



## Perception of Self Vulnerability to HIV Infection among Long Distance Truck Drivers in Ibadan, Nigeria

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### ABSTRACT

Two hundred and thirty-three truck drivers, in transit from Lagos to destinations within northern Nigeria were interviewed on their knowledge of HIV/AIDS, perception of susceptibility and condom use using a pre-tested questionnaire. The mean age of respondents was  $31.9 \pm 8.9$  years and nearly all of them (94.4%) had heard of AIDS through mass media and friends. Only 20.9% correctly knew the routes of transmission of HIV and 35.2% reportedly had at least one female sexual partner outside the home and 65.9% of these were food sellers. Even though the majority was aware of the sexual transmission route, only 26.2% had ever used a condom. Reasons given for not using condoms included reduction in sexual pleasure (42.5%) and condom being a barrier between them and their partners (40.7%). Perception of self vulnerability to HIV infection was low as 63.6% believed that they cannot contract HIV infection. There is need to intensify educational strategies among this group which will incorporate other at risk groups like food sellers, petrol attendants, petty traders and hawkers at the parks and stop over points.

**KEY WORDS:** Long distance truck drivers, HIV, perception of vulnerability, knowledge of HIV/AIDS, condom use.

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### INTRODUCTION

Throughout many countries within the eastern, southern and western Africa, railway infrastructure is still significantly underdeveloped and as a result majority of freight is transported by road. Communities along the main transport routes have been documented to be affected by other sexually transmitted infections and communicable diseases [1]. Long-distance truck drivers in Africa, India and Thailand have been found to participate in vigorous sexual cultures at roadside settlements and border crossings whose transient residents include poor, often young, women from rural hinterlands [2]. Furthermore, results from studies among long distance truck drivers suggest that they have low HIV/STI knowledge [3] have higher reported rates of STIs [4, 5, 6, 7] engage in sex with multiple regular and commercial partners while on the road [8,9], report low condom use [10] and engage in illicit drug use [9]. While long-distance truck drivers have long been implicated in the spread of HIV in Africa, there are not many published reports on long-distance truck drivers' perception of self vulnerability. The study therefore set out to assess the knowledge of Long distance truck drivers (LDTDs) about HIV, sexual behaviour, condom use and perception of self vulnerability.

### MATERIALS AND METHODS

#### Study design

The study was a descriptive cross-sectional survey aimed at collecting information on knowledge of HIV, sexual behaviour, condom use and perceived susceptibility to HIV infection among long distance truck drivers in Ibadan.

#### Description of Study area

Cities have long been a natural part of life in Western Nigeria. Ibadan originally settled as a war camp came to have a diversity of settlers from various parts of Yorubaland and beyond. As an administrative centre in the colonial era, Ibadan continued to grow. The present population of the city is 1,338,659 [11]. The city of Ibadan is divided into three zones based on the historical progression - traditional inner core, transitional area and the sub-urban periphery [12]. The city of Ibadan comprised 5 local government areas and is home to many private and government owned health institutions. There are many motor parks in Ibadan under the auspices of the National Union of Road Transport Workers

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(NURTW) in all the 5 local government areas. However there are 4 major trailer/truck parks situated at Ojoo, Sango, Bodija, and Shasha. All these major parks were used for this study.

### Study Population and sampling

All the long distance truck drivers who were available at the 4 truck parks in Ibadan during the period of data collection and who consented to be part of the study were recruited into the study. Each respondent was informed about the purpose of the study that the data collected would be used for research purposes only and that participation was voluntary. All the respondents gave their verbal informed consent before being interviewed.

### Instrument for Data Collection and Process of Data Collection

The pretested structured questionnaire used for data collection was divided into six sections namely; socio-demographic characteristics; sexual behaviour; knowledge of HIV/AIDS, perceived susceptibility to HIV infection; attitude towards condom use and reported use of condom. The interviews were conducted during the waiting periods when the drivers are waiting for their turn to load their trucks at the different parks. Data collection started with advocacy visits to the officers of the National Union of Road Transport Workers (NURTW) to explain the purpose of the study as well as obtain permission to carry out the study. Permission was granted after these meetings and deliberations. All the truck drivers available at the parks during the period of study were interviewed. Informed consent was taken from each driver before the commencement of the interview. Languages of interview were Yoruba, Hausa and English. During data collection, the questions on demographic characteristics were asked last because at pretest it was found that respondents were reluctant to answer some questions after being asked their demographic information. Data collection took a period of six weeks.

### Data Analysis

Each questionnaire was scrutinized for completeness, coded and entered into the computer. The EPI INFO statistical software package was used in analyzing the data. Descriptive and chi-square test statistics were used for data analysis. All statistical tests were carried out at 5% (0.05) level of significance.

## RESULTS

### Demographic Characteristics

Two hundred and thirty-three truck drivers were surveyed. The mean age of respondents was 31.9  $\pm$  8.2 years with 96 (41.2%) falling within the 31-40 year age group. Majority of the respondents belong to the three major ethnic groups: Yoruba 138 (59.2%), Hausa 64 (27.5%) and Igbo 26(11.2%). Other ethnic groups represented were Nupe (0.9%), Urhobo (0.4%), Kanuri (0.4%) and Fulani (0.4%). Educational attainment of respondents showed that more 94 (40.3%) had primary education, followed by those with Arabic 57 (24.5%) and secondary education 33(14.2%). These and other demographic profiles of respondents are presented in Table 1. Three-quarters of the respondents 175 (75.1%) were married and 64.4% were of the Islamic faith. Among those who were married, 68.5% were in monogamous marriage.

Table 1 – Socio-demographic characteristics of respondents

Socio-demographic characteristics	No	%
<b>Age (in years)</b>		
11 – 20	13	5.6
21 – 30	93	39.9
31 – 40	96	41.2
41 – 50	27	11.6
51 – 60	4	1.7
<b>Marital status</b>		
Married	175	75.1
Single	58	24.9
<b>Educational level</b>		
None	30	12.9
Arabic	57	24.5
Primary school	94	40.3
Modern III	18	7.7
Secondary School	33	14.2
National Diploma	1	0.4
<b>Number of respondents' wives (N= 175)</b>		
One	120	68.6
Two	44	25.1
Three	8	4.6
Four	3	1.7

**Professional Background**

Almost all respondents 229 (98.2%) possess the class E professional driving license which is the legal document for driving six-axle vehicles. Mean year of driving was  $11.1 \pm 5.8$  years. Ninety-nine (42.5%) had been driving for a period of 6 to 10 years, 49(21.0%) with 11-15 years of driving experience, 31(13.3%) had less than 5 years of driving experience while 22(9.4%) had over 20 years of driving experience. Goods transported were manufactured goods like textile and plastics (58.4%), food stuffs (23.6%) and petroleum products (18.0%) (Table 2). Majority of the respondents 165(70.8%) take off from Ibadan while 65 (27.9%) take off from Lagos. Nine routes are mostly plied by respondents with the Lagos-Ibadan-Yauri-Kebbi/Sokoto route (40.8%) topping the list. Respondents' journey from their departure point to their final destination take varying number of days ranging from one to more than 5 days with a mean of  $2.4 \pm 0.9$  days.

Table 2 – Professional Profile of Respondents

Professional Profile of Respondents	No	%
<b>Driving experience (in years)</b>		
0 – 5	31	13.3
6 – 10	99	42.6
11 – 15	49	21.0
16 – 20	32	13.7
> 20	22	9.4
<b>Type of goods transported</b>		
Petroleum products	175	23.6
Foodstuff	58	18.0
Other goods(textile, planks, plastics)	136	58.4
<b>Duration of journey (in days)</b>		
One	11	4.7
Two	156	67.0
Three	41	17.6
Four	10	4.3
Five	8	3.4
> Five	7	3.0

**Sexual Behaviour**

One hundred and seven (45.9%) of the drivers reported not having any female friends apart from their spouses at the time of the survey. Of the 126 who had, 62 (49.2%) reportedly had one, 42(33.3%) had two, 6 (4.8%) had three while 9(7.1%) had more than five female friends in the twelve months preceding the study with a median of 1.93 women. These female friends were reported to be respondents' active sexual partners. Ninety-two (73.0%) and 3(2.3%) were food sellers and sex workers respectively (Table 3).

Table 3 – Occupation of respondents' female friends

Variable	No	%
<b>Have female friends at truck stops</b>		
Yes	82	35.2
No	151	64.8
<b>Occupation of respondents' female friends</b>		
Food seller	54	65.9
Jobless	9	10.9
Traders	8	9.7
Petrol attendants	4	4.9
Sex worker	3	3.7
Student	1	1.2
Other (nurse, police woman)	3	3.7

Only 61 (26.2%) of respondents reportedly had used condom during sexual activities three months preceding the study. Of these, 72.1% used it for pregnancy prevention and 27.9% for the prevention of sexually transmitted infections including HIV. More of the respondents (72.1%) used condoms with only their wives and only 27.9% used condoms with girlfriends and sex workers. Of the 61 who use condom, 18 (29.5%) reportedly use condoms regularly after being aware of HIV/AIDS.

Nineteen (31.1%) of the 61 respondents who reportedly use condom knew the three (condom should be put on when the penis is firmly erect, if condom breaks during intercourse, penis should be withdrawn and a new one put on before sexual activity continues and condom should be thrown away immediately after each sexual episode) corrected listed ways of using condom. Only 23.3% of respondents would use condom if their partners insisted (Table 4). Factors influencing non-use of condom included reduction in sexual pleasure (42.5%), condoms create artificial barrier between them and their partners (40.7%), and not being at risk of HIV infection (30.5%).

Table 4 – Reported condom use among respondents

Variables	No	%
<b>Ever used condom</b>		
Yes	61	26.2
No	172	73.8
<b>Reason for condom use</b>		
Prevention of pregnancy	44	72.1
Prevention of infection	17	27.9
<b>Person with whom condom was used</b>		
Wife	37	60.7
Sex worker and girl friends	24	39.3
<b>Use of condom if partner insist (n=233)</b>		
Yes	54	23.2
No	179	76.8

#### Awareness and Knowledge of HIV/AIDS

Two hundred and twenty (94.4%) of the respondents were aware of HIV/AIDS and major sources of awareness were radio and friends. Of these 220, 46(20.9%) knew all the transmission routes (sexual, blood transfusion, mother-to-child and from sharp objects), 48(21.9%) knew three ways, 62(28.2%) knew two ways and 64 (29.1%) knew only the sexual transmission route. Education was found not to have an influence on knowledge of HIV/AIDS ( $p>0.05$ ).

#### Perception of Self Vulnerability

Different perceptions of self vulnerability to HIV infection were expressed by the respondents. One hundred and forty-six (62.7%) of the respondents believed that they cannot be infected with HIV while 106 (45.5%) believed they cannot be infected with HIV because they eat well. Other perceptions are presented on table 5. On the possibility of having been exposed to the virus in the course of their travels, 96.5% said there was no possibility and 92.7% indicated that there was no risk of contracting HIV from the women they had had sex with at their various stop over towns/ villages.

Table 5 – Perception of Self-vulnerability among respondents

*Perception of self vulnerability statements	N	%
<b>I can never be infected with HIV</b>	<b>146</b>	<b>62.7</b>
I cannot be infected with HIV because I eat well	106	45.5
I cannot have AIDS because I am protected through the use of traditional medicine	79	33.9
I cannot have AIDS because I do not take injections	54	23.2
I cannot have AIDS even if I sleep around with other women apart from my wife	47	20.2
<b>Possibility of being exposed to HIV infection in 12 months preceding the study</b>		
Yes	8	3.4
No	225	96.6
<b>Possibility of contracting HIV from sexual partners</b>		
Yes	17	7.3
No	216	92.7

\* Multiple responses

## DISCUSSION

Majority of the respondents were within the 31-40 years age bracket. This age bracket has been associated with high level of sexual activities. This group constituted the work force which if affected could lead to massive economic problems. The high awareness was consistent with the findings of Niraula et al [13] and Chaudhry et al [14]. The sexual behaviour exhibited by these respondents has been documented by other studies [8, 13]. A reason proffered for exhibiting these behaviours is the need to let out their body heat which usually rises up before continuing their journey [15].

The study found low level of perceived self vulnerability. This may exist because of the ignorance of the risks involved in having unprotected sex with multiple partners. It may also be as a result of the assumption that taking antibiotics after each sexual activity or the use of medicinal waste band which reportedly loosens immediately a woman with the disease is touched. These beliefs invariably would give drivers a false sense of invincibility. In addition, Meda et al [3] reported that the truck drivers studied seem to have a problem translating the knowledge they do have into perception of individual risk, and denial is a part of their attitudes to HIV/AIDS as fewer than half of drivers studied felt they were at risk, and less than one-fifth (18%) reported using condoms. Similarly Mohammed and Pacca [16] reported that three quarters

of truck drivers studied did not perceive themselves to be at risk of HIV/AIDS infection. This finding is however noted to be at variance with the findings of Oduwole et al [17] where 70% of their respondents perceived themselves to be at a risk of HIV infection.

The study documented drivers' relationship with women at their various stop over towns. This has been documented as another piece of the truckers' sexual activity pattern made up of regular or semi-regular "girlfriends" in the communities along the route. As truckers begin to associate with these women, several studies have noted a trend toward casual sex with women they perceive as "clean", not toward less casual sex as a whole. To make this distinction, truckers rely either on their own judgment, or sometimes on the services of middlemen [18]. Although these women typically have sex with truckers in exchange for gifts or money, the truckers do not perceive them as sex workers, and believe that a personal relationship of sorts exists between them. They will be less likely to use a condom during sexual relations with such a woman as their perception of risks decreases. This is believed to be the justification for the preponderance of food sellers among the female friends of the drivers surveyed by this study.

Furthermore, there is some evidence that training in negotiation skills traditionally offered largely to sex workers should be extended to truck drivers who are potential clients of sex workers. Wilson et al [19] reported truck drivers' comments that sex workers can be very persistent in offering their services, especially when drivers are perceived to be drunk or bored. Drivers therefore may need counselling in rejecting the offers of sex as evidenced in the findings among Malawian truck drivers where one reportedly said that "After everyone drops out of [long distance] bus, you see these women remain, maybe one of them wants to sleep with the driver or conductor, so even if the driver or conductor had no plan of sleeping with a woman, he ends up doing so because the woman is there." [20].

The reported low use of condom may be related to the perception that condom prevent them from fulfilling their natural, cultural and social responsibilities as impregnators of women. Condom use has also been associated with infidelity. This reported low usage was corroborated by an earlier study among Nigerian long-distance truck drivers where few reported using condoms regularly, if at all, despite fairly high knowledge of HIV/AIDS [17] and those of Bwayo et al [21] among same population in Mombasa. These findings show a clear lack of correlation between the correct knowledge of AIDS and application in the prevention of acquisition and transmission of HIV. Much is therefore to be done in making the use of condoms more consistent.

## Conclusion

Based on the findings, intervention efforts should be based on a self-sustaining HIV/AIDS education package for drivers and their women by involving the NURTW leaders and representatives of the different groups interacting with the drivers.

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