

Voluntary Counseling and Willingness to Screen among Nigerian Long Distance Truck Drivers

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ABSTRACT:

Background: Voluntary counseling and testing (VCT) is an important preventive strategy in the control of HIV/AIDS and Long distance truck drivers (LDTD) have been identified as an important group in the transmission of HIV/AIDS. This study aims to assess knowledge and perception of Nigerian long distance truck drivers on HIV/AIDS, voluntary counseling and testing and their willingness to undergo HIV screening. **Materials and Methods:** One hundred and ninety seven LDTD in Enugu, Nigeria were surveyed using pre tested structured questionnaires. **Results:** Awareness of HIV/AIDS was high (94.9%) amongst the drivers and the media was their commonest source of information. Similarly the awareness of VCT was high (94.4%). One hundred and eight (54.8%) respondents were willing to undergo HIV screening test if offered freely and 86 (43.7%) others have previously been screened. Educational status was a significant determinant of willingness to undergo HIV screening $p < 0.05$. The reasons for screening were mainly doctors' recommendation (19.3%) and voluntary self screening (18.8%). The commonest reasons for not wanting to undergo screening were the feeling of not being at risk (27.9%), fear of a positive result (10.2%) and cost of screening test (9.6%). **Conclusion:** There is a critical need to improve HIV screening participation amongst Long distance drivers in Nigeria.

KEY WORDS; HIV/AIDS, Long Distance Truck Drivers, Voluntary Counseling and Testing.

INTRODUCTION

The HIV / AIDS pandemic is one of the most serious health crises in the world. By the end of 2006, AIDS and AIDS related illnesses had killed more than 25 million people and an estimated 39.5 million people were living with HIV¹. Sub-Saharan Africa has continued to bear the greatest burden of the HIV / AIDS epidemic, with approximately 63% of the total number of people living with HIV, 65% of the 4.3 million of total new infections and 72% of the 2.9 million deaths in 2006¹. The Joint United Nations Programme on HIV/AIDS (UNAIDS) estimates that in Nigeria, around 3.1% of adults between ages 15-49 were living with HIV/AIDS by the end of 2007².

Voluntary counseling and testing for HIV entails confidential counseling with clients that

helps them make informed decisions related to HIV testing and risk reduction. VCT consists of two counseling sessions: one prior to taking the test known as pre-test counseling and one following the HIV test when the results are given known as post-test, and follow up counseling³.

The need for the expansion of HIV voluntary counseling and testing (VCT) as an integral part of preventive strategies has been advocated^{4,5,6,7}. Expanding HIV screening is a relatively cost effective way of increasing life expectancy and decreasing disease transmission. Experts attribute irreversible immunologic damage and complications as well as transmission of HIV through risky behavior to delays in a patient's treatment due to lack of knowledge of HIV status⁸. The Centre for Disease Control and prevention in the USA estimates that up to 20,000 new infections annually can be attributed to people who are unaware of their HIV- positive results⁸. Apart from preventing transmission to sexual partners, early detection of ones HIV status can assist the individual in learning to live positively, accessing care and support at an early stage as

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well as planning for ones own and their family's future.

Previous studies show that LDTD constitute an important group for HIV transmission as a result of their peculiar lifestyle^{9, 10, 11}. They stay away from their families for long periods of time and in the unhealthy environment along the high ways become easy prey for commercial sex workers.

This study was aimed at assessing their awareness and practice of VCT, willingness to screen and to identify opportunities for the improvement of VCT uptake amongst this important group.

MATERIALS AND METHODS

A cross sectional survey of 200 male LDTD was carried out at three major stations in Enugu, south east Nigeria. Sample size was calculated using the formula $pxq / (SE)^2$, where p= prevalence, q= 100-p and SE=sampling error tolerated¹². Therefore, using a prevalence of 50% and sampling error of 5%, the minimum sample size required was 100 but 200 drivers were studied for better representation and to accommodate attrition.

Approval was received from the ethics committee of the University of Nigeria Teaching Hospital Enugu and the executive of the drivers union in each park before carrying out the study. In addition, verbal consent was received from each driver before recruitment into the study. Consecutive recruitment of consenting drivers was done until the desired number was completed. The objectives of the study were explained to the drivers and confidentiality assured by non- inclusion of self identifying characteristics in the questionnaire which was the instrument used for data collection.

Pre-tested structured questionnaires were administered to the drivers by medical students specially trained for the survey. Information obtained from the questionnaires were the socio-demographic characteristics of the drivers, knowledge of HIV/AIDS, their sexual behavior, awareness of VCT and willingness to undergo screening. Knowledge of cause, modes of transmission, and ways of preventing HIV/AIDS was assessed using a list of options. Any respondent that marked up to half of the correct options was judged to have adequate knowledge. Data analysis was carried out with EPI- INFO version 2002 computer software. The

Chi-square test was done for testing statistical significance. Statistical significance was considered present when p value was less than 0.05.

RESULTS

One hundred and ninety seven drivers completed the questionnaires giving a response rate of (98.5 %). All were males and their age range was 20-62 years with a mean 35.6 ± 9.41 years. Table 1 shows the socio-demographic characteristics of drivers studied. One hundred and seventy three drivers (87.8%) were of the Christian religion, majority were married and ninety six (48.7%) had primary education. One hundred and eighty seven (94.9%) had heard of HIV/AIDS and the main source of information was the mass media.

Table 1: Socio-demographic profile of the study population

Characteristics	No. Studied (n = 197)	Percentage (%)
Age (years)		
20-29	50	25.4
30-39	84	42.6
40-49	43	21.8
50-59	16	8.1
60 and above	4	2.1
Educational status		
No formal education	29	14.7
Primary education	96	48.7
Secondary education	49	24.9
Tertiary education	23	11.7
Marital status		
Married	104	52.8
Single	84	42.6
Separated/widowed	9	4.6
Religion		
Christianity	173	87.8
Islam	19	9.7
Traditional	5	2.5

Table 2: Awareness and knowledge of HIV/AIDS in 197 LDTD.

Aware of HIV/AIDS	Number	Percentage (%)
Aware of HIV/AIDS (n = 197)		
Yes	187	94.9
No	10	5.1
Source of information (n = 418) *		

Table 2: Continued.

Aware of HIV/AIDs	Number	Percentage (%)
Mass media	137	73.3
Health talk	101	54.0
Friends	93	49.7
Church/Mosque	47	25.1
Books	40	21.4
Knowledge of modes of transmission (n=197)		
Correct	132	67.0
Incorrect	65	33.0
Knowledge of cause of HIV/AIDS (n=197)		
Correct	122	61.9
Incorrect	75	38.1
Knowledge of preventive measures (n=197)		
Correct	144	73.1
Incorrect	53	26.9
Knowledge that HIV/AIDS has no cure (n=197)		
Yes	50	25.4
No	147	74.6

* Multiple responses given.

One hundred and thirty two (67.0%) drivers had adequate knowledge of modes of transmission of HIV/AIDS, 122 (61.9%) and 144(73.1%) of the drivers had correct knowledge of the cause of HIV/AIDS and it's preventive measures respectively as shown in Table 2. However some drivers still attributed the cause of HIV/AIDS to punishment from God and activity of witches and demons. Only 50 (25.4%) drivers knew that HIV/AIDS has no cure.

The awareness and practice of HIV screening is shown on Table 3. One hundred and eighty six (94.4%) are aware there is HIV screening test. Their major source of information on this was the mass media. One hundred and eight (54.8%) would be willing to undergo HIV screening test if offered freely and 86 (43.7%) have previously been screened. The reasons for screening were mainly doctors' recommendation (19.3%) and voluntary self screening (18.8%).

Table 3: Awareness and practice of HIV/AIDS screening test in 197 LDTD.

Characteristics	Number	Percentage (%)
Aware of HIV/AIDS screening test		
Yes	186	94.4
No	11	5.6
Source of information*		
Mass media	118	63.4
Health talk	98	52.7
Friends	74	39.8
Books	28	15.1
Willingness to screen		
Yes	108	54.8
No	89	45.1
Total	197	100.0
Practice of screening		
Yes	86	43.7
No	111	56.3
Total	197	100.0
Reasons for screening		
Doctor's recommendation	38	19.3
Voluntary self screening	37	18.8
Premarital screening	12	6.1
Loss of friend/relative to HIV/AIDS	5	2.5
Reasons for not screening		
Feels not at risk	55	27.9
Fear of positive result	20	10.2
Cost of test	19	9.6
Ignorance of where to go for test	5	2.5

Multiple responses given.

The commonest reason for not wanting to undergo screening is the feeling of not being at risk (27.9%) and fear of a positive result (10.2%). The relationship between willingness of the drivers to undergo HIV screening and their socio-demographic characteristics is shown in Table 4. Drivers aged 50 years and above, who were single, widowed or divorced and those who engaged in extramarital sexual relationships were more willing to screen than their counterparts but this was not statistically significant. There was however a statistically significant association between a higher educational attainment and willingness to screen $p < 0.05$. Table 5 shows the relationship between socio-demographic variables of the

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drivers and their practice of screening. Drivers who were single, widowed or divorced as well as those who engaged in extramarital sex had been screened more than others though this observation was not statistically significant.

Table 4: Socio-demographic and other variables in relation to willingness to screen.

AGE (YEARS)	YES	NO	Total	P-value
20-29	28 (56.0%)	22 (44.0%)	50	$\chi^2=4.6$
30-39	45 (53.6%)	39 (46.4%)	84	DF 3
40-49	20 (46.5%)	23 (53.5%)	43	$p=0.21$
50 and above	15 (75.0%)	5 (25.0%)	20	(NS)
Marital status				
Married	56 (53.8%)	48 (46.2%)	104	$\chi^2=08$ Df1
Single/widowed/ divorced	52 (55.9)	41 (44.1%)	93	$p=0.77$ NS
Educational status				
None	5 (17.2%)	24 (82.8%)	29	$\chi^2=19.6$
Primary	59 (61.5%)	37 (38.5%)	96	Df3
Secondary	29 (59.2%)	20 (40.8%)	49	$p=0.0002$
Tertiary	15 (65.1%)	8 (34.9%)	23	Significant
Engaged in extramarital sex				
Yes	70 (59.8%)	47 (40.2%)	117	$\chi^2=2.92$ Df1
No	38 (47.5%)	42 (52.5%)	80	$p=0.08$ NS

Table 5: Socio-demographic and other variables in relation to practice of screening

Age (years)	Yes	No	Total	P-value
20-29	20 (40.0%)	30 (60.0%)	50	$\chi^2=7.27$
30-39	37 (44.0%)	47 (56.0%)	84	DF 3
40-49	15 (34.9%)	28 (65.1%)	43	$p=0.06$ NS
50 and above	14 (70.0%)	6 (30.0%)	20	
Marital status				
Married	45 (43.3%)	59 (56.7%)	104	$\chi^2=0.01$
Single/ Widowed				DF 1
Divorced	41 (44.1%)	52 (55.9%)	93	$p=0.90$ NS
Educational status				
None	14 (48.3%)	15 (51.7%)	29	$\chi^2=0.51$
Primary	41 (42.7%)	55 (57.3%)	96	DF 3
Secondary	22 (44.9%)	27 (55.1%)	49	$p=0.92$ NS
Tertiary	9 (39.1%)	14 (60.9%)	23	
Engaged in extramarital sex				
Yes	50 (42.7%)	67 (57.3%)	117	$\chi^2= 0.10$
No	36 (45.0%)	44 (55.0%)	80	DF1 $p=0.75$ NS

Fifty drivers (25.4%) admitted they were at risk of contracting the disease and they attributed this risk to their indulgence in extramarital relationships, non use of condoms and sharing of clippers/razors with others. In the three months

preceding the study, 117 (59.4%) of the drivers had indulged in extramarital sex.

DISCUSSION

There is very urgent need to reduce the spread of HIV infection especially in Sub-Saharan Africa where the infection is spreading very fast. One way of effecting this reduction is through voluntary counseling and testing. By expanding HIV screening services, people identified with HIV can begin highly effective and lifesaving medical therapy early enough and improve their quality of life. When people realize their HIV status they may reduce high risk behaviors and decrease transmission of the virus

Awareness of HIV/AIDS in LDTD in this study was high and consistent with the findings of a previous study in Enugu, Nigeria¹⁴ which reported an awareness of 100.0%. However only 61.9% of the drivers correctly identified an infective agent virus as the cause of HIV/AIDS. Myths and misconceptions still abound as regards the exact cause of HIV/AIDS. Inappropriate knowledge and misconceptions could hamper preventive efforts for the control of HIV/AIDS especially behavioral change by diverting attention to these other perceived though false causes. Efforts at addressing these misconceptions using the media and other sources of information need to be instituted.

The media was the main source of information in this study and its role as a vital source of information on HIV/AIDS is corroborated by other studies^{13, 14, 15}. However other methods of dissemination of information on HIV/AIDS e.g. churches and health awareness campaigns should be employed. The awareness of HIV screening test was also high (94.4%) and one hundred and eight (54.8%) of the drivers were willing to undergo HIV screening test without paying. This provides opportunity for the government, non governmental organizations and donor agencies to provide free screening services for this very important high risk group.

Practice of screening was low (43.1%) amongst the drivers. Also a comparable low level of screening of 30.0% was reported amongst long distance drivers in Zambia¹⁶. Barios et al¹⁷ reported a similar low level of screening (35.0%) amongst adults with various risk factors for HIV/AIDS including men who engaged in

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unprotected sexual relationships with multiple sexual partners. Doctor's recommendation (19.3%), voluntary self screening (18.2%) were the commonest reasons for screening amongst drivers who have previously undergone HIV screening. Screening for medical disorders is not yet a common practice amongst Nigerians as evidenced by low levels of participation that have been recorded in cervical cancer screening and breast self examination surveys ^{19,20}.

Doctors' recommendation as revealed in this study has also been previously reported as a major motivation to undergo screening ²¹. Doctors and other health workers should be trained on the act of counseling and encouraged to use every opportunity of their contact with patients to counsel and encourage them to do the HIV screening test. VCT has been shown to be highly acceptable and effective with good yield when offered by trained counselors ⁶. Integrating HIV screening into the routine baseline investigations for patients seeking medical attention could remove the fear, tension and stigma associated with screening.

Poor perception of risk of acquiring the disease (45%), fear of positive result (20.2%) and cost (19.2%) were the common barriers to HIV screening. Health education campaign emphasizing the universal susceptibility of individuals to HIV infection, the availability of free anti retroviral drugs for treatment and support services for those who are sero-positive are recommended. Individuals need to know that early detection of HIV infection confers to them the benefit of early institution of therapy and other measures which improve well being and prolongs life. In Nigeria presently most individuals still pay to obtain a HIV screening test. Subsidy or free screening could improve the practice of screening amongst this group.

CONCLUSION:

This study has shown a high awareness of VCT and moderate willingness to undergo VCT if offered freely amongst Nigerian LDTD. The practice of HIV screening is still low amongst the drivers despite their high risk sexual conducts. Health education campaigns and the review of existing government policy towards provision of free or subsidized HIV screening tests could remove some of the constraints to HIV screening and increase the uptake of VCT among this group. This expectedly should contribute to

reduction in HIV transmission in the entire population

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