ORIGINAL RESEARCH ARTICLE

Transactional Sex, Condom and Lubricant use among Men who have Sex with Men in Lagos State, Nigeria

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Abstract

Men who have unprotected sex with men may also have unprotected sex with women and thus serve as an epidemiological bridge for HIV to the general population. This cross sectional descriptive study assessed condom and lubricant use and practice of transactional sex among men who have sex with men (MSM) in Lagos state. Simple random sampling was used to select three community centres and snowball sampling technique was used to recruit 321 respondents. Almost half (50.9%) had received payment for sex while 45.4% had paid for sex in the past. Consistent condom use was practiced by 40.5% of respondents during the last 10 sexual encounters, 85.6% used lubricants mostly with condom, products used were KY jelly, body cream, saliva and Vaseline. There is need for behavioural change to reduce risky practices which predisposes this group of MSM to HIV and sexually transmitted infections. *Afr J Reprod Health 2013 (Special Edition); 17[4]: 90-98).*

Keywords: MSM, sex for money, unprotected sex, lubricants

Résumé

Les hommes qui ont des rapports sexuels non protégés avec des hommes peuvent aussi avoir des rapports sexuels non protégés avec des femmes et servent ainsi de pont épidémiologique pour la transmission du VIH à la population générale. Cette étude descriptive transversale a évalué l'emploi des préservatifs et du lubrifiant et la pratique de rapports sexuels transactionnels chez les hommes qui ont des rapports sexuels avec des hommes (HSH) dans l'Etat de Lagos. L'échantillonnage aléatoire simple a été utilisé pour sélectionner trois centres communautaires et la technique d'échantillonnage en boule de neige a été utilisée pour recruter 321 personnes interrogées. Près de la moitié (50,9 %) avaient reçu le paiement pour le sexe alors que 45,4 % avaient payé pour le sexe dans le passé. L'utilisation systématique du préservatif a été pratiquée par 40,5% des personnes interrogées au cours des 10 derniers rapports sexuels, 85,6 % ont utilisé des lubrifiants surtout avec le préservatif, les produits utilisés étaient gelée KY, crème pour le corps, la salive et la vaseline. Il faut un changement de comportement afin de réduire les pratiques à risque qui prédispose ce groupe des HSH au VIH et aux infections sexuellement transmissibles. *Afr J Reprod Health 2013 (Edition Spéciale); 17[4]: 90-98).*

Mots-clés: HSH, sexe transactionnel, préservatif, lubrifiants

Introduction

Men who have sex with men (MSM) describe a behavioral phenomenon rather than a specific group of people. It is generally the preferred term, because in the context of human immuno-deficiency virus (HIV) infection, the important issue is risk behavior rather than sexual identity[1]. MSM do not constitute a uniform group of people, it includes self-identified gay and bisexual men, men who do not accept their gender and self identify as women, men who engage in male-male sex and self-identify as heterosexual. Married and unmarried heterosexual men may also engage in male to male sex[2].

Sex between men frequently involves anal intercourse which, if unprotected, carries a high risk of HIV transmission for the receptive partner, and a significant risk for the insertive partner. Male-male sex is often initiated during adolescent years and is very common in the repertoire of adolescent sexual experimentation. There are also many institutions wherein men are obliged to spend long periods in all male company such as in

the military, prisons, mining, and male-only educational establishments; and in which male-male sex can be common[3,4].

In many Western nations, MSM had been identified very early on as one of the key risk-groups in the HIV epidemic; hence research and HIV prevention efforts had focused more specifically on the population to curb the spread of HIV. In North America and Western Europe, there is strong evidence of resurgent HIV epidemics among MSM[5]. Data from 23 European countries show that annual number of HIV diagnoses rose by 86% between 2000 and 2006. In the United States; gay, bisexual, and other men who have sex with men represent approximately 2% of the population, yet constitutes the population most severely affected by HIV; and are the only risk group in which new HIV infections has been increasing steadily since the early 1990s. In 2006, MSM accounted for 53% of all new HIV infections; and MSM with a history of injection drug use accounted for an additional 4% of new infections[6].

Nigeria ranks second in the world in terms of the number of people living with HIV/AIDS, the adult HIV prevalence increased from 1.8% in 1991 to 5.8% in 2001, before dropping to 4.4% in 2005[7]. From the 2010 national HIV sero prevalence study 4.1% was obtained for the general population while MSM had prevalence above 13%[8]. This disparity was also observed in a study conducted in three cities in Nigeria where MSM had prevalence four to ten times higher than the general population[9]. Twenty three percent of new cases of HIV infection in the same year was attributed to high risks groups including MSM, female sex workers (FSW) and injection drug users (IDU). According to the 2010 integrated biological and behavioral surveillance study (IBBBS) 15.4% of MSM in Lagos state were infected with HIV[10].

Multiple prevention strategies to prevent HIV and sexually transmitted infections which includes correct and consistent condom use have been shown to be highly effective. Consistent condom use with male and female partners for all the states in the IBBBS was shown to be generally low at 50%[10], compared to the 2007 result, consistent condom use with non-paying male partners remained at 43% among MSM in Lagos state[11]. Evidence indicates that unprotected paid sex is a significant factor of the HIV epidemics in the West African region[12]; the IBBSS showed that only a third of the MSM who were involved in transactional sex practiced consistent condom use thereby putting them at risk of HIV infection[10]. The use of water and silicone based lubricants has been shown to be important for the correct functioning of condoms during anal sex, it reduces the risks of condoms breaking[13]. There is dearth of data on lubricant use among MSM in Nigeria, in view of the research going on in the development of an acceptable antiretroviral rectal Microbicide gel this study was carried out to assess the use of condoms and lubricants and occurrence of transactional sex among MSM in Lagos state.

Method

Lagos State is a group of islands located in the South-Western region of Nigeria, it is divided into 20 local government areas and is the commercial and industrial hub of the country with an estimated population of 9,013,534 according to the 2006 national census[14]. As of April 2011 there were eleven community centre's in Lagos state where MSM can freely socialize without fear of stigma or discrimination. The centre's also serves as focal points for obtaining sexual health information, free condom, lubricants, HIV counseling and testing and referrals for health care related services. Managed by Non-Governmental Organizations, they are located in public buildings that are easily accessible to the MSM population and on daily basis an average of 6 to 10 MSM patronize each of these centres.

A cross sectional descriptive study was carried out among MSM aged 15 – 60 years; who patronize MSM designated community centre's in Lagos state. The formula for descriptive study $n = z^2 pq/d^2$ was used to calculate minimum sample size of 291, prevalence of 25.5% obtained in a previous study was used[11], 10% was added to make provision for incompletely filled questionnaires, hence a total of 321 questionnaires were administered.

A list of MSM community centre's in Lagos State was collected from the Lagos State AIDS

Control Agency (LSACA). Only 7 LGAs in the state, namely Ajeromi-Ifelodun, Apapa, Eti-Osa, Ikeja, Lagos Mainland, Suru-Lere and Mushin had a total of eleven community centres. Three community centres were selected using simple random sampling; the selected centres were located in Ajeromi-Ifelodun, Ikeja and Mushin LGA. Courtesy visits were made to these community centre's to intimate the management about the purpose of the research study and obtain support and permission to collect information from MSM patronizing the centres.

Snowball sampling method was used in the recruitment of 107 participants in each of the LGA. On average, between five - seven MSM patronize the centre in Mushin daily; 7 - 10 in Ajeromi-Ifelodun and 8 - 12 in Ikeja. The MSM operating the centres were recruited as the initial seeds; and they were thereafter requested to recruit their peers who visit the centres. These next groups of respondents were equally asked to identify peers and this went on until the desired sample size of 107 respondents was attained in each of the three centres. The data collection lasted five weeks. Participation was voluntary, written informed consent was obtained prior to participation and they were assured of confidentiality regarding information obtained. Ethical approval for the study was obtained from the ethics and research committee of Lagos University Teaching Hospital.

The instrument for data collection was a pre tested, semi structured questionnaire, three research assistants were recruited and trained to assist in the distribution of the questionnaires, assist those who had difficulty in completing the questionnaires and collection of the questionnaires on the field. This was carried out in the month of May 2011. Data obtained was entered and analyzed using Epi info version 3.5.3 and WinPepi. Data analysis involved the use of frequency tables and chi-square was used to determine association between variables at $p<0.05$.

Results

Most respondents were within 20 to 29 years (68.8%) followed by 30-39 years (16.5%); less than 20 years (13.7%) and those that were 40 years and above (1.0%). The mean age of the respondents was 25.28 years ± 4.60. More respondents were Yoruba (49.1%) followed by Igbo 34.4%, the Efik and Urhobo ethnic groups constituted 9.2%, while the remaining 7.3% were Hausas. Most respondents were Christians (76.6%) followed by those that practiced Islam (21.0%). Only 2.4% of the respondents practiced traditional religion. More than half of the respondents (58.8%) had secondary education and 32.3% had tertiary education. Over half (57.4%) of the respondents were unemployed while 42.6% were employed. Most of the respondents were single and not in a steady relationship (66.0%), 19.6% were single, in a steady relationship/cohabiting, 7.2% were married to a female, 4.8% were married to a male and the remaining 2.4% were either divorced/separated (Table 1).

Table 1: Socio-demographic Characteristics of Respondents

Characteristics (n=291)	Frequency (%)
Age (yrs.)	
<20	40 (13.7)
20-29	200 (68.8)
30-39	48 (16.5)
≥40	3 (1.0)
Ethnic group	
Yoruba	143 (49.1)
Igbo	100 (34.4)
Hausa	21 (7.3)
Efik and Urhobo	27 (9.2)
Religion	
Christianity	223 (76.6)
Islam	61 (21.0)
Traditional	7 (2.4)
Marital status	
Single, not in a steady relationship	192 (66.0)
Single, in a steady relationship/cohabiting	57 (19.6)
Married to a female	21 (7.2)
Married to a male	14 (4.8)
Divorced/separated	7 (2.4)
Educational Level	
No Formal Education	19 (6.5)
Primary	7 (2.4)
Secondary	171 (58.8)
Tertiary	94 (32.3)
Employment Status	
Unemployed	167 (57.4)
Employed	124 (42.6)

A little over half (50.5%) of the respondents were homosexual while 47.8% were bisexual, the remaining respondents were transgender (1.7%). Two thirds of the respondents comprising 66.3% were not living openly as MSM, while 33.0% were living openly as MSM.

Among the respondents that were not living openly as MSM, 33.7% were hiding their sexual orientation from people generally, 32.6% were hiding their orientation from their family and 19.2% were hiding their orientation specifically from their friends. Only 14.5% of the respondents were hiding theirs from their colleagues. More of the respondents (68.7%) had multiple sex partners with a mean of 2.9+1.5; more than half (52.9%) had sex with males only, followed by those who had sex with both male and female (47.1%) sexual partners (Table 2).

Table 2: Sexual Identity of Respondents, Number and Gender of Current Sexual Partners

Variable	Frequency
Sexual identity (n=291)	
Homosexual	147 (50.5)
Bisexual	139 (47.8)
Transgender	5 (1.7)
Openly living MSM (n=291)	
Yes	96 (33.0)
No	193 (66.3)
Non response	2 (0.7)
Hiding sexual orientation from (n= 193)	
Everybody	65 (33.7)
Family	63 (32.6)
Friends	37 (19.2)
Colleagues	28 (14.5)
Number of sexual partners (n=291)	
1	91 (31.3)
2-3	107 (36.8)
4-5	43 (14.7)
> 5	50 (17.2)
Mean = 2.9±1.5	
Gender of Partners (n=291)	
Males only	154 (52.9)
Both males and females	137 (47.1)

About half (50.9%) of the respondents' sexual partners were just casual friends followed by 41.9% in steady relationships and 18.9% who had sex with customers. Out of the respondents, 76.3% who had sex with male partners had anal sex, while 38.5% had oral sex. Respondents that had vaginal sex with their female partners were 67.9% followed by 48.2% who had oral sex and 24.8% who had anal sex. Half of the respondents (50.9%) had received money for sex; about one third (29.7%) had accepted money to take care of self and family including paying school fees, 15.5% felt it was reward earned for sex, and another 15.5% had no reason for taking money, but just took it because it was offered. For 11.5% of the respondents, they accepted money because they were sex workers. Over half (54.6%) had not paid for sex in the past while the remaining 45.4% had (Table 3).

Table 3: Sexual History of Respondents

Variable	Frequency
***Type of Relationship (n=291)**	
Casual friends	148 (50.9)
Steady relationship	122 (41.9)
Customers	55 18.9)
One night stand	47 (16.2)
Spouse	25 (8.6)
***Type of sex with male partners (n=291)**	
Anal sex	222 (76.3)
Oral sex	112 (38.5)
***Type of sex with female partners (n=137)**	
Vaginal sex	93 (67.9)
Oral sex	66 (48.2)
Ever received money for sex (n= 291)	
Yes	148 (50.9)
***Reasons for receiving money for sex (n=148)**	
To take care of self and family	44 (29.7)
Reward for sex	23 (15.5)
For no reason	23 (15.5)
Because I'm a sex worker	17 (11.5)
I didn't have job	1 (0.7)
Because of coercion by boss	1 (0.7)
No response	39 (26.4)
Ever paid for sex (n=291)	132 (45.4)

*multiple response

Less than half (40.5%) used condom consistently during the last 10 sexual episodes, almost two thirds (62.5%) of respondents reported using condom during the last sexual encounter, among this group 93.4% used male condom. The main reasons for not using condom were that respondent got carried away (27.9%), partners opposed the use (26.7%); condom was not available (10.5%) while another 10.5% did not want to bother about using it. Majority of the

respondents (87.6%) had access to condom; for those who had access, 40.4% got condoms from Pharmacy/chemist, 27.1% got it from the community centre's and 14.9% got from their partners (Table 4).

Table 4: Condom Use among Respondents

Variable	Frequency
Use of condom in the last 10 sexual episodes (n=291)	
All the time	118 (40.5)
6-8 times	44 (15.1)
4-5 times	39 (13.4)
2-3 times`	67 (23.0)
Once	2 (0.7)
Not at all	13 (4.5)
No response	8 (2.8)
Use of condom at last sex (n=291)	
Yes	182 (62.5)
No	86 (29.6)
Non response	23 (7.9)
Type of condom used (n=182)	
Male condom	170 (93.4)
Female condom	12 (6.6)
Reasons for non-use (n=86)	
I got carried away	24 (27.9)
Partner opposed	23 (26.7)
I did not want to bother	9 (10.5)
Condom was not available	9 (10.5)
Condom is not reliable	6 (7.0)
Condom interferes with sexual pleasure	6 (7.0)
I was forced	6 (7.0)
I was too shy/afraid to use it	3 (3.4)
Access to condom (n= 291)	
Yes	255 (87.6)
No	36 (12.4)
Source of Condoms (n= 255)	
Pharmacy/ chemist	103 (40.4)
Community centres	69 (27.1)
Partner	38 (14.9)
Peer educators	25 (9.8)
Petty traders shop	20 (7.8)

Most of the respondents (85.6%) used lubricants, for respondents who were not using lubricants, 59.5% did not use because they believed they did not need it, 19.1% did not know it was useful. KY jelly was used by 55.4% of respondents; 44.6% used body cream; some respondents (26.1%) used saliva while the remaining 24.1% used Vaseline. Over two thirds (67.9%) were using lubricants with condom; 58.2% used lubricants all the time, 21.3% used often and 20.5% of the respondents used occasionally (Table 5).

Table 5: Use of Lubricants among Respondents

Variable	Frequency
Use of lubricants (291)	
Yes	249 (85.6)
No	42 (14.4)
Reasons for non use (n=42)	
I didn't need it	25 (59.5)
I didn't know it was useful	8 (19.1)
I didn't know where to get	6 (14.3)
I couldn't afford to buy it	3 (7.1)
Type of lubricant used (n= 249) multiple response	
KY jelly	138 (55.4)
Body cream	111 (44.6)
Saliva	65 (26.1)
Vaseline	60 (24.1)
Method of Use (n=249)	
With condom	169 (67.9)
With and without condom	66 (26.5)
Without condom	14 (5.6)
Frequency of Use (n=249)	
All the time	145 (58.2)
Often	53 (21.3)
Occasionally	51 (20.5)

There was statistically significant relationship between receiving payment for sex and use of condoms with more of the respondents (79.7%) who received payment using condoms (X^2=7.638, p=0.022). More of the respondents with no formal education (68.4%) conducted transactional sex, this was statistically significant (Likelihood-ratio X^2=33.664, p=0.000). More of the respondents (70.8%) who used lubricants all the time used it with condoms compared to respondents who used lubricants without condom, this was statistically significant (Fishers exact p=0.0001).

A higher proportion of the transgender respondents (60%) were living openly as MSM (X^2=40.941, df=2, p=0.000 fishers) and 80.0% use saliva as lubricants (X^2=6.705, df=2, p=0.027 fishers), while a higher proportion of bisexual respondents 57.5% had transactional sex (X^2 = 10.824, df=2, p=0.009 fishers) Table 6.

Table 6: Relationship between sexual orientation of respondents, their living openly as gay, engaging in transactional sex and using saliva as lubricants

Sexual orientation	Living Openly as MSM		
	Yes	**No**	**Total**
	Frequency (%)	**Frequency (%)**	
Homosexual	73 (49.7)	74 (50.3)	147
Bisexual	20 (14.6)	117 (85.4)	137
Transgender	3 (60.0)	2 (40.0)	5
Total	96 (33.2)	193 (66.8)	289
	X^2 = 40.941, df = 2, p = 0.000 (fishers)		
	Transactional Sex		
Homosexual	71 (48.6)	76 (51.4)	147
Bisexual	77 (57.5)	62 (42.5)	139
Transgender	0 (0.0)	5 (100.0)	5
Total	148 (51.9)	143 (48.1)	291
	X^2 = 6.705, df = 2, p = 0.027 (fishers)		
	Use of Saliva as Lubricant		
Homosexual	35 (23.8)	112 (76.2)	147
Bisexual	26 (18.7)	113 (81.3)	139
Transgender	4 (80.0)	1 (20.0)	5
Total	65 (22.5)	226 (77.5)	291
	X^2 = 10.824, df 2, p = 0.009 (fishers)		

Discussion

The result of this study carried out among MSM in Lagos state showed high level of risk factors for HIV infection namely multiple sexual partnership, unprotected anal intercourse and transactional sex even though majority had at least secondary school level education.

Half of the respondents were homosexual while 47.8% were bisexual, only a third were living openly as MSM, among the 66.3% not living openly as MSM, 33.7% were hiding their orientation from everybody 32.6% from family members and the remaining from friends and colleagues. This is similar to the result of a study carried out in East Africa where 62% had not disclosed their sexual orientation to family or friends[15] but lower than the 90.7% of respondents in a Malawi study that kept their sexual orientation secret from friends and family members[16].

Sex work has been shown to play an important role in HIV transmission and HIV prevalence is much higher among sex workers and their clients compared to the low risk population. Several studies carried out among African MSM have shown a high proportion engaging in transactional sex, 74% in Mombasa Kenya[17], 53.9% in three cities in Nigeria[18] and 36% in Kano Nigeria[19]. Most of the MSM in this study had past history of transactional sex, 45.4% had paid for sex in the past while 50.6% had received money for sex, among this group; 11.5% were sex workers. Transactional sex is much higher in this study population than what was recorded in the result of the 2008 NDHS which showed that about two percent of men in the general population reported paying for sex in the twelve months preceding the study, this behavior was commoner among young men 20-29years of age[20]. It is also higher than the result of a study conducted in Saint Petersburg's[21] where 23% of the MSM had received money for sex in the past and 21% had paid for sexual services and the 12.6% of MSM in Almaty the largest city in Kazakhstan that reported transactional sex[22].

In view of the high biological risk associated with anal intercourse, unprotected anal intercourse is a risky behaviour that has been implicated in HIV transmission while the use of condoms has been shown to provide protection against sexually transmitted infections. In a baseline study conducted among MSM in the state of Andhra Pradesh in India[23]. 77% of the MSM reported condom use at last sex which is higher than the 62.5% obtained in this study, but this figure is better than the 43.4% of MSM in a 2010 study

carried out in Abuja, Ibadan and Lagos Nigeria[18] who used condom at last sex with a male partner. Even though condom use was high at last sex consistent use in the last 10 sexual episodes was low (40.5%), The result of a systematic review and meta-analysis conducted on patterns of condom use among MSM in China in 2011 however revealed a similar pattern of consistent condom use of 36.3% between 2006-2008[24] consistent condom use has been strongly recommended for MSM during anal intercourse because evidence has shown that it reduces HIV transmission by 64% and other STIs by 42% [25]. In this study it was observed that respondents who engage in transactional sex were more likely to use condoms which is similar to the result obtained in the Russian study[26].

Accessibility of condoms was not a hindrance to condom use for majority of MSM in this study compared to MSM in Egypt and Tunisia where 70.5% and 85.3% respectively had difficulty in obtaining condoms[27] . The main reasons for not using condoms were respondents getting carried away to the point of forgetting or not wanting to bother, partner opposed condom use and unavailability of condoms. This is in contrast to reasons cited by Senegalese MSM in a 2007 study where the type of relationship, age of partner and being unemployed were reasons for not using condom for both homo and heterosexual intercourse[28].

The use of oil-based products including Vaseline and body cream as lubricants with condom was reported in a study carried out among MSM in southern Sub Saharan Africa namely Malawi, Namibia and Botswana[29], this practice was also common among the MSM in this study unlike MSM in Nepal where about three quarters used water based lubricants. A high proportion of study respondents (85.6%) reported using lubricants, this is similar to the result of the IBBS survey conducted in Nepal in 2008 mentioned above[30]. Respondents in this study who used lubricants with condoms were more likely to use it all the time compared to those that used lubricants without condom and transgender MSM were more likely to use saliva as lubricant. The practice of safe anal sex described here as consistent condom use with water based lubricants was poor in this study which is similar to the findings of another study carried out among MSM in Abuja in 2008[31]. In this study, respondents who had no formal education and whose sexual orientation were bisexual were more likely to conduct transactional sex this is similar to the findings of a study conducted in Estonia where socio-demographic factors including level of education and sexual orientation of respondents affected their sexual behaviour[32].

There is need for behavioural change to reduce risky practices which predisposes this group of MSM to HIV and sexually transmitted infections because quite a significant proportion of them practice anal sex with both male and female partners, transactional sex, inconsistent condom use and also used inappropriate products as lubricants.

Contribution of Authors

Concept – Ayoola OO, Sekoni AO, Odeyemi KA
Study Design - Ayoola OO, Sekoni AO, Odeyemi KA
Data Collection - Ayoola OO
Data Analysis - Ayoola OO, Sekoni AO
Drafting of manuscript and critical review of intellectual content - Ayoola OO, Sekoni AO, Odeyemi KA
Final revision for publication - Sekoni AO

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