

# Sexual Behaviour, HIV-Related Knowledge and Condom Use by Intra-City Commercial Bus Drivers and Motor Park Attendants in Lagos, Nigeria

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## ABSTRACT

A study was undertaken among 395 intra-city commercial bus drivers, conductors and motor park attendants in a sub-urban community in Lagos, Nigeria. It was aimed at ascertaining the level of knowledge of the participants on sexually transmitted diseases including AIDS, their sexual practices and perceived vulnerability to these diseases and, in particular, their attitude to and use of condoms. A semi-structured interview schedule was used for data collection. The men were found to have a strongly woven network of sexual relationships. Their sexual network included, apart from their wives and regular partners, commercial sex workers, young female hawkers, schoolgirls, and market women within and outside the motor parks. More than two thirds (74.3%) of the men had multiple sex partners and many of them had had sexually transmitted diseases at one time or another. Condom ever-use rate was 65.6% but consistent and regular use rate with casual partners was 11.6%. Almost all the respondents (96.4%) knew themselves to be at high risk of contracting STDs, while 87.6% felt that it was impossible for them to “catch” AIDS. Poor knowledge of risk factors for STDs was exhibited, as many of them attributed their previous STDs to excessive exposure to the sun, having sex in the sun, and their partners remaining in the bath for too long. Intra-city commercial bus operators and men at motor parks are a high risk group for acquiring HIV infection. Their sexual networking with a variety of women within and outside the parks also seems to suggest that they play a major role in transmitting HIV infection in urban communities in Nigeria. There is a need for intervention programmes with a focus on men at motor parks and similar high risk groups. (Afr J Reprod Health 2005; 9[1]: 78–87)

## RÉSUMÉ

Comportement sexuel, connaissance liée au VIH et à l'utilisation des préservatifs par les chauffeurs des autobus commerciaux et les assistants des gares d'auto, Lagos, Nigéria. Une étude a été menée au sein de 395 chauffeurs d'autobus, des receveurs et les assistants des gares d'autobus dans une communauté sous-urbaine à Lagos, Nigéria. Elle avait pour but de vérifier le niveau de connaissance des participants par rapport aux maladies sexuellement transmissibles y compris le SIDA, leurs pratiques sexuelles et la vulnérabilité perçue à ces maladies, surtout leur attitude envers leur utilisation des préservatifs. Les données ont été collectées à l'aide d'un programme d'une interview structurée. On a découvert que les hommes avaient un réseau de rapport sexuel bien tissé. A part leurs femmes et des partenaires sexuels régulières, leur réseau sexuel comprenait des prostituées, des jeunes colporteuses, des écolières, des marchandes à l'intérieur et à l'extérieur de la gare d'autobus. Plus de deux tiers (74,3%) des hommes avaient de multiples partenaires sexuelles et beaucoup d'entre eux ont eu, à un moment ou un autre, des maladies sexuellement transmissibles. Le taux d'avoir jamais utilisé les préservatifs était de 65,6% alors que le taux par rapport à l'utilisation constamment et régulièrement avec les partenaires occasionnelles était de 11,6%. Presque tous les répondants (96,4%) savaient qu'ils couraient de haut risque de contracter les ISTs alors que 87,6% ont estimé qu'il leur était impossible d'“attraper” le SIDA. Ils ont fait preuve d'une faible connaissance des facteurs de risque face aux ISTs puisque beaucoup d'entre eux ont attribué leurs ISTs ultérieures au fait d'être en contact excessif avec le soleil, d'avoir fait l'amour sous le soleil et que leurs partenaires sont restées longtemps dans le bain. Les chauffeurs d'autobus qui desservent la ville et les hommes qui se trouvent dans les gares d'autobus constituent un groupe en grand danger d'attraper l'infection du VIH. Leur mouillage de réseau sexuel avec une variété de femmes à l'intérieur et à l'extérieur de la gare d'autobus semble suggérer qu'ils jouent un rôle important dans la propagation du VIH dans les communautés urbaines au Nigéria. Il faut des programmes d'intervention qui se concentrent sur les hommes dans les gares d'autobus et sur les autres groupes en grand danger pareil. (Rev Afr Santé Reprod 2005; 9[1]: 78–87)

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KEY WORDS: HIV/AIDS, STDs, drivers, condom

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## Introduction

In late 1993, close to 850,000 cases of AIDS had been reported to the World Health Organization (WHO) from over 180 countries and territories.<sup>1</sup> By the end of December 2000, the human immunodeficiency virus (HIV), which causes AIDS, had brought about a global epidemic far more extensive than earlier predicted. The UNAIDS and WHO now estimate that the number of people living with HIV/AIDS is about 39.4 million,<sup>2</sup> a figure that is 50% more than what was predicted in 1991. For several reasons, the figure is still thought to represent only a small proportion of the true world total. In Nigeria, the prevalence of HIV infection among sexually active adults (15–49) is 5.0%, and about 3.5 million individuals in this age group are estimated to be currently infected.<sup>3</sup>

Infection with HIV and STD occurs in specific risk situations and scenarios. Among young people, girls are pressured into having sex with their boyfriends and/or older men, syringes with drugs are shared with friends, and boys are pressurised to join friends for a night out with girls of no virtue. For adults, especially in sub-Saharan Africa, sexual contact has been shown to be by far the dominant mode of HIV transmission, followed by blood transfusion and exposure to needles, syringe and skin piercing instruments.<sup>4</sup>

The great majority of HIV-infected adults in sub-Saharan Africa are known to have acquired the virus through heterosexual intercourse,<sup>4,5</sup> and infected women outnumber men by ratio 6:5. The frequent presence of other STDs tends to facilitate HIV transmission. Central and East Africa are the hardest hit by the epidemic, which accounts for one sixth of the regions' populations but between half and two-thirds of its infections. In several towns and cities, a quarter or even one third of all men and women aged 15–49 years are estimated to be HIV positive.<sup>1</sup> In many Nigerian cities, HIV prevalence is above 10%,<sup>3</sup> and there are indications that the situation might

become worse if drastic interventions are not implemented.

Men's sexual behaviour greatly places women at risk of acquiring the infection.<sup>5</sup> Male behaviour contributes to HIV infection in women who often have less power to determine when, how and even where sex takes place. Some sub-groups of the population, such as female sex workers and long distance drivers, have been shown to be particularly at increased risk of exposure to HIV.<sup>6–8</sup> A study in which the knowledge and attitudes of long distance truck drivers concerning sexually transmitted diseases (STD) and sexual behaviour were surveyed revealed that 317 (99%) of the subjects had heard of AIDS and were aware of the correct risk-reducing behaviour. Though they knew that the use of condoms can prevent the transmission/acquisition of STDs, only 32% had ever used condoms despite the fact that 61% admitted to visiting prostitutes.<sup>9</sup> Similar reports<sup>10–11</sup> have identified drivers, especially those covering inter-regional long distances, as clients of prostitutes at truck stops along their routes. A high prevalence of sexually transmitted infections, including HIV, *Trichomonas vaginalis*, *Candida albicans*, *Neisseria gonorrhoea*, *Chlamydia trachomatis*, bacterial vaginosis and active syphilis were detected in prostitutes operating at truck stops in the Kwazulu-Natal area of South Africa.<sup>12</sup> Many truck stops have become satellite communities by drawing people from remote villages to trade, catch transport or offer services including prostitution to passing traffic. Truck drivers and their crew spend their leisure hours relaxing in the myriad brightly-lit bars and small hotels. Drinks, companionship and casual sex are abundantly offered.<sup>13</sup>

Although many programmes for the prevention of HIV/AIDS and other sexually transmitted diseases are being carried out in Nigeria, the intra-city commercial bus drivers and motor park attendants, a group similar to long distance drivers, have been virtually overlooked in the dynamics of urban HIV and their role as

potential carriers of HIV/STD. This study was conducted with the aim of understanding HIV-related knowledge and sexual behaviour, particularly condom use, among this group of Nigerians. Data from this study will help in designing effective strategies for sexual behaviour modification and prevention of sexually transmitted infections including HIV/AIDS for this group.

## Methods

### Study Population

This study was conducted in Ajegunle, Ajeromi Ifelodun Local Government Area of Lagos State. Ajegunle is a densely populated and deprived area of Lagos. Permission to undertake the study was obtained from the local government council and the two unions — Nigerian Union of Road Transport Workers and the Lagos State Mini Bus Drivers Association, which both control activities at the parks. Three main motor parks – Boundary, Amukoko and Tolu – were selected for the study because of the large number of drivers and park attendants usually found there.

### Sample Size

The study was primarily descriptive in nature. We assumed that about 30% of the respondents would have one outcome measure of interest, for example, condom use rate. The sample size expression  $n = Z^2 p(1-p) / \delta^2$  was used to determine the minimum number of subjects required. With 95% level of confidence ( $Z = 1.96$ ) and an error margin of 5%, assuming random sampling, a sample size of 322 was determined. To compensate for non-response rate of about 10%, the final sample size was adjusted to 354.

### Selection of Study Subjects

Because of the fluid and rowdy atmosphere of the parks, it was difficult to establish dependable sampling frames. We however took advantage of the fact that around mid-day, there is less passenger traffic and buses are usually lined up in

long queues waiting to take their turns. Our respondents included the bus drivers and conductors. They were interviewed consecutively until the required sample size was achieved. For each bus, a driver and a conductor or an attendant were interviewed. A semi-structured interview schedule was used to obtain information on knowledge of sexually transmitted diseases, number of sexual partners, types of sexual partners and the use of condoms. Some of the questions were open-ended and allowed respondents to explain their responses. Cooperation of the drivers was possible because we had discussed the objectives of the study with union officials, as the drivers owe allegiance to their respective unions. In order to ensure that the men understood and knew what we were talking about, each interviewer carried a sample packet of Gold Circle condom, which was shown to respondents only at the point of questioning about condoms.

### Data Management

Data forms were checked by field supervisors for completeness and obvious errors and/or inconsistencies. Where omissions were observed, they were corrected in the field after verification. Where missing information could not be verified and collected, such items were excluded in the analysis. The Epi Info (version 6.04b) software was used for data entry, cleaning and analysis. Frequency distributions were generated for categorical variables and measures of location were determined for quantitative variables such as age, number of sexual partners, etc. Although this study was primarily descriptive in nature, we deliberately took a large sample that would enable us to undertake meaningful cross-tabulations with adequate sample size in the cells. The chi-square statistic was used for comparison of rates (proportions) and for test of homogeneity in contingency tables.

## Results

A total of 395 respondents were interviewed; their age range was from 15 to 59 years, with a

mean of 26.6 ( $\pm 8.3$ ) years. Majority of them (67%) were young, between the ages of 20 and 39 years (Table 1). Teenagers comprised about one tenth (11.8%) of the study group. Less than half (40.1%) of the respondents were married.

### Sexual Networks

Many of the drivers satisfied their sexual desires by patronising commercial sex workers (CSWs). Of the 395 respondents, 211 (53.4%) reported regular patronage of CSWs. Figure 1 shows the patronage rate according to age of respondents. About two thirds (66.9%) of the men aged 20–29 years patronised female sex workers (FSW) while about half of the other age groups did so. Thus, patronage of CSWs was significantly related to the age of respondents ( $p < 0.05$ ) but not with marital status ( $p = 0.185$ ). Apart from commercial sex workers, these men engaged in sexual relations with female hawkers (62%), market women (44.2%), schoolgirls (44.2%) and other casual sex partners (35.4%). Sexual activity took place at various locations including the motor garages within the motor parks, hotels/ brothels, inside the bus, bars, at partners' homes, at respondents' homes, as well as other available places and opportunity. More than two thirds of them (74.3%) had regular sex partners aside from their wives or girlfriends. The number of sex partners for those who were sexually active ranged from one to fifteen, with a median of three. Some of the respondents (16.3%) did not specify the number of partners, they simply indicated "many".

### Knowledge of Sexually Transmitted Diseases

When respondents were asked to mention diseases that could be transmitted through sex, the most commonly mentioned STI was gonorrhoea (93.6% of respondents). Others were syphilis (71.8%), HIV/AIDS (42.9%) and *jedi-jedi*. In all, 376 (95.2%) of the respondents were able

to correctly mention a sexually transmitted disease either in vernacular or English. No respondent specifically mentioned chlamydia, candidiasis, genital warts, although some of the vernacular descriptions may have included symptoms associated with them.

Two hundred and twenty (55.7%) of the respondents perceived themselves as being at risk of contracting sexually transmitted infections. Reasons for their perception are shown in Table 2; various factors that increase the risk of contracting the diseases were given. The predominant factors mentioned included having sex in the sun or on sunny days, having sex with female sex workers and failure to use condoms. The men pointed out that women are at risk of contracting STIs if they always remain in the bath tub for a long time or if they have many sex partners. Those who considered themselves not likely to contract STIs also gave various reasons as shown in Table 3. Prominent among the reasons is the fact that they were careful. Being careful to them meant having sex with mainly young girls whom they perceived are less likely to be HIV positive, and using condoms when in doubt.

Respondents gave the following responses when asked of symptoms that would help them know if a woman is infected with any STD: "when fingering her she will feel pain"; "she has wet pants"; "she will have stomach pain", "bad odour", "hot belly", "itching private part", "by pressing her abdomen", "she looks sick", "she has rashes in the private part", and "you can't know".

### Respondents' Health-Seeking Behaviour in case of STI

Majority of the respondents (168 or 42.5%) would consult orthodox medical practitioners for STD treatment, others (85 or 21.5.9%) would consult chemists, traditional (native) healers, or use drugs and herbs themselves (11.1%). Very few (6.1%) would talk to a friend or spouse or a

Table 1 Age Distribution of Respondents

Age group (years)	No. of respondents (% of total)
15–19	44 (11.8)
20–29	142 (38.1)
30–39	108 (29.0)
40–49	56 (15.0)
50–59	22 (6.2)
60+	1 (0.3)
Total	373

\*Twenty two respondents did not provide information on their ages

Table 2 Respondents' Reasons for being at Risk of STIs

Reasons/Comments
<input type="checkbox"/> Anybody can get it, all men get these diseases
<input type="checkbox"/> By mistake
<input type="checkbox"/> If you sex prostitute
<input type="checkbox"/> You cannot trust women
<input type="checkbox"/> Because I sex in the sun
<input type="checkbox"/> Because I flirt about
<input type="checkbox"/> Have sex anyhow
<input type="checkbox"/> Because I don't use condom
<input type="checkbox"/> Because I visit prostitutes
<input type="checkbox"/> I have fun always
<input type="checkbox"/> I have many partners
<input type="checkbox"/> I sex on sunny days
<input type="checkbox"/> If no use condom
<input type="checkbox"/> If not careful

Table 3 Respondents' Reasons for not considering themselves at risk of Contracting STIs

Reasons/comments
<input type="checkbox"/> I have one sex partner/wife
<input type="checkbox"/> I trust my partner
<input type="checkbox"/> I am a child of God/I am religious
<input type="checkbox"/> I am careful (I sleep with only young girls)
<input type="checkbox"/> I don't go to ashawo (female sex worker)
<input type="checkbox"/> I don't go to hotels
<input type="checkbox"/> Don't meet her everyday
<input type="checkbox"/> I am engaged to marry
<input type="checkbox"/> God forbid
<input type="checkbox"/> I have had it before
<input type="checkbox"/> God protects me
<input type="checkbox"/> I have two trusted wives
<input type="checkbox"/> Have only one wife

sex partner about the problem.

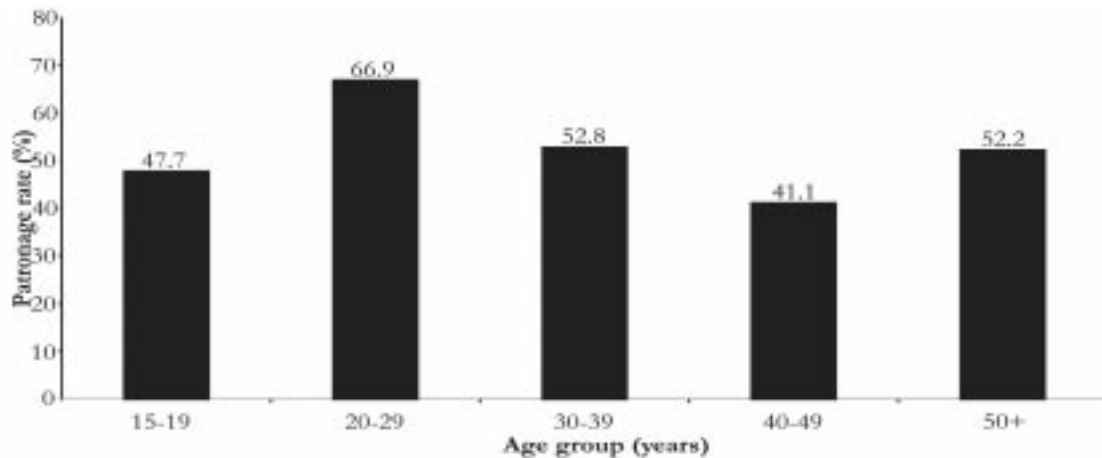


Figure 1 Age-Specific Patronage of Female Sex Workers by Intra-City Bus Drivers and Motor Park Attendants in Lagos

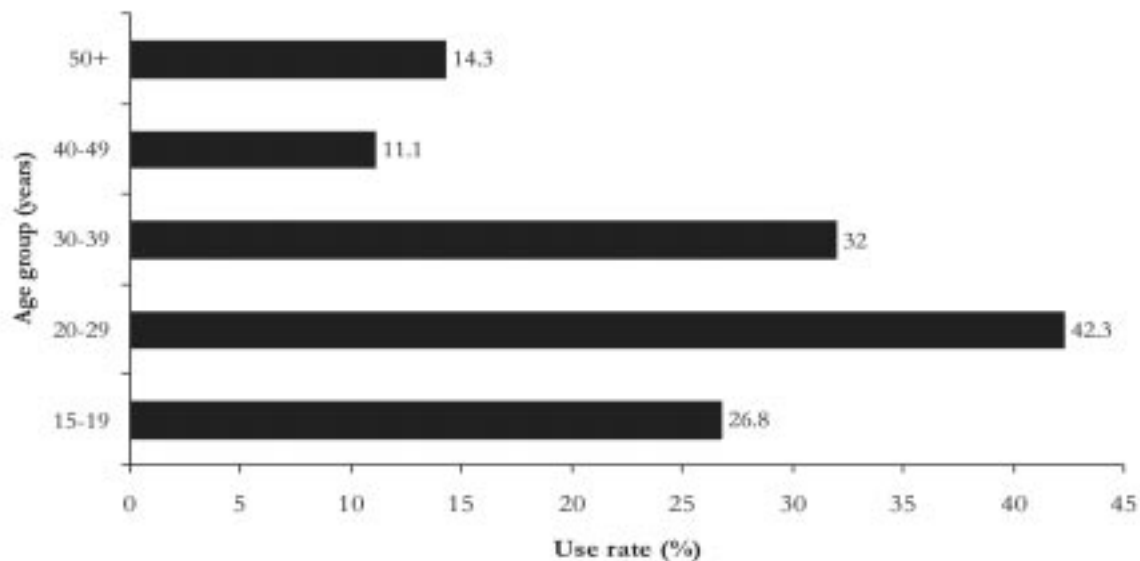


Figure 2 Age-Specific Current Condom Use Rate among Intra-City Bus Drivers and Motor Park Attendants in Lagos

### What Respondents Have Heard about HIV/AIDS

The respondents were requested to comment on what they have heard about AIDS, and they responded as follows: "it kills"; "you can get it through sex, blood, barbing, nail cutting"; "white

man's disease"; "Fela (a popular Nigerian musician) died of AIDS"; "animals can spread the disease"; "can get it through prostitutes and injections"; "disease of homosexuals, flirts, foreigners"; "can get it in toilets"; "can get it by sharing things like spoons and cups"; and "no cure".

### Perceived Risk of Acquiring AIDS

When the 262 respondents were asked if they think they could contract HIV, 228 (87%) said it was impossible for them to contract HIV, 19 (7.2%) said it was possible, while the rest had no idea. They further mentioned the types of people who can contract the virus as female sex workers, workers, elites, Fela girls (Fela was a popular Nigerian musician who had many wives and died of AIDS), men who flirt, adulterous men, and foreigners. Very few respondents (12%) thought that anybody could contract the virus. The best way they knew of protecting themselves from HIV/AIDS was the use of condoms, faithfulness to partners, washing up (douching) after sex, avoiding sex with prostitutes, abstinence and having sex with only young girls.

### Names Respondents Used for Condoms

Condom was popularly known by all the respondents. They named condom either by its function, shape, texture, make or brand. These included agbajo, ase, balloon, condom, raincoat, rubber, gold circle, cool, durex, filla daddy, umbrella, helmet, protector, bullet proof, blow-blow, cap, globe, iboko, jacket, mawu-mawu, mafakaru and nylon.

### Condom Ever-Use and Regular Use with Casual Partners

From the 381 sexually active respondents, 250 (65.6%) had used condoms at some point and 44 (11.5%) reported use with casual partners (in the last sexual encounter). Ever-use and current use with casual partners were significantly related to the age and marital status of respondents ( $p = 0.001$ ,  $p = 0.0387$  respectively). The younger respondents were more likely to have used condoms than their older counterparts. Current use rate was significantly lower in the older age groups (40 years and above) than in younger ones (Figure 2).

Table 4 Respondents' Reasons for not using Condoms

Reasons
<input type="checkbox"/> Breaks easily (it can cut)
<input type="checkbox"/> I am a Christian
<input type="checkbox"/> Partner complains
<input type="checkbox"/> It hurts (it pains)
<input type="checkbox"/> I have faithful partners
<input type="checkbox"/> God forbid
<input type="checkbox"/> I am too old for that
<input type="checkbox"/> I don't patronize female sex workers
<input type="checkbox"/> No pleasure (no fun)
<input type="checkbox"/> Waste of time
<input type="checkbox"/> Don't just like it
<input type="checkbox"/> No woman (girlfriend) now
<input type="checkbox"/> No need
<input type="checkbox"/> Not sure

### Reasons for not Using condoms

A variety of reasons were given by the respondents for not using condoms. The common reasons included complaints that it easily breaks or bursts, it reduces sexual pleasure, it hurts, or it can remain in the woman's body. Other reasons such as waste of time, being too old, trust in partner, being a Christian, just don't like it, etc, did not relate to the characteristic of the condom but to the attitude and perception of respondents.

### What Women say about Condoms

The most common comments were as follows: "no joy", "gives them rashes", "not reliable", "it's painful", "it breaks", "it can remain inside a woman's body", "good for protection", "na for all this ashawo" (meaning that it is for female commercial sex workers).

### What Men say about Condoms

Most of the men echoed common comments on condom such as "no pleasure", "not costly",

"it cuts easily", "readily available" and "women don't like it."

#### Partner's Reaction upon request to use Condom

Some 63.8% of the respondents indicated that they would comply if a woman who is not a wife or regular partner should ask them to use condoms, but if a wife does, only 36.7% would comply.

#### Discussion

Nigeria is currently experiencing generalised HIV/AIDS epidemic, with a prevalence of 5.0% in more than half of the 36 states.<sup>3</sup> Indeed, in many states, HIV prevalence has been consistently over 10% among adults aged 15–49 years. While the epidemic rages, many subgroups of the population continue to engage in risky sexual behaviour due to ignorance, disbelief, or out of sheer recklessness. In some countries such as Namibia, Tanzania and Kenya, HIV transmission has been shown to be closely connected to traffic density and long distance truck drivers. Their partners at truck stops have been clearly shown to be the main factors in propagating the epidemic. Studies in Nigeria have shown that the prevalence of HIV among long distance truck drivers is higher than among the general population.<sup>13</sup> Truck drivers are usually involved in complex sexual networking with commercial sex workers and itinerant market women.<sup>14</sup> They therefore place their spouses/partners at a greater risk of acquiring HIV infection.

Anecdotal evidence has suggested that intra-city commercial bus drivers are involved in behaviours that are inimical to their reproductive health and that of their sexual partners. This study has shown that the men at motor parks knew that certain diseases are transmitted through sexual contact, they also knew that having multiple sexual partners places individuals at increased risk of STIs including HIV/AIDS infection. However, more than two thirds of them (74.3%) had regular

sex partners aside from their wives or girlfriends. The number of sex partners mentioned ranged from one to fifteen, with a median of three. This finding suggests that knowledge about the risk associated with contracting STIs is not necessarily translated to behaviour modification. It was surprising that majority of the men perceived themselves as being at risk of acquiring STDs, yet they did not associate themselves with the risk of HIV/AIDS infection. The impression that AIDS is a white man's disease that is associated with foreigners and people who travel abroad is dangerous, as it gives a false sense of security to these men who themselves neither travel nor are closely associated with foreigners. For those who associate AIDS with "all these ashawo" (female sex workers), it is difficult to explain why they continue to patronise the same sex workers. Further studies with this subgroup should apply qualitative data collection techniques such as focus group discussions and in-depth interviews to explore the rationale and socio-cultural context of these risky behaviours and beliefs despite the knowledge they possess.

In a study on condom use and knowledge of AIDS among sexually active Namibians,<sup>15</sup> it was found that 70% of the respondents had never used a condom, and a significant proportion had no intention of doing so. Similar low rates of condom use have been reported in other studies in Nigeria.<sup>16,17</sup> In recent times, however, relatively higher condom use rates have been reported from studies especially among sexually active single males.<sup>18,19</sup> In our study, condom ever-use rate was 65.6% although current use with casual partners in the last sexual encounter was lower. The gap between patronage of female sex workers along with other sex partners and condom use (which may be used as a measure of risk) is wide and needs to be addressed urgently.

Hawking at motor parks is deeply entrenched in almost all Nigerian cities. Many young girls who are involved in hawking around motor parks increasingly become victims of



sexual abuse. Sexual abuse, especially of the very young girls, is rarely reported but it is evidenced by the increasing number of teenage pregnancies and pregnancy terminations. Increasing sexual activities among very young girls is introducing another dimension to HIV/AIDS control as well as reproductive health as a whole. It is generally known that higher maternal mortality ratio, vesico-vaginal fistula and other adverse reproductive health outcomes are commoner among teenage mothers. While the young women become victims of sexual abuse and child labour, the older ones, in the process of hawking, engage in non-conventional commercial sex work with bus drivers and motor park attendants. The types of sexual activities and sexual relationships that have been noted among long distance truck drivers were observed to also exist among intra-city drivers. Intra-city commercial bus operators and men at motor parks are a high risk group for acquiring HIV infection. Their sexual networking with a variety of women within and without the parks also means that they play a major role in transmitting HIV infection in urban communities in Nigeria. There is urgent need for intervention programmes with a focus on men at motor parks and similar high risk groups. The current poverty alleviation programme of the Federal Government of Nigeria should seriously consider providing vocational training to our young women so as to discourage street trading, hence, reducing women's exposure to the risk of becoming victims of physical and sexual abuse by this group of men.

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