ORIGINAL ARTICLE

The Knowledge, Attitude and Practice of Voluntary Counselling and Testing (VCT) for HIV/AIDS among undergraduates in a Polytechnic in Southeast, Nigeria

I. J. Ikechebelu MBBS, FWACS, G. O. Udigwe MBBS, FWACS, N. Ikechebelu MBBS, MPH, L. C. Imoh MBBS

Departments of *Obstetrics & Gynaecology and *Community Medicine, Faculty of Medicine, College of Health Sciences, Nnamdi Azikiwe University Nnewi Campus

ABSTRACT

Background: The identification of infected individuals is an important step in the control of the HIV epidemic. Voluntary counselling and testing (VCT) for HIV/AIDS is a concept developed in this direction. The objective of this study is to determine the level of knowledge, attitude and practice of Voluntary Counselling and Testing (VCT) for HIV/AIDS among undergraduates in a Nigerian tertiary institution.

Method: This is a cross sectional study using a multistage sampling method to enroll students from different levels of the national diploma programme into the study. A structured questionnaire was administered to the 260 students with response rate of 70%.

Result: Only 115 (63.2%) of the students were aware of VCT with 68 (59.1%) having heard of it at least one year prior to the study. Mass media and Churches were the highest sources of information on VCT. Most of the students did not know where VCT services could be obtained and knowledge of what VCT entails was also low. However, 127 (69.8%) students approved the necessity of counselling prior to testing and 117 (64.3%) were ready to take a positive result in good fate.

At least one out of every four students (54 of 182) had been sexually active within three months preceding the study. Only 48 (26.4%) students had taken an HIV test at one time or the other before the study. Majority (62.5%) of those who had been tested went for the screening just to know their HIV status. Premarital testing (18.8%) was the second commonest reason for taken an HIV test. Majority of the respondents (74.2%) were willing to go for VCT. Among those who were not willing to go for VCT, the commonest reason given was that they were certain they were not infected.

Conclusion: This study highlights the need to step up efforts to increase the students' awareness of VCT, deepen their knowledge and create the right attitude towards VCT through the mass media and religious bodies. Teaching on HIV/AIDS and VCT should also be incorporated into the school curriculum. A shift from the present clinicbased approach to a more routine and widespread public health model will increase access to VCT. Stand alone VCT centres should therefore be cited in educational institutions, community centres, market

places, youth friendly centres etc for proximity to the people.

KEYWORDS: Knowledge; Attitude; Practice; VCT; HIV/AIDS.

Paper accepted for publication 28th May 2006-08-05.

INTRODUTION

The Acquired Immunodeficiency Syndrome (AIDS) is caused by the Human Immunodeficiency Virus (HIV). The infection, which was first described in the USA in 1981 among homosexuals, has since spread all over the globe with sub-Saharan Africa having the highest prevalence of infected individuals¹. Conservative estimates of about 42 million people are infected globally, giving a death toll of about 2.4 million annually. More than 25 million people have died from the disease worldwide. The pool of infected individuals is maintained by 16,000 new infections daily and 6 million new infections yearly ². What is more disturbing is that the majority of these infections occur in people under the age of 25 years.

More than 3.5 million people in Nigeria are already infected. The 2003 National HIV Seroprevalence sentinel survey revealed that the prevalence rate for Nigeria was 5.0% with Anambra State having 3.8% prevalence ³. Over 850,000 people have died of the disease in Nigeria with annual death put at 170,000 ⁴. Again the majority of the victims are in the age group of adolescence and young adults. In view of this disturbing HIV statistics globally and particularly in the developing countries, the focus has turned to identification of infected individuals as an important link to treatment and control of the spread of the HIV epidemic. Voluntary counselling and testing (VCT) for HIV/AIDS is a concept developed in this direction.

The VCT is a process whereby individuals or couples undergo counselling to help them make an informed choice about being tested for HIV. It emphasizes that this decision must be entirely the choice of the individual and there must be assurance of the process being confidential. Screening however was

initially unpopular and certainly not an option for the larger population because there were no programs designed to cushion the impact of a positive result. However the advent of anti-retroviral therapy and treatment for opportunistic infections has turned the tide of events in favour of HIV screening.

The VCT programme therefore identifies the infected individuals and serves as a gateway to clinical care, supportive services and counselling to reduce chances of transmission to others ^{5,6}. Besides, it serves as a basic form of health education, providing information about the disease and helping individuals manage anxiety around sexual intimacy and relationship ^{7,9}. It also provides for HIV negative individuals to live responsibly and take adequate measures that will enable them remain negative. The VCT involves two major components: HIV Counselling and Testing for HIV. HIV counselling is the confidential dialogue between a person and a care provider aimed at enabling the individual to make a decision to have HIV test or not.

In parts of the world most severely affected by HIV/AIDS, fewer than 1 in 10 people with HIV/AIDS know they are infected ⁶. Furthermore, many HIV infected adolescents remain unaware of their status and do not seek health care ¹⁰. This, by implication, signifies an under utilization of VCT services. However, it is estimated that by 2005, there will be up to 180 million people in need of testing and counselling annually ^{11,12}. It is therefore imperative that efforts be made to step up VCT so as to maximize opportunities to reach those with HIV infection or at high risk ¹³. One way of achieving this is by finding out peoples' knowledge, perception and attitude towards VCT.

This study is, therefore, set to assess the students' perception of VCT and barriers to their utilization of VCT programmes with the view to improving the delivery and utilization of VCT services among this group and the larger society.

METHOD

This study was done at the Federal Polytechnic Oko, Anambra State, Nigeria. The institution has two campuses; the main campus is situated at Oko while the other campus for preliminary students is situated at Ufuma. Oko is a sub-urban area having one of its boundaries as Ekwulobia a developing town with some commercial activities. Most of the inhabitants are farmers. The school is located in the heart of the town and most of the students reside off campus.

This is a cross sectional study with the view of

assessing the knowledge, attitude and practice of voluntary counselling and testing among undergraduates of Federal Polytechnic, Oko. The study covers only students in the main campus. The students were grouped into four by their level of study (OND I, OND II, HND I and HND II) and 65 questionnaires were randomly distributed to students at each level in the lecture hall to complete. A total of 260 questionnaires were distributed.

The method of data collection was by means of semi-structured and self-administered questionnaires. The questions were mainly close ended to avoid ambiguity of responses. Care was taken to avoid the use of ambiguous medical terms capable of distorting the meaning of the questions to the respondents. In view of the objective of the study, each section contained twenty questions covering the area of knowledge, attitude and practice of VCT.

Permission was obtained from the respondents before they were given the questionnaires to complete. They were also assured of the confidentiality of their responses and filling of their name was optional. The data is presented in tables and figures and compared with simple percentages. The test of statistical significance was calculated using Chi-square test with P-values < 0.05 considered as significant.

RESULTS

Out of 260 questionnaires distributed, 182 where answered correctly giving a response rate of 70% and this formed the basis for this study. Male students were 72 (39.6%) while 110 (60.4%) were females. The mean age of the respondents' was 22.3 ± 2.0 years. The detail of the age distribution is shown in Table I. The respondents' were mainly Christians with 101 (55.5%) Catholics, 34 (18.7%) Anglicans, 32 (17.4%) Pentecostals and 8 (4.4%) Methodists/Baptists. The remaining 7 (3.8%) were either traditionalists or Moslems. Analysis of the level of study of the students showed that 62 (34.1%) were in OND I, 35 (19.2%) in OND II, 46 (25.3%) in HND I and 39 (21.4%) in HND II level respectively.

Only 115 (63.2%) students were aware of VCT while 67 (36.8%) had not heard of it. More females (n = 89; 80.9%) than males (n = 26; 36.1%) knew about VCT. This was statistically significant (P < 0.05, $X^2 = 7.14$, df = 1). Among those who knew of VCT, 68 (59.1%) first heard of it within the last one year while 47 (40.9%) heard of it within the last two years. The sources of the information were as follows: health workers 20 (17.4%); mass media 54 (47.0%); friends 15 (13.0%); Church 23 (20.0%) and others 3 (2.6%) as illustrated in Figure 1.

Only 48 (26.4%) students were aware of a centre where VCT services are offered, while 134 (73.6%) were not aware of such centres. Of the 115 students who were aware of VCT, 40 (34.8%) knew that VCT involves counselling before and after testing, 33 (28.7%) believe it involves confidentiality; 22 (19.1) said it involves individuals being tested on their own will; while 20 (17.4%) said it is a programme on HIV.

The students had different views on who should be encouraged to go for VCT. This is shown in Table II. Most of the students 127 (69.8%) believe everybody should be tested while 55 (30.2%) were selective.

Figure 2 shows the reactions of the students to the news of a positive result after testing. Most of the students (n = 117; 64.3%) believe they will "take it in good fate", while a small proportion (n = 4; 2.2%) want to "spread the virus to others". After taken an HIV test, 76 (41.8%) students would like to inform their pastor/priest first, 34 (18.7%) would reveal it first to their partner/spouse, 31 (17.0%) and 23 (12.6%) respectively preferred their mother and father, while 10 (5.5%) and 8 (4.4%) preferred their sibling and friend respectively.

Fifty four (29.7%) students (males 21; 11.5% and females 33; 18.1%) had been sexually active in the last 3 months preceding the study, while 128 (70.3%) students (males 51; 28.0% and females 77; 42.3%) had not had sex within this period. Only 48 (26.4%) students (males 15; 8.3% and females 33; 18.1%) had taken an HIV test any time before this study. There is no statistically significant relationship between sexual exposure in the last 3 months prior to the study and the likelihood of having taken an HIV test before. (P > 0.05, $X^2 = 1.39$, df = 1). The commonest reason given for taking an HIV test before is the "need to know the status" (n = 30; 62.5%), followed by "premarital screening" (n = 9; 18.8%) and the least is "blood donation" (n = 1; 2.1%). See Figure 3.

Majority of the students (135; 74.2%) would like to go for VCT while 47 (25.8%) had a negative view. Those not willing to go for VCT gave their reasons as illustrated in Table III.

Table I. The Age Distribution of the Students

Age group (years)	Frequency (%)	
15-19	23 (12.6)	
20-24	139 (76.4)	
25-29	10 (5.5)	
30-34	6 (3.3)	
35-39	2 (1.1)	
40 and above	2 (1.1)	
Total	182 (100.0)	

Table II. Frequency Distribution of Students View on who should be Encouraged to go for VCT

People needing VCT	Frequency (%)	
Couple	13 (7.1)	
Children	3 (1.6)	
Young adults	22 (12.1)	
Pregnant women	4 (2.2)	
Only those who are sick	13 (7.1)	
Everybody	127 (69.8)	
Total	182 (100.0)	

Table III. Frequency Distribution of Students Reasons for not Going for VCT

Reasons	Frequency (%)
Scared of the psychological trauma of a positive result	4 (8.5)
The test is expensive	6 (12.8)
Not aware of where the test is done	4 (8.5)
Afraid of stigmatization	2 (4.3)
I am sure I don't have HIV	28 (59.6)
Afraid other people will know about the result	1 (2.1)
Others	2 (4.2)
TOTAL	47 (100.0)

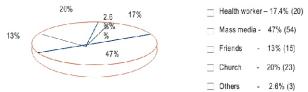


Fig. 1. Students source of information on Voluntary Counselling and Testing for HIV/AIDS.

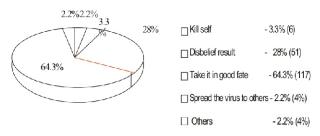


Figure 2. Students Possible Reaction to the News of a Positive HIV Test.



Figure 3. Students Reasons for Already Taken an HIV Test.

DISCUSSION

The results obtained from this study showed that about two thirds (63.2%) of the students were aware of VCT. The awareness is low compared to 80-90% reported among university students and among youths in Kenya and other East African countries ¹⁴⁻¹⁶. It is of note that females were more aware than their male counterparts. This is encouraging when we consider that females are usually sidelined in matters concerning sexual and reproductive health. More so it portrays a ray of hope that these young ladies (tomorrows' mothers),

will be more aware and are likely to endorse the prevention of mother to child transmission of HIV (PMTCT) programme. Majority of the students who knew about VCT got this information in the last one year prior to the study. This is a reflection of the increased activity and funding of HIV/AIDS programmes in Nigeria where the youths are recognized as a major priority in the HIV prevention programme.

The mass media was reported as the commonest source of information on VCT. This is not surprising considering the wide coverage of the electronic and print media. Other potentially useful sources of information according to the respondents include the Church, health workers and peers. It is important that all avenues are exploited to pass across this vital message of VCT. It is revealing that about a quarter (26.4%) of the students were aware of a place were VCT services are offered. This suggests that even among those who are aware of VCT, majority do not know where the services are offered. This may be due to the clinicbased approach to VCT in this country. Access to VCT is limited to your need for other health services. A shift to a more routine and widespread public health model will increase access to VCT. Stand alone VCT centres should therefore be cited in educational institutions. community centres, market places, youth friendly centres, among others for proximity to the people.

Majority of the students believe that everybody should be encouraged to go for VCT or should be screened for HIV. This means that the students are aware that no particular age group is spared of the HIV scourge. However, only a few of the students considered the "young adult" as a group that will particularly benefit from the VCT program. This may reflect the low perception of these students of their vulnerability to HIV/AIDS. About one out of every three students does not see pre-test counselling as a necessity; a consequence of their poor knowledge of VCT. This is at variance with the response of youths in Kenya and other developing countries ¹⁴.

It is interesting that more than two thirds of the students were willing to take the news of a positive result in good fate. This group of students are more likely to take advantage of the welfare services and the on going anti-retroviral therapy, which will increase their chances of survival and their ability to cope with the disease. However, more positive education will help reduce the proportion of the students who would either disbelief the result, kill themselves or transmit the virus to someone else as revenge.

It is not surprising that majority of the students would like their pastor or priest to be the first to know of

their HIV status after testing. This may be due to the popularly held belief in our society that the clergy is nearest to God. Also encouraging is the fact that an appreciable number of the students would reveal their result to their partner or parents. It is therefore important to educate parents on the VCT program and motivate them to give support to their children regardless of the outcome of such test. The clergy should be incorporated into the VCT program to enhance its acceptance.

This study also showed that more than a quarter of the students were sexually active within the last three months prior to the study. This figure may be lower than the actual figure in view of the fact that in our society, matters regarding sexuality are not freely and openly discussed. Nonetheless, it reaffirms the claim that students in our higher institutions are sexually active and the need to make VCT an attractive option for the students. Fear of recent exposure to HIV was the commonest reason given for accepting a test. This supports the fact that many people do not go for a test unless they have a feeling of vulnerability. Marriage purposes emerged as the second commonest reason given by those who had gone for a test. This is understandable now that many Churches have made HIV screening a pre-requisite for wedding. It would be wise therefore to exploit this avenue to propagate VCT. AIDS information centre in Uganda similarly reported an increase in number of youths seeking VCT especially for premarital reasons 15,16.

The majority of the students have not been screened as at the time of this study and they believe they are not infected which a false sense of security, considering their risky behaviour. There was also no statistical relationship between recent sexual exposure and the likelihood of taking an HIV test. This is potentially dangerous since some of the students who do not know of their sero-status may be infected and thus be a vehicle for transmission of the virus. The other students were discouraged from taking an HIV test by reasons such as: the expensive nature of the test, lack of knowledge of centres where VCT services are rendered and the psychological trauma of a positive result. If these limitations are addressed especially making VCT free and linking it to care and support services ¹⁷; the number of students and young adults who will embrace VCT will increase considerably.

In conclusion, this study highlights the need to step up efforts to increase the students' awareness of VCT, deepen their knowledge and create the right attitude towards VCT through the mass media and religious bodies. Teaching on HIV/AIDS and VCT should also be incorporated into the school curriculum. A shift from the

present clinic based approach to a more routine and widespread public health model will increase access to VCT. Stand alone VCT centres should therefore be cited in educational institutions, community centres, market places, youth friendly centres, among others for proximity to the people.

REFERENCES

- Cotran RS, Kumar V, Collins T. Robbins's pathological basis of disease. 6th Edition. Philadelphia, W.B. Sanders Company. 1999: 236-250.
- Ayankogbe OO, Omotala BD, Inem VA, Ahmed OA, Manafa OU. Knowledge, attitude, beliefs and behavioural practices for creating awareness about HIV/AIDS, in Lagos State Nigeria; Nigeria Medical Practitioner 2003; 44(1): 7-10.
- 3. Nigeria Federal Ministry of Health. Technical Report on the 2003 National HIV Sero-prevalence Sentinel Survey. FMOH, Abuja Nigeria, April 2004.
- Nigeria: HIV/AIDS Country Report 2003. National Action Committee on AIDS, Abuja Nigeria. December 2003.
- Nigeria Federal Ministry of Health. National Guidelines on Prevention of Mother to Child Transmission of HIV. FMOH, Abuja, Nigeria. 2005.
- 6. World Health Organisation: The Right to know, New Approaches to HIV testing and counselling. August 2003. Available online at http://www.who.int/hiv/en.
- 7. Sheon N. Sacraments of surveillance; Ethnography of HIV test clinic. Available online at www.managingdesire/org/aboutconfessionandhiv.
- Lupton D, McCarthy S, Chapmans S. Doing the right thing; the symbolic meanings and experiences of having HIV antibody test. Soc Sci Med.1995; 41(2): 173 -180.

- Bread S. Sexual risktaking and HIV antibody testing; A qualitative investigation. In Aggleton P, Hart G, David P (Eds). Families and communities responding to AIDS. London, England UCL Press. 1999: 51.
- Peralta L, Deeds BG, Young K. Promoting identification of HIV infected youths; borrowing concepts from the media to reduce the HIV epidemic? J. Asso-Acad. Minor Phys 2002; 13(2): 41-47.
- Chequer P, Cuchi P, Mazin R, Garcia Calleja JM. Access to antiretroviral treatment in Latin American countries and the Caribbean. AIDS 2002; 16(Suppl.3): S50-57.
- 12. Galvao J. Access to antiretroviral drugs in Brazil. Lancet 2002; 360(9348): 1862-1865.
- 13. Global Health Sector Strategy for HIV/AIDS 2003 2007; provides a framework for partnership and action. Geneva, WHO. 2003.
- The Voluntary HIV-1 Counseling and Testing Efficacy Study Group. Efficacy of voluntary HIV -1 counseling and testing in individuals and couple in Kenya, Tanzania and Trinidad; A randomized trial; The Lancet 2000; 356(9224): 103-112.
- Nabwiso F, Moor T, Tukwasiibwe E, Marun E, Haggins D. HIV counselling and testing in young Ugandans. Abstract PO-C253215. Presented at the 9th int'l AIDS conference. Berlin, Germany, 1993.
- Kakovia A. Attitude of young people to counselling services and HIV screening and testing. Abstract PO-D-5325. Presented at the 8th int'l AIDS conference, Amsterdam. Holland. 1992.
- 17. Sweat M, Gregorich S, Sangiwa G, *et al* Cost effectiveness of voluntary HIV-1 counselling and testing in reducing sexual transmission of HIV-1 in Kenya and Tanzania. The Lancet 2000;356 (9224): 113-121.