health personnel [24, 26]. The implementation of HIV Pre-Exposure Prophylaxis (PrEP) in many countries has acted as a catalyst for enhancing routine healthcare practices and promoting greater engagement in sexual health services. This has resulted in a favorable impact on both the range of sexual experiences and the effectiveness of bio-behavioral HIV prevention measures. This study advocates for more innovative PrEP and HIV testing engagement, given the gross under-utilization of both in Cote d' Ivoire.

Thirdly, we found a significantly strong association between knowledge of HIV test kits and anti-retroviral treatment (ART) with higher odds of both sexual activity and multiple sexual partnerships. This finding may imply that participants who had heard about HIV test kits and treatment for HIV were more likely sexually active with multiple partners compared to those who were unaware of HIV test kits and HIV treatment. It is important to establish public health protocols in Cote d' Ivoire that allow nursing and unlicensed health care personnel to evaluate people for PrEP, order PrEP for those eligible, communicate HIV self-testing education, and undertake follow-up support services, particularly in the rural communities that mostly make up the sample in this study. A recent analysis of 114 articles investigating the integration of HIV services with other healthcare services revealed that, overall, the integration proved successful in sub-Saharan Africa [41]. However, certain interventions aimed at enhancing health outcomes faced challenges, primarily due to issues such as patient retention, adherence, inadequate staff

training and resources, and suboptimal quality of care [41]. To provide comprehensive care and improve health outcomes, HIV PrEP and testing for HIV should be fully integrated into all other health care and social services involving the youth in Cote d' Ivoire. Moreover, issues such as patient retention, adherence, inadequate staff training and resources, as well as suboptimal quality of care need to be addressed urgently.

Limitations and Strengths of the Study

The 2021 Cote d'Ivoire Demographic and Health Survey (DHS-CI 2021) concluded its final report in French, which was subsequently transcribed into English to integrate some of its discoveries into this research. Given that HIV disease is intricately linked to social and economic disparities and remains significantly stigmatized, the utilization of self-report surveys in this study potentially introduces recall bias and social desirability bias. Furthermore, the study's design indicates that it cannot definitively establish or infer a causal relationship between HIV PrEP, HIV testing, and behaviors associated with sexual experience due to its cross-sectional nature. While acknowledging certain constraints, this study boasts numerous strengths. Unlike the few existing studies focusing on Cote d' Ivoire, and relying on older versions of the DHS datasets, this study provides the most recent evidence in the field. The primary data completed in 2021 with final reports only available recently in 2022, confers on this study, the best available evidence on HIV PrEP knowledge, HIV PrEP approval, and HIV testing for Cote d' Ivoire. Our models incorporated variables chosen for their significance in the existing literature, extensively examined in HIV PrEP, HIV testing, and related studies. Importantly, the study utilized a nationally representative sample, enhancing reliability and enabling generalizability to settings beyond Cote

d'Ivoire and across other sub-Saharan African countries.

Conclusions

HIV Pre-Exposure Prophylaxis (PrEP) is relatively new in sub-Saharan Africa, and despite PrEP recommendation from the World Health Organization (WHO) since 2015, innovative approaches to optimize comprehensive knowledge of PrEP for men is still a challenge. The findings in this study reveal that HIV PrEP knowledge and approval is very low, and HIV testing rate is equally very low, yet a significant number of men aged 15-59 years in Cote d'Ivoire are both sexually active with many engaging in sexual intercourse with multiple partners. Furthermore, HIV testing, knowledge of HIV test kits and anti-retroviral treatment were strongly associated with higher odds of sexual activity and multiple sexual partnerships, respectively. At present, there are comprehensive knowledge gaps surrounding PrEP, exacerbated by misconceptions and stigma, despite clear indications of significant interest and willingness among key populations and groups at behavioral risk for HIV infection.

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Recognizing that HIV testing serves as the primary step in the HIV prevention care continuum and that individual exposure to HIV increases with an increase in sexual activity and the number of sexual partners, it is important to allocate additional material and human resources to enhance both testing and PrEP services. Consequently, the current HIV prevention care continuum in Cote d'Ivoire should explore and fortify both formal and informal community-level structures including networks comprising of men aged 15-59 years, with innovative approaches to HIV PrEP and HIV testing education.

Conflict of Interests

The author(s) declare that they have no competing interests.

Funding

No specific funding was provided for this study.

Acknowledgements

The authors would like to acknowledge Inner City Fund International (IFC) for granting us permission to use DHS dataset.

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