Sexual Risk Behaviours of Intercity Commercial Drivers In Ilorin, Kwara State, Nigeria

¹A.I. Olugbenga-Bello, ²V.O. Oboro, ³D.B. Parakoyi and ³T.M. Akande ¹Department of Community Medicine, Lautech College of Health Sciences, ²Department of Obstetrics and Gynecology, Osogbo, Osun State, Nigeria ³Department of Epidemiology and Community Health, College of Health Sciences, University of Ilorin, Ilorin, Nigeria

Abstract: Long distance drivers are at increased risk of sexually transmitted infections due to frequent recourse to casual sex. To examine the sexual risk behaviours of intercity commercial drivers. This is a cross-sectional study conducted by administering pre-tested semi-structured questionnaires to obtain information on the sociodemographic characteristics, knowledge about HIV transmission and risk perception of the drivers. The eligibility criteria were Inter-state commercial bus and taxi driver who have been working for more than 6 months, drivers who are residents in Ilorin, who sets out from and returns to Ilorin and drivers registered with any of the drivers unions within Ilorin (NURTW or RTEAN). A multi-stage sampling technique was used. The drivers have a poor knowledge of HIV/AIDS and practice risky sexual activities, irrespective of their awareness about HIV/AIDS. Over half of the men gave a history of extramarital affairs and over a third have a positive history of penile pus or STDs, yet about 66% did not use condom always. Those who had extramarital affairs are significantly less likely to use condoms. Long distance drivers constituted a group of men with risky sexual behaviours that need to be targeted for interventions to encourage health sexual behaviours.

Key words: Drivers, sexual risk behaviours, STI/HIV, commercial drivers, transmitted infections

INTRODUCTION

Drivers belong to an occupational group and as a result have peculiar behavior imposed upon them by demand of their occupation. Long distance, inter-city commercial drivers, travel over long distance, spending some days away from homes and families looking for passengers and may need to sleep at garages or even petrol stations during fuel crisis. Prolonged absence from their spouses makes majority of them to include in extra marital affairs with many women including CSWs along their routes. These behaviors make them vulnerable to HIV infection (Orobuloye *et al.*, 1993).

Some of the risk factors for HIV infection among the long distance commercial drivers include -:

Multiple sexual relationships: The long-distance drivers travel frequently and because they are away from home for long periods of time they may have many sex partners. A study done among drivers in Ilorin (Araoye *et al.*, 1996) showed that 91% of the single sexually active men had multiple sex partners, 71.5% of the married men had

extramarital sexual relationships and 72% had multiple extramarital sex partners. The prevalence of casual sex was 43% among the respondents.

Poor treatment of Sexually Transmitted Infections (STIs): Both ulcerative and non-ulcerative sexually transmitted infections have been identified as major cofactors in HIV transmission (Peter, 2002; Egah et al., 2001; Jassamine et al., 1990; Nyamuryekung et al., 1997), especially infections that cause genital ulcers. Certain groups including long distance truck drivers and their sexual partners have been reported as having a disproportionate effect on the transmission dynamics of STD including HIV, in a population (Nyamuryekung et al., 1997). In Ilorin (Nigeria) a study found that commercial bus drivers and truck drivers had high prevalence of STIs (Araoye et al., 1999).

Non use of latex condom during unsafe sexual intercourse: A low prevalence of condom use has been discovered in various studies among the commercial bus drivers (Araoye *et al.*, 1996; Gibney *et al.*, 2002) despite

high numbers of casual sexual partners. Lack of the knowledge of method of use, lack of pleasure, fear of failed erection, religious consideration and lack of awareness were reasons given for non use of condom among them.

Patronage of Commercial Sex Workers (CSW): In heterosexual transmission of HIV infection, CSWs were found to have high prevalence of HIV and the result of a sentinel survey done in 2001, showed a 34% prevalence of HIV among the CSWs (FMH, 2002). An important interface between CSWs and the society are their clients, who are exposed to the same risk factors that CSWs are exposed to Estebanez *et al.* (1993). Studies conducted in East Africa and Nigeria found that truck and commercial bus drivers were clients of CSWs (Orobuloye *et al.*, 1993; Araoye *et al.*, 1999; Estebanez *et al.*, 1993).

Other factors include intravenous drug use, the use of non-injectable recreational drug of abuse e.g. Marijuana, alcohol and cocaine, anal intercourse, traditional practices such as tattooing, hold prospect for HIV transmission.

The AIDS epidemic has created an unparalleled complex medical and social challenge in this country. The magnitude of this epidemic is not only in the loss in human lives, but also in the enormous financial burdens to health care systems and loss of productivity to the country. HIV could be an occupational hazard and commercial drivers have been identified as high risk group (Araoye *et al.*, 1996; Pison, 1993). This could be explained by the aspects of their lifestyle while on duty. These group are a priority group for STD/AIDS control because of certain characteristics that is peculiar to them as given above as well as low literacy level. The objective of this study is to determine the sexual risk behaviours of drivers and to determine opportunities for intervention.

MATERIALS AND METHODS

Ilorin town, is in the North-central zone of Nigeria and located on the longitude 4°35'E and latitude 8°3N. Ilorin is about 302 km North of Lagos, 602 km south of Kaduna and about 475 km South of Abuja, the Federal Capital of Nigeria (KASPOD, 1997) and is linked by many road networks to other parts of the country. The town is made up of 3 Local Government Areas namely Ilorin East, Ilorin West and Ilorin South. The projected population for Ilorin in 2000 was about 1.5 m (Adeyemi and Parakoyi, 2000). Ilorin serves as a major stop for drivers traveling from the northern region of the country to the southern and western regions. The garages are located within the town, usually along the major road links to the localities plied by the motorists. Economic activities take place within and

around the garages usually involving male and female hawkers and traders. There are touts, drug hawkers and miscreants in these garages. There are 4 major garages in Ilorin, with different routes plied by the commercial drivers, which cater for inter-states and long distance journey. These are Maraba Garage in Ilorin East LGA, Sawmill Garage and Oloje Garage in Ilorin west LGA and Eromo (Offa) Garage in Ilorin south LGA.

Study design: This is a cross-sectional study conducted by administering a pre-tested semi-structured questionnaires to obtain information on the sociodemographic characteristics, knowledge about HIV transmission and risk perception of the drivers. Research assistants were recruited and trained for the administration of the questionnaires. The questionnaire was pre-tested among commercial drivers in an inter-state garage in Offa, a town outside Ilorin. This was to ensure validity and reliability of instrument, it was then analyzed and necessary modifications effected.

The eligibility criteria include:

- Inter-state commercial bus and taxi driver who have been working for more than 6 months.
- Drivers who are residents in Ilorin, who sets out from and returns to Ilorin.
- Drivers registered with any of the drivers unions within Ilorin (NURTW or RTEAN).

Sampling strategy: Multi-stage sampling technique was used. From the 4 motor parks, namely Maraba, Oloje, Eromo and Saw-mill, simple random sampling by balloting was used to select Maraba and Oloje garages for the study. Proportional sampling technique was used, where the sample size for each garage was selected based on the population of drivers in each garage.

Having satisfied the inclusion criteria, subjects were selected by balloting such that those who picked yes were included in the study until the study size for the garage was obtained. One hundred and four drivers were selected from Maraba garage and 36 from Oloje garage. The selection was done on one of those days that the drivers had their monthly meetings

Data analysis: The questionnaire were checked and sorted out manually and the data obtained were analysed using SPSS statistical software package. Frequency distribution tables were generated while cross-tabulation and test statistics were done where appropriate.

Permission was sought from the chairmen of the two Unions bodies namely, Road Transport Employers Association of Nigeria (RTEA) and the National Union of Road Transport Workers (NURTW) to use their drivers for the study. After explaining the purpose of the study to them, a letter of introduction was given to introduce the researcher to the various garages to allow the drivers to participate in the study. The purpose of the study, was explained to the participants collectively and then individually. Individual consent was obtained before commencing the interview session.

RESULTS

Table 1 shows the socio-demographic characteristics of the sampled population of drivers in Ilorin. The age range was 16-65 years, with a mean of 37 ± 10 years. Over a third (36.4%) of the respondents were aged 35-44years. As expected, almost all (85.7%) were still married, while 2.5% were widowed and 1.1% were separated. Only 8.2% of them had tertiary education, majority (38.9%) having had only primary education. Virtually all are Yoruba by tribe (97.5%) and majority (89.3%) were Moslem by religion.

Eighty-nine point six percent have heard about HIV/AIDS, while 10.4 % had no knowledge of HIV/AID as at the time of study. Twenty eight point six percent (80) had no correct knowledge of what AIDS means, while, 71.4 % (200) had a correct knowledge of what AIDS means. Fifty three point six percent (150) had correct knowledge or the agent of transmission, while 46.4%(130) had a wrong knowledge of the agent of transmission, majority (96.1%) knew that HIV can be contracted through sexual intercourse, however 81.4% (228) had a wrong knowledge that HIV can be transmitted through insect bite, while only 18.6%(52) had a correct knowledge that HIV cannot be transmitted through insect bite. Forty nine point six (139) knew that an infected person can transmit the virus to another person.

The HIV risk behaviours of the drivers are shown in Table 2. Twenty four point six percent of the drivers were engaging in alcohol intake, while 24.3% were smoking cigarette and 3.9% were smoking hemp. Fifty-three point six percent of the respondents were involved in extramarital affairs, while, 11.8% of them were engaged in casual sex while on trip. Thirty eight point two percent of respondents had history of penile purulent discharge, while 37.1% were sure they had STD before. Among respondent who had extramarital relationship, 20% never used condom before and 46% were using condom occasionally.

Table 3 showed that, 92.6 % of respondents who have heard of HIV/AIDS were engaged in extramarital affairs, compared with 88.4% of them with no knowledge of HIV/AIDS as at the time of study who had

Table 1: Socio-demographic charateristics of respondents

Age	Total	
group		
(years)	n	(%)
15-24	34	12.1
25-34	72	25.7
35-44	102	36.4
45-54	54	19.3
>=55	18	6.4
Ethnicity		
Yoruba	273	97.5
Hausa	5	1.8
Others	2	0.7
Religion		
Islam	250	89.3
Christianity	30	10.7
Educational level		
Primary Educ.	109	38.9
Secondary Educ.	59	21.1
Tertiary Educ.	23	8.2
None	50	17.9
Quranic Educ.	39	13.9
Marital status		
Married: Monogamy	100	35.7
Polygamy	140	50.0
Single	30	10.7
Widowed	7	2.5
Separated	3	1.1
Number of wives		
0	40	14.3
1	100	35.7
2	119	42.5
3	12	4.3
>=4	9	3.2
Total	280	100.0

Table 2: HIV risk behaviours of respondents

		Frequency		
HIV risk			(0.4)	
behaviours		n	(%)	
Alcohol intake:	Yes	69.0	24.6	
	No	211.0	75.4	
	Total	280.0	100.0	
Smoking:	Yes: Cigarette	68.0	24.3	
	Hemp	11.0	3.9	
	No	201.0	71.8	
	Total	280.0	100.0	
History of extramarital:	Yes	150.0	53.6	
Affairs	No	130.0	46.4	
	Total	280.0	100.0	
Casual sex on trip:	Yes	33.0	11.8	
	No	247.0	88.2	
	Total	280.0	100.0	
History of penile pus:	Yes	107.0	38.2	
discharge	No	173.0	61.8	
	Total	280.0	100.0	
History of STD:	Yes	104.0	37.1	
	No	173.0	61.8	
	Don't know	3.0	1.1	
	Total	280.0	100.0	
Use of condom with sexu	al partners:			
	Always	51.0	34.0	
	Occasionally	69.0	46.0	
	Never	30.0	20.0	
	Total	150.0	100.0	

no extramarital affairs; however, the difference is not statistically significant. Higher percentage of the respondents having extramarital relationship (57.7%) were

Table 3: HIV risk behaviours of respondents

	Extramarital affairs							
	Yes	(%)	No	(%)	Total	p Value		
Awareness				•				
Yes	137	(92.6)	114	(88.4)	251	$X^2 = 1.441$		
No	11	(7.4)	15	(11.6)	26	p = 0.696		
Total	148	(100)	129	(100)	277			
Condom use								
Yes	64	(42.3)	28	(21.5)	92	$X^2=18.277$		
No	86	(57.7)	102	(78.5)	188	p = 0.0001		
Total	150	(100)	130	(100)	280	_		
History of STD								
Yes	61	(40.7)	43	(33.0)	104	$X^2 = 8.288$		
No	89	(59.3)	87	(67.0)	176	p = 0.040		
Total	150	(100)	130	(100)	280			

not using condom, compared to 42.3% of them with extramarital relationship who were using condom. The difference in the use of condoms is highly significant, (p = 0.0001). Majority of respondents with history of STIs (40.7%) had extramarital relationship, compared with 33.0% of respondents who have had STI but had no extramarital relationship. The difference in occurrence of STIs among the respondents with extramarital affairs is significant, with p = 0.040.

DISCUSSION

This study looked at the sexual risk behaviours among long distance drivers in Ilorin, Nigeria. The major findings from this study are that the drivers have a poor knowledge of HIV/AIDS and practice risky sexual activities, irrespective of their knowledge about HIV/AIDS. Over half of the men gave a history of extramarital affairs and over a third had a positive history of penile pus or STDs, yet about 64% did not use condom always. Those who had extramarital affairs are significantly less likely to use condoms. Moreover, majority of the men were married, thus increasing the likelihood of transmitting infections to their wives. Identifiable factors in these drivers that probably contributed to the high incidence of risky sexual behaviour includes the low level of education, as only 8% of them have achieved more than a secondary education. Low level of education has been associated with high incidence of promiscuity among men (Pisani et al., 2006; 2004; Hawken et al., 2002; Lowndes et al., 2000). Moreover, poorly educated men tend to be polygamous (Hosain and Chatterjee, 2005; Estcourt et al., 2000; Morio et al., 1999; Basuki et al., 2002), as shown also in this study, where at least half of the men have more than one wife.

In this study, one fifth of the study population engaged in alcohol intake and smoking. Alcohol intake and smoking have been reported to be increased among patients with STIs. Thus interventions to reduce alcohol consumption and smoking still have a potential to reduce adverse risk behaviors in the sexuality of drivers. Alcohol is known to be associated with disinhibition behaviours associated with risky behaviours and the tendency to be involved in unprotected sexual intercourse (Pisani *et al.*, 2006; Lowndes *et al.*, 2000; Hosain and Chattevgee, 2005; Estcourt *et al.*, 2000; Morio *et al.*, 1999).

Because men in this study are largely involved in extramarital affairs, efforts directed at fidelity will have a large impact on the effort to reduce unhealthy sexual behaviour among the drivers. Although, we did not demonstrate a significant relationship between extramarital affairs and awareness of HIV/AIDS in this study, the risk of engaging in extramarital affairs is still higher (92.6%) in the group demonstrating awareness than in the groups that has a low awareness (88.4%). Similarly, an increased risk of STDs, 40.7% versus 33.0S%, is demonstrated with extramarital affairs. It shows that efforts directed at increasing awareness about HIV/AIDS and modifying risky behaviours, particularly among those with history of STDs are potentially helpful in reducing frequency of extramarital affairs among long distance drivers.

CONCLUSION

In conclusion, long distance drivers in our study are at increased risk of HIV/AIDS infection because of risky sexual behaviours such high rates of extramarital affairs with corresponding low level of condom use. Low level of education and reduced awareness about HIV/AIDS are major contributors. Efforts should be directed at these modifiable risk factors. Alcohol intake are smoking should also be discouraged among them.

Long distance drivers constituted a group of men with risky sexual behaviours that need to be targeted for interventions to encourage healthy sexual behaviours. A low level of education exists among this high risk group for the transmission of the HIV. The knowledge of means of transmission of the infection is not adequate among the respondents and less than half of respondents knew an infected person could transmit the virus to another person. The sexual risk behaviours that were identified among the respondents include high prevalence of extramarital sexual affair, sexually transmitted disease and poor use of condom among respondents who engaged in extramarital affairs. Urgent steps need to be taken to massively educate this occupational group about their risky sexual behaviours; these steps should bear in mind the peculiarities of the group and should be appropriately targeted.

ACKNOWLEDGEMENT

The authors wish to acknowledge the cooperation of the executives National Union of Road Transport Workers (NURTW) and the chairmen of the various garages studied. They worked tirelessly for the success of this study and greatly facilitated the meetings with all the respondents included in the study.

REFERENCES

- Adeyemi, O. and A. Parakoyi, 2000. Report on Kwara State NIDs Implementation of 2nd Round. (Unpublished), pp. 18-24.
- Araoye, M., O. Kayode, T. Akande and R. Ndom, 1999. Strategies for Preventing STDs and AIDS among Commercial Drivers. Nig. Med. Pract., 38: 5-10.
- Araoye, M.O., B.A. Onile and E.T. Jolayemi, 1996. Sexual behavior and condom acceptance among Nigerian drivers. West Afr. J. Med., 15: 6-10.
- Basuki, E., I. Wolffers, W. Deville, N. Erlaini, D. Luhpuri, R. Hargono, N. Maskuri, N. Suesen and N. van Beelen, 2002. Reasons for not using condoms among female sex workers in Indonesia. AIDS. Edu. Prev., 14: 102-16.
- Egah, D.Z., G.E. Imade, A.S. Sagay, A.I. Zoakah, E.B. Banwart and E.S. Audu, 2001. HIV-1 infection among patients with Genital Ulcer Diseases in Jos, Nigeria. Afr. J. Clin. Exp. Microbiol., 2: 21-38.
- Estcourt, C.S., C. Marks, R. Rohrsheim, A.M. Johnson, B. Donovan and A. Mindel, 2000. HIV, sexually transmitted infections and risk behaviours in male commercial sex workers in Sydney. Sex Trans. Infect., 76: 294-298.
- Estebanez, P., K. Fitch and R. Najara, 1993. HIV and Female sex workers. WHO. Bull., 72: 379-412.
- Federal Ministry of Health, 2002. National AIDS and STD Control Programme: HIV/AIDS in Nigeria, Overview of the Pandemics, pp. 1-4.
- Gibney, L., N. Saquib, M. Macaluso et al., 2002. STD in Bagladesh's Trucking Industry, Prevalence and risk factors. Sex. Trans. Infect., 7: 31-36.
- Hawken, M.P., R.D. Melis, D.T. Ngombo, K.N. Mandaliya,
 L.W. Ng'ang'a, J. Price, G. Dallabetta and
 M. Temmerman, 2002. Opportunity for prevention of
 HIV and sexually transmitted infections in Kenyan
 youth: Results of a population-based survey. J.
 Acquir. Immune. Defic. Syndr., 15: 529-35.

- Hosain, G.M. and N. Chatterjee, 2005. Beliefs, sexual behaviours and preventive practices with respect to HIV/AIDS among commercial sex workers in Daulatdia, Bangladesh. Public Health, 119: 371-81.
- Jessamine, P.G., F.A. Plummer, J.O. Achola et al., 1990. Human Immuno-deficiency Virus, Genital Ulcer and the Male foreskin: Synergism in HIV Transmission. Scand. J. Infect. Dis., 69: 181-186.
- KASPOD consultants, 1997. Report on Residential/ commercial layout of Ilorin East.
- Lowndes, C.M., M. Alary, C.A. Gnintoungbe, E. Bedard, L. Mukenge, N. Geraldo, P. Jossou, E. Lafia, F. Bernier, E. Baganizi, J. Joly, E. Frost and S. Anagonou, 2000. Management of sexually transmitted diseases and HIV prevention in men at high risk: targeting clients and non-paying sexual partners of female sex workers in Benin. AIDS., 10: 2523-34.
- Morio, S., K. Soda, K. Tajima, H.B. Leng, K. Kitamura, S. Mizushima, K. Ohshige, F. Tan, A. Suyama, H. Sopheab and T. Phalla, 1999. Sexual behaviour of commercial sex workers and their clients in Cambodia. Japan-Cambodia Collaborating Research Group. J. Epidemiol., 9: 175-82.
- Nyamuryekung'e, K., U. Laukamm-Josten, B. Vuylsteke *et al.*, 1997. STD services for women at truck stop in Tanzania: Evaluation of acceptable approaches. East Afr. Med. J., 74: 343-347.
- Orobuloye, I., P. Caldwell and C. Caldwell, 1993. The role of high-risk occupation, in the spread of AIDS: Truck drivers and itinerant Market Women in Nigeria. Int. Family Planning Perspec., 19: 43-48.
- Peter, R.L., 2002. Reducing heterosexual transmission of HIV in poor countries, (Clinical review). Br. Med. J., 324: 207-213.
- Pisani, E., P. Girault, M. Gultom, N. Sukartini, J. Kumalawati, S. Jazan, E. Donegan, 2004. HIV, syphilis infection and sexual practices among transgenders, male sex workers and other men who have sex with men in Jakarta, Indonesia. Sex Trans. Infect., 80: 536-40.
- Pisani, E., H. Purnomo, A. Sutrisna, A. Asy, M. Zaw, C. Tilman, H. Bull and G. Neilsen, 2006. Basing policy on evidence: Low HIV, STIs and risk behaviour in Dili, East Timor argue for more focused interventions. Sex Trans. Infect., 82: 88-93.
- Pison, G., 1993. Seasonal Migration: A risk factor for HIV infection in rural Senegal. J. Acquir. Immun. Def. Syn., 6: 196-200.