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Condom use among people living with HIV/AIDS attending Abejukolo General Hospital in Kogi State, North Central Nigeria

Adekunle G. Salaudeen, Omotosho I. Musa, Austin Ojotule¹, Ayodeji S. Yusuf², Kabir A. Durowade³, Lukman O. Omokanye⁴

Departments of Epidemiology and Community Health, ²Surgery, and ⁴Obstetrics and Gynaecology, University of Ilorin, Ilorin, ¹Kogi Diagnostic and Reference Hospital, Ayingba, Kogi State, ³Department of Community Medicine, Federal Medical Centre, Ido-Ekiti, Ekiti State, Nigeria

Correspondence to: Dr. Adekunle G Salaudeen, Department of Epidemiology and Community Health, Faculty of Clinical Services, University of Ilorin, P. O. Box 4465, Ilorin, Nigeria. E-mail: adekunlesalaudeen@yahoo.com

Abstract

Background: Condom programming is an integral component in a range of HIV/AIDS prevention strategies and with repeated sexual contact among HIV-discordant couples, 98-100% of those who used latex condoms correctly and consistently did not become infected. The objective of this study is to determine condom use among people living with HIV/AIDS (PLWHA).

Methods: This is a cross-sectional survey carried out among 231 PLWHA and receiving care and treatment at General Hospital Abejukolo in Kogi State, Nigeria. The research instrument was interviewer-administered questionnaire. The data obtained were analysed using EPI-INFO version 3.4.1 software and *P*-value of < 0.05 was significant for the study.

Results: About three-quarters (70.6%) of the respondents had ever used condom. Reasons given by respondents who did not use condom were: Desire for children (39.7%), and reduction of sexual pleasure (17.7%) and partner preference. More than half (56.0%) of the respondents with multiple partners did not use condom. About half 119 (51.5%) have used condom in the last sexual encounter. Gender, literacy level and disclosure of HIV status to partners significantly influence condom use during sexual intercourse.

Conclusion: The poor uptake of condom among PLWHA underscores the need for government and other stakeholders in the management of HIV/AIDS to provide more enlightenment opportunities to address the gaps in condom use and disclosure of HIV status to partners.

Key words: Condom use, HIV/AIDS, Nigeria, PLWHA

Resume

Fond: Programmation condom est une partie intégrante dans une gamme de VIH/sida, des stratégies de prévention et avec répété contact sexuel entre les couples VIH-discordants, 98-100 % de ceux qui utilisaient des préservatifs en latex correctement et ne toujours pas s'infecter. L'objectif de cette étude est de déterminer l'utilisation du préservatif chez les personnes vivant avec le VIH/sida (PVIH).

Méthodes: Il s'agit d'une enquête transversale menée auprès des PVIH 231 et de récepteur de soins et de traitement à Abejukolo hôpital général dans l'état de Kogi, Nigeria. L'instrument de recherche a été l'intervieweur questionnaire. Les données obtenues ont été analysées à l'aide du logiciel EPI-INFO en version 3.4.1 et valeur *p* de 0,05 <était importante pour l'étude de.

Résultats: Environ les trois quarts (70,6 %) des personnes interrogées avaient déjà utilisé le préservatif. Raisons invoquées par les répondants qui n'utilisaient pas de préservatifs ont été : le désir pour les enfants (39,7 %) et diminution du plaisir sexuel (17,7 %) et de préférence de la partenaire. Plus de la moitié (56,0 %) des répondants ayant plusieurs partenaires n'utilisaient pas de préservatif. 119 environ la moitié (51,5 %) ont utilisé des préservatifs

dans la dernière relation sexuelle. Sexe, niveau d'alphabétisme et divulgation de la séropositivité aux partenaires influence significative sur l'utilisation du préservatif lors des rapports sexuels.

Conclusion: La mauvaise absorption du préservatif chez les PVVIH souligne la nécessité pour le gouvernement et d'autres intervenants dans la gestion du VIH/sida à offrir plus de possibilités pour combler les lacunes dans l'utilisation du préservatif et de divulgation de la séropositivité aux partenaires illumination.

Mots clés: L'utilisation du préservatif, VIH/sida, Nigeria, VIH/sida

Introduction

Human immunodeficiency virus (HIV) infection and Acquired Immune Deficiency Syndrome (AIDS) epidemic has become a serious health and developmental problems in many countries around the world.^[1] A total of over 23 million AIDS death have been recorded since the beginning of the epidemics over two decades ago.^[2] AIDS epidemic in Africa has reached an alarming proportion. It is generally regarded as the major health crisis of the 21st century and one of the terrible epidemics in human history.^[3] In July 2008, report of Global AIDS epidemic released by Joint United Nation Programme on AIDS (UNAIDS) and World Health Organization (WHO) put the global burden of HIV infection at 33 million, with the Sub-Saharan Africa being the worst hit with 22 million people living with HIV (PLHA).^[4]

The 2008 sentinel survey revealed that HIV/AIDS prevalence for Nigeria was 4.6%.^[5] HIV/AIDS crisis is to a large extent a crisis of sexual behavior as unsafe sex is responsible for a large majority of HIV infection in the Sub-Saharan Africa, Latin America, and the Caribbean.^[6] No cure is available for AIDS and the disease threatens the social and economic well-being of the countries of the world.^[7] Sexual transmission accounts for about 80% of cases of HIV infection in developing countries.^[8] It is also the predominant mode of transmission in central and western Europe.^[9]

Condom programming is an integral component of HIV/AIDS prevention strategies which include informed responsible and safer sexual behavior exemplified by delayed age of onset of sexual activity, abstinence, condom use, and reduction in number of sexual partners.^[10] In Nigeria, majority of sexually active persons do not use condom during intercourse. Condom use during intercourse is not perceived as necessary in sexual encounter involving a regular partner.^[11] Condom use does not offer total protection but significantly reduce the risk of infection.^[11]

It is against this background that, this study was conducted to determine condom use among people living with HIV/AIDS (PLWHA) attending Abejukolo General Hospital in Kogi State, North Central Nigeria.

Methods

This was a hospital-based descriptive cross-sectional survey that was carried out among 231 people living with HIV/AIDS who have been enrolled into care and treatment at General Hospital Abejukolo in Omala Local Government Area of Kogi State, Nigeria. The hospital renders comprehensive care and treatment services to PLWHA, in addition to voluntary counselling and testing. There are five health facilities that refer such patient to the general hospital. Written consent for participation in the survey was obtained from the respondents before the commencement of the study. The total population of the enrollee (PLWHA) in the hospital was 253 but only 231 consented and participated in the study. Subjects who are age 15 years and above were recruited for the study.

The research instrument used was semi-structured interviewer-administered questionnaire. Pretest of the questionnaire was done among 30 PLHA attending Dekina General Hospital which is 90 km away from the study site. This ensured necessary modification of the research tools before they were used for data collection. Five research assistants among whom were 3 PLHA and 2 HIV counsellors were recruited, trained, and used to administer the questionnaires to the respondents when they come for their monthly support groups meetings and regular clinic attendance. The data obtained were manually validated for errors and entered for analysis using EPI Info version 3.4.1 software package. Chi-square was the test statistics used and *P*-value less than 0.05 was significant.

Results

The respondents' ages ranged from 16 to 64 years with mean of 33.2 ± 9.02 years. Most of the respondents (71.5%) were in the age group 25-44 years. There were more females 136 (58.9%) than males and majority 142 (61.5%) were Christians. Over one-third of the respondents 90 (39.0%) had secondary education while 31 (13.4%) had no formal education [Table 1]. Of the total respondents, 212 (91.8%) had good knowledge of functions and types of condom while 19 (8.2%) had poor knowledge. More than three-quarters 192 (83.0%) of the subjects knew

various places where condom can be obtained such as chemist shops, hotel, hospitals and supermarkets.

Before the respondents knew their HIV status (positive) none of them used condom with regular sexual partners or their spouse, while only 5 (2.2%) had used condom for casual sex partners. However, after being diagnosed as HIV positive 163 of the total respondents had used condom; eighty five (52.1%) used it with spouse, 46 (28.2%) with regular partner and 32 (19.70%) for casual sex partners. Majority 115 (70.6%) used condom to prevent being infected with other sexually transmitted infections while 27 (16.6%) used it for prevention of unwanted pregnancy.

Reasons given by 68 respondents who have not used condom included: Desire to have children (39.7%), reduced sexual pleasure/drive (17.7%) among others [Table 2]. Among the 163 respondents that used condom, 105 (64.4) used it always while 58 (35.6%) used it occasionally. More than half (56.0%) of the respondents with multiple partners did not use condom during sexual intercourse. More than one-third 91 (39.4%) of the total respondents had sero-concordant spouse and 53 (58.2%) of this group used condom regularly. More male respondents (83.2%) used condom compared with the females (61.8%) and this observed difference is statistically significant (P -value = 0.0004473). Also, respondents with higher literacy levels use condom during sexual intercourse more than those with no formal or low level of education; and this is statistically significant P -value = 0.0000 [Table 3]. Similarly, most of the respondents that were single (80.0%) used condom during sexual intercourse compared with those that were married, divorced, or widowed. This also is not statistically significant (P = 0.0605).

Of the 135 respondents who disclosed their HIV status to their partners, 82 (60.7%) used condom at last sexual intercourse while only 38.9% of respondents who did not disclose status to their partners used it in the last sexual encounter. There is a statistically significant difference (P = 0.0018) in condom use and disclosure of status to partners.

More than three-quarters of sero-concordant respondents (84.6%) used condom during sexual intercourse; however, only 62.2% of those who had HIV-negative partners and 61.8% of those who did not know the HIV status of their partners used condom during sexual encounter. The difference is statistically significant (P value < 0.00004775) as more sero-concordant spouse used condom compared with others. Most of the respondents 217 (93.9%) suggested that condom use should be promoted among PLWHA for HIV prevention

Table 1: Socio-demographic characteristics of the respondents $N = 231$

Variable	Frequency (%)
Age group (years)	
<25	34 (14.7)
25-34	96 (41.6)
35-44	69 (29.8)
45-54	27 (11.7)
55 and above	5 (2.2)
Sex	
Female	136 (58.9)
Male	95 (41.1)
Religion	
Christianity	142 (61.5)
Islam	89 (38.5)
Literacy level	
No formal education	31 (13.4)
Primary	72 (31.2)
Secondary	90 (39.0)
Tertiary	38 (16.5)
Marital status	
Divorce/separated	11 (4.8)
Married	159 (68.8)
Single	40 (17.3)
Widowed	21 (9.1)

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Table 2: Condom use among respondents

Variable	Frequency (%)
Ever use condom during sexual intercourse	
Yes	163 (70.6)
No	68 (29.4)
Total	231 (100)
Reasons for using condom	
Prevention of unwanted pregnancy	27 (16.6)
Prevention of infecting partners with HIV	21 (12.9)
Prevention of acquisition of other STI	115 (70.6)
Total	163 (100)
Reasons for not using condom	
Spouse do not like it	25 (36.8)
Desire to have children	27 (39.7)
Reduces sexual pleasure	12 (17.7)
Personally do not like it	4 (5.9)
Total	68 (100)
Consistency of condom use	
Always	105 (64.4)
Occasional	58 (35.6)
Total	163 (100)
Condom use among sero-concordant spouse	
Yes	53 (58.2)
No	38 (41.8)
Total	91 (100)

HIV=Human immunodeficiency virus, STI=Sexually transmitted infections

while 205 (88.7%) recommended free distribution of condom to PLWHA and the general populace.

Discussion

Majority of the respondents (71.5%) were within the age range of 25-44 years. In Nigeria, the

Table 3: Relationship between literacy level, disclosure of HIV status to partner, HIV status of partners, gender, and condom use among respondents

Variable	Condom use (%)		
	Yes	No	Total
Literacy level			
No formal education	10 (23.3)	21 (67.7)	31 (100)
Primary	43 (59.7)	29 (40.3)	72 (100)
Secondary	75 (83.3)	15 (16.7)	90 (100)
Tertiary	35 (92.1)	3 (7.9)	38 (100)
Total	163	68	231
	$\chi^2=41.53,$	$df=3,$	$P=0.0000$
Disclosure of HIV status to partner			
No	37 (38.9)	59 (61.1)	96 (100)
Yes	82 (60.7)	53 (39.3)	135 (100)
Total	119	112	231
	$\chi^2=9.75,$	$df=1,$	$P=0.0018$
HIV status of partners			
Negative HIV status	23 (62.2)	14 (37.8)	37 (100)
Positive HIV status	77 (84.6)	14 (15.4)	91 (100)
Do not know partner status	63 (61.2)	40 (38.8)	103 (100)
Total	163	68	231
	$\chi^2=19.90,$	$df=2,$	$P=0.00004775$
Gender of respondents			
Male	79 (83.2)	16 (16.8)	95 (100)
Female	84 (61.8)	52 (38.2)	136 (100)
Total	163	68	231
	$\chi^2=12.32,$	$df=2,$	$P=0.0004473$

HIV=Human immunodeficiency virus

highest infection rates have been reported in the 20-24 year age group,^[12] and since those infected with HIV may become symptomatic later, that could explain the clustering of respondents in the 25-44 years age group considering the emergence of the disease about 2 decades ago. Majority of the respondents (68.8%) were married. The high level of HIV prevalence among couples in this study is a clear sign that marriage is not totally protective of HIV/AIDS, if other preventive measures like safer sex practice are not adopted. This finding is similar to a previous study which documented that in countries where sex outside marriage is common, sex without condom within marriage is risky as data from around the world suggest that married women's greatest risk of contracting HIV is through sexual intercourse with their husbands.^[13]

On the proportion of respondents that used condom during sexual intercourse, 163 (70.6%) of respondents said they used condom during sexual intercourse. Although 64.4% of those that use condom used it always (45.5% of the total

respondents), 25.1% used it occasionally and 29.4% never used it, even after diagnosis. This finding was in contrast to that of the study carried out among PLWHA in Maiduguri, Nigeria where 62.2% never used condom.^[14] Regular use of condom among respondents in this study is similar to that of the study of the fertility desire and sexual behavior of people living with HIV/AIDS in South West Nigeria, where 48.8% of the respondents used condom regularly.^[15] This study result is slightly higher than that of the study conducted in Kampala, Uganda among PLWHA where 38% of client reported, use of condom always.^[16] However, the occasional use of condom in the Ugandan study was 48% which is in contrast to the occasional use in our study. The reasons given for the occasional use of condom in our study include: Partner is also positive, married, need to have children, partner dislike, and condom reduces sexual pleasure. These reasons were similar to what was reported in a hospital-based cross-sectional survey among PLWHA in South-west Ethiopia.^[17]

This study also showed that the use of condom among the respondents is affected by gender because a significant number of males used condom compared with the females ($P = 0.0004473$). The religious affiliation of the respondents had no significant difference on use of condom even though more Christians use condom than Muslims. This is not a surprise because the teachings of the two religions on the use of condom are similar. The literacy level of respondents had a positive influence on the use of condom. This showed that respondents with tertiary and secondary levels of education use condom during sexual intercourse than others with lower or without formal education ($P = 0.0000$). This finding is consistent with what was reported in a study done among PLWHA in Kaduna State, Nigeria.^[15] The high rate of condom use among people with higher education could be due to better awareness and knowledge of condom and its important function of preventing the spread of HIV/AIDS and other STIs.

Among the 231 respondents, 135 (58.4%) of them disclosed their HIV status to their partners. Others disclosed their status to relations, religious leaders and 10% of the respondents did not disclose their status to anybody. It, therefore, means that they may not even bother to ask their sexual partner to use condom during sexual intercourse which could result in unabated spread of HIV infection in the society. This is a great potential setback for the efforts of the Government and other partner agencies involved in HIV prevention and control programs. Furthermore, 60.7% of those that disclosed their status used condom in the last sexual encounter

compared with only 38.9% of those who did not. There was a statistically significant relationship between disclosure of HIV status to partner and use of condom at last sex ($P = 0.0018$).

Use of condom among couples showed that 62.2% of sero-discordant couples used condom during sexual intercourse, surprisingly 84.6% of sero-concordant couples used condom during sexual intercourse. Majority (86.8%) of the respondents with sero-concordant spouse said they used condom to prevent re-infection. This result is in contrast to report of a study to assess the risk behavior among HIV-1 discordant couples in rural South-west Uganda where only 30% of sero-discordant couples have ever used condom and condom use among sero-concordant couples was 36% after diagnosis.^[18] The interactions among PLWHA during support group meetings where they share experiences may have aided the increase in the use of condom in this study. It could also have been influenced by disclosure of HIV status of respondents to their sexual partner.

In this study, regular use of condom among the respondents with sero-discordant couple was 45.9%. A similar study of sero-discordant couples conducted in three Africa countries; Rwanda, Haiti, and Zambia reported lower regular condom use; 17% reported lower regular condom use in Rwanda,^[19] 24% in Haiti^[20] and 33% in Zambia.^[21] The higher level of condom use among respondents in this study may be due to ongoing counselling among respondents in the facility where they are receiving care and treatment. This study has revealed that 29.4% of the respondents had never used condom during sexual encounter despite going through counseling sessions in the facility where they were receiving care. The reasons they gave were because they were married, it reduces sexual pleasure, desire to have children, and partner preference not to use condom.

There is need to encourage PLWHAs to disclose their HIV status to their partners and provision of free condom during HIV counseling and testing (HCT) by, when they come for monthly support group meetings and clinic follow-up.

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