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Knowledge, Attitude and Uptake of Voluntary Confidential Counseling and Testing (VCCT) for HIV/AIDS Among Young Adults in an Urban Settlement in Southwest Nigeria

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Abstract: The provision of voluntary counseling and testing for HIV/AIDS is central to HIV/AIDS control programme; it provides the scope for individuals to make informed and independent decisions to find out their HIV status and it is a critical component in influencing behaviour and preventing further transmission. This descriptive cross sectional survey was done among adolescents aged 15-25 years in Alekuwodo, an urban settlement in Osogbo Osun state. Respondents (373) were interviewed, using a pre-tested semi-structured questionnaire. Two-thirds of respondents had up to secondary education. Awareness of VCCT was less than that of HIV/AIDS as only 64.4% of respondents heard of VCCT, compared to 97.9% of the respondents who had heard of HIV/AIDS. The electronic media is the major source of information. However, 7.1% of all respondents who heard of HIV/AIDS and about a tenth of those that have had sex had done VCCT. Furthermore, 6.4% of those who had heard of VCCT claimed not to be in support due to fear, high cost and doubt of confidentiality. There was no statistically significant association between awareness of and uptake of VCCT. The study showed a low level of VCCT uptake despite high sex-related risk behavior among the youth. Massive education should be embarked upon emphasizing the simplicity, affordability and confidentiality of the test.

Key words: VCCT, uptake, young adults, urban settlement, HIV/AIDS, respondents

INTRODUCTION

HIV/AIDS has become a serious global health and psychosocial crisis, with about 32 million infected individuals worldwide (UNAIDS, 2007). It does not only affect adults, but also adolescents and children (UNAIDS, 2006). They are exposed to the virus through unprotected risky sexual, intravenous drug abuse and peer group influence during this period of their physiological and psychological transition (UNAIDS, 2004). In 2005, it was estimated that there were 2, 900, 000 adults living with HIV/AIDS in Nigeria; 1, 600, 000 (57%) of these are women; 240, 000 are children. In addition 310, 000 deaths have resulted from AIDS among adults and children and 1.8million are orphans of AIDS (FMOH, 2006; HIV and AIDS in Nigeria, 2007). In the 2003 survey, the national prevalence rate had dropped to 5 from 5.8% in 2001. However, it has been found that state prevalence rates vary from as low as 1.2% in Osun state to as high as 12% in Cross River State. Overall, 13 of Nigeria 36 states had prevalence rates of over 5%. Nigeria's STD/HIV control programme estimates that over 60% of new HIV infections are in the 15-25 years age group (FMOH, 2006; HIV and AIDS in Nigeria, 2007).

Treatment and care consists of a number of different elements including Voluntary Counseling Confidential and Testing (VCCT), food and nutrition, support for the prevention of onward transmission of HIV, follow-up counseling, protection from stigma and discrimination, spiritual support, the provision of antiretroviral (ARVs), treatment of STIs, management of nutritional effects, prevention and treatment of opportunistic infections (OIs) traditional treatment, palliative care, preparing for death, family and orphan support (HIV and AIDS Treatment and Care in Resource Poor Communities, 2007).

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The objective of VCCT is to ensure, acceptance of the test; provision of care for HIV-Infected individuals especially pregnant women; prevention of HIV transmission and provision of psychosocial support (UNAIDS, 2002). It provides the scope for individuals to make informed and independent decisions, to find out their HIV status and is a critical component in influencing behaviour and preventing further transmission (Homans, 2003). VCCT includes specialized counseling on issues like HIV and AIDS information; pretest or decision counseling; post test counseling and plans for reducing risk behaviour (Coovadia, 2006). The knowledge of sero status through testing and counseling is the key entry point to prevention services in populations at risk and to care and support for persons living with HIV/AIDS (UNMIS HIV/AIDS Unit, 2006). HIV testing and counseling can lead to an increased condom use, fewer sexually transmitted infections and safer practices AIDS (UNMIS HIV/AIDS Unit, 2006; UNAIDS, 2002).

With the increasing diagnosis of AIDS in young adults (age group 15-25) from 3.9% in 1999 to 4.7% in 2003 and the estimates of over 60% of new cases of HIV infection among this age group (UNAIDS, 2004), this study becomes important. This study aimed to study the knowledge, attitude and uptake of VCCT among the adolescents and will help in understand ing the adolescent view about VCCT and also guide in ways of increasing the uptake of VCCT among them, thus limiting the spread of the disease.

MATERIALS AND METHODS

The study community is one of the fourteen wards in Osogbo Local Government, Osun state in southwestern Nigeria and the most populous ward in the LGA (National Population Commission, 1998). The total population of the community from the 1991 National Population Census was 14, 823 and with an annual growth rate of 2.83 in Nigeria, the projected population for year 2006 is 21, 201. The inhabitants are mainly Yorubas, Christianity and Islam being their predominant religion.

This is a descriptive cross-sectional study. A list of the 27 registered streets was obtained from the LGA secretariat and 18 of these (representing 2/3 of the total) were chosen by simple rand om sampling through the means of a ballot. Adolescents aged 15-25 years who consented to being interviewed, in every other household in all the selected streets were interviewed. The data was gathered with the aid of a pre-tested semi-structured questionnaire administered by trained research assistants. The questionnaires were checked and sorted out manually and the data obtained was analyzed using SPSS statistical software package.

RESULTS

Three hundred and seventy-three respondents were interviewed. Majority of the respondents (88.2%) were 24 years or less. Male respondents made up 52% of the sample. About two-thirds of the respondents had up to secondary level of education, most (96.8%) were single and Yorubas were the predominant ethnic group making up 91.4% of the sample (Table 1).

The knowledge of respondents as regards HIV/AIDS and VCCT is presented in Table 2. Awareness of HIV/AIDS was high. As many as 97.9% of the respondents had heard of HIV/AIDS with the electronic media being the most quoted source of information. Awareness of VCCT was less than that of HIV/AIDS as only 64.4% of respondents had heard of VCCT. The electronic media also played a leading role in serving as the source of information in majority of respondents (71.5%) who had heard of VCCT.

Attitudes were largely in support of VCCT amongst those who were previously aware of it. Only 6.4% of those who had heard of VCCT claimed not to be in support of VCCT. The others (220) who were in support gave various reasons for their positive disposition. The leading reasons were that VCCT helps in making volunteers know their HIV status and that it helps in curbing the spread of HIV/AIDS. Other reasons g iven for the positive

Table 1: Socio-demographic characteristics of respondents

n = 373 Item	Frequency	Percentage
Age group		
15-19 years	193	51.7
20-24 years	136	36.5
25-29 years	38	10.2
30 years and above	6	1.6
Sex		
Male	194	52.0
Female	179	48.0
Educational status		
None formal	9	2.4
Primary	22	5.9
Secondary	220	59.0
Tertiary	122	32.7
Occupation		
Schooling	326	87.4
Civil service	10	2.7
Artisanship	19	5.1
Farming	7	1.9
Trading	7	1.9
Others	4	1.1
Marital status		
Single	361	96.8
Married	12	3.2
Ethnicity		
Yoruba	341	91.4
Ibo	21	5.6
Hausa	6	1.6
Others	5	1.3

Table 2: Respondents Knowledge of HIV/AIDS and VCCT

	Frequency	Percentage
Have you ever heard of HIV/AIDS?		
Yes	365	97.9
No	8	2.1
Total	373	100.0
***Through which medium?**		
Radio	134	36.7
Television	169	46.3
Newspaper	35	9.6
Friends/relations	28	7.7
School	44	12.1
Others (church, books, bill boards etc)	10	2.7
Have you ever heard of VCCT?		
Yes	235	64.4
No	130	35.6
Total	365	100.0
What was your first source of information?		
Church	2	0.9
Friends/relations	21	8.9
Health workers	6	2.6
Print media	5	2.1
Electronic media	168	71.5
School	27	11.5
Not stated	6	2.6
Total	235	100.0

* multiple responses

Table 3: Respondents Attitude to VCCT

	Frequency	Percentage
Do you support VCCT?		
Yes	220	93.6
No	15	6.4
Total	235	100.0
If yes, why?		
It helps to know one's HIV status	66	30.0
It helps to help curb the spread of HIV	62	28.2
The counseling helps to increase HIV knowledge	21	9.5
It serves for early detection and commencement of treatment	20	9.1
It helps to know what steps to take depending on HIV status	31	14.1
Other reasons	7	3.2
No specific reason	13	5.9
Total	220	100.0
Do you think your lifestyle will be altered after attending VCCT?		
Yes	128	54.5
No	95	40.4
Not sure	12	5.1
Total	235	100.0
In what way do you think your life will be impacted?		
Disturbed emotions	50	39.1
Spiritual steps	1	0.8
I will face stigmatization/social discrimination	13	10.2
Positive steps (seeking treatment, responsible lifestyle etc)	34	26.6
Negative steps (taking to alcohol, smoking, suicide etc)	3	2.3
Can't say for sure	27	21.1
Total	128	100.0

disposition are as shown in Table 3. Even though many of the respondents who had previously heard of VCCT felt that going for VCCT will somewhat alter their lifestyles, majority will advocate for VCCT (88.5%) and majority of all respondents (78.1%) will go for VCCT in the future. (Table 4).

Table 4: Intention to advocate or use VCCT in the future

	Frequency	Percentage
Will you advocate for VCCT?		
Yes	208	88.5
No	20	8.5
Not sure	7	3.0
Total	235	100.0
Will you go for VCCT in the future?		
Yes	285	78.1
No	42	11.5
Not sure	38	10.4
Total	365	100.0

Table 5: Respondents Risk behaviour

	Frequency	Percentage
Have you ever had sex?		
Yes	212	56.8
No	161	43.2
Total	373	100.0
Do you use condoms when having sex?		
Yes	182	85.8
No	30	14.2
Total	212	100.0
If yes, who with?		
Spouse	15	8.2
Regular sex partner	124	68.1
Casual sexual partner	43	23.6
Total	182	100.0
If yes, how frequently?		
Regularly	99	54.4
Occasionally	72	39.6
Rarely	11	6.0
Total	182	100.0
If yes, what for?		
Contraception	16	8.8
Protection from STIs	47	25.8
Both	119	65.4
Total	182	100.0
If no why?		
Condom reduces pleasure /may be inconvenient	4	13.3
I have sex with only one trusted HIV negative partner	6	20.0
We use other forms of contraception	2	6.7
I don't/didn't plan when to have sex	2	6.7
Just don't feel like using condoms	16	53.3
Total	30	100.0

Table 6: Uptake of HIV screening

	Frequency	Percentage
Have you done any HIV screening?		
Yes	26	7.1
No	339	92.9
Total	365	100.0
If yes, under what circumstances?		
Voluntary	11	42.3
Routine medical check up	6	23.1
Antenatal clinic	2	7.7
Others (prior to blood donation, etc)	7	26.9
Total	26	100.0
***If no why? (n=339)**		
Costly	22	6.5
Confidentiality not assured	19	5.6
Fear	43	12.7
Not aware of testing centre	6	1.8
I am sure I don't have HIV	28	8.3
Indifference	52	15.3
Others (I don't have time, my parents have not given me permission etc)	17	5.0
No response	152	44.8

*Multiple responses

Tables 7: Evidence of association

	Have you done any HIV screening? Frequency (%)			
	Yes	No	Total	Statistics
Do you use condoms when having sex?				
Yes	19 (10.8)	157 (89.2)	176 (100.0)	Fisher's Exact test (2-sided)
No	4 (14.3)	24 (85.7)	28 (100.0)	p = 0.530
Total	23 (11.3)	181 (88.7)	204 (100.0)	
Have you ever had sex?				
Yes	23 (11.2)	183 (88.8)	206 (100.0)	Fisher's Exact test (2-sided)
No	3 (1.9)	156 (98.1)	159 (100.0)	p = 0.000
Total	26 (7.1)	339 (92.9)	365 (100.0)	
Have you heard about VCCT?				
Yes	19 (8.1)	216 (91.9)	235 (100.0)	Fisher's Exact test (2-sided)
No	7 (5.4)	123 (94.6)	130 (100.0)	p = 0.400
Total	26 (7.1)	339 (92.9)	365 (100.0)	

Table 5 presents the pattern of sex-related HIV/AIDS risk behaviour reported among the respondents. More than half (212) of the respondents have had sex with as high 85.8% of these claiming to use the condom during sex. Most of the respondents who have sex did so or do so with a regular sexual partner and use the condom regularly. Of the 182 respondents who use the condom, 119 (65.4%) use it for contraception and prevention of STIs. Most of those who did not use the condom (53.3%) did not just feel like using it.

The uptake of VCCT is shown in Table 6. Only 26 (7.1%), of all respondents who had heard of HIV/AIDS had ever taken a screening test. Eleven of these (42.3%) took the screening test voluntarily, while others took the test under circumstances such as during a routine medical check up (23.1%), during ante-natal care (7.7%) and some other circumstances such as before a blood donation. Various reasons were given for staying away from HIV screening. These included fear (12.7%), indifference (15.3%), high cost (6.5%) and concerns over confidentiality (5.6%).

Table 7 shows the cross tabulations to determine the association between various factors and the uptake of HIV screening. Relatively more respondents who did not use the condom during sex (14.3%) did HIV screening than those who used (10.8%). This association was however not statistically significant (p = 0.530). The respondents who had ever had sex took HIV screening tests more than those who have not ever had sex. More than a tenth of those who had ever had sex had done HIV screening compared to 200 of those who had not. This finding was statistically significant at the 5% significance level (p = 0.001). There was no statistically significant association between awareness of VCCT and uptake of HIV screening even though more respondents who have heard of VCCT took tests than those who have not heard of VCCT.

DISCUSSION

This study looked at the knowledge, attitudes and uptake of VCCT among young persons of whom majority were 24 years or less, were single and had at least secondary school education. This target group has been noticed to bear a huge share of the HIV/AIDS burden (UNAIDS, 2006) and have been described as the centre of the HIV/AIDS epidemic (Monasch and Mahy, 2006).

Majority had heard about HIV/AIDS but respondents were less aware of VCCT. Awareness of VCCT in Nigeria (Iyaniwura and Oloyede, 2006; Iliyasu *et al*., 2006) and other developing countries (Layer, 2001; Zhang *et al*., 2007) has generally been found to be low even though high VCCT awareness levels has been reported (Muganga *et al*., 2002) in some other developing countries. Given the relatively new introduction of the VCCT strategy in the prevention and control of HIV/AIDS it may be expected to find lower awareness levels of VCCT than that of the disease itself but the gap that exists in this population may be too wide and may represent a poor effort of control programmes at reaching this strategic group with VCCT awareness messages. A finding that may support this view is that most of those who were aware of VCCT were informed through the mass media just as well as the majority of those who were aware of HIV/AIDS. If VCCT messages then have been appropriately packaged through the mass media, most who have heard of the disease through the medium are expected to have heard of VCCT. The mass media has been found to be the most quoted source of information in many studies on reproductive health among youths (Ikechebelu *et al*., 2006) but concerns about the comprehensiveness of messages being passed through the mass media have been expressed. This calls for a reappraisal of the use of the mass media as a means of reaching youths with health information especially those that pertain to HIV/AIDS prevention strategies including VCCT.

Attitudes were largely positive amongst those who have heard of VCCT. As high as 93.6% of those who had previously heard of VCCT had a positive disposition to the strategy despite the fact that more than half of the respondents felt that their lifestyles will be altered after attending VCCT. Most studies (Iliyasu *et al*., 2006; Iyaniwura and Oloyede, 2006; Van Dyk and Van Dyk, 2003) have found that attitudes to VCCT are largely positive and this presents programme planners with immense opportunities. One should however be quick to consider yet another gap that was found in this study and that is the gap between positive attitudes and eventual uptake of the test. A model of behaviour change predicts that a positive attitude precedes intention to use and is followed by practice and the highest level of adoption of any particular behaviour is advocacy for that behaviour. Considered against this model, most of the youths interviewed in this study can be said to either have stopped at the attitude level or were 'caught' at that level. Whatever the case, it is imperative that methods and means of ensuring sustained progress along the KAIPA (Knowledge, Attitude, Intention, Practice, Advocacy) ladder are researched into and adopted for this and similar youth populations where the attitude-use gap has been documented.

We found a testing prevalence of 7.1% among those who had heard of HIV/AIDS and similar to what was found by Ikechebelu *et al*. (2006), voluntary testing was the major reason for testing. HIV/AIDS testing prevalence in Nigeria and other African countries is widely reported in literature as low (deGraft-Johnson *et al*., 2005; Hutchinson and Mahlalela, 2006; Ikechebelu *et al*., 2006; Iyaniwura and Oloyede, 2006; Kawichai *et al*., 2005) despite the fact that it has been found to be an effective means of reducing the HIV/AIDS burden. Intention to go for the test in future was expressed by majority (78.1%) while as high as 88.5% of respondents who had previously heard of VCCT claimed that they will advocate for VCCT even though they were not currently doing so. Given a testing prevalence of 7.1%, it is apparent that there must be barriers that account for the wide disparities between awareness, attitude, intention to use or advocate on one hand and eventual practice on the other hand. These barriers must be adequately researched into both at the individual level and at operational/service delivery levels.

In our study, it was found that uptake of VCCT was significantly higher among the youths who had ever had sex than among those who had not ($p = 0.001$). This is directly linked to self perceived risk of HIV infection. The commonest route for transmitting HIV in this environment is through sexual intercourse thus respondents who had never had sex perceived themselves as being at low risk of infection hence did not bother to take HIV tests. This self perceived risk was found to be the most important factor influencing VCCT readiness among youths in a rand omized trial on acceptability of VCCT carried out by Fylkesnes and Silziya (2004) and was also found to be the major reason given for non-testing by respondents in a Northern Thailand study (Kawichai *et al*., 2005). The pitfall inherent in this is that self-perceived risk may often times be different from scientific risk as self perceived risk is dependent on the breadth of the knowledge of risky behaviours engaged in by the respondent and a host of other factors. It is a good starting point anyway and efforts should be directed at improving the self risk assessment by individuals.

CONCLUSION

Sex-related risk behaviour is high among the youths who participated in this study yet, VCCT awareness and uptake is low. Many youths may thus be at risk yet are not taking the test. Fear was the strongest reason given for staying away from testing. Concerns about cost and confidentiality were also top among the reasons given. Obviously, VCCT is an important tool for preventing HIV, it leads adolescents to confront their behaviour and assess its consequence. However majority stayed away from HIV testing due to fear high cost and doubt of confidentiality of the result. HIV rates among youth continue to rise since many do not know they have it, leading to further spread. VCCT is effective in slowing HIV spread but awareness and acceptability of VCCT among youth is still low. Emphasis should be made on comprehensive communication of the simplicity, affordability and confidentiality of the test. There is also a need for youth targeted programmes to reduce stigma so that its fear will not prevent people from accessing essential care.

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