

CROSS SECTIONAL SURVEY OF HIV/AIDS HIGH RISK BEHAVIOURS AMONG COMMERCIAL MOTORCYCLE ('OKADA') RIDERS IN JOS METROPOLIS, PLATEAU STATE

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ABSTRACT

Objective: This cross-sectional survey assessed the knowledge about HIV/AIDS and sexual behaviours of the Commercial Motor Cycle Riders in Jos Metropolis, Plateau state.

Methodology: A two stage sampling technique was used to recruit 47 subjects from each of the eight (8) Commercial Motor Cycle Riders station to make up a total of 376 eligible subjects for this study. Data was generated using semi-structured interviewer administered questionnaire and the results were analyzed using EPI info version 2000 computer software.

Results: The study revealed that all the respondents were males, with mean age of 25.7±3.6 years and 86.4% of them were not married. Up to 55.0% of the respondents did not attend any school, while 30.0% attended either Arabic or primary schools. Only 21.3% of the respondents had good knowledge about HIV/AIDS Whereas 47.8% and 30.9% of them had fair and poor knowledge respectively. Up to 43.0% of the respondents had their first sexual intercourse at or before the age of 17 years, the major circumstance for which was 'fun' (73.4%). Out of the 24.0% of the respondents who admitted to have had casual sex in the last 12 months, 89.0% had sex with commercial sex workers (as well as other women) and in 87.0% of the cases condom was used. The major reason for not

using condom during casual sex was 'dislike of condom' (41.6%) followed by 'unavailability of condom' (33.0%) and 'refusal of partner' (25.0%). One form of illicit drug or the other was used (at least once) by 81.6% of the subjects, while 32.0% of them had ever consumed alcohol.

Conclusion: The study revealed that being unmarried have a statistically significant relationship with keeping multiple sexual partners. Alcohol consumption is also shown to have a strong statistically significant relationship with indulgence in casual sex. However it was observed that knowledge had no statistically significant relationship with use of condom, frequency of casual sex and sex with commercial sex workers. Illicit drug use was also not found to have a statistically significant relationship with indulgence in casual sex.

Key words: Commercial Motor-cycle Riders (Okada), HIV/AIDS, Commercial Sex Workers, Regular sexual partner.

INTRODUCTION:

Human immunodeficiency virus (HIV) is the causative agent for Acquired immune deficiency syndrome (AIDS). First case was seen in USA in 1981 and was first diagnosed in Nigeria in a 13-year-old girl in Ibadan, Oyo State in 1986¹. This disease was initially seen mostly in intravenous drug user (IDU) and homosexuals in USA, but presently the main mode of transmission is through heterosexual

intercourse, particularly in sub-Saharan Africa where IDU and homosexuality are not common and promiscuous heterosexual activities are rampant. This is coupled with the traditional practice of local invasive practices such as uvulectomy, tribal marks and 'healing' marks common in African societies using shared unsterilised instruments.

These conditions have made the transmission of the disease to continue to rise progressively reaching a prevalence level of 5.0% presently in Nigeria². It is known that 3.4 Million Nigerians are living with the virus, out of which young people aged between 15-29 years account for 19.5% of the cases compared to 11.8 million young people aged between 15-24 years living with the virus globally². Another factor fingered for the progressive rise in prevalence in the society is the early onset of sexual activity and unsafe promiscuous activities of the youth. UNAIDS reported that out of the young people aged 15-24 years, 18% of girls and 8% of the boys had sexual intercourse before the age of fifteen years.² Thus the global infection rate of 6,000 infections daily among youth, will not be surprising to those aware of early onset of sexual intercourse among the youth.

The burden of the disease has continued to depress the economies of the affected countries both directly and indirectly, for example, life expectancy in sub-Saharan Africa has dropped to 47 years when it would have been 62 years without AIDS¹. And in the 45 most affected countries it is estimated that between the year 2000-2020, 68 million people will die earlier than they would have died in the absence of HIV/AIDS¹. A study in Zambia revealed that 65% households in which the mother had died from AIDS had dissolved. This is after stripping the households of assets and income earners, further impoverishing the poor¹. Thus the economy becomes weakened, since the condition affects the most important resource of any nation (human resource). Thus there is need to address this scourge.

Recognized high-risk group for sexually

transmitted diseases including HIV/AIDS are young adults away from home such as sailors, soldiers, long distance lorry drivers migrant labourers and bar attendants¹³. The commercial Motorcycle riders (Okada riders) are also young adults not necessarily away from home but most of them are unmarried. We intend to find out whether the commercial motorcycle riders fit into the high-risk group for HIV/AIDS and other STIs.

This knowledge shall help in designing methods/programmes of preventing the transmission of the disease through the commercial motorcycle riders.

METHODOLOGY:

Jos Metropolis is the capital of Plateau state, which is located at the geographical North central region of Nigeria. Jos city has an estimated landmass of 15,000 Km² and a projected (from 1991 Census) population of 2.7 Million people¹³. It lies between latitude 7° and 11° North and longitude 7° and 25° East. The adult literacy rate was estimated as 59.1% and 36.5% for males and females respectively. The indigenous ethnic groups are Beroms, Afizere, Jarawa though the Hausas, Igbos, Yorubas among other nationalities predominate the capital city being the centre of commerce of the state.

The study population was young Commercial motorcycle riders operating within Jos metropolis at the time of the study. We looked at the HIV/AIDS high-risk behaviours among them.

A two stage sampling technique was used to recruit the calculated sample size of 376 using the formula $N = Z^2 Pq/d^2$. Stage one was finding out the number of the major stations and calculating the number of respondents to be recruited in each major station of the Commercial Motor cycle Riders. There were eight (8) major stations and 47 respondents were to recruit from each major station. Then in the next stage, 47 respondents were recruited from each of the major stations.

RESULTS:

In this cross sectional survey all of the

respondents were males, 86% of whom were not married. More than half of the respondents, 55% (208) did not attend any school, 114 (30%) attended either Arabic or primary school and only 54 (14%) have completed secondary education. The highest level of Education attained by the head of households of the respondents were; 244 (65%) did not attend any Arabic or Primary school, 16(4.3%) completed Secondary school and only 4 (1.0%) have completed Diploma/NCE.

Almost all of the respondents 368 (98%) have heard of the disease HIV. Most of them 240 (64%), heard through friends, 96 (25.5%) through Radio, 36 (10%) through Television and only 4 (2.1%) through their parents. Most of the respondents know that germs cause the disease, 364 (98%) with only 4 (2.1%) of the respondents believing that God causes it. On prevention of HIV/AIDS, 192 (51%) said it could be prevented by use of condom, 240 (64%) said by avoiding sexual intercourse with multiple partners. About cure for HIV/AIDS, 312 (83%) were aware it has no cure, 28 (7.5%) believed herbal drugs could cure it but none believed that having sex with a virgin could cure it.

Knowledge about HIV/AIDS cause, transmission and prevention were grouped into; poor, fair and good knowledge. Only 80 (21.3%), had good knowledge, 180 (47.8%) had fair knowledge and 116(30%) had poor knowledge about HIV/AIDS.

Close to half of the respondents (43.7%), had their first sexual intercourse at or before the age of seventeen years. And only 4% (16) have never had sexual intercourse. The

circumstance for first sexual intercourse was mostly for fun 176 (73%), followed by 32 (13%) each for both procreation and under influences of alcohol. In the last 12 months, 84% (296) had sexual intercourse while 234 (65%), 32 (13%) had it with others in addition to CSW and 132 (56.4%) did not have it with CSW. Twelve of the respondents (3.1%) practice homosexuality. Use of condom during sex with a regular partner during the last sexual intercourse was 2.1% while with a casual partner the figure was as high as 87% (of cases of casual sex). Reasons for not using condom during sex with a regular partner was "trust" in 44% (112),"Dislike for condom" 33% (84), "wife" 46 (18%), "unavailability of condoms" 8 (3.3%) and "refusal by partner" was 4 (2%). In cases of last casual sex, condom was not used because of the following reasons; "dislike for condom" 5 (41%), "refusal by partner" 3 (25%) and "unavailability of condoms" (2) 33%.

Drug intake was very high with 304 (81%) of respondents having taken one illicit drug or the other. The pattern of illicit drug use is as follows: Marijuana 204 (67%), Glue 84 (28%) and Petrol 16 (5%) and 164 (53%) of them take the drug daily. Alcohol consumption was found among only 32% (120) of the respondents and most of them 68 (57%) take it on rare occasion. About 42% (100) of the respondents suggested effective condom use as method of preventing the spread of the disease, while 32% (76) and 20% (48) respectively, said 'total abstinence' and 'faithfulness to sexual partner' are better methods of control.

TABLE 1: PERSONAL CHARACTERISTICS OF RESPONDENTS

AGE (YEARS)	FREQUENCY	PERCENTAGES (%)
15-19	52	14.0
20-24	104	28.0
25-29	220	58.0
Mean age \pm SD	27.5 \pm 3.6	
MARITAL STATUS		
Single	328	87.0
Married	48	13.0
Divorced	4	10.0
EDUCATIONAL STSTUS		
Illiterate	208	55.0
Arabic School	58	15.4
Primary School	56	15.2
Secondary School	54	14.4
CIRCUMSTANCE FOR 1ST SEXUAL EXPOSURE		
Fun	176	73.4
Procreation	32	13.3
Drunk	32	13.3
SOURCE OF INFORMATION ON HIV		
Friends	240	64.1
Radio	96	25.2
Television	36	9.6
Parent (s)	4	1.1

TABLE 2: REASONS FOR NOT USING CONDOM DURING LAST REGULAR AND CASUAL SEX BY RESPONDENTS.

REASON	REGULAR SEX	CASUAL SEX
Trust	44%	-
Dislike for condom	33.0%	41.4%
Partner refused	2%	25%
Condom not available	3.3%	33%
Wife	18%	-

TABLE 3: ASSOCIATION BETWEEN SOME PARAMETERS AND HIV/AIDS HIGH RISK BEHAVIOUR

KNOWLEDGE ABOUT HIV AND FREQUENCY OF CAUSAL SEX	KNOWLEDGE	FREQUENCY OF CAUSAL SEX			Total	X ²	df	P-value	signi
		Never	Occasional	Frequent					
		Poor	8	53					
Fair	4	96	80						
Good	4	31	45						
Total	16	180	180	376					

KNOWLEDGE ABOUT HIV AND FREQUENCY SEX WITH CSW	KNOWLEDGE	SEX WITH CSW		Total	X ²	df	P-value	Signi
		Had sex with CSW	No Sex CSW					
		Adequate	65					
Inadequate	15	4	19					
Total	80	12	92					

KNOWLEDGE ABOUT HIV CONDOM USE	KNOWLEDGE	CONDOM USE		Total	X ²	df	P-value	signi
		Do not use condom	Uses condom					
		Inadequate	14					
Adequate	66	7	73					
Total	80	12	92					

DRUG USE AND FREQUENCY OF CASUAL SEX	DRUG USE	CONDOM SEX		Total	X ²	df	P-value	signi
		Had casual sex	No casual sex					
		Use drug	79					
Don't use drug	13	59	72					
Total	92	284	376					

ALCOHOL CONSUMPTION AND FREQUENCY OF CASUAL SEX	ALCOHOL	CASUAL SEX		Total	X ²	df	P-value	Signi
		Had casual sex	No casual sex					
		Consumers	65					
Non consumers	19	229	248					
Total	84	284	368					

MARITAL STATUS AND FREQUENCY OF CASUAL SEX	MARITAL STATUS	CASUAL SEX		Total	X ²	df	P-value	signi
		Had casual sex	No casual sex					
		Married	55					
Not married	37	14	51					
Total	92	284	376					

Key: S = Significant
 NS = Non-Significant
 Signi = Significance
 X² = Chi - square
 CSW = Commercial Sex workers

DISCUSSION

The study revealed that most of the commercial motorcycle riders did not attend any school, majority are not married and are self-employed with a regular source of income. Several studies have attributed these characteristics with high risk for HIV/AIDS. These characteristics are similar to other recognized high-risk group such as; Military and Primary personnel, Sailors, Pilots, air hostesses etc.

A study of sexual behaviour and knowledge about HIV/AIDS in Viet Name has revealed that there is an association between being a young man (particularly unmarried) and having multiple sexual partner⁶. The low proportion of respondents that attend school also point to another risk factor as shown by a cross-sectional study of secondary school students in Plateau state which revealed that high conceitedness to parents and school is inversely related to high risk sexual behaviour. This group we studied were neither close to their parents nor school.

Civil servants who depend wholly on their salaries for sustenance are facing financial difficulties these days due to the irregular payment of salaries by the government at all levels. With this development self-employed individual tend to have a more stable resource at their disposal than the civil servants. A study in china have revealed that self employed individuals who have more regular and higher financial resources at their disposal indulge more in casual sex than those that are Government employed¹³. The same scenario could be happening in this country! In most instances, casual sex is associated with some benefits in cash or kind. With financial constraint, casual sex ceases to be preference; hence we expect higher frequency of casual sex amongst the self- employed (commercial motorcycle riders inclusive).

There was a statistically significant relationship between alcohol consumption / illicit drug intake and high-risk behaviours for HIV/AIDS. This is another factor that is common among other recognized high-risk groups for HIV/AIDS. This could be

explained by the depression of inhibitions by these agents (alcohol and drug). In addition to characteristics common to commercial motorcycle riders and recognized high risk groups, there was a relatively high level of homosexual activities (3.1%) found among the respondents, compared to 2.6% recorded in the National Behavioural Surveillance Survey (NBSS).¹⁰ This is another high-risk behaviour that we found in our study, which had not been extensively studied in Nigeria. Therefore control measures can only succeed if we understood the factors that influence high-risk behaviour for HIV/AIDS. The study also revealed a relationship between marital status and casual sex.

In conclusion, the commercial motorcycle riders in Jos metropolis have a lot of sociodemographic and other characteristics in common with recognized high- risk groups for HIV/AIDS (and other STIs). Thus they should be recognized as a high- risk group and measures to be directed at preventing the spread of the disease through them.

We recommend religious organizations (religious teachers) and the association of the commercial motorcycle riders as a possible channel to have access to the commercial motorcycle riders for interventions. The effort by the Federal Government of introducing sex education in primary and secondary schools does not take care of those in technical and informal schools (such as Arabic schools). This group is too significant (numerically and otherwise) to be left unattended to.

REFERENCES

1. Report on HIV/AIDS epidemic; UNAIDS, July 2001.
2. HIV/AIDS emergency Action plan (HEAP); FMOH, NACA, April 2001.
3. Gender and AIDS Almanac; UNAIDS, and Sociometric Corporation 2001.
4. Education sector response to HIV/AIDS in Nigeria. FGN, UNAIDS, UNESCO.

5. World Bank Report 1997; Caldwell, 1995; Orubuloye et al 1994.
6. THANG D B, Chi K P, et al, Bulletin of the WHO, 2001.79 (1); cross-sectional study of sexual behaviour and Knowledge about HIV among Urban and Rural minority residents in Viet Nam.
7. D Wilkison, S S Abdool Karim, A Harison et al. Unrecognized Sexually Transmitted infections in rural South African Women, a hidden epidemic, Bulletin of the World Health Organizations, 1999, 77(1).
8. Gail B Slap, Lucy Lot, Bin Huang et al. Sexual behaviour of adolescent in Nigeria: cross-sectional survey of secondary school students, British Medical Journal, West African Edition Vol. 6 No 1 Jan March 2003.
9. A. O Lucas and H M Gilles, Short textbook of Public Health Medicine for the tropics, 4th edition, Printed by ARNORLD London 2003.
10. L Olaronke, A E Joshua, Z Akinyemi and A Ankomah, National Behavioural Survey 1: Brothel based sex work in Nigeria, Society for Family Health, September 2001.
11. National Population Census Result 1991.
12. J F Jekel. Sample size Randomization and Probability theory. Epidemiology, Biostatistics and Preventive Medicine. W B Saunders Company, Philadelphia (USA), 1996. 163-165.
13. Plateau state diary 2002. Published by the Ministry of Information, Plateau State.
14. SW Marco, YG Mellisa and Z Jinwei. Two cultures, two levels of AIDS risk, WHO, 1999.77 (3): 278-280.