

## CONDOM USE AMONGST PEOPLE LIVING WITH HIV/AIDS ON ANTIRETROVIRAL THERAPY IN PORT HARCOURT NIGERIA

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### ABSTRACT

**Background:** Human Immunodeficiency Virus/ Acquired Immunodeficiency syndrome (HIV/AIDS) is a scourge which affects every aspect of a country's growth. Considering the financial demands of HIV treatment, reduction of spread of virus through preventive measure may be a very useful tool in our environment.

**Aim:** To evaluate the practice and determinants of condom use amongst people living with HIV/AIDS (PLWHA).

**Methods:** A cross-sectional study carried out on PLWHA. Information on their socio-demographic variables and practice of condom use were collected. Data analysis was done using the statistical package for social sciences and a  $P < 0.05$  was considered significant.

**Results:** A total of 250 PLWHA participated in

the study with a median age of 35 (31–42) years. Majority 72.0% of respondents were females. Only 38.4% of respondents used condoms and 68.0% were aware of their partner's HIV status. Relationship between knowledge of partner status and use of condom was not significant ( $p$  value = 0.265). Those who were aware of safe sexual practices were found to be more consistent with condom use ( $p$  value = 0.048). Condom use was neither affected by age, sex nor marital or educational status.

**Conclusion:** This study identified knowledge of safe sexual practice, but not partner's status nor socio-demographics, as a determinant for condom use. More effective health education is needed.

**Keywords:** HIV prevention, condom use, partner's status, HIV infection

### INTRODUCTION

Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) is a pandemic and a debilitating disease that adversely affects the socio-cultural and

economic wellbeing of an individual as well as a country. It carries with it both ethical and legal woes. It is one of the world's most serious health and development challenges. According to United Nations Programme on



HIV and AIDS, approximately 36.7 million people worldwide are living with HIV/AIDS as at the end of 2016. Sub-Saharan Africa is the most affected region, with an estimated 25.6 million people living with HIV in 2015.<sup>2</sup>

Sexual intercourse has been identified as the major route of HIV transmission. In heterosexual relationships, women are more prone to contracting HIV infection from their male partners. Condoms, when used well, have been found to be effective in reducing risk of HIV transmission during sexual intercourse. Condom programming is a vital component in HIV prevention program.

The first national HIV/AIDS prevention plan (NPP) was developed in Nigeria in 2007, using the Abstinence, Be faithful and Condom use (ABC) approach. Other new interventions have also been put in place since then which have helped reduce prevalence of HIV infection from 5.8 in 2001 to 3.0 percent in 2014.

Condom use is still low and covers less than is required in sub-Saharan Africa. The consistent use of condoms amongst HIV infected people is a vital preventive measure among sero-discordant and sero-concordant couples. It prevents reinfection of already resistant strains to antiretroviral drugs amongst sero-concordant couples as well as, reduction in viral burden during sex and avoidance of transmission of other sexually transmitted infections. Several studies have shown various findings on condom use amongst people living with HIV/AIDS.<sup>6</sup>

This study aims to assess the use of condom amongst people living with HIV/AIDS

(PLWHA) in Nigeria and also determine the relationship between socio-demographic variables and condom use.

### Methodology

The study was carried out in the university of Port Harcourt teaching hospital (UPTH), a major federal government tertiary health institution in the south-south geopolitical zone of Nigeria. It serves as a health care and research centre for patients from the state and beyond.

This was a cross-sectional and descriptive study where pretested and structured questionnaires were distributed to PLWHA receiving care at the facility. The study was targeted at those already on antiretroviral therapy (ART). After adequate counselling by members of the research team, 250 participants were recruited systematically.

The questionnaire was of two parts: the first was on the socio-demographic data while the second part sought information on details of condom use among participants. Information retrieved was transferred to and analysed using the statistical package for social sciences (SPSS) version 22; Inc, Chicago, Illinois. Statistics was both descriptive and inferential and a P value of <0.05 was considered statistically to be significant.

### RESULT

There were a total of 250 respondents of which 180 (72.0%) were females and 70 (28.0%) were males. Their educational levels are as shown in Table 1. A total of 44 (17.6%) of them were less than 30 years, 130 (52.0%), 49 (19.6%), 19 (7.6%), 8 (3.2%) fell within range of 30-39, 40-49, 50-59, >60

years, respectively. Median age was 35 (31–42) years.

**Table 1:** Socio-demographics of respondents

Demographics	Frequency (%)
<b>Sex</b>	
Males	70 (28.0)
Females	180 (72.0)
<b>Marital Status</b>	
Single	65 (26.0)
Married	166 (66.4)
Widow (er)	15 (6.0)
Divorced	2 (0.8)
No Response	2 (0.8)
<b>Level of Education</b>	
None	3 (1.2)
Primary	50 (20.0)
Secondary	112 (44.8)
Tertiary	84 (33.6)
No Response	1 (0.4)

About a little less than half (48.0%) of the respondents had their partner's acceptance to have the HIV screening test, while about a third of the respondents chose not to answer. About 162 (68.0%) of them were aware of their partner's status and of this number, 92(36.8%) were HIV positive. Also almost half of the respondents do not use condoms. See Table 2.

**Table 2:** Partner status and use of condoms

<b>Acceptability of Partner to do Test</b>	
Yes	120 (48.0)
No	57 (24.8)
No Response	73 (29.2)
<b>Knowledge of Partner Status</b>	
Yes	162 (64.8)
No	71 (28.4)
No Response	17 (6.8)
<b>Status of Partners</b>	
Positive	92 (36.8)
Negative	70 (28.0)
<b>Use of Condoms</b>	
Yes	96 (38.4)
No	120 (48.0)
No Response	34 (13.6)

There was no statistically significant relationship between socio-demographic

variables and history of condom use. However, there was a statistically significant association between knowledge of safe sex and condom use. Table 3

**Table 3:** Association between demographic parameters, condom use, disclosure status, knowledge of partners' status and knowledge of safe sex with Condom usage

	Positive history of Condom use	Negative history of Condom use	P value
<b>Age group</b>			
<30	20 (20.8)	16 (13.3)	
30 – 39	45 (46.9)	68 (56.7)	
40 – 49	21 (21.9)	22 (18.3)	0.386
50 - 59	6 (6.3)	11 (9.2)	
-	4 (4.2)	3 (2.5)	
<b>Sex</b>			
Males	33 (34.4)	31 (25.8)	0.172
Females	63 (65.6)	89 (74.2)	
<b>Marital status</b>			
Single	24 (25.0)	22 (18.3)	
Married	67 (69.8)	91 (75.8)	0.541
Widowed	3 (3.1)	6 (5.0)	
Divorced	1 (1.0)	0 (0.0)	
<b>LOE</b>			
None	1 (1.0)	2 (1.6)	
Primary	13 (13.5)	27 (22.5)	
Secondary	45 (46.9)	55 (45.8)	0.276
Tertiary	37 (38.5)	35 (29.2)	
<b>Knowledge of Partner Status</b>			
Yes	72 (75.0)	81 (67.5)	0.265
No	24 (25.0)	38 (31.7)	
<b>Knowledge about safe sex</b>			
Yes	92 (95.8)	106 (88.3)	0.048
No	4 (4.2)	14 (11.7)	

LOE - Level of education

Table 4 shows correlation between demographic variable and other variables with the use of condom. There is a significant relationship between partner's status and use of condom. A weak but significant negative correlation was found between partner's status and condom use (those whose partners were negative use condoms more).

**Table 4:** Correlation between demographics and other variables with condom use in respondents

	Condom use	
	r	P value
Age group	0.009	0.898
Gender	0.090	0.204
Marital status	-0.040	0.578
Level of Education	0.130	0.066
HIV status of relatives	-0.098	0.170
Partner's status	-0.301	0.001
Time of Diagnosis	-0.123	0.082
Disclosure	-0.003	0.967
Knowledge of safe sex	0.109	0.136
Partners attitude to testing	0.026	0.767
Mode of transmission		
Casual sex	-0.096	0.174
Blood transfusion	0.009	0.902
Needle stick injury	0.121	0.086
I don't know	0.067	0.340

## Discussion

HIV/AIDS is one of the world's most serious health conditions that can negatively impact on the socioeconomic progress of a country. Sub-Saharan Africa has been reported to have the highest number of people living with HIV/AIDS.<sup>2</sup> Considering the fact that most of the countries in sub-Saharan Africa, including Nigeria are resource poor, preventive measures to reduce spread HIV may be extremely useful. This include, in addition to the ABC, DE of prevention – abstinence, be faithful to one partner, condom use, do not do drugs, use of sterile equipment.

The major route of HIV transmission is via sexual intercourse and condom has been found to be an effective preventive measure, when used correctly

We aimed to determine condom use in HIV patients with respect to demographics and

knowledge of partner status. In our study, over two thirds of the patients were females. Females have been found to be typically more prone to contracting HIV infection because of biological and societal factors that adversely affect them. This has been documented in other studies.”

A little less than half of the sexual partners of our clients accepted to do HIV test. This is a fairly good response as knowledge of partner's infection with HIV is laden with emotional trauma that may lead to denial and refusal to do the test. A related study had a similar finding. A hundred and sixty two clients(64.8%) were aware of their partner's HIV status as against another study with lower figures, and of these, 92(36.8%) had their partners testing HIV positive.

Overall, just about a third of the clients use condom. Amulticenter study involving Tanzania, Kenya and Namibia reported similar findings of awareness of partner status but those that use condom amongst them were way higher than we observed in this study. Another study in Northwestern Ethiopia also reported consistent use of condom in a high percentage of their patients. Poor use of condom amongst PLWHA has also been documented in Nigeria and elsewhere. This indeed is very disturbing because a good number of clients do not know their partner's HIV status and still indulge in unprotected sex with them. Another related study showed a higher use of condom in sero-discordant people. In our study, one would have expected that those aware of their partner's status would practice safe sex via consistent use of condom to avoid transmission or reinfection. It is



possible that they might feel that there was no need for protection as they were both infected or that it was okay to have unprotected sex since they were on antiretroviral agents. In addition, they are also at risk of contracting other sexually transmitted infections. This wrong and risky notion ought to be corrected via health education on risk of reinfection amongst HIV positive people. According to a study done in Tanzania, knowledge of partner's HIV status remained a significant predictor of condom use.

Gender was not one of the determinants of condom use. In fact, our study showed that females had higher numbers with positive and negative history of condom use. Similar finding was reported by Akinyemi et al at Ibadan. Considering the fact that over two thirds of the clients were females, and in our environment, condom use is mostly determined by the males due to sociocultural reasons, this might explain the high number of those not practicing safe sex by using condoms. Ironically, Salaudeen et al reported a higher use of condoms amongst their male clients. This still supports the notion that condom use is majorly determined by males in Africa.

Use of condom was not affected by age and educational status. This study was conducted in an urban area, which might explain the lack of association with educational level but their poor practice of condom use is a poor reflection of their safe practices. Contrary to this, a related study done in Kogi state reported that condom use was more among the educated clients. Similarly, a study done in Northwestern Ethiopia reported a lower

use of condom in females and those living in rural areas. The level of education in rural areas is typically lower than those in the urban areas. While we recorded no association between condom use and age, a related study reported higher likelihood of condom use amongst the higher age group. While this is commendable, it is also worrisome that the use of condom is low in the younger age group as they are among the high risk group. Marital status was also not a determinant of condom use as there was no statistically significant association between the two variables. Bachanas *et al* reported higher use of condom amongst married couples.

Condom use was found to be more with those knowledgeable of safe sexual practice, although there was a weak but significant negative correlation. Practice of safe sex remains suboptimal amongst PLWHA. Understanding risky sexual behaviours remains an important area of public health research especially in PLWHA. More effort is needed to enhance health education and this include government commitment to a reasonable extent.

In conclusion, inasmuch as this study was limited by the subjective nature of clients' response as this was a questionnaire based study, it doesn't exclude the fact that use of condom in our clients was poor, but partner's acceptability to do test was commendable. There is need for continuous health education on practice of safe sex amongst PLWHA so as to achieve significant reductions in rate of HIV transmission.





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