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Awareness and Knowledge of HIV Pre-Exposure Prophylaxis (PrEP) among Female Sex Workers in Abeokuta South Local Government Area, Ogun State, Nigeria

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Abstract:

Background: HIV pre-exposure prophylaxis (PrEP) is a highly effective biomedical HIV-prevention strategy, but its population-level impact depends on the awareness and accurate knowledge of the populations most at risk. Female sex workers (FSWs) are disproportionately affected by HIV, yet Nigerian evidence on their PrEP awareness and knowledge remains limited. This study assessed the levels of awareness and knowledge of HIV-PrEP among FSWs in Abeokuta South Local Government Area (LGA), Ogun State.

Methods: A descriptive cross-sectional survey recruited 274 FSWs (96.1% response rate) through multi-stage snowball sampling across identified hotspots. Data were collected using a validated structured questionnaire (Cronbach's α = 0.736–0.812) and analysed in SPSS version 27 using frequencies, percentages, means and standard deviations, and the chi-square test of independence (α = 0.05).

Results: Respondents were predominantly young (46.1% aged 15–24 years; mean 20 ± 0.85 years) and educated (59.1% tertiary). Although 71.6% had heard of HIV-PrEP, only 38.7% had ever seen the medication and 48.5% knew where to access it; healthcare workers (65.1%) were the leading information source. Overall awareness was moderate for 60.8%, high for 26.0% and low for 13.2% (mean 13.69 ± 5.10). For knowledge, 89.7% correctly identified PrEP as prevention for HIV-negative persons and 83.8% recognised its effectiveness, yet 50.0% wrongly believed or were unsure that it cures HIV and 42.2% thought it could be given to HIV-positive persons. Overall knowledge was moderate for 50.4%, high for 29.9% and low for 19.7% (mean 8.00 ± 3.00). Duration of sex work was not significantly associated with knowledge ($\chi^2 = 6.84$, df = 6, p = 0.336).

Conclusion: FSWs demonstrated moderate but incomplete awareness and

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knowledge of HIV-PrEP, with persistent misconceptions and weak service-linkage that were independent of years of practice. Targeted, service-linked education and misconception-focused counselling are required to convert basic familiarity into accurate, actionable understanding.

Keywords: HIV pre-exposure prophylaxis, Awareness, Knowledge, Female sex workers, HIV prevention,

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Introduction

Despite decades of prevention and treatment, sub-Saharan Africa (SSA) has suffered the highest proportion of new HIV infections and HIV-related deaths, making HIV a leading public health concern worldwide (Nagai et al., 2024; Badru et al., 2025). In that context, prevention is an essential part of the response and HIV pre-exposure prophylaxis (PrEP) is one of the most effective biomedical HIV prevention tools for preventing sexual acquisition of HIV among HIV-negative people at high risk (Sun et al., 2022; Gormley et al., 2023). If used correctly and consistently, PrEP can decrease the risk of getting HIV through sex by over 90% and is a key component of modern combination-prevention strategies (Chen & Lai, 2023; Jin et al., 2023).

But clinical effectiveness does not necessarily equate to population-level impact for PrEP. The benefit of the intervention can only be realised when eligible individuals know the intervention exists, how it works and are able to access and use it appropriately (Jin et al., 2023; Liu et al., 2024). Thus, the awareness and knowledge are the earliest and most critical parts of the PrEP care continuum; significant gaps exist between hearing about PrEP and having sufficient knowledge to pursue PrEP (Jin et al., 2023). Evidences from various settings consistently demonstrate that awareness is still insufficient and unevenly distributed and that even with improved awareness, misconceptions around eligibility, correct use and side effects exist (Matson et al., 2021; Ferrand et al., 2023; Suprasert et al., 2024; Borode et al., 2025).

Among the most vulnerable groups to HIV disproportionately affected is the population of female sex workers (FSWs) who are prone to multiple sex partners, inconsistent condom use, socio-economic vulnerability, stigma and lack of access to comprehensive health services (Ademe et al., 2023; Badru et al., 2025). They are consequently a priority group for PrEP. However, research conducted with key populations frequently reveals a gap between vulnerability and awareness and knowledge, with the people most vulnerable to HIV infection least likely to possess accurate information on the matter (Cosmas et al., 2023; Suprasert et al., 2024; Nzungize & Munyaneza, 2025).

PrEP has been included in the national HIV prevention programs in Nigeria, but evidence suggests limited knowledge and uptake of PrEP among various high-risk groups with most studies conducted among students, adolescents and general population in Nigeria (Agba et al., 2025; Gbaja-Biamila et al., 2024). Strong, context-specific data on the extent of FSWs' knowledge about PrEP, and at what point it was lacking, is limited, especially in Ogun State. This gap limits the capacity of policy makers, programme managers and providers to create education and service-delivery interventions that can help this population make the journey from awareness to accurate and actionable knowledge.

Accordingly, this study assessed the level of awareness and the level of knowledge of HIV-PrEP among FSWs in Abeokuta South LGA, Ogun State, and examined whether the number of years spent in sex work was associated with their level of knowledge. The findings provide an evidence base for targeted, service-linked HIV-prevention education for this vulnerable population.

Materials and Methods

Study design and setting

A descriptive cross-sectional design was adopted, permitting the collection of data from a defined population at a single point in time to assess levels of awareness and knowledge of

HIV-PrEP and to examine associations among study variables without manipulation. The study was conducted in Abeokuta South LGA, an urban local government area that forms the core of Abeokuta, the capital of Ogun State, in south-western Nigeria. The LGA is characterised by vibrant commercial activity and a proliferation of hotels, brothels, nightclubs and other social hotspots that serve as operational settings for FSWs, making it an appropriate context for the study.

Population, sample size and sampling

The target population comprised female sex workers operating within Abeokuta South LGA. Eligible participants were women aged 18 years and above who engaged in transactional sex within the study area, were HIV-negative or unaware of their HIV status and were willing to provide informed consent. Women who were unwilling to participate, acutely ill or observed to have unstable mental health were excluded.

The sample size was estimated using the Cochran formula for proportions, with a 95% confidence level (Z = 1.96), an assumed maximum-variability proportion (p = 0.5) and a 6% margin of error, yielding an initial size of approximately 267. A 7% buffer for non-response and incomplete questionnaires produced a final target of 285 participants. Given the hidden and stigmatised nature of the population, a multi-stage, non-probability snowball sampling technique was employed. Hotspots were first mapped with the assistance of local health workers, community gatekeepers and volunteer FSWs; social-network leaders were then engaged to explain the study and facilitate access; and eligible respondents were finally screened, recruited voluntarily and encouraged to refer peers. Recruitment was conducted alongside a mini health-outreach (HIV, hepatitis and syphilis testing, PrEP education and commodity distribution) to build trust and enhance participation.

Instrument, validity and reliability

Data were collected using a structured questionnaire organised into sections covering socio-demographic and occupational characteristics, awareness of HIV-PrEP, and knowledge of HIV-PrEP. Awareness items were scored on a binary scale (Yes/No) and summed into a composite score (range 0–24); knowledge items were similarly scored and summed (range 0–14). Content validity was established through expert review in public health, HIV prevention and research methodology, and face validity was confirmed through pre-testing among FSWs with characteristics similar to the study population. Reliability was assessed in a pilot study of 29 FSWs from hotspots outside the study area; Cronbach's alpha coefficients ranged from 0.736 to 0.812 across the constructs, all above the 0.70 threshold, indicating acceptable internal consistency.

Data collection and analysis

The questionnaire was self-administered by literate participants, while those requiring assistance had items clarified or translated into their preferred language (Yoruba, Igbo, Hausa or Pidgin English), with responses recorded by the researcher. Completed questionnaires were collected on the spot to minimise loss. Of 285 questionnaires administered, 274 were retrieved and validated, giving a 96.1% response rate. Data were coded and analysed in SPSS version 27. Descriptive statistics (frequencies, percentages, means and standard deviations) summarised the socio-demographic characteristics and the awareness and knowledge items. Composite awareness and knowledge scores were categorised into low, moderate and high levels using the mean ± standard deviation approach: scores below (mean − SD) were classified as low, scores within (mean ± SD) as moderate, and scores above (mean + SD) as

high. The chi-square (χ^2) test of independence was used to examine the association between the number of years in sex work and the level of knowledge, with statistical significance set at $p < 0.05$.

Ethical considerations

Ethical approval was obtained from the Babcock University Health Research Ethics Committee (BUHREC; approval number 1080/24). Written and verbal informed consent were obtained from all participants. Personal identifiers were excluded to preserve anonymity, participation was voluntary and withdrawal was permitted at any point without consequence, and completed questionnaires were stored securely with access restricted to the research team.

Results

Socio-demographic and occupational characteristics

The respondents were predominantly young, with 46.1% aged 15–24 years and a mean age of 20 ± 0.85 years, indicating early entry into sex work. Most were single (60.9%), Christian (66.4%) and had attained tertiary education (59.1%). Yoruba respondents formed the largest ethnic group (46.4%). Occupationally, most had practised for 1–9 years (83.5%), the majority (60.2%) had no other source of income, and weekly earnings clustered between ₦5,000 and ₦49,000 (Tables 1 and 2).

Table 1. Socio-demographic characteristics of respondents (n = 274)

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	15–24	126	46.1
	25–34	81	29.4
	35–44	62	22.6
	≥45	5	1.9
	Mean age ± SD = 20 ± 0.85		
Marital status	Single	167	60.9
	Married	27	9.9
	Separated/Divorced	61	22.3
	Widowed	7	2.6
	Co-habiting	12	4.4
Religion	Islam	91	33.2
	Christianity	182	66.4
	Others	1	0.4
Educational status	No formal education	4	1.5
	Primary	27	9.9
	Secondary	81	29.6
	Tertiary	162	59.1
Ethnicity	Yoruba	127	46.4
	Hausa	8	2.9
	Igbo	50	18.2

Variable	Category	Frequency (n)	Percentage (%)
	Others (Ijaw, Nupe, Togo, Idoma)	89	32.5

Source: Field survey, 2026.

Table 2. Socio-economic and occupational characteristics of respondents (n = 274)

Variable	Category	Frequency (n)	Percentage (%)
Years of experience	1–4 years	119	43.4
	5–9 years	110	40.1
	10–14 years	39	14.2
	≥15 years	6	2.2
Other source of income	No	165	60.2
	Yes	109	39.8
Currently a student	No	155	56.6
	Yes	119	43.4
Apprentice (learning a trade)	No	226	82.5
	Yes	48	17.5
Weekly income	₦5,000–₦20,000	81	29.6
	₦21,000–₦49,000	85	31.0
	₦50,000–₦75,000	51	18.6
	₦76,000–₦100,000	44	16.1
	₦100,000 and above	13	4.7

Source: Field survey, 2026.

Awareness of HIV-PrEP

Awareness of HIV-PrEP was present but not universal. While 196 respondents (71.6%) had heard of HIV-PrEP, 78 (28.4%) had not. Healthcare workers were the dominant source of information (128; 65.1%), followed by medical outreaches (40; 20.5%), whereas informal and media sources contributed comparatively little (Table 3). However, familiarity did not extend to practical exposure: only 106 respondents (38.7%) had ever seen HIV-PrEP medication, with tablets the most recognised form (70.9%) and awareness of other formulations low or absent (Table 4). Knowledge of where to obtain PrEP was similarly limited, with only 133 respondents (48.5%) able to identify an access point—chiefly government hospitals (74.7%) and primary healthcare centres (19.2%) (Table 5). Risk indicators underscored the population's vulnerability: 164 respondents (59.8%) reported a prior or recent sexually transmitted infection, 150 (54.9%) perceived themselves at risk of HIV, and many reported multiple daily clients (Table 6).

Table 3. Awareness of HIV-PrEP and sources of information among respondents

S/N	Item	Response/Category	Yes n (%)	No n (%)	Mean (SD)
1	Ever heard of HIV-	—	196 (71.6)	78 (28.4)	0.72

S/N	Item	Response/Category	Yes n (%)	No n (%)	Mean (SD)
	PrEP?				(0.45)
2	Sources of information (n = 196)	Friends	31 (15.8)	165 (84.2)	0.16 (0.37)
		Relatives	1 (0.7)	195 (99.3)	0.01 (0.08)
		Colleagues	20 (10.3)	176 (89.7)	0.10 (0.30)
		Social media	17 (8.9)	179 (91.1)	0.09 (0.29)
		Newspaper	3 (1.4)	193 (98.6)	0.01 (0.12)
		Drug vendors	4 (2.1)	192 (97.9)	0.02 (0.14)
		Pharmacy	19 (9.6)	177 (90.4)	0.10 (0.29)
		Healthcare worker	128 (65.1)	68 (34.9)	0.65 (0.48)
		In school	1 (0.7)	195 (99.3)	0.01 (0.08)
		Support group	0 (0.0)	196 (100.0)	0.00 (0.00)
		A client	11 (5.5)	185 (94.5)	0.06 (0.23)
		Hand bills	3 (1.4)	193 (98.6)	0.01 (0.12)
		Medical outreaches	40 (20.5)	156 (79.5)	0.21 (0.41)
		Others	0 (0.0)	196 (100.0)	0.00 (0.00)

Source: Field survey, 2026.

Table 4. Exposure to HIV-PrEP medication among respondents

S/N	Item	Response/Category	Yes n (%)	No n (%)	Mean (SD)
3	Ever seen HIV-PrEP medication?	—	106 (38.7)	168 (61.3)	0.39 (0.49)
	Forms of PrEP seen (n = 106)	Tablet	75 (70.9)	31 (29.1)	0.71 (0.45)
		Capsule	24 (22.8)	82 (77.2)	0.23 (0.42)

S/N	Item	Response/Category	Yes n (%)	No n (%)	Mean (SD)
		Gel	7 (6.3)	99 (93.7)	0.06 (0.24)
		Injection	0 (0.0)	106 (100.0)	0.00 (0.00)
		Suppository	1 (1.3)	105 (98.7)	0.01 (0.11)

Source: Field survey, 2026.

Table 5. Awareness of HIV-PrEP access points among respondents

S/N	Item	Response/Category	Yes n (%)	No n (%)	Mean (SD)
4	Know where to access HIV-PrEP?	—	133 (48.5)	141 (51.5)	0.49 (0.50)
5	Access points (n = 133)	Government hospital	99 (74.7)	34 (25.3)	0.75 (0.44)
		KPOSS	0 (0.0)	133 (100.0)	0.00 (0.00)
		Private hospital	5 (4.0)	128 (96.0)	0.04 (0.20)
		PHC centre	26 (19.2)	107 (80.8)	0.19 (0.39)
		Patent medicine store	1 (1.0)	132 (99.0)	0.01 (0.10)
		Pharmacy store	3 (2.0)	130 (98.0)	0.02 (0.14)
		Colleagues	4 (3.0)	129 (97.0)	0.03 (0.17)
		Community vendors	3 (2.0)	130 (98.0)	0.02 (0.14)
		Others	0 (0.0)	133 (100.0)	0.00 (0.00)

Source: Field survey, 2026.

Table 6. Risk experience and behaviour of respondents

S/N	Item	Response/Category	Frequency n (%)	Mean (SD)
6	Was HIV-PrEP issued free?	Yes	105 (38.2)	
		No	3 (1.0)	
		Not applicable	166 (60.8)	
7	Ever had an STI	Yes	164 (59.8)	0.60 (0.49)

S/N	Item	Response/Category	Frequency n (%)	Mean (SD)
	(before/recently)?			
8	Perceive self at risk of HIV?	Yes	150 (54.9)	0.55 (0.50)
9	Number of clients daily	1–3	126 (46.1)	
		4–6	91 (33.3)	1.90 (1.17)
		7–9	18 (6.4)	
		10+	36 (13.2)	
		Undecided	3 (1.0)	
10	Duration of awareness of HIV-PrEP	Few days	61 (22.1)	
		Few weeks	16 (5.9)	
		Few months	48 (17.6)	2.66 (1.26)
		Few years	71 (26.0)	
		Undecided	78 (28.4)	

Source: Field survey, 2026.

Categorisation of the composite awareness score (mean 13.69 ± 5.10) showed that most respondents had moderate awareness, with smaller proportions at the high and low ends (Table 7). Thus, while familiarity with the concept of PrEP was fairly widespread, awareness of its formulations, access points and service linkage remained incomplete.

Table 7. Overall level of awareness of HIV-PrEP among respondents (n = 274)

Level of awareness	Score range	Frequency (n)	Percentage (%)
Low awareness	0–8	36	13.2
Moderate awareness	9–16	167	60.8
High awareness	17–24	71	26.0
Total		**274**	**100.0**

Mean awareness score = 13.69 ± 5.10. Source: Field survey, 2026.

Knowledge of HIV-PrEP

Respondents demonstrated a moderate level of knowledge of HIV-PrEP. Core concepts were well understood: 246 (89.7%) correctly identified PrEP as a medication taken by HIV-negative persons to prevent HIV infection, 228 (83.3%) knew it must be taken throughout the period of exposure, 207 (75.5%) that it must be taken daily, and 229 (83.8%) recognised its effectiveness in preventing HIV (Table 8). Nevertheless, important misconceptions persisted: 137 respondents (50.0%) wrongly believed or were unsure that PrEP can cure HIV, and 115 (42.2%) thought it could be given to HIV-positive individuals—indicating conflation of PrEP with antiretroviral treatment. Only 99 respondents (36.1%) had ever used or considered using PrEP.

Among the 175 respondents who had not used or considered PrEP, the leading reasons were lack of awareness (27.9%), fear of side effects (17.1%), stigma associated with taking PrEP

(13.1%) and non-availability (9.1%) (Table 9). When probed on familiarity and purpose, only 105 (38.3%) reported being familiar with the PrEP concept, and just 52.6% correctly identified prevention as its primary function, while 28.5% remained undecided (Table 10).

Table 8. General knowledge of HIV-PrEP among respondents (n = 274)

S/N	Knowledge item	Yes n (%)	No n (%)	Mean (SD)
1	PrEP refers to medications taken by HIV-negative persons to prevent HIV infection	246 (89.7)	28 (10.3)	0.90 (0.30)
2	PrEP medication is given to HIV-negative persons only	206 (75.2)	68 (24.8)	0.75 (0.43)
3	PrEP must be taken daily for it to prevent HIV	207 (75.5)	67 (24.5)	0.76 (0.43)
4	PrEP must be taken throughout the period of exposure to HIV	228 (83.3)	46 (16.7)	0.83 (0.37)
5	HIV testing is required before receiving PrEP	177 (64.7)	97 (35.3)	0.65 (0.48)
6	PrEP medications have side effects	162 (59.1)	112 (40.9)	0.59 (0.49)
7	PrEP can cure HIV in infected individuals*	137 (50.0)	137 (50.0)	0.50 (0.50)
8	PrEP can be given to HIV-positive individuals*	115 (42.2)	159 (57.8)	0.42 (0.49)
9	PrEP is effective in preventing HIV infection	229 (83.8)	45 (16.2)	0.84 (0.37)
10	Ever used or considered using PrEP	99 (36.1)	175 (63.9)	0.36 (0.48)

**Misconception items (a "Yes" response is incorrect). Source: Field survey, 2026.*

Table 9. Reasons for not using or considering HIV-PrEP among respondents (n = 175)

Reason	Yes n (%)	No n (%)	Mean (SD)
Not aware	77 (27.9)	98 (35.8)	0.28 (0.45)
Cost	3 (1.1)	172 (62.7)	0.01 (0.11)
Fear of side effects	47 (17.1)	128 (46.7)	0.17 (0.38)
Pill size	9 (3.3)	166 (60.6)	0.03 (0.18)
Stigma associated with taking PrEP	36 (13.1)	139 (50.7)	0.13 (0.34)
Not available	25 (9.1)	150 (54.7)	0.09 (0.29)
Needs direction to use	21 (7.6)	154 (56.2)	0.08 (0.27)
Unsustainable drug-refill challenges	3 (1.1)	172 (62.7)	0.01 (0.11)
Limited access to PrEP	10 (3.6)	162 (59.1)	0.04 (0.20)
Unconcerned about HIV	3 (1.1)	172 (62.7)	0.01 (0.11)

Source: Field survey, 2026.

Table 10. Familiarity and understanding of the purpose and use of HIV-PrEP (n = 274)

S/N	Item	Response/Category	Yes n (%)	No n (%)	Mean (SD)
11	Familiar with the HIV-PrEP concept	—	105 (38.3)	91 (33.2)	0.38 (0.49)
12	PrEP medications are designed to:	Treat HIV	42 (15.3)	232 (84.7)	0.15 (0.36)
		Prevent HIV	144 (52.6)	130 (47.4)	0.53 (0.50)
		Cure HIV	6 (2.2)	268 (97.8)	0.02 (0.15)
		Don't know	6 (2.2)	268 (97.8)	0.02 (0.15)
		Undecided	78 (28.5)	196 (71.5)	0.29 (0.45)
13	How should HIV-PrEP be taken?	Daily	137 (50.0)	137 (50.0)	1.99 (1.68)
		Weekly	9 (3.3)	265 (96.7)	0.03 (0.18)
		Monthly	7 (2.6)	267 (97.4)	0.03 (0.16)
		Occasionally	11 (4.0)	263 (96.0)	0.04 (0.20)
		When needed only	21 (7.7)	253 (92.3)	0.08 (0.27)
		Don't know	11 (4.0)	263 (96.0)	0.04 (0.20)
		Undecided	78 (28.5)	196 (71.5)	0.29 (0.45)
14	Requirements to start HIV-PrEP	HIV-negative test	147 (53.6)	100 (36.5)	0.54 (0.50)
		Urine test	34 (12.4)	162 (59.1)	0.12 (0.33)
		Client's willingness	33 (12.0)	164 (59.9)	0.12 (0.33)
		HCW counsel	33 (12.0)	164 (59.9)	0.12 (0.33)
		Medical prescription	27 (9.8)	170 (62.0)	0.10 (0.30)

Source: Field survey, 2026.

Categorisation of the composite knowledge score (mean 8.00 ± 3.00) showed that half of the respondents had moderate knowledge, with high and low knowledge accounting for the remainder (Table 11). Overall, foundational understanding of the preventive purpose of PrEP coexisted with substantive gaps in eligibility, correct use and the distinction between prevention and treatment.

Table 11. Overall level of knowledge of HIV-PrEP among respondents (n = 274)

Level of knowledge	Score range	Frequency (n)	Percentage (%)
Low knowledge	0–7	54	19.7
Moderate knowledge	8–12	138	50.4
High knowledge	13–14	82	29.9
Total		**274**	**100.0**

Mean knowledge score = 8.00 ± 3.00. Source: Field survey, 2026.

Years of practice and level of knowledge

The chi-square test showed no statistically significant association between the number of years spent in sex work and the level of knowledge of HIV-PrEP (χ^2 = 6.84, df = 6, p = 0.336). The distribution of low, moderate and high knowledge was broadly similar across all experience groups, indicating that longer involvement in sex work did not, on its own, translate into greater knowledge of PrEP (Table 12).

Table 12. Chi-square analysis of years of practice by level of knowledge of HIV-PrEP (n = 274)

Level of knowledge	1–4 yrs	5–9 yrs	10–14 yrs	≥15 yrs	Total	χ^2 (df)	p-value
Low	30	18	5	1	54		
Moderate	60	55	20	3	138	6.84 (6)	0.336
High	29	37	14	2	82		
Total	**119**	**110**	**39**	**6**	**274**		

Not significant at p < 0.05. Source: Field survey, 2026.

Discussion

In this study, the awareness and knowledge of HIV-PrEP was evaluated in Abeokuta South LGA and whether there was a relationship between the duration of practice and the knowledge evaluated. The socio-demographic characteristics, mostly young, single, educated and economically dependent on sex work, also reflect the pattern observed elsewhere among FSWs and confirm their prioritization as a group for HIV prevention (Ademe et al., 2023; Nzungize & Munyaneza, 2025). Notably, the average age at their first visit to the service is low, with younger FSWs being biologically, behaviourally and structurally more vulnerable to HIV.

Overall, there was moderate awareness of HIV-PrEP. While the majority (7 of 10 respondents) heard about PrEP, much of that awareness was not service-focused, as fewer participants reported seeing PrEP (38.7%) or knowing where to get PrEP (48.5%). Separate to this, is a disconnect between general awareness and actionable awareness, confirmed by Sun et al. (2022) who found that despite the increase in global awareness, significant gaps

remain among the high-risk population and by Aidoo-Frimpong et al. (2022) who found that awareness does not necessarily lead to access and usage. The fact that healthcare workers and medical outreaches were the top information sources is consistent with the evidence of the importance of providers and formal health sources in PrEP awareness (Dettinger et al., 2021; Zhao et al., 2026). Similarly, the level of exposure and lack of knowledge of access points indicate that the awareness creation in this setting has not been enough practical or associated with services delivery (Cosmas et al., 2023) who noted that structural and access barriers can be a limiting factor in PrEP uptake despite its level of awareness.

Knowledge was in the same pattern of good foundations but with specific misconceptions. The majority of respondents correctly interpreted PrEP as a preventive medicine for people who were not yet infected with HIV and its effectiveness, and that it must be used daily, during the period of exposure. Overall, half mistakenly or were unsure that PrEP was able to cure HIV and a large number believed it could be administered to people living with HIV, suggesting a misunderstanding between PrEP use and antiretroviral treatment (ART). This is the combination of accurate core knowledge and persistent misconceptions that is well documented with Sun et al. (2022) highlighting that although knowledge of effectiveness is high, understanding of eligibility, correct use, and clinical requirements is inconsistent, while Agba et al. (2025), found that awareness among the Nigerian population is often greater than comprehensive knowledge. The high prevalence of never using or considering PrEP (36.1%) as well as the most common "barriers to use" (lack of awareness, fear of side effects, stigma and non-availability) further highlight how knowledge and access barriers work in tandem to limit uptake (Cosmas et al., 2023; Suprasert et al., 2024).

Of particular interest is the fact that there was no significant relationship between the level of knowledge and years of practice ($\chi 2 = 6.84$, df = 6, p = 0.336). There was no association between experience in sex work and knowledge of PrEP, suggesting that knowledge is gained more from engaging with health education, providers and outreach services than from duration of exposure to risk. This aligns with both Dauria et al. (2021) who suggested that, rather than length of exposure to risk environments, structural and educational interventions play a crucial role in knowledge acquisition for vulnerable women, and Liu et al. (2024) who found that knowledge about PrEP is more shaped by access to targeted information than by length of time in risk environments. This has important practical consequences: all FSWs, including senior sex workers, need to be educated about PrEP; it's not as if all senior sex workers have sufficient information.

Overall, the results suggest this population is fairly aware of PrEP and understands the relevance of its relevance to their risk, although awareness and knowledge is incomplete and riddled with inaccuracies and unengagement with services regardless of experience. The interventions should, therefore, be more than raising awareness and move toward practical, service-connected education that clearly communicates what PrEP is, who is eligible using it, how to take it, and what and where it is available, and that explicitly addresses the misconceptions of cure and use by people living with HIV. A provider-based and peer-based delivery approach, as part of an existing sexual and reproductive health outreach, will likely be particularly effective, as healthcare workers provide the primary source of information in this population.

Conclusion

The demonstration of moderate but incomplete awareness and knowledge of HIV-PrEP among female sex workers in Abeokuta South LGA highlights the need to strengthen the uptake of HIV prevention and treatment services. There was high-level familiarity with the concept and core facts were well-known, but actual knowledge of formulations and access points was limited, and misconceptions were common (e.g., PrEP is a cure for HIV; people with HIV can take PrEP). Importantly, there was no increase in knowledge with experience of years, showing that knowledge is not based on the number of years spent in practice. Targeted education about PrEP, with a focus on dispelling misconceptions, and that links to PrEP services and is delivered by health care workers, community outreach staff, and peer educators, paired with confidential, FSW-friendly access, is a critical component in increasing knowledge and taking action to improve PrEP uptake among FSWs.

Recommendations

1. Public health agencies and partners should boost targeted, service-integrated awareness-raising efforts to effectively and explicitly describe PrEP, its users, and its characteristics and availability.
2. Teach an accurate message on PrEP; correct common misconceptions about PrEP, particularly that it cures HIV or can be used by people who are HIV-positive.
3. The primary source of information was healthcare workers; thus PrEP education should be provided regularly by healthcare providers during outreach and clinic visits using easy-to-understand information and supported by trained peer educators who are also part of the FSW community.
4. Knowledge does not increase with years at practice, and education should be given to all FSWs at all experience levels.
5. Increase access to PrEP services, make them more FSW-friendly and confidential, and make them available at the same time as HIV and STI testing and other sexual and reproductive health services, to decrease stigma.

Limitations

The study was conducted across a single LGA, and employed non-probability snowball sampling, limiting generalisability; it was a cross-sectional study, so it is not possible to draw conclusions about change over time; and there was potential for recall and social-desirability bias due to the sensitive and stigmatised nature of sex work, and the use of self-report. Rather than actual PrEP uptake or adherence, awareness and knowledge were assessed.

References

Ademe, B., Bogale, E. K., & Anagaw, T. F. (2023). Utilization of HIV pre-exposure prophylaxis and associated factors among female sex workers in Bahir Dar City, North-West Ethiopia: A cross-sectional study, 2022. *International Journal of General Medicine, 16*, 6015–6024. https://doi.org/10.2147/IJGM.S443477

Agba, S. A., Akpan, M. I., Okolie, E. A., Obadare, U. P., Akpan, A. I., Okolie, F. N., & Ndep, A. O. (2025). Knowledge, attitude, and uptake of HIV pre-exposure prophylaxis among students in tertiary institutions in Calabar Metropolis, Nigeria. *Porto Biomedical Journal, 10*(4), e297. https://doi.org/10.1097/j.pbj.0000000000000297

Aidoo-Frimpong, G., Orom, H., Agbemenu, K., Collins, R. L., Morse, G. D., & Nelson, L. E. (2022). Exploring awareness, perceptions, and willingness to use HIV pre-exposure prophylaxis: A qualitative study of Ghanaian immigrants in the United States. *AIDS Patient Care and STDs, 36*(1), 8–16. https://doi.org/10.1089/apc.2021.0156

Badru, O., Hlongwa, M., & Adeagbo, O. A. (2025). Knowledge and awareness of pre-exposure prophylaxis among men in sub-Saharan Africa: A scoping review protocol. *Health Science Reports, 8*(1), e70377. https://doi.org/10.1002/hsr2.70377

Borode, S.B., Gentry, O.A., Adelani, A.A**.,** Olofin-Samuel, M.A., Oyelami, B.F., & Ilugbaro, D.O. (2025). Assessment of compliance to highly active anti-retroviral therapy (HAART) among patients in selected Hospitals in Ibadan, Oyo State. *International journal of Ebola AIDS HIV and Infectious disease and immunity* 10(1), 1-12

& Lai, Y. (2023). Knowledge domain and emerging trends in HIV pre-exposure prophylaxis: A visualization analysis via CiteSpace. *Frontiers in Microbiology, 14*, 1099132. https://doi.org/10.3389/fmicb.2023.1099132

Cosmas, M., Loice, M., William, S., Esther, G., Carey, F., Tecla, T., David, B., John, K., & Aliza, M. W. (2023). Oral pre-exposure prophylaxis (PrEP) awareness and acceptability among persons who inject drugs (PWID) in Kenya: A qualitative investigation. *Research Square*. https://doi.org/10.21203/rs.3.rs-2512731/v1

Dauria, E. F., Levine, A., Hill, S. V., Tolou-Shams, M., & Christopoulos, K. (2021). Multilevel factors shaping awareness of and attitudes toward pre-exposure prophylaxis for HIV prevention among criminal justice-involved women. *Archives of Sexual Behavior, 50*(4), 1743–1754. https://doi.org/10.1007/s10508-020-01834-4

Dettinger, J. C., Pintye, J., Dollah, A., Awuor, M., Abuna, F., Lagat, H., Kohler, P., John-Stewart, G., O'Malley, G., Kinuthia, J., & Beima-Sofie, K. (2021). Brief report: "What is this PrEP?"—Sources and accuracy of HIV pre-exposure prophylaxis (PrEP) awareness among adolescent girls and young women attending family planning and maternal child health clinics in Western Kenya. *Journal of Acquired Immune Deficiency Syndromes, 88*(4), 356–360. https://doi.org/10.1097/QAI.0000000000002782

Ferrand, J., Walsh-Buhi, E., Dodge, B., Svetina, D., & Herbenick, D. (2023). Variations in pre-exposure prophylaxis (PrEP) awareness and healthcare provider interactions in a nationally representative sample of American men aged 15–49 years: A cross-sectional study. *AIDS and Behavior, 27*(9), 2932–2943. https://doi.org/10.1007/s10461-023-04016-0

Gbaja-Biamila, T., Obiezu-Umeh, C., Nwaozuru, U., Rosenberg, N. E., Igbokwe, M., Oladele, D., Musa, A. Z., Idigbe, I., Conserve, D., Day, S., Tahlil, K., Ong, J., Muessig, K., Nkengasong, S., Xian, H., Tucker, J. D., Ezechi, O., & Iwelunmor, J. (2024). Awareness of, willingness to use, and experiences with pre-exposure prophylaxis among youth in Nigeria. *BMC Health Services Research, 24*(1), 1128. https://doi.org/10.1186/s12913-024-11459-1

Gormley, M. A., Nagy, T. R., Moschella, P., Lu, Z., Rodriguez, J., & Roth, P. (2023). HIV pre-exposure prophylaxis in the emergency department: A systematic review. *Annals of Emergency Medicine, 81*(4), 468–481. https://doi.org/10.1016/j.annemergmed.2022.07.015

Jin, G., Shi, H., Du, J., Guo, H., Yuan, G., Yang, H., Zhu, Z., Zhang, J., Zhang, K., Zhang, X., Lu, X., Xu, W., Wang, S., Hao, J., Sun, Y., Su, P., & Zhang, Z. (2023). Pre-exposure prophylaxis care continuum for HIV risk populations: An umbrella review of systematic reviews and meta-analyses. *AIDS Patient Care and STDs, 37*(12), 583–615. https://doi.org/10.1089/apc.2023.0158

Kabaghe, A. N., Singano, V., Payne, D., Maida, A., Nyirenda, R., Mirkovic, K., Jahn, A., Patel, P., Brown, K., Farahani, M., Kayigamba, F., Tenthani, L., Ogollah, F., Auld, A., Zulu, F.,

Msungama, W., & Wadonda-Kabondo, N. (2023). Awareness of and willingness to use oral pre-exposure prophylaxis (PrEP) for HIV prevention among sexually active adults in Malawi: Results from the 2020 Malawi population-based HIV impact assessment. *BMC Infectious Diseases, 23*(1), 712. https://doi.org/10.1186/s12879-023-08683-1

Liu, Y., Wei, S., Cheng, Z., Xian, Y., Liu, X., Yang, J., Liu, Y., Yu, M., Chen, Z., Chen, J., Ma, J., Cui, Z., & Li, C. (2024). Correlates of oral pre-exposure prophylaxis cessation among men who have sex with men in China: Implications from a nationally quantitative and qualitative study. *BMC Public Health, 24*(1), 1765. https://doi.org/10.1186/s12889-024-19182-6

Matson, M., Nery-Hurwit, M., Crosby, S., Greene, G. J., & Macapagal, K. (2021). Awareness and knowledge of pre-exposure prophylaxis among sexual and gender minority adolescents assigned male at birth in the United States. *Archives of Sexual Behavior, 50*(4), 1701–1711. https://doi.org/10.1007/s10508-020-01904-7

Nagai, H., Ankomah, A., Fuseini, K., Adiibokah, E., Semahegn, A., & Tagoe, H. (2024). HIV pre-exposure prophylaxis uptake among high-risk population in sub-Saharan Africa: A systematic review and meta-analysis. *AIDS Patient Care and STDs, 38*(2), 70–81. https://doi.org/10.1089/apc.2023.0117

Nazli, A., Garner, A., & Gokengin, D. (2022). Awareness of HIV pre-exposure prophylaxis among men who have sex with men using apps for sexual encounters in Türkiye. *International Journal of STD & AIDS, 33*(13), 1124–1133. https://doi.org/10.1177/09564624221126867

Nzungize, A., & Munyaneza, A. (2025). Assessment of awareness and willingness to use pre-exposure prophylaxis for HIV prevention among female sex workers in Rwanda: A cross-sectional study. *Frontiers in Public Health, 13*, 1544080. https://doi.org/10.3389/fpubh.2025.1544080

Sun, Z., Gu, Q., Dai, Y., Zou, H., Agins, B., Chen, Q., Li, P., Shen, J., Yang, Y., & Jiang, H. (2022). Increasing awareness of HIV pre-exposure prophylaxis (PrEP) and willingness to use HIV PrEP among men who have sex with men: A systematic review and meta-analysis of global data. *Journal of the International AIDS Society, 25*(3), e25883. https://doi.org/10.1002/jia2.25883

Suprasert, B., Tate, M., Reagan, D., Ruiz, R., Gao, K., McNaughton, K., Miller, K., Marr, A., Taylor, K. D., Wilson, E. C., & McFarland, W. (2024). Continuing low awareness and use of pre-exposure prophylaxis (PrEP) for HIV among people who inject drugs (PWID), San Francisco, 2022. *AIDS and Behavior, 28*(6), 2089–2100. https://doi.org/10.1007/s10461-024-04308-z

Ware, K. B., & Ajonina, M. U. (2021). Awareness of and willingness to use HIV pre-exposure prophylaxis among community residents. *Research in Social & Administrative Pharmacy, 17*(11), 1957–1961. https://doi.org/10.1016/j.sapharm.2021.02.012

Zhao, R., Li, Y., He, S., Zhang, W., Sun, J., Fang, Z., Zhang, L., Su, S., Ong, J. J., & Zhang, L. (2026). Awareness, acceptance, and uptake of HIV pre-exposure prophylaxis among men who have sex with men (MSM) in Northwestern China: A cross-sectional study. *AIDS and Behavior, 30*(2), 429–439. https://doi.org/10.1007/s10461-025-04884-8

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