

Research Article

The Pattern of Use of Condoms among HIV /AIDS Patients Attending a Tertiary Health Care Facility in South West Nigeria

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Abstract

Introduction: HIV prevention is an essential and integral part of any HIV treatment programme. This could include the use of HAART as prevention itself, abstinence from sex, and the use of barrier methods including condoms. **Objective:** To evaluate the relevance and effectiveness of components of the HIV/AIDS treatment programme in our facility with emphasis on both male and female condoms. **Materials and Methods:** A previously verified questioner was administered to 255 of our clients by trained counsellors. The results were subjected to simple statistical analysis including bivariate analysis using statistical software SPSS V.20. **Results:** The number of clients using condoms consistently was found to be low (49%). Only 33.3% of females knew how to use the female condoms and even less preferred to use the female condom. Over 80% of females preferred the male condom. **Conclusion:** The use of condoms among our clients needs to be increased and more wide spread to further reduce prevention. The use of female condoms should be encouraged rather than leaving the determination of safe sex activity solely to the male and male condoms.

Keywords: Sex, HIV AIDS, Female, Condoms, Prevention

INTRODUCTION

Human Immune deficiency syndrome (HIV) was first described in 1981 among young gay men in New York (USA) presenting with symptoms of Pneumocystis Carinii pneumonia (PCP) (Gallo and Montagnier, 2003). Since then there has been a global pandemic with sub-Saharan Africa being particularly hard hit. This has inturn decimated other sectors apart from health in the society. HIV/AIDS has become such a full-blown developmental crisis affecting all sectors of the economy in most developing countries. Its social and economic consequences are felt widely not only in health but in education, industry, and agriculture as well as transport (Omer and Mariam, 2008). However, the introduction of highly active antiretroviral drugs (HAART) has led to a considerable reduction in mortality and morbidity among infected patients. The most vulnerable groups are the commercial sex workers which could be in a formal and informal setting, men who have sex with men(MSM) and intravenous drug users(Kim et al., 2013).

This having been established, prevention is an important and implicit component in any effort aimed at reducing the prevalence of this virus in a society. This may include HAART treatment itself as prevention. This is then assessed by determining individual viral loads of those within the community and then taking an aggregate. Put in simple terms, once the viral load within a community is reduced it follows that there will be a reduction in transmission and hence increase in prevention. However this has its limitations including issues of selection and measurement, the importance of HIV prevalence in determining the potential for ongoing HIV transmission,

interpretation of community viral load and its effect on ongoing HIV transmission in a community, and the ecological fallacy (i.e, ecological bias)(Miller et al., 2013). Social behaviour with specific regards to sexual relations has been found to be essential in the evaluation of prevention. In studies carried out in sub-Saharan Africa which includes South Africa, a region particularly hard hit by the pandemic (Yusuf and Benyah, 2012) the use of condoms was found to be a critical determinant in the effectiveness of prevention.

It was found that the majority (63%) of the participants had never used a condom with their primary sexual partner in the past 3 months, 60% were not aware of the HIV status of their sexual partner, 7.6% had a casual sexual partner in the past 3 months, 20% had two or more sexual partners in the past 12 months and 17.3% reported to have been diagnosed with a sexually transmitted infection (STI) (other than HIV) in the past 12 months. The various HIV risk behaviours were predicted, by being single and alcohol use for multiple sexual partners; by fewer antenatal visits, being HIV negative and not having used alcohol for lack of condom use; by being HIV positive, having experienced physical partner violence and psychological distress for having been diagnosed with a sexually transmitted infection (other than HIV); and by lower education, unplanned pregnancy, non-antenatal care attendance by expectant father, the belief that anti-retroviral drugs can cure HIV and being HIV positive for having a partner with HIV positive or unknown status (Peltzer and Mlambo, 2013). It should be noted that not only is the use of condoms important but techniques and frequency of use are essential as highlighted in south Africa and other related regions including Nigeria (Umar et al., 2001). Reports have suggested that the use of female condoms may not be popular among the clients. Studies carried out elsewhere have supported this (Holt et al., 2013). It would be interesting and useful to determine if this is the case in our facility. As a result of the foregoing and the existence of HAART programme in our facility for over five years now it has become necessary to determine the pattern of condom use among our clients. This would give us an assessment of our services and be an indicator of needs for intervention to make our programme more effective.

METHODS

This would be carried out on our HIV positive patients on HAART. Structured questionnaires would be administered by trained personnel to 255 clients after having obtained verbal informed consent. This population size was determined using Fishers formula with a P (where P is the proportion of PLWHA using condom during the last sexual encounter) of 83%(Umar et al., 2001) with confidence interval of 95% and normal deviation of $Z = 1.96$ and $d = 0.05$. Twenty three additional respondents had been incorporated to take care of the possibility of the participants opting out of the study.

$$N = Z^2 Pq / d^2$$

Setting: The study would be carried out in Osogbo the capital city of Osun state in Nigeria. It has an urban setting with a population of 3,416,959. The residents are majorly Yoruba however there are other tribes including Hausas, Igbos and those of Edo state origin. The weather is typically tropical with periods or heavy rain fall alternating with the dry season. All participants would be counselled on the proper use of condoms after the questioner might have been administered. The questioner has been pretested and verified in the ART clinic at Asubiaoro hospital in Osogbo.

Inclusion criteria

- 1) HIV positive on HAART
- 2) Clients within our facility
- 3) Clients who give informed consent

Exclusion Criteria

- 1) HIV negative
- 2) Clients who refuse to participate following informed consent.
- 3) Clients not enrolled in our facility

RESULTS

The total number of participants was 255. Of this 47.10%, the majority, were in the age bracket 26-35 years. The median age was 35 years. The majority were of female sex 80%, while most of them claimed to have at least secondary education 43.5%. 75.30% of the clients were married while 2.4% were divorced. The major occupation of the clients was trading 40.40% while 23.50% were civil servants. Almost all, over 98% correspondents agreed to knowing what condoms are most of them indicated that they had some form of formal

Table 1. Showing the socio-demographic characteristics of the respondents

	FREQUENCY (N= 255)	PERCENTAGE (%)
AGE		
16-25	13	5.10
26-35	120	47.10
36-45	87	34.10
46-55	26	10.20
56-65	9	3.5
SEX		
MALE	51	20.00
FEMALE	204	80.00
EDUCATIONAL STATUS		
PRIMARY	52	20.4
SECONDARY	111	43.5
TERTIARY	92	36.1
MARITAL STATUS		
SINGLE	39.00	15.30
MARRIED	192.00	75.30
DIVOURCE	6.00	2.40
WIDOWED	16.00	6.30
SEPERATED	2.00	0.80
OCCUPATION		
CIVIL SERVANT	60.00	23.50
TRADER	103.00	40.40
ARTISAN	51.00	20.00
STUDENT	11.00	4.30
FARMER	10.00	3.90
UNEMPLOYED	16.00	6.30
RETIREE	4.00	1.60
TOTAL	255	100%

Table 2. Showing the practice of condom by the respondents

VARIABLES	FREQUENCY	PERCENTAGE
DO YOU USE CONDOM		
YES	201	78.80
NO	54	21.20
DO YOU USE CONDOM FOR EVERY SEXUAL ENCOUNTER		
YES	125	49.00
NO	130	51.00
DOES THE HIV STATUS OF YOUR PARTNER DETERMINE IF YOU WILL USE CONDOM		
YES	161	63.10
NO	94	36.90
DO YOU TAKE ALCOHOL		
YES	29	11.40
NO	226	88.60
IF YES, DO YOU FEEL ALCOHOL INTAKE COULD AFFECT YOUR DECISION TO USE CONDOM		
YES	3	1.20
NO	26	10.20
AS A FEMALE DO YOU KNOW HOW TO USE A FEMALE CONDOM		
YES	68	33.30
NO	136	66.70
AS A FEMALE WOILD YOU PREFER TO USE A FEMALE CONDOM THAN A MALE CONDOM		
YES	29	14.20
NO	175	85.80

training. 83.50% knew what female condoms were and 63.10% did not think there was any advantage over a female or male condom (Table 1).

78.80% agreed to ever having used condoms, however only 49% agreed to using condoms for every sexual encounter. 63.10% said the knowledge of their partners HIV status would influence the decision to use a condom. 11.40% admitted to taking alcohol of this the majority were male. Of those that took alcohol, only 1.20% said it would affect their decision to use a condom or not. The majority affirmed that alcohol if taken

Table 3. showing the relationship between practices of condom by socio-demog

VARIABLES	FREQUENCY		P-VALUE
	YES	NO	
AGE and DO YOU TAKE ALCOHOL			
16-25	1(7.7)	12(92.3)	0.199
26-35	9(7.5)	111(92.5)	
36-45	12(13.8)	75(86.2)	
46-55	6(23.1)	20(76.9)	
56-65	1(11.1)	8(88.9)	
TOTAL	29(11.4)	226(88.6)	
EDUCATIONAL STATUS & AS A FEMALE DO YOU KNOW HOW TO USE A FEMALE CONDOM			
PRIMARY	8(18.2)	36(81.8)	0.048
SECONDARY	36(39.1)	56(60.9)	
TERTIARY	24(35.3)	44(64.7)	
TOTAL	68(33.3)	136(66.7)	
EDUCATIONAL STATUS & DO YOU TAKE ALCOHOL			
PRIMARY	3(5.8)	49(94.29)	0.063
SECONDARY	10(9.0)	101(91)	
TERTIARY	16(17.4)	76(82.6)	
TOTAL	29(11.4)	226(88.6)	
DOYOU USE CONDOM FOR EVERY SEX ENCOUNTER & SEX			
MALE	29 (56.9)	22 (43.1)	0.137
FEMALE	96(47.1)	108(52.9)	

Table 4. Showing the practice of condom by the respondents

VARIABLES	FREQUENCY	PERCENTAGE
DOES THE HIV STATUS OF YOUR PARTNER DETERMINE IF YOU WILL USE CONDOM		
YES	161	63.10
NO	94	36.90

Table 5. Showing the relationship between the age and knowledge of the respondents on female condom

VARIABLES	FREQUENCY		P-VALUE
	YES	NO	
AGE and ARE YOU AWARE OF CONDOM DESIGNED FOR FEMALE USE			
16-25	10 (76.9)	3(23.1)	0.001
26-35	105(87.5)	15(12.5)	
36-45	77(88.5)	10(11.5)	
46-55	15(57.7)	11(42.3)	
56-65	6(66.7)	3(33.3)	
TOTAL	213 (83.5)	42(16.5)	

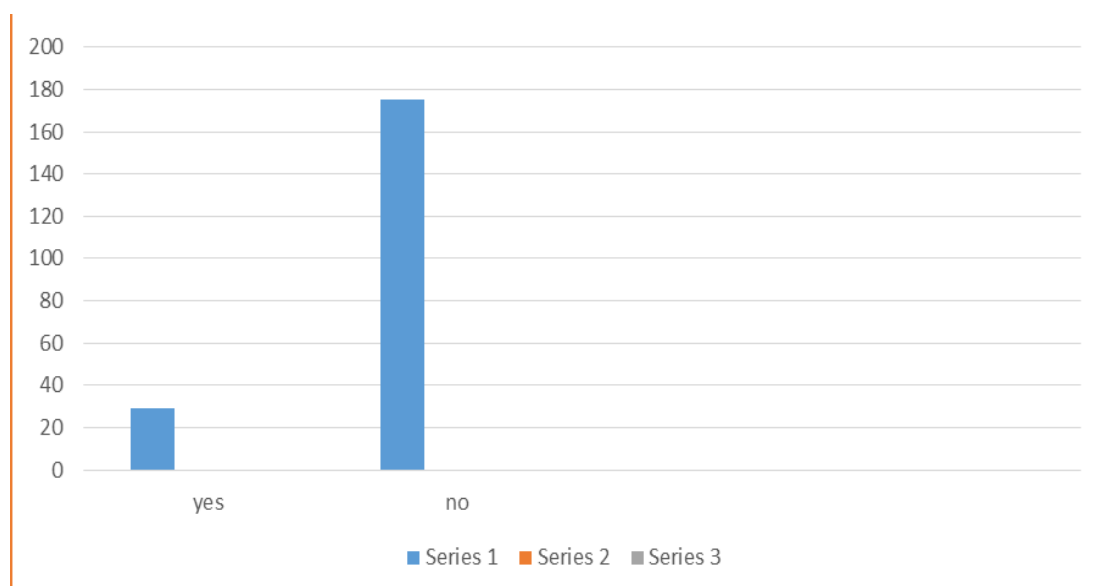


Figure 1. Those females who would prefer using male condoms to female condoms

YES= Females who prefer female condoms
 NO=Females who prefer male condoms

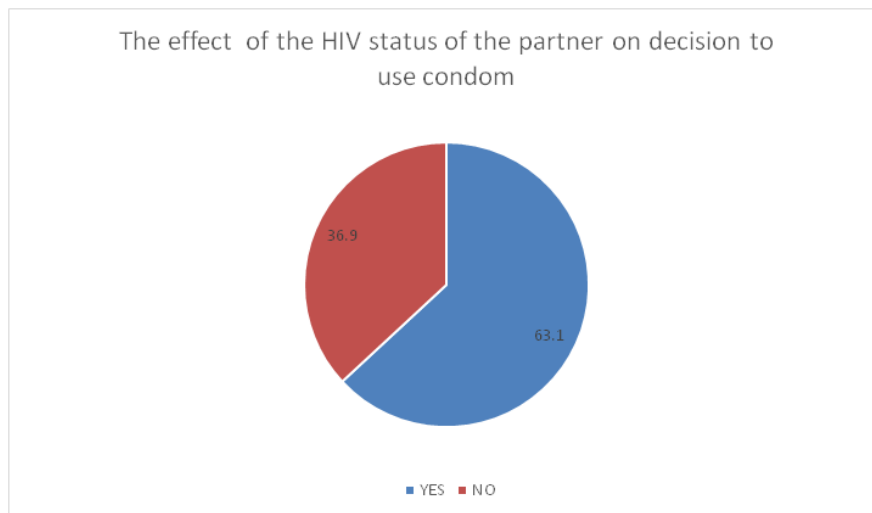


Figure 2. The effect of the HIV status of the partner on decision to use condom

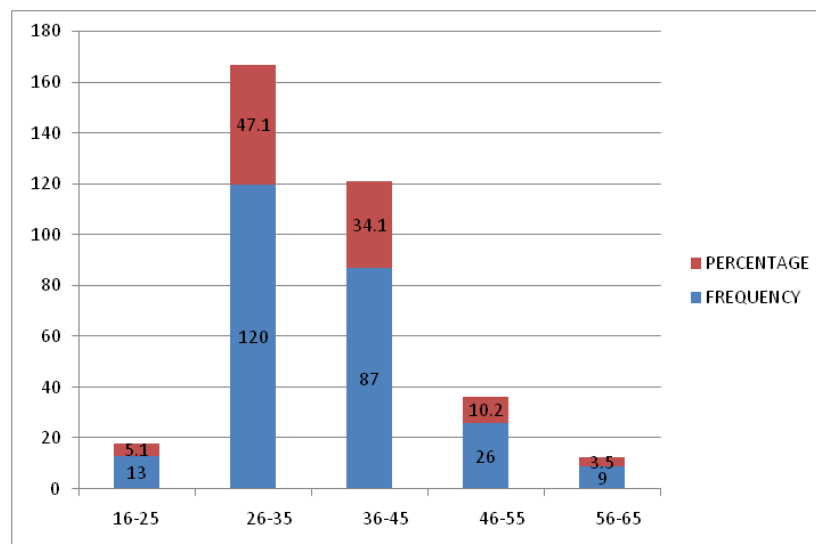


Figure 3. Percentage/frequency of the study population by age distribution

played no role in their decision to use a condom. The majority who agreed to be aware of the female condom were between age bracket 26-35 and most of them were of the female sex. (This was found to be statistically significant $p=0.001$) (Table 5). 7.4% of the female sex thought that female condoms would be more effective than male condoms. Of those who knew about female condoms most were married 6.8%. Majority of those who consumed alcohol were in the 36-45 age bracket. Those who knew about female condoms had attained secondary education and those who took alcohol had passed through a tertiary institution.

DISCUSSION

Condom use is an integral indicator of risky sexual behaviour and, as a result, is a potential predictor of future HIV infection rates. Consequently, documenting trends in condom use and exploring the factors associated with their utilisation are important for broadening the information base for the design of HIV intervention programmes. Different factors can increase or decrease transmission risk. For example taking antiretroviral drugs can reduce the risk of an HIV-infected person transmitting the infection to another by as much as 96% (Cohen et al., Cohen) and it has been estimated that consistent use of the condom can reduce transmission of infection significantly even among active sex workers (Pilotto et al., 2011). From this it can easily be appreciated why emphasis on use and proper use of the condom cannot be overstated at any point in time. The majority of our patients were between 26-35 years with a median age of 35 years (Table 1). Most of the participants were female. This is comparable to findings obtained in other parts of Africa where members of the female sex who attended the clinics were more than males (Kidder et al., 2013). The participants were mostly between 26 and

35 years (Table 1). This is not unexpected as this is a period during which individuals are likely to be optimally sexually active. In a study carried out in India the most commonly affected age group was 25-44 years (Vora et al., 2011)

The majority (80%) (Table 1) of our clients were females. This only further establishes the already accepted fact that the female sex is more vulnerable to HIV infection than the male sex due to economic, biological and social factors (Madkan et al., 2006). Though the majority of our clients who took alcohol indicated that this would not affect their decision whether or not to use a condom, it has been established in other studies that the intake of alcohol was a definite risk factor the effect being more pronounced in females than males, females being seven (7) times at risk than those who did not consume alcohol (Fentahun and Mamo, 2014).

The majority of our clients who imbibed alcohol were between 36-45 years though in other studies the majority of those who took alcohol were 40 years and below (Surah et al., 2013). This is an important variable as it is likely to affect proper judgment as regards condom use during the height of sexual desire and so also those who indulge in alcohol intake tend to adhere less to drug (HAART) (Surah et al., 2013), intake and this could lead to the emergence of drug resistant strains of the HIV viruses. Fortunately only a relatively small percentage of our clients take alcohol (11.4%) (Table 2). 63.10% said the knowledge of their partners HIV status would influence the decision to use a condom (Table 4 and Figure 2). This is a significant finding as studies have shown that actual HIV status especially among married men would affect their decision to use a condom rather than perceived HIV status which was of more relevance with regards to married women (Anglewicz and Clark, 2013).

Forty nine percent of our male respondents agreed to knowing what condoms are and using them for every sexual encounter. This is strikingly similar to a community in South Africa which reported 49.2% using condoms consistently (Nyembezi et al., 2014). The use and awareness of female condoms tend to be lower than that of male condoms (Dhana et al., 2014). In this study the majority of those being aware of female condoms were between 26-35 years. Most of them were females and had attained at least secondary school education (table 3). Analysing by sex, of the female participants only 33.30 % (Table 2) knew how to use the female condom and majority of all females, 85.80 % (table 2) preferred to use a male condom than female condom. This high percentage of those who preferred to use the male condom (Figure 1) among females could be as a result of sexual dominance orientation (SDO) where by the females feel that males should take the leading and dominant role concerning sexual activity. This was found to be the case in a study carried out in the United States where the use of female condoms was significantly lower than that of male condoms for similar reasons, a concept referred to as sexual dominance orientation (SDO) (Rosenthal et al., 2012). However it may be necessary to re-orientate the females such that they use female condoms thereby retaining more bargaining power as regards the issue of safe sex and HIV prevention. It may at this point be necessary to emphasize that it has been documented variously that females are more susceptible to HIV than males.

CONCLUSION

Prevention of HIV is an integral and ongoing implicit component of management of HIV/AIDS. The percentage of clients who use condoms consistently is still too low. More emphasis has to be placed during counselling on the need to use condoms more effectively. The issue of SDO and females has to be tackled with more import and urgency in order that they may bargain more for safer sex.

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