

IJBHS 2010007/6108

HIV: Knowledge on modes of transmission and attitude towards Voluntary Counselling and Testing (VCT) amongst Nigerian undergraduates

A. Omorogiuwa*, E. B. Ezenwanne⁺, M. O. Ozor* and G. A. Oaikhena[•]

*Department of Physiology, Faculty of Basic Medical Sciences, College of Medicine,
Ambrose Alli University, Ekpoma, Edo State, Nigeria

⁺Department of Physiology, Faculty of Basic Medical Sciences, College of Medicine,
University of Benin, Edo State, Nigeria

[•]Department of Anatomy, Faculty of Basic Medical Sciences, College of Medicine,
Ambrose Alli University, Ekpoma, Edo State, Nigeria

(Received January 25, 2010)

ABSTRACT: The study investigated knowledge on mode of transmission of HIV and attitude toward voluntary counseling and Testing (VCT) amongst Nigerian undergraduates. A cross-sectional questionnaire survey containing questions on HIV transmission, condom use, sexual practices and VCT on HIV were administered to 1,200 randomly selected students from three tertiary institutions in southern Nigeria. In this study 405(88.8%) of males use condom while 51(21.1%) of males are involved in sexual activity without the use of condom. For their female counterpart 256(76.12%) of females had sex with condom, while 81(23.89%) are involved in sexual activity without the use of condom. There was a significant difference between condom use initiators in males and females; $p < 0.05$. The study revealed that 345(59.9%) males had not gone for voluntary counseling and testing, 297(86.09%) were sexually active, while 48(13.91%) were sexually inactive. Out of the 345(62.5%) females who had not gone for voluntary counseling and testing, 288 (83.48%) were sexually active while 57(16.52%) were sexually inactive. there was no significant difference $p < 0.05$ between sexually active males that have gone for voluntary counseling and testing and sexually active females that have gone for for voluntary counseling and testing. In this study the major reason while males do not go for voluntary counseling and testing was because of the anticipated suicidal inclination in case of a positive result. Conversely the females do not go for voluntary counseling and testing mainly because they feel it will cost them a lot of money to do the test.

Keywords: HIV, VCT, Undergraduate, Nigeria.

Corresponding author: Dr. Omorogiuwa Arthur

E-mail: ask4ade2006@yahoo.com

Phone number: +234(0)7039460340, +234(0)8053627304

Introduction

In terms of cure HIV remains a puzzle to the scientific community despite the effrontery by relevant stakeholders. Nevertheless prevention remains a veritable tool for the spread of this disease and knowing your status is one sure way of enhancing the prevention strategy. By the end of 2007, 33.2 million people world wide were living with HIV; 2.5 million people became newly infected and 2.1 million people had lost their lives to AIDS in the same year besides 67% of the 33.2 million people are living sub Saharan Africa (1,2). A panacea for curbing the spread of HIV, a public health problem with multisystemic and multidimensional socio-economic implications is Voluntary Counseling and testing (VCT). Voluntary counseling and testing, involves a pretest and post test education of a client, enabling him/her to make an informed decision about what ever the HIV result will turn out to be.

Most studies involving couples in Africa show that knowledge of HIV test results promotes behaviour change and reduces transmission (3). The recent development of new treatments for HIV has brought improvements in the medical care of people living with HIV. The benefits of early detection of the virus have also increased because the most effective treatment results occur in the earliest stage of HIV (4). It is evident that sexual activity and engagement in high-risk behaviours, which favour the spread of HIV infection, are on the increase in tertiary institutions. A concern is that not all individuals who may be at risk for HIV infection close to be tested. Literature reports that only 36% of individuals who reported at least on high-risk behaviour had been tested for HIV (5).

The undergraduates comprise the future work force of any country and as such a set of human resources that should be handled with diligence. Tertiary institution students fall within the most sexually active and High HIV risk groups and are more comparable across nation. For example, Kaaya, Flisher, Mbawambe, Schaalma; Aaro and Klepp's review (6) of studies on sexual behaviour of students in sub-saharan African indicate high prevalence rates of sexual intercourse; infrequent use of condoms and other contraceptives and with significant proportion of adolescents who have two or more lifetime sexual partners.

This study is focused on knowledge about salient modes of transmission of HIV and attitudes towards voluntary counseling and testing (VCT) amongst Nigerian tertiary institution students. Findings of this study are important in assessing risky sexual behaviors that may favour the spread of HIV in Nigerian tertiary institution and the society at large. Findings will also help to evaluate the acceptance of VCT, a tool designed to curb the spread of HIV.

Methods

This cross sectional study was carried out in 3 tertiary institutions in Southern Nigeria. From each institution 100 students with a F:M ratio of 1:1 were randomly selected from a pool of volunteers from 100 level – 400 level. Thus each level contributed 50 males and 50 females making a total of 100 subjects per level, and a total of 400 subjects per tertiary institution. The total target population was therefore 1,200 subjects with 600 males and 600 females. The purpose of the study was explained to them.

A structured questionnaire was used for the study and it composed of 29 questions. Questions 1 – 7 covered the socio-demographic data of the subjects. Questions 8 – 14 (7 items) covered salient modes of transmission of HIV. Questions 15 – 18 (4 items) covered condom use and its initiator, while questions 19 – 29 (11 items) covered voluntary counseling and testing. Questions on mode of transmission of HIV included: {1} HIV is sexually transmitted {2} Withdrawal of the penis before climax prevents HIV {3} Tatto or body mark is a possible source of HIV infection {4} showering or washing one's genitals (private parts) after sex prevents HIV {5} using a lamb skin condom or rubber is the best protection against HIV {6} douching after sex will help a woman from getting HIV {7} a pregnant woman with HIV must give the virus to her unborn baby. Questions on condom use included: {1} sexual activity {2} having sex with a condom {3} who initiates condom use {4} why sexual activity does not involve the use of a condom. Questions on voluntary counseling and testing included: {1} if HIV is diagnosed early treated if can prolong one's lifespan {2} have you heard of voluntary counseling and testing (VCT) before {3} where they heard it from {4} have you gone for one, if you have heard {5} have many times have you gave if yes {6} if no would you like to go far one {7} no VCT because I can't curtail it, I will kill myself {8} no VCT because I will not get married because of fear of infecting my unborn children {9} no VCT because does

not have a cure {10} no VCT because it will cost me a lot of money {11} no VCT because result will not affect my sexual lifestyle.

All the questionnaires used in the study were pilot tested in each of the three tertiary institutions. The subject (30 in each tertiary institution) involved in the pilot test had no difficulties with any of the items and responded accurately to all items.

Results were presented in tables and appropriate statistical analyses were done using the chi-square test.

Results

A total of 1,200 students were randomly selected and questionnaires were administered to them. However 1,128 filled out the questionnaires fully, giving a response rate of 94%. Subjects' demographics are represented in table 1.

Table 1: Subjects demographics

Age	Value
100L	19.75±2.10
200L	20.56±2.43
300L	21.78±3.16
400L	24.33±2.18
Sex	
Male	576(51.1%)
Female	552(48.9%)
Year of study	
1 st year	300(26.6%)
2 nd year	275(24.4%)
3 rd year	254(22.5%)
4 th year	299(26.5%)

The respondents were 100% knowledgeable about the modes of transmission of the disease. Sexual activity in the respondents is shown in table 2.

Table 2: Sexual activity in males and females.

Sexually active	Males N = 576	Females N = 552
Active	456 (79.17%)	339(61.4%)*
Inactive	120 (20.83%)	213 (38.5%)*

* P < 0.01; males are more sexually active than females

Four hundred and five (405) (88.8%) of males use condom while 51 (21.2%) of males are involved in sexual activity without the use of condom. 258 (76.12) of females had sex with condom while 81 (23.89) of females are involved in sexual activity without the use of condom of the 405 males that were involved in sexual activity using condom, 37 (9.14%) of females imitated the use, 97 (23.95) of males imitated its use while 271 (66.91) were a collective decision. There was a significant difference between condom initiators

in males and females; $P < 0.05$. A total of 345 females (62.5%) had not gone for voluntary counseling and testing 288 (83.48) were sexually active while 57 (16.52%) were sexually inactive. A total of 345 (59.9%) males had not gone for voluntary counseling and testing 297 (86.09%) were sexually active while 48 (13.91%) were sexually inactive. There was no significant difference $P < 0.05$ between sexually active males that have gone for voluntary counseling and testing and sexual active females that have gone for voluntary counseling and testing.

The reasons for not going for voluntary counseling and testing is shown in table 3.

Table 3: Reasons for not going for VCT amongst tertiary institution students.

Reasons	Males N = 345	Females N = 345
If positive, I can't curtail it I will kill myself	246 (71.3%)	243 (70.4%)
If positive, I won't get married for fear of infecting my inform children	225 (65.2%)	243 (70.4%)
It does not have a cure so I should not bother myself about my status	222 (64.3%)	237 (68.7%)
It could cost me a lot of money to do the test	234 (67.8%)	264 (76.5%)
The result whether positive or negative will not affect my sexual life style	207 (60%)	240 (69.6%)

Although females have a more positive attitude towards voluntary counseling and testing it was not statistically significant ($P > 0.05$).

Discussion

HIV is transmitted mostly through sexual contact, parenteral exposure to blood or blood products and from mother to child during the perinatal period (7). Some studies reveal that the primary means of HIV is through sexual intercourse(8). This study revealed that 79.17% and 61.4% of males and females respectively are sexually active and this is an alarming percentage especially with regard to the fact that the primary means of HIV is through sexual intercourse. However this study also interestingly revealed that only 21.2% of males and 23.89% of females are involved in sexual activity without the use of condom. This means that most of the sexually active respondents are involved in sexual activity in an unprotected manner. It is not surprising to see this kind of trend as this study also revealed that the respondents were absolutely aware of the modes of transmission of HIV. This is in consonance with a study which revealed that 95.6% of its respondents were aware that sexual intercourse is one of the modes of transmission of HIV (9). Although in that study knowledge about other salient modes of transmission of HIV amongst the respondents was low. The discrepancy here may be attributable to the fact that this study was done among undergraduates so it is expected that they will be more knowledgeable.

HIV counselling and testing, as conducted in reviewed studies, appears not an effective primary prevention strategy for apparently uninfected participants (10). This observation corroborates with the findings of this study, as more than half of the respondents have not gone for voluntary counseling and testing. The dominant reasons for not going for voluntary counseling and testing include committing suicide in case the result turns out to be positive, cost of doing the investigation and the fear of infecting their unborn children, in case of a positive result. Other literature revealed that 45.1% would accept screening for the virus (9) and major reasons given for this negative attitude was the fear of living with a disease that has no cure (if the result comes out negative) and the stigma attached to HIV/AIDS in our society (11).

Conclusion/Recommendation

From this study, it is obvious that knowledge about the modes of transmission of HIV amongst undergraduate is not much of an issue anymore. However fear of the unknown i.e supposing I am positive if I am tested remains a rate-limiting factor for VCT as a bona fide tool for curbing the spread of HIV. This fear though potent enough to prevent individuals from going for voluntary counseling and testing, it is unfortunately impotent in the prevention risky sexual behaviours amongst undergraduate. The role of risky sexual behaviour in the spread of Sexually Transmitted Disease, HIV inclusive, is enormous. This fear in favour of not going for voluntary counseling and testing maybe potentiated by some fallacies about the disease. It is therefore recommended that when HIV is discussed as a subject either formally or informally, the emphasizes should be on the positive break through so far in the scientific community. Knowledge about break through like having HIV negative children from HIV positive parents can help demystify the disease, allay fears and bring more and more people closer to voluntary counseling and testing

References

1. UNAIDS AIDS epidemic update (2007). World Health Organization Geneva. UNAIDS/ 0.7.27E/JC1322E
2. UNAIDS (2008). Report on the global aids epidemic
3. Allen SA, Karita E, N'gandu N, Tichacek A. 1999. The evolution of voluntary testing and counseling as an HIV prevention strategy. In cubney I, Climente rj, Vermund SH eds. Preventing HIV in developing countries. Biomedical and behavioural approaches P 87 – 108. New York Kluwer Academic/Plenum Publishers;
4. Galvan FH, Bing EG, Bluthenthal RN. 2000. Assessing HIV testing and care Acq Imm D 25: 5151 - 6
5. Kalichman SC, Hunter TL. 1993. HIV related risk and antibody testing: an urban community survey. AIDS Educ J 5:234- 43
6. Kaaya SF; Flisher AJ, Mbwambo JK, Schaalma H, Aaro, LE, and Kleep K – IA. (2002). Review of studies of sexual behaviour of students in sub-saharan Africa SC J Pub He 30: 148 - 60
7. Heyward, W.L and Curran, J.W. (1989). The epidemiology of AIDS. US Sci. Am. 259 (4): 52 – 59.
8. Healy, M. and Coleman, T. (1989). A primer on AIDS for health professionals Health Education 1:4-10
9. Weinhardt LS, Carey MP, Johnson BT, Bickham NL (1999). Effect of HIV counseling and testing on sexual risk behavior: a meta-analytic review of published research. Am J Pub He 89:1397-405
10. V.O Awusi, Anyanwu EB (2009). HIV/AIDS related knowledge and attitudes of pregnant women in delta state, Nigeria. Benin journal of postgraduate medicine. 11(1) :15-20
11. Donald de korte, Fiona Percy-de korte (2005): HIV – related stigma and discrimination in the era of universal access to ARV treatment. Afr Health 29 (6): 11 – 12