Original Research Article

SEXUAL BEHAVIOR AND RISKY PRACTICES AMONG ADULTS LIVING WITH HIV/AIDS IN BAYELSA STATE, NIGERIA

ABSTRACT

Background: HIV/AIDS remains a public health challenge with an estimated 37.9 million persons living with HIV/AIDS (PLWHA). Risky sexual behaviours/practices among PLWHA increase the likelihood of co-infection and further spread of infection. Understanding the pattern of these behaviours will aid in the modelling of campaigns to control further spread of infection.

Aim

To examine sexual behaviour and risky practices among adults living with HIV in Bayelsa State, Nigeria.

Methodology

Six hundred (600) participants were recruited for this cross-sectional study from the HIV/AIDS clinics at Federal Medical Centre (FMC), Yenagoa, and Otuasega Cottage Hospital, Ogbia in Bayelsa State, after obtaining informed consent. An interviewer-administered questionnaire was used to collect data comprising socio-demographic characteristics and the sexual activities/behaviour of the respondents in this study. The data obtained from the study were analyzed and presented as frequencies and percentages.

Result

Most of the respondents reported sexual intercourse 532(88.7%) 3months to study. Sexual intercourse with casual partners 20(3.8%), multiple sexual partners 72(12%), and sex workers 2(0.4%) were observed among the respondents. Regular use of condoms during sex was reported by 63(11.8%), while 200(37.6%) sometimes, 96(18.0%) rarely, and 173(32.5%) never. Recent treatment of STI was reported by 115(19.2%). Alcohol use before sex was reported by 218(36.3%). Overall, 253(42.2%) of the respondents engaged in at least one form of risky sexual behaviour.

Conclusion

There is a preponderance of risky sexual behaviour/practices among PLWHA in Bayelsa State that may account for coinfection with STI as well as increase HIV/AIDS transmission.

Keywords

HIV/AIDS, Sexual behaviours, risky practices, PLWHA, Bayelsa State.

INTRODUCTION

Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) remains a global public health concern with an estimated global population of 37.9 million people living with HIV and AIDS (PLWHA) (UNAIDS, 2019). Though recent global trends are indicative of

declining HIV prevalence, new HIV infections are still highest among youths living in Sub-Saharan Africa with about 5% of the adult population in this region living with HIV (Toska et al., 2017). By implication, the sustained spread of HIV, a sexually transmitted infection, in this region is highly suggestive of indulgence of PLWHA in risky sexual behaviour.

Risky sexual behaviour among PLWHA has been defined in literature as engaging in unprotected sex with any partner, having multiple sexual partners, casual sex, sex under the influence of alcohol and sexual exchange (Wondemagegn & Berkessa, 2020). This serves as a major and effective driver of the HIV epidemic (Shukla et al., 2016), increasing the risk of infection in non-HIV partners and exposing HIV-infected partners to the risk of suprainfection by other strains of HIV (Essomba, 2013; Mhalu et al., 2013; Peretti-Watel et al., 2006). Hence, risky sexual behaviour among PLWHA has the potential to both limit as well as erode progress made in the control of HIV/AIDS both locally and globally.

There has~~ve~~ been some inconsistencies in the reports of previous studies examining the sexual behaviour of PLWHA. Studies conducted in California (Diamond et al., 2005), Uganda (Bunnell et al., 2006), and Cameron (Marcellin et al., 2010) noted a decrease in rates of risky sexual behaviour among PLWHA after initiation of ART whereas other studies from New York (Lightfoot et al., 2005), Cote D'Ivoire (Diabaté et al., 2008), Ethiopia (Dessie et al., 2011), Uganda (Bajunirwe et al., 2013), and Nigeria (Olley, 2008) reported increased likelihood of engaging in risky sexual practice after initiation of ART.

We suggest~~opine~~ that disparities in previous reports from different countries as well as different regions within same country may be due to country/region-specific differences in social, cultural, economic and geopolitical settings. Hence understanding the prevalence and pattern of sexual behaviour among PLWHA in specific regions will help identify risky behaviours that could sustain HIV infection and suprainfection within the studied region and provide useful information for counsellors to guide sexual health care delivery among PLWHA.

In the south-south region of Nigeria, Bayelsa state is rich in crude oil as well as natural gas, thus serving as home to several foreign and local oil gas companies. This is adduced as being contributory to the very active nightlife within the state which may boost transactional sex and other sexual activities that could encourage the spread of HIV infection. Despite these known indices, there is paucity of data regarding the sexual behaviour among adults living with HIV in Bayelsa state.

Therefore, this study was aimed at examining sexual behaviour among adults living with HIV in Bayelsa state, Nigeria to evaluate the prevalence of risky sexual behaviour among this population.

METHODS

Study design and Study site

This cross-sectional survey was carried out in Bayelsa state, Nigeria. One secondary and one tertiary health facility was selected for this study. The choice of the facilities where the study will be carried out was achieved by balloting for the secondary and the tertiary health facility independently. Federal Medical Centre (FMC), Yenagoa was the tertiary health facility selected while Otuasega Cottage Hospital, Ogbia was the secondary health facility selected. The study was carried out between August and November 2021.

Ethical consideration

Research ethics clearance was obtained from the ethics committee of the University of Port Harcourt (UNIPORT) and University of Port Harcourt Teaching Hospital (UPTH) with ethics' number UPTH/ADM/90/SII/VOLXI/1063. Administrative approval/permission was also obtained from the Ministry of Health, Yenagoa, Bayelsa state. Written informed consent was obtained from all study participants after carefully explaining the study protocol and significance. All materials used were de-identified by using randomly assigned research identifiers. The study participants were assured of the confidentiality of the information they provide.

Participants

Study participants were selected using a multistage sampling technique. Following selection of health facilities by balloting, the list of PLWHA who visited the health facilities were generated from the database of the HIV clinics. PLWHAs who attended ART clinic, had been on ART for at least one year, women of reproductive age (15-49 years) were included while acutely ill persons who were unable to communicate were excluded. These comprised of one thousand five hundred (1500) patients who then constituted the sampling frame from which participants were drawn. Probability proportional to size (PPS) method was used to determine the number of participants to be selected from each facility. This amounted to five hundred and forty (540) participants from FMC Yenagoa that had one thousand three hundred and fifty (1350) patients who visited the HIV clinic in the previous month, and sixty (60) participants from Otuasega Cottage Hospital, Ogbia that had one hundred and fifty (150) patients who visited the HIV clinic in the previous month. All patients on the sampling frame were assigned numbers and the random start number of 3 and an interval of 2 were applied for selection of participants from the sampling frame. A total of six hundred (600) participants were recruited for this study.

Study instrument and Data collection

A pre-tested interviewer-administered semi-structured questionnaire was used to collect data in this study. Data collection was done by four trained research assistants. The questionnaire was divided into three sections covering socio-demographic characteristics, sexual behaviour,and reproductive desires.

Statistical analysis

The data obtained was entered into excel file and cleaned before exporting into the software, IBM Statistical Product and Service Solution (SPSS) version 25 for analysis. Data were analyzed with the use of descriptive statistics such as frequencies and percentages.

RESULTS

A total of 600 PLWHA were recruited and a response rate of 100% was recorded in the study. The study comprised of 160 males (26.7%) and 440 females (73.3%). Most of the respondents 340(56.7%) were between 31-40 years, 338 (56.3%) had vocational/technical education as their highest level of education, and 457(76.2%) were married. The mean age of the respondents was 34.6±6.4 years. (Table 1)

Most of the respondents, 592(98.7%) were heterosexual and 532(88.7%) reported having sexual intercourse in the last three months, out of which 20(3.8%) had sex with a casual sexual partner

and 2(0.4%) had sex with commercial sex workers. Also three months prior to the interview, 68(11.3%) of the respondents had no sexual partner, 460(76.7%) had one sexual partner, and 72(12%) had multiple sexual partners. A total of 359(67.5%) of the respondents used condoms out of which only 63(11.8%) used condoms each time they had sex, while 200(37.6%) sometimes used condom, 96(18.0%) rarely used condom during sexual intercourse. The result also shows that 115(19.2%) had treated STIs in three months prior to the study. Intake of alcohol before sex was reported by 218(36.3%) of the respondents with 56(25.7%) indicating that they always take alcohol before sex, 105(48.2%) often take alcohol before sex and 57(26.1%) occasionally take alcohol before sex. (Table 2)

Overall, 253(42.2%) of the respondents engaged in at least one form of risky sexual behaviour. (Figure 1)

Table 1: Social Demographic characteristics

Variable	Frequency (n=600)	Percent (%)
Sex		
Male	160	26.7
Female	440	73.3
Age group		
≤20 years	15	2.5
21-30 years	140	23.3
31-40 years	340	56.7
41-50 years	100	16.7
> 50 years	5	0.8
Mean ± SD	*34.6 ± 6.4*	
Education		
Basic primary	15	2.5
Secondary	78	13
Under graduate	30	5
Vocational/Technical	338	56.3
Graduate	65	10.8
Post graduate	74	12.3
Marital status		
Single	78	13.0
Married	457	76.2
Separated	24	4.0
Divorced	6	1.0
Widowed	13	2.2
Cohabiting	22	3.7

Table 2: Sexual behavioural pattern

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Variable	Frequency	Percent

	(n=600)	(%)
Sexual preference		
Heterosexual	592	98.7
Homosexual	7	1.2
Bisexual	1	0.2
Sexual intercourse in the last three months		
Yes	532	88.7
No	67	11.2
I don't remember	1	0.2
Who had sex with n=532		
Spouse	438	82.3
Regular sexual partners	72	13.5
Casual sexual partner	20	3.8
sex worker	2	0.4
Number of sexual partners		
None	68	11.3
One	460	76.7
Two	70	11.7
Three	2	0.3
Used condom during sex n=532		
Each time	63	11.8
Sometimes	200	37.6
Rarely	96	18.1
Never used	173	32.5
Infected with STIs the last 3 months		
Yes	115	19.2
No	458	76.3
I don't remember	27	4.5
Take alcohol before sex		
Yes	218	36.3
No	382	63.7
Frequency of alcohol intake (n=218)		
Always	56	25.7
Often	105	48.2
Occasionally	57	26.1

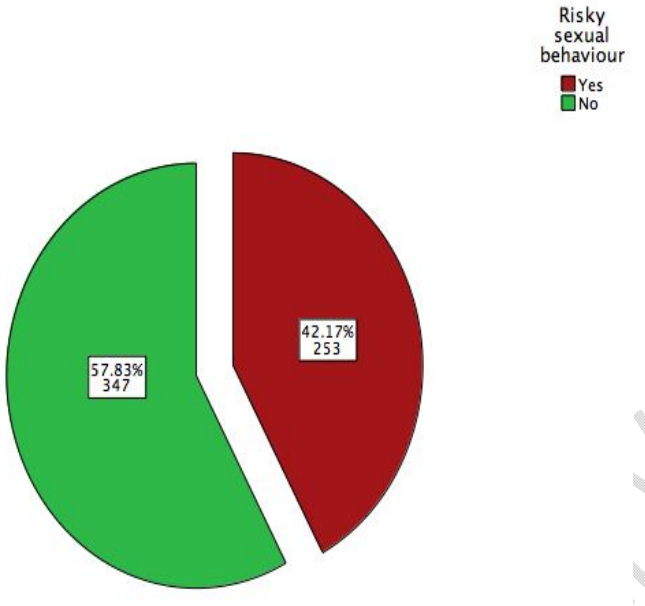

Figure 1: Prevalence of risky sexual behaviour among respondents

DISCUSSION

This study provides insight into the pattern of sexual behaviour among PLWHA in Bayelsa state, Nigeria. It was observed that 88.7% of PLWHA in Bayelsa state were sexually active and had engaged in sexual intercourse within 3 months prior to the study. Improvement in the health of PLWHA following continued use of ART was previously suggested to engender renewed sexual desires with return to sexual activity for reasons such as; companionship, to save their marriages, to have children, material support and to satisfy their sexual desires (Wamoyi et al., 2011). Our finding therefore indicates the need to pay attention to the sexual and reproductive health of PLWHA following consistent use of ART with evident improvement in health. This would ensure that their sexual and reproductive wellbeing is not neglected due the requisite attention given to HIV treatment. Furthermore, they will also receive the needed psychosocial support to help them adopt safe and healthy sexual behavior.

The proportion of sexually active individuals in this present study is higher than previous reports of 74.6% in Togo (Yaya et al., 2014), 64% in Mozambique (Pearson et al., 2011) and 51.4% in Uganda (Bajunirwe et al., 2013) among PLWHA on ART. This difference may be due to differences in the studied populations, given that this present study surveyed PLWHA of reproductive age with at least one year of ART. The high rate of sexual activity observed among PLWHA in Bayelsa in this present study also portrays the need to continually promote safe sex practices among PLWHA during follow-up clinic and counselling sessions. Sustained health education to continually remind and encourage PLWHAs to practice safe sex with particular emphasis on its role in the prevention of opportunistic infection and suprainfection with other

HIV strains is sacrosanct and should be integrated into HIV/AIDS management programs in highly endemic regions.

The overall prevalence of risky sexual behaviour observed in this present study was 42.2%. This is similar to the reports of previous studies in other developing countries (Luchters et al., 2008; Ncube et al., 2012; Olley, 2008; Ragnarsson et al., 2011). High prevalence of risky sexual behaviour among PLWHA poses a heightened risk of spread of HIV infection in the general HIV-naïve population as well as re-infection with a different HIV strain and proliferation of opportunistic infections among PLWHA. This may explain in part the continued increase new HIV cases and disease related mortality rates in the developing countries. In this present study, 19.2% of PLWHA reported infection with STIs within 3 months prior to the study. This may not be unassociated with risky sexual behavior in this population and only represents a fraction of the possible opportunistic infections that PLWHA are encumbered with.

The prevalence of STI among PLWHA observed in this present study is similar to a previous report of 18.2% in Northwest Ethiopia (Kassie et al., 2019) but less than 26.6% reported in Central Ethiopia (Schönfeld et al., 2018). An association between STI and risky sexual behavior including multiple sexual partners and not using condom during sexual intercourse was demonstrated by Kassie et al. (2019). It is therefore, pertinent to promote safe and healthy sexual behavior among PLWHA through continued health education. Risky sexual behavior among PLWHA have been associated with several factors including; having a positive sero-status partner, not disclosing sero-status, having a desire for a child, having experience of perceived stigma, and lack of education of protecting self from strain (Mosisa et al., 2018).

The risky sexual practices observed in this present study include sexual intercourse with casual partner, multiple sexual partners, sex with commercial sex workers, irregular use of condom during sex and use of alcohol before sex. Given the pattern of risky sexual behavior observed in this present study, there is a need to identify tools that can effectively discourage and mitigate them. The pattern of risky sexual behavior observed in this present study supports the reports of previous studies (Demissie et al., 2015; Ragnarsson et al., 2011; Yaya et al., 2014).

CONCLUSION

In conclusion, there is a preponderance of risky sexual behaviour/practices among PLWHA in Bayelsa State that may account for coinfection with STI as well as increase HIV/AIDS transmission. ART programs should integrate behavioural change intervention and secondary prevention strategies with continued education and counselling sessions for PLWHA.

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Comment [d3]: comprehensive and meaningful paper