

Full Length Research Paper

HIV-related knowledge and condom use by taxi drivers in Southern St. Lucia, West Indies

R. O. Orisatoki¹ and O. O. Oguntibeju^{2*}

¹Department of Medical Physiology, School of Medicine, Spartan Health Sciences University, Vieux Fort, Saint Lucia, West Indies.

²Department of Biomedical Sciences, Faculty of Health and Wellness Sciences, Cape Peninsula University of Technology, Bellville, South Africa.

Accepted 14 October, 2009

Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) is increasingly becoming a major public health issue in the Caribbean. Despite the threat posed by the rapid spread of the virus, many subgroups of the populations continue to engage in risky sexual behaviours. HIV among the taxi drivers is a concern because these men belong to an occupational group whose lifestyle while on duty have made them to be identified as highly susceptible. This study was done among male taxi drivers that operate at a major airport in St. Lucia. Out of 80 questionnaires distributed, 60 were filled showing a response rate of 75%. The knowledge of HIV/AIDS was high among the drivers (78.3%). However, misconceptions still exist among them. Less than half of the respondents use condom consistently. Constraints to the affordability and availability of condoms were identified. Religious belief was identified as a possible factor in non-usage of condom. Steps need to be taken to educate this occupational group in order to modify their sexual behaviours. It is suggested that government should endeavour to make condoms more affordable and accessible to this subgroup of the population.

Key words: HIV/AIDS, knowledge, condom use, taxi drivers, St. Lucia.

INTRODUCTION

The prevention and control of HIV/AIDS remains a challenge to health care policy makers and health care providers worldwide (Guiella and Madise, 2007). HIV/AIDS is increasingly becoming a major public health issue in the Caribbean. According to the United Nations AIDS Epidemic update in 2008, HIV/AIDS prevalence rate was 1.1% in the Caribbean, second to Sub-Saharan Africa. This makes the virus the leading cause of death among the productive working persons aged 25 - 44 years in the world (UNAIDS, 2008). Although infection with HIV is known to occur in specific risk situations and scenarios, however HIV is commonly transmitted through unprotected heterosexual and homosexual relationship, infected blood during transfusion, injections with unsterile needles (intravenous drug abuse) and accidental needle

stick injuries and mother to child transmission (Smith et al., 1995). Some studies done in Africa and India have associated long distance truck drivers and taxi drivers to increased risk of HIV infection (Rao et al., 1999; Ekanem et al., 2005; Olugbenga-Bello et al., 2007). Despite the threat posed by the rapid spread of HIV, many subgroups of the population continue to engage in risky sexual behaviour possibly due to ignorance, disbelief or recklessness (Figueroa, 2008).

The role of male latex condom in HIV epidemic reduction when it is consistently and appropriately used prior to sexual intercourse has been documented. However, given the high vulnerability of sexually active people, it is of importance to have a better understanding of condom use behaviour and the likely barriers to effective use among the target population, in order to help them lead healthy sexual and reproductive lives (Bankole et al., 2007). Risky sexual behaviours in the Caribbean has been implicated as a major contributing factor to the spread of HIV/AIDS where heterosexual transmission accounts for 60% of HIV/AIDS cases, with commercial

*Corresponding author. E-mail: oguntibeju@cput.ac.za, bejufemi@yahoo.co.uk. Tel: +27 21 953 8495. Fax: +27 21 959 6770.

commercial sex trade playing a prominent role in the transmission pattern in the region and unprotected sexual intercourse between the sex workers and clients (Figueroa, 2008).

St. Lucia is part of the Windward Island chain, a subgroup of the islands within the West Indies with a population of about 156,000 with tourism accounting for 38% of gross domestic product (GDP) (Sharmon, 2005).

St. Lucia has 2 international airports, the Hewanorra airport, situated in the Southern part of the country, Vieux Fort and is served mainly by a major taxi association or group (The Southern Taxi Association). The second airport is the George FL Charles airport in Castries (which is a far smaller airport, accommodating only small aircrafts), the Northern part of the country. Taxis are a popular means of getting around the island, with the drivers being well informed and familiar with all the points of interest. HIV among the taxi drivers is a concern, because these men belong to an occupational group and therefore exhibit some behaviours imposed upon them by the demand of their work, such as been away from their families for long duration of hours and in some cases unhealthy environment, thereby falling prey to unhealthy sexual practices. A research done in Nigeria has shown that intercity commercial taxi drivers were at increased risk of sexually transmitted infections due to frequent recourse to casual sex (Olugbenga-Bello et al., 2007).

Although many programmes for the prevention of HIV/AIDS and other sexually transmitted diseases are being carried out in St. Lucia, the intra-city commercial bus drivers and taxi drivers have been virtually overlooked in the dynamics of the urban HIV and their role as potential carriers of HIV/AIDS. This study was conducted with the aim of understanding HIV-related knowledge and sexual behaviour particularly condom use, among this group of St. Lucians. To facilitate the design of effective policies that can address taxi drivers' reproductive health problems, it is necessary to gain a thorough understanding of patterns of their sexual behaviour and factors that affect them. Data from this study will help in designing effective strategies for sexual behaviour modification and prevention of HIV/AIDS in this group. The study was deemed important and relevant due to the increasing spread of HIV in the Caribbean and other parts of the world. To our knowledge, no such study has been carried out in St. Lucia.

MATERIALS AND METHODS

The study was conducted in May, 2009 among the male taxi drivers in the Hewanorra International Airport. Permission to undertake the study was obtained from the Southern Taxi Association which controls the activities of the airport taxi drivers. Hewanorra airport was selected for this study due the large number of taxi drivers found here and also due to proximity of the airport to the medical school. It is also the busier of the two airports.

This is a descriptive study where qualitative data were gathered via structured close-ended questionnaire. However, some of the

questions were open-ended and allow the respondents to explain their responses. The questionnaires used were previously validated (Akeke et al., 2007). The aims and objectives of the study were discussed with the association executives who later conveyed them to their members. Due to the unpredictable circumstances that could delay the flights arrival, we however took advantage of the midday which is normally a quiet period to distribute the questionnaires. Information obtained from the respondents via the questionnaires was on the knowledge of sexually transmitted diseases and HIV/AIDS, types of sexual partners and the use of condoms. The data were collated and analysed using the Statistical Package for Social Sciences 13.0 (SPSS 13.0) data base. Statistical significance was set at $p < 0.01$.

RESULTS

Of 80 questionnaires distributed, 60 were correctly filled, showing a response rate of 75%. The ages of the respondents ranged from 28 - 58 years with mean age of 40 (SD 2.8). Table 1 shows the assessment of knowledge of HIV/AIDS of respondents: Results showed that 78.3% of the respondents knew the definition of HIV/AIDS, 76.7% of them were aware of the various modes of transmission and 73.3% were knowledgeable about risks of contracting the infection. Eighty percent (80.0%) of the respondents understood that there is a relationship between STDs and HIV/AIDS and 73.3% believed that sexually transmitted infections increase the chance of contracting HIV.

Table 2 shows behaviours associated with risk of contracting HIV/AIDS: Twenty-nine persons admitted to have had sex within the last twelve months using condoms while eight persons said they did not use condom. Eight of the respondents had penile discharge after unprotected sexual intercourse. Only twenty respondents believed that the use of condoms was enough to protect against HIV infection. Five persons said they have had sex with prostitutes in the last twelve months using condoms, while twenty persons had sex with casual partners and twenty six had sex with stable partners within the last 12 months using condoms.

Table 3 showed the opinions on the availability of condom. Thirty-one persons thought condoms were readily available whenever needed, while twenty-three were of the opinion that condoms were affordable at cheap prices. Three persons said they usually feel embarrassed buying condoms at the shops, reasons given ranged from being shy to feeling that the shoppers recognised them and the indiscreet way that the workers handover the condoms to them without putting it in a bag.

Table 4 shows the beliefs and attitudes associated with condom use: 44(73.7%) believe that it protects their life, 36(60%) said it should be used at all sexual intercourse, 109(83.8%) prevents the spread of HIV infection, 38(29.2%) reduces/eradicates sexual pleasures, 114(87.7%) prevents unwanted pregnancies, 107(82.3%) prevents the spread of STDs/STIs, 25 (19.2%) said that condoms are too tight, 10(7.7%) increases the spread of

Table 1. Respondents Knowledge of HIV/AIDS.

Knowledge	Yes (%)	No (%)
Do you know what HIV/AIDS means?	78.3 47/60	8.3 5/60
Do you know how HIV/AIDS is transmitted?	76.7 46/60	8.3 5/60
Do you know who are at risk of contracting HIV/AIDS?	73.3 44/60	11.7 7/60
Do you know that there is relationship between sexually transmitted diseases and HIV transmission?	80 48/60	5 3/60
Do you know that sexually transmitted infections increases the chance of contracting HIV?	73.3 44/60	11.7 7/60

Table 2. Respondents' risky behaviours.

Risky behaviours	Yes (%)	No (%)
Do you use condoms during sexual intercourse in the last twelve months?	48.3 29/60	13.3 8/60
Have you experienced penile discharge in the last twelve months?	13.3 8/60	73.3 44/60
Do you believe that the use of condoms is sufficient for protection against HIV/AIDS?	33.3 20/60	50 30/60
Do you use condom during sex with prostitutes?	8.3 5/60	91.7 55/60
Do you use condom during sex with casual partners?	33.3 20/60	66.7 40/60
Do you use condom during sex with stable partners?	43.3 26/60	56.7 34/60

Table 3. Respondents' responses on distribution of condoms.

Distribution of Condoms	Yes (%)	No (%)
Do you think condoms are easily available when needed?	51.7 31/60	26.7 16/60
Do you think condoms are affordable at cheap prices?	38.3 23/60	41.7 25/60
Do you feel embarrassed buying condoms at the shops/	5 3/60	50 30/60
Do you think the government is doing enough to encourage use of condoms?	25 15/60	51.7 31/60

HIV, 3 (2.3%) believed that condoms have worms, 32 (24.6%) were of the opinion that there is no need to use condoms, I have only one partner, 12 (9.2%) believed that there is no need to use condoms because I will never be involved in illicit sex, 29 (22.3%) said do not use condoms at all, 86 (66.2%) should be given to prisoners, 5 (3.8%) do not use condoms due to religious belief, 11 (8.5%) condoms are not healthy.

DISCUSSION

Despite extensive efforts by various governments and non-governmental organizations in promoting safe sex in the Caribbean, condom use among the males (taxi drivers inclusive) is relatively low with many still engaging in unprotected sexual activities (Figueroa, 2008). This makes this group an important target for primary prevention

Table 4. Respondents' belief and attitudes on condom use.

Beliefs	Yes (%)	No (%)
Condom usage protects my life	73.3 44/60	6.7 4/60
Condoms should be used at all times.	60 36/60	16.7 10/60
Condom usage prevents the spread of HIV.	70 42/60	8.3 5/60
Condom usage reduces/eradicates sexual pleasure.	50 30/60	21.7 13/60
Condom usage prevents unwanted pregnancies.	73.3 44/60	10 6/60
Condom usage prevents the spread of STIs but not HIV.	35 21/60	40 24/60
Condoms are too tight.	21.7 13/60	55 33/60
Condom usage increases the spread of HIV.	5 3/60	70 42/60
Condoms have worms.	6.7 4/60	70 42/60
There is no need to use condoms; I only have one partner.	35 21/60	43.3 26/60
There is no need to use condom; I will never be involved in illicit sex.	13.3 8/60	63.3 38/60
I do not use condoms at all.	16.7 10/60	61.7 37/60
Condoms should be given to prisoners.	65 39/60	13.3 8/60
I do not use condoms because of religion.	15 9/60	65 39/60
Condoms are not health.	18.3 11/60	60 36/60
Condoms should be used with prostitutes only.	10 6/60	66.7 40/60

tion interventions. Moreover, a variety of myths concerning AIDS and HIV transmission remain strong among a significant number of the Caribbean people and may possibly be a strong factor that impedes the use of condom (Figueroa, 2008). In this study, the knowledge of HIV/AIDS is relatively high among the taxi drivers 47/60 (78.3%), although studies have shown that knowledge does not necessarily lead to behavioural changes (Rubin-Stiffman et al., 1992; Akeke et al., 2007).

Slightly over 48% of the respondents admitted to the use of condoms during sexual intercourse in the last twelve months, with just above 43% having stable partners while 33.3% have sexual intercourse with casual partners. This shows that there were incident of multiple uses of condoms. Sexual patterns in the region contribute to the continued spread of HIV among the people and

multiple sexual partners are relatively common throughout the Caribbean especially among the youth and men and those who had extramarital affairs are much less likely to use condoms, thus increasing the likelihood of transmitting HIV and other sexually transmitted infections to their partners (Figueroa, 2008; Orisatoki et al., 2009).

One third of the respondents believed that the use of condoms is sufficient for protection against HIV/AIDS. Studies have shown that the role of latex condom in HIV infection prevention based on appropriate and consistent use remains an effective approach to HIV epidemic reduction. The concerns with condom use revolves around condom safety and breakage, condom ineffectiveness, disappearance of condom into the vagina, decreased sexual pleasure and condom use signifying infidelity or having an STI. Tackling such misperceptions remains a challenge for programs and policies aimed at increasing condom use among sexually active men (Feldman et al., 1997; MacPhail and Campbell, 2001).

Over 51% of the respondents thought that condoms can easily be obtained when needed. A study done in Jamaica found that HIV education and prevention programmes have contributed to increase in condom distribution and that sales increased significantly by creating more awareness on where the condoms can be obtained (Figueroa, 2004). However, the majority of the respondents admitted that they do feel embarrassed buying condoms at the shops and do not feel that the government is doing enough to encourage the use of condoms. Given the increasing level of HIV in the region, better understanding of condom use behaviour and the barriers to its effective use among the target population in order to help them lead healthy sexual and reproductive lives is imperative. Studies have suggested that knowledge about the risk associated with contracting STIs is not necessarily translated to behaviour modification (Orisatoki and Oguntibeju, 2008).

In this study 35% believed that using condom prevents the spread of STI, but do not prevent the spread of HIV/AIDS. Male resistance (partly due to misconception about condom) to condom use and women's inability to negotiate safer sex due to the socioeconomic and cultural conditions faced by women such as poverty, economic dependence, socio-sexual subordination and power inequity have been attributed to the increase vulnerability to HIV infection (Hope, 2001).

Commercial sex work is believed to be one of the risky sexual practices in the spread of HIV both as a first line of infection from a sex worker to a male customer and a second line of infection from husband to an innocent wife (Oguntibeju and Fabode, 2002). Prolonged absences of the male taxi drivers from their spouses could possibly create an atmosphere for some of them to engage the services of commercial sex workers, which make them more vulnerable to HIV infection (Orobuloje et al., 1993; Araoye et al., 1999).

A negative attitude towards condom use was seen in

15% of the respondents who said 'I do not use condom at all because my church does not allow it'. Unfavourable attitudes towards condom use might be related to religious belief (McCarthy, 2009). It is our opinion that such religious belief may inherently contribute to the spread of HIV infection.

Conclusion

The AIDS epidemic has resulted into a complex medical and social challenge in the Caribbean. This is not only in loss of human lives, but great financial burdens imposed on the already overwhelmed health care system and loss of productivity to the region. This study is pertinent in this group of workers whose occupation have made them to be identified as high risk group because of the lifestyle while on duty. The sexual risk behaviours identified among this group of men that constitutes risky sexual behaviours include high prevalence of extramarital affairs and poor use of condom during sexual intercourse. Steps need to be taken to educate this occupational group in order to modify their sexual behaviours. Also the government and non-governmental organisation should make condoms affordable at cheaper prices or possibly make it more available for free at public places like the toilets, hotels, airports, gas stations, pharmacy stores or health centres.

Limitation of the study

The study was carried out in only one airport due to problems of logistics and financial constraints, however the findings in this study was expected to give an insight into what prevails in other parts of the country. The study was limited by paucity of literature regarding knowledge and attitudes on HIV/AIDS among the taxi drivers on the island since this is the first study done in St. Lucia.

ACKNOWLEDGEMENTS

We wish to thank the Spartan Health Sciences University for approval of the study as well as provision of stationeries for the study. We also thank the executives of the Southern Taxi Association, Hewanorra airport, Vieux Fort for their co-operation and support. To all the participants in this study, we say thank you.

REFERENCES

Akeke VA, Mokgatle M, Oguntibeju OO (2007). Assessment of knowledge and attitudes about HIV/AIDS among inmates of Quthing prison, Lesotho. *West Ind. Med. J.* 56 (1): 48-54.

- Araoye MO, Akande KT, Ndom R (1999). Strategies for Preventing STDs and AIDS among commercial drivers. *Niger. Med. Pract.* 38: 5-10.
- Bankole A, Ahmed FH, Neema S, Ouedraogo C, Konyani S (2007). Knowledge of correct condom use and consistency of use among adolescents in four countries in Sub-Saharan Africa. *Afr. J. Reprod. Health* 11 (3): 198-220.
- Ekanem EE, Afolabi BM, Nuga AO, Adebajo SB (2005). Sexual behaviour, HIV-related knowledge and condom use by intra-city commercial bus drivers and motor park attendants in Lagos, Nigeria. *Afr. J. Reprod. Health* 9 (1): 78-87.
- Feldman DA, O'Hara P, Baboo KS, Chitalu NW, Lu Y (1997). HIV prevention among Zambian adolescents: developing a value utilization/norm change model. *Social Sci. Med.* 44 (4): 455-468.
- Figueroa JP (2004). An overview of HIV/AIDS in Jamaica: Strengthening the response. *West Ind Med J* 53: 277-82.
- Figueroa JP (2008). The HIV Epidemic in the Caribbean: meeting the challenges of achieving Universal access to prevention, treatment and care. *West Ind. Med. J.* 57 (3): 195-203.
- Guiella G, Madise NJ (2007). HIV/AIDS and Sexual-Risk Behaviors among Adolescents: Factors influencing the use of condoms in Burkina Faso. *Afr. J. Reprod. Health* 11 (3):182-196.
- Hope KR (2001). Population mobility and multi-partner sex in Botswana: implications for the spread of HIV/AIDS. *Afr. J. Reprod. Health* 5: 74-83.
- MacPhail C, Campbell C (2001). 'I think condoms are good but, aai, I hate those things': condom use among adolescents and young people in a Southern African township. *Social Sci. Med.* 52 (11): 1613-1627.
- McCarthy A (2009). The Pope, Condoms and HIV. Why the Pope may be right. *Bri. Med. J.* 14: 338.
- Oguntibeju OO, Fabode F (2002). Prevalence of sexually transmitted diseases (Gonorrhoea, Trichomoniasis, Candidiasis, Syphilis) and HIV infection among young adults in Oyo, Nigeria. *Med. Tech. SA*, 16, 351-352.
- Olugbenga-Bello AI, Oboro VO, Parakoyi DB, Akande TM (2007). Sexual risk behaviours of intercity commercial drivers in Ilorin, Kwara State, Nigeria. *Res. J. Med. Sci.* 1(5): 284-288.
- Orisatoki OR, Oguntibeju OO (2008). Knowledge and Attitudes of Students in a Caribbean Medical School towards HIV/AIDS. *Afr. J. Biomed. Res.* 11(2): 137-143.
- Orisatoki RO, Oguntibeju OO, Truter EJ (2009). The contributing role of tourism in the HIV/AIDS epidemic in the Caribbean. *Niger. J. Med.* 18 (2): 143-148.
- Orobuloye I, Caldwell P, Caldwell C (1993). The role of high-risk occupation in the spread of AIDS: Truck drivers and itinerant Market Women in Nigeria. *Int. Family Planning Perspectives* 19: 43-48.
- Rao KS, Pilli RD, Rao AS, Chalam PS (1999). Sexual lifestyle of long distance lorry drivers in India: questionnaire survey. *Brit. Med. J.* 318 (1): 162-163.
- Rubin-Stiffman A, Earls F, Dore P (1992). Changes in AIDS related risk behaviour after adolescence: relationships to knowledge and experience concerning HIV infection. *Paediatric* 89: 950-966.
- Sharmon J (2005). Sustainable Tourism in St. Lucia. A Sustainability assessment of trade and liberalization in tourism services: <http://www.iisd.org>.
- Smith KJ, Skelton HG, Wagner KF (1995). Pathogenesis of HIV-1 Disease. *Int. J. Dermatol.* 34: 308-318.
- UNAIDS (2008). AIDS epidemic update. www.unaids.org.