

Attitudes and Behaviour of Nigerian University Students towards Voluntary HIV Counselling and Testing

Ezebunwa E. Nwokocha & Victor Eyango

Department of Sociology

University of Ibadan, Ibadan, Nigeria

Vol. 7 Issue 1, 2009

Abstract

Despite increased campaign for voluntary counselling and testing (VCT) for HIV/AIDS in Nigeria only a negligible number of young people participates in this activity. This study investigates the factors affecting the attitudes and behaviour of students at the University of Ibadan, which is a microcosm of other universities in the country, as a way of understanding the context in which apathy towards VCT occurs. The Health Belief Model and the Theory of Reasoned Action enable the study to highlight the variables that interact to influence students' behaviour towards VCT. Data were collected through structured questionnaires and in-depth interviews (IDIs). The survey involved 400 respondents selected through a multi-stage sampling technique, while 12 IDIs were conducted among undergraduate and postgraduate students identified as relatively knowledgeable about issues related to VCT – mainly as peer educators. The findings show that although 95.3% of the students were aware of VCT, only 15% of them had undertaken voluntary HIV testing. The specific results indicate that there is a wide gap between intention and action related to VCT. Of the 57.5% respondents who had discussed VCT and intended to participate in it, only 27.3% actually underwent VCT. A combination of overconfidence in not being HIV positive, fear of testing positive to the virus, the perceived non-confidentiality of test results and stigma and discrimination strongly discourage students from partaking in VCT. The study clearly indicates the need to bridge the gap between knowledge and behaviour through vigorous sensitization and enlightenment activities.

Key words: *vulnerability, confidentiality, VCT, stigma and discrimination, Nigeria*

Background and Problem Statement

Among the identified pressing health problems in the world, HIV/AIDS ranks as one of the most crucial. Research shows that AIDS is the fourth most important single cause of death particularly in Africa (WHO, 1999). For instance, although 11 percent of the world's population resides in sub-Saharan Africa, 70 percent of the global HIV/AIDS infections occur in this region (UNAIDS, 2005), making it the hottest spot for the spread of the epidemic.

Global estimates indicate that HIV/AIDS is most prevalent among young people. Of the 60 million plus people that were infected over a period of 20 years, about half are aged between ages 15 and 24 years (UNAIDS, 2001; WHO, 2001). In Nigeria, sixty percent of those infected with the virus belong to the latter age category (NPC, 2004) and constitute the most vulnerable group because of the likelihood of engaging in high-risk behaviour (Lampsey, 2002;

Sesay, 2003). Notwithstanding this reality, access to and use of VCT have been disappointingly low for reasons such as the limited number of testing facilities, denial, stigma and discrimination (Barnett and Whiteside, 1999; UNAIDS, 2004). This study indicates that in poor and middle-income countries, only 10 percent of those that need VCT actually succeed in gaining access to these services (UNAIDS, 2004) even in settings where they are available.

This apathy could be explained by the fact that most of the estimated 37 million people living with HIV worldwide are unaware that they are carriers of the virus; the proportion is highest in sub-Saharan Africa (WHO, 2000). The situation results partly from HIV/AIDS campaigns that focus mainly on the epidemic's public health implications and healthy living (Enosolease and Offor, 2004). While these data are also necessary, little or lack of emphasis on voluntary counselling and testing has resulted in a limited impact on the willingness to be tested. As the Nigeria Demographic and Health Survey (NDHS, 2003) shows, awareness of VCT is not widespread among Nigerians mainly due to limited advocacy and sensitization. The NDHS also reveals that approximately eight in ten Nigerians have never been tested, while a large majority of young people aged between 15 and 24 have not undertaken a HIV test (NPC, 2004) even when they are among the most vulnerable groups.

The immediate effect of indifference towards counselling and testing is under-reporting of cases of HIV infection, which itself undermines the validity of data on both the incidence and the prevalence of the disease. It could be argued that sustained reduction in the national HIV prevalence rate could stem from low rate of counselling and testing rather than behavioural change. For instance, studies have shown that after the initial increase from 4.5% in 1996 to 5.8% in 2001, HIV prevalence in Nigeria has been on the decline as indicated by data from 2003 (5.0%) and 2005 (4.4%) (Kanki, 2006). This inverted U-shaped HIV prevalence decline posture is a product of antenatal clinic related testing among women in routine maternal health care clinics; it hardly indicates accurate statistics given that these women do not represent all segments of the Nigerian society. The current Population Reference Bureau (PRB, 2009) data which reveal a decline in HIV prevalence in Africa generally are also subject to the limitation related to inaccuracy of information for the same reason explained above.

It is therefore pertinent to investigate the issues surrounding VCT, and in particular those related to attitude and behaviour, among university students in Nigeria with a view to suggesting appropriate strategies that will impact positively on the attitude and behaviour of relevant individuals and groups. The direct benefit of HIV counselling and testing, and especially among the most vulnerable groups such as students, is not only its potential for reducing HIV transmission, as individuals would likely take protective measures once they know they are infected (Odutolu *et al.*, 2006), but also as a complement to the data from antenatal clinics. In addition to this, VCT when properly undertaken would likely reduce the ignorance, fear and stigma associated with HIV infection (Adewole *et al.*, 2006).

Literature Review and Theoretical Framework

Voluntary counselling and testing is a confidential process through which a person's HIV status is ascertained. It includes pre and post-test counselling aimed to help individuals make informed choices (UNAIDS, 2000). Beyond the fact that the results of VCT are essential in re-directing the behaviour of the affected individuals, they are also necessary in understanding the actual burden of the disease for effective planning and intervention (FMOH, 2002; CLP, 2003). As Enosolease and Ofor (2004) noted, VCT is not only one of the most efficient strategies for preventing HIV, it is also a cost-effective means of preventing the transmission of HIV (Ajuwon *et al.*, 2008). It has been reported that VCT services are now relatively widely available in parts of Nigeria and that access to anti-retroviral (ARV) drugs has increased considerably as a result of support from government and international agencies (Ajuwon *et al.*, 2008).

According to UNAIDS (2004), VCT stands out as an intervention that plays a vital role in the treatment and prevention of the virus. Ajuwon *et al.* (2008) had stated that in the absence of a cure for AIDS, primary prevention through targeted intervention is one of the major means of controlling a further spread of the virus in a country like Nigeria where a combination of poverty, lack of awareness and high risk behaviour among others bolster people's vulnerability to the virus. Three of the underpinning principles in the conduct of HIV testing have been identified by UNAIDS (1999) to include confidentiality, counselling and informed consent.

When people learn of their infection early, there can be important benefits for both prevention and care. Studies show that many who do not know their sero-status worry about their past behaviour and therefore experience anxiety, which could be reduced with a HIV test result (Quinn, 1992). Counselling enables individuals to cope better with stigma and discrimination. The early detection of HIV facilitates referral for medical care, monitoring and psychosocial support. Unfortunately, full use of VCT services among Nigerians is still low and even more so among young people notwithstanding their involvement in high risk behaviour including unprotected sex (Adewole and Lawoyin, 2004; Ajuwon *et al.*, 2002). For instance, Shokunbi *et al.* (2006) reporting on a study on sexual behaviour conducted in 2003 among 609 male students at the University of Ibadan revealed that only 51 of this total consented to undertaking VCT.

The essence of VCT is more critical in a country like Nigeria where the number of people with the disease is high. For instance, on the basis of the 2003 HIV prevalence survey, Isiugo-Abanihe (2005) noted that an estimated 3.2 to 3.8 million Nigerians are HIV positive (more than the population of some countries like Cape Verde 0.5 million; Mauritius – 1.2 million; Gambia and Guinea Bissau – 1.6 million each; Mauritania – 3.1 million etc (Population Reference Bureau, 2005). Even though the 2005 National HIV sero-prevalence

sentinel survey revealed that 2.86 million Nigerians were infected which is a marked drop in prevalence rate, the number still remains relatively high.

Studies show that there has been a steady increase in the prevalence rate of HIV/AIDS in Nigeria from 1.8 percent in 1991 to 5.8 percent in 2001, 5 percent in 2003 and 4.4 percent in 2006 (CLP, 2001; FMOH, 2002; NPC, 2004). Although these data indicate a decline in the prevalence rate, given Nigeria's large population size, it still ranks as the country with the third highest number of HIV infected people in the world behind South Africa and India (FMOH, 2002; Avert, 2005). The main modes of HIV transmission in Nigeria are through heterosexual contacts (80%) and blood transfusions (10%), the remaining transmissions occur through mother to child transmission (MTCT) and homosexual contacts among others (FMOH, 2002; Avert, 2005). Lack of information on sexual health, stigma and discrimination, poor health care facilities and cultural beliefs and practices are mainly implicated in the spread of the virus in Nigeria (NPC, 2004; Avert, 2005).

Studies have revealed substantial gender differences in the patterns of HIV infection among young people in various part of the world. Where heterosexual transmission is dominant, more young women than men are infected by the virus. The patriarchal family system and the low status of women have been implicated in the gender disparity of the HIV prevalence rate in Nigeria which manifests itself through social and cultural inequality exemplified in low autonomy and powerlessness among females (Isiugo-Abanihe, 2005). It is estimated that about 48 percent of people living with HIV/AIDS (PLWHA) globally are women; and sub-Saharan Africa stands out as the only region where more women than men are infected (UNAIDS, 2001; WHO, 2001; Hammarckjolo, 2002). Restricted access to VCT can be explained in the context of power relations within the family; even when women have equal desire for counseling services as men, their limited control over the means of production and reproduction undermines the realization of such a goal.

Theoretical Framework

The Health Belief Model (HBM) by Rosenstock (1966) and Becker (1974) and the Theory of Reasoned Action (TRA) by Ajzen and Fishbein (1980) were employed as the theoretical framework for this study. The Health Belief Model explains health related behaviour from a social psychological perspective using the theories of value-expectancy and decision-making. The model focuses on dimensions affecting an individual's control over a specific action and uses those same dimensions to predict behaviour. The position of this model which focuses on the individual's subjective assessment of the health situation, especially with regard to using health services, is that by taking a particular action, an individual's susceptibility/vulnerability would be reduced or if the disease had already occurred, its severity would be ameliorated.

The model is based on the understanding that a person will take health related action such as, in the context of the present analysis, undergoing VCT if that person perceives that a negative health condition, including HIV/AIDS,

can be avoided by taking a certain action; and is convinced that the action is likely to be effective and beneficial. The model asserts that a person's motivation to undertake a health related action can be located in the following factors: perceived susceptibility, severity, benefits and barriers and cues to action and self efficacy. Applying this model in the analysis presupposes that these students have some level of awareness related to VCT to enable them to appreciate their vulnerability to the virus, the importance of early detection and its relationship with appreciating the actual or potential severity and cues to actions that could ameliorate the effects on infected persons. The model did not however take into account other factors that influence attitude towards VCT such as norms, religion, and skepticism regarding the reliability of test result among others. It also did not provide an explanation of the role of significant others in influencing attitudes and behaviour. As such, the underlying factors that impinge on the intentions and actions of individuals are neither identified nor analyzed.

The theory of reasoned action is predicated on the premise that a person's behaviour is determined by his/her intention to undertake a particular action and that this intention is a function of his/her attitude towards his/her behaviour and his/her subjective norms. The two fundamental assumptions that are derived from the above statement are that human beings are rational and make systematic use of the information available to them; and that people consider the possible implications of their intended actions before deciding whether to engage or not in certain behaviour. This theory reveals that intention is not only the antecedent of behaviour but also a cognitive representation of a person's readiness to perform a given action. This perspective postulates that intention is determined by three factors which include attitudes towards a specific behaviour, subjective norms and perceived behavioural control (Taylor *et al.*, 2006).

Intention among students to undergo VCT can be explained partly by their knowledge about and attitude towards this activity. For instance, in situations where young people are apathetic towards VCT as a result of the scepticism surrounding the confidentiality of test results, the reliability of testing kits and the competence of medical personnel among others, the intention to undertake such health seeking activity such as VCT may not be sufficiently activated among prospective VCT-facility users. Fear of the invalidation of test result arising from these limitations can generate some level of apathy even when prospective clients are aware of the importance of the exercise. Subjective norms which relate to a person's perception and belief about how his/her significant others will react to his/her behaviour is also crucial in explaining a person's attitude and behaviour towards VCT. If a student, for instance, knows that the people who matter most to him/her will view his/her participation in VCT as something positive, then the person is more likely to develop an

interest in partaking in that behaviour than when participation would likely be viewed negatively by his/her significant others.

The intention to participate in VCT that derives from perceived behavioural control is related to the perception of the individual's ability to withstand the outcome of such counselling and testing. Given the issues surrounding HIV/AIDS such as stigma and discrimination, and the psychological trauma suffered by HIV/AIDS positive people among others, prospective facility users may find it difficult to decide to participate in VCT. The inability to make such a decision among some people might be premised on perceived poor behavioural control over negative outcomes of events and circumstances generally which could worsen the mental and psychological disposition of such a VCT-facility user. This study notes that one of these three factors or a combination of two or three together determine intention and predisposition to VCT among individuals and groups in relevant contexts.

Conceptual Framework

This framework synthesizes the Health Belief Model and Theory of Reasoned Action in further explaining voluntary counselling and testing among students in the study area. The interaction of the relevant factors is illustrated in an attempt to show the associations between the dependent and independent variables at a glance.

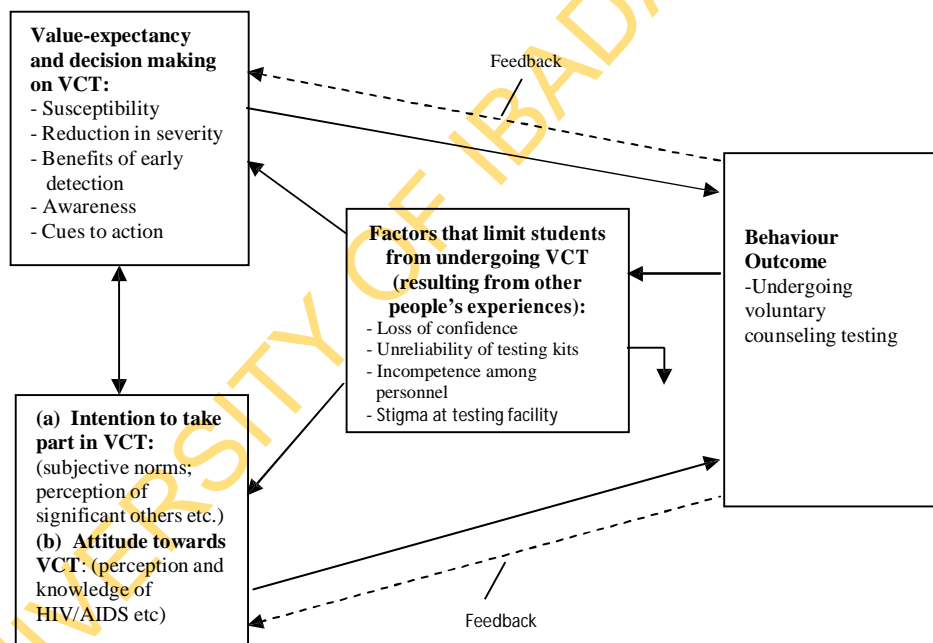


Fig. 1: Conceptual Framework

Source: Nwokocho & Eyangho 2009

The framework shows that value-expectancy and decision making on VCT which are driven by perceived susceptibility, the quest for a reduction in severity, the benefits of early detection, awareness and cues to action affect the intention to participate in VCT and the attitude towards it. In turn, the attitude towards VCT which is associated with an individual's knowledge of the thematic virus impinges on value-expectancy and decision making related to counselling and testing. Figure 1 also indicates that loss of confidence in the VCT process ascribed to the unreliability of testing kits, incompetence among health personnel and perceived stigma at testing facilities negatively influence both decision making regarding VCT and the intention and attitude related to the latter activity.

Knowledge of these inadequacies can be derived from information generated from individuals and groups that may have had interaction with VCT facilities at some point and observation. In effect, these limiting factors discourage a large number of students from undergoing VCT as and when necessary. This is demonstrated by the arrow that is deflected downward, indicating non-involvement with VCT at behaviour level. A contrary outcome would result in a situation where these students have confidence in the process, perceive testing kits as reliable and personnel as competent and where stigma and discrimination are minimal. For the latter scenario, the likelihood of more people wanting to get involved would be far higher than the former.

Figure 1 further shows that students who might not have experienced these limitations could undergo VCT on the basis of perceived vulnerability, an amelioration of severity in a situation where the disease has already been contracted and the benefits of early detection. Similarly, an individual's subjective norms, an assessment of the likely perception of significant others and knowledge of issues related to HIV/AIDS notwithstanding the limitations inherent in a testing facility can motivate involvement in VCT. The diagram shows that undergoing VCT may eventually alter the negative perception individuals have about the testing process. The figure also indicates that clients' VCT experiences necessarily activate feedback which impinges on perception, awareness, decision-making and cues to action which collectively determine the extent to which these clients would be willing to undertake VCT subsequently.

Materials and Methods

Data collection for the study involved qualitative and quantitative techniques. Primary data were elicited through survey questionnaires and in-depth interviews (IDI), while secondary data were collected using existing literature. By this triangulation, robust information was generated. The questionnaire schedule contained open and closed questions and were pre-coded. In-depth interviews were undertaken using a guide that ensured discussions followed the specific objectives of the study. While the questionnaire administration was

carried out by the researcher and two field assistants trained prior to data collection, due to the sensitive nature of the subject matter, the IDIs were undertaken by the researchers alone.

The study population, for quantitative data, comprised university of Ibadan students, irrespective of level or discipline. A multi-stage sampling method was used in selecting respondents for the study. The first stage involved the clustering of faculties into four groups comprising the humanities, physical sciences, biological and basic medical sciences. At the second stage, the faculties that represented each cluster were selected through simple random sampling. Thus the faculties of education, technology, medical sciences and public health were chosen.

The third stage involved the random selection of one department from each of the selected faculties. Specifically, the Department of Educational Management was selected to represent the Faculty of Education and the Department of Electrical Electronics for the Faculty of Technology. The faculties of Medical Sciences and Public Health were treated as departments. A simple random sampling technique was used in selecting students, who became the respondents for the study, in their respective academic departments. However, the number of respondents chosen in each of the selected departments depended on the total number of students in each of these units. In the end, the 400 respondents were selected in the following proportion: Educational Management (192 or 48%), Electrical Electronics (132 or 33%), Medical Sciences (52 or 13%) and Public Health (24 or 6%). Of the above number of distributed questionnaires, 391 were returned. However, after data entry, cleaning and editing, only 383 copies questionnaires were found to be usable and were subsequently analyzed.

In-depth interviews were conducted, by the researcher, among the different categories of students both on the basis of sex and the level of studentship. In all, 12 such interviews were undertaken with different respondents to reflect gender balance. Again, the quest for balance necessitated the inclusion of 6 each of graduate and undergraduate students identified through key information elicited from lecturers, student association executives and porters, in the halls of residence. These respondents were included in interviews on the basis of three major criteria, namely, their perceived leadership qualities, fame and willingness to participate in the study. In the latter sense, the aim of the study was fully communicated to prospective interviewees, in the course of consent-seeking, with a proviso that they reserved the right to decline participation at any time.

The data generated through the questionnaires were analyzed at univariate and bivariate levels. The univariate analysis involved the use of descriptive statistics such as frequencies and percentages. The bivariate analysis examined relationships among variables. In-depth interviews were conducted in English and responses were transcribed by a research assistant competent in such transcription. The resulting data were analyzed using manual content analysis; information or insights were imported into different aspects of study-findings

on the basis of their relevance to the discourse. Throughout fieldwork, ethical considerations were emphasized; participation was based on informed and voluntary consent. As such, respondents for the study were not only at liberty to discontinue their participation at any point during the exercise but their confidentiality was also fully guaranteed.

Results

A total of 400 undergraduate and postgraduate students from the selected university were involved in the study. The respondents represented different sexes, age groups, ethnic nationalities, religion, and academic levels. Table 1 presents a summary of the socio-demographic characteristics of the respondents. It reveals that only 383 copies of questionnaires representing about 96 percent of the total sample were used for analysis. By isolating questionnaires that were not properly completed in the course of data entry and cleaning, both reliability and validity were ensured. However, some of the variables did not have up to 383 responses because some study respondents did not respond to some of the questions for reasons such as ignorance or a perceived impingement on their privacy.

The sex distribution of respondents in Table 1 shows that there were more males (55.1%) than females (44.9%) in the sample. This reflects the data from the university's Management Information System (MIS) which in 2006 recorded more males than females at the University of Ibadan. This difference is negligible in contrast to many spheres of life where males are significantly dominant. With regard to the department of the respondents, the allocated percentage to each cluster in the methodology was strictly adhered to. As a result, 48% of the respondents were from Educational Management, another 33% from Electrical Electronics, 13% from Medical Sciences and the remaining 6% was from Public Health.

Table 1 also indicates that 67.4% of the respondents were Yoruba; Igbo constituted 18.3% while other ethnic groups including Hausa made up 14.3% of the total. This distribution was expected given that the university is located in Southwest Nigeria where Yoruba is the dominant ethnic group. The fact that 91.9% of the respondents were single was also expected because of their status as students who are mainly dependent on parents and/or guardians.

Table 1: Distribution of respondents by selected socio-demographic characteristics

Variables	Categories	Frequency	Percentage
Sex	Male	211	55.1
	Female	172	44.9
	Total	383	100
Age	15-19	66	17.2
	20-24	163	42.6
	25-29	102	26.6
	30-34	32	8.4
	35-39	7	1.8
	40-44	10	2.6
	45+	3	0.8
	Total	383	100
Department	Educational mgt.	184	48
	Elect. Elect	126	33
	Medical Sci.	50	13
	Public Health	23	6
	Total	383	100
Level of study	100	118	30.8
	200	61	15.9
	300	48	12.5
	400	25	6.5
	500	12	3.1
	700	92	24.0
	800	27	7.0
	Total	383	100
Religion	Christianity	331	86.4
	Islam	48	12.5
	Traditional	4	1.1
	Total	383	100
Ethnic group	Yoruba	258	67.4
	Hausa	2	0.5
	Igbo	70	18.3
	Others	53	13.8
	Total	383	100
Marital Status	Single	352	91.9
	Married	29	7.6
	Cohabiting	2	0.5
	Total	383	100

Some of these socio-demographic variables show relationships with VCT. For instance, the ages of respondents were found to have an association with voluntary counselling and testing. This is apparent in Table 2 which indicates a significant value of 0.001. The table reveals a consistent association between the age of respondents and participation in VCT. For instance, the highest percentage of students who were yet to undergo VCT (96.8%) belonged to the 15-19 age group. Those aged 30 and over have the highest percentage of

participation in the test. This indicates that the older these students become, the more likely they are to undergo VCT.

Table 2: Cross-tabulation of respondents' age and VCT

	Undergone VCT			Total	
		Yes	No		
Age of respondents	15-19	Count	2	61	63
		% within age	3.2%	96.8%	100%
	20-24	Count	16	144	160
		% within age	10%	90%	100%
	25-29	Count	22	77	99
		% within age	22.2%	77.8%	100%
30+	Count	16	35	51	
	% within age	31.4%	68.6%	100%	
Total	Count	56	317	373	
	% within age	15%	85%	100%	
Significant value				0.001	

The low percentage of students aged 15-19 who had undergone testing (3.2%) could be a function of their perceived lesser likelihood of contracting the disease. The situation could also be explained by apathy towards using VCT facilities and lack of realization of the essence of such counselling and testing. There is a general low rate of VCT among University of Ibadan students as indicated in Table 2 with only about 15% of the total respondents having undertaken VCT.

To generate information on the perception of VCT, respondents were asked questions related to awareness, their opinion of the benefits and general comments. The above figure shows that there is a relatively high level of awareness of VCT with 95.3% of respondents indicating so while only 4.7% reported a lack of VCT awareness. Although the percentage of those who reported awareness of VCT is high, it does not translate into behaviour, given that only 15% of these respondents, as shown in Table 2, had undergone VCT. An IDI respondent noted:

Most of us are aware that VCT centres exist in Ibadan and the university in particular. We also know the importance of getting tested for HIV and AIDS, however a large majority of students are afraid of visiting these centres even when the services are free. I for one will find it difficult to partake in VCT; coping after testing positive, assuming the result so indicates, will not be easy. It is better not to know than knowing and dying out of frustration.

This paper argues that this discrepancy exists because awareness is not holistic but is mainly focused on the existence of these VCT facilities rather than the importance of early detection and access to and use of antiretroviral therapy (ART) as and when necessary. With regard to students' involvement in discussions related to voluntary counselling and testing, only 44% of the respondents have ever discussed VCT. The remaining 56% have either not had any discussions on the subject (42%) or cannot remember having discussed VCT with any person or group (14%).

This distribution suggests that more efforts are needed to sensitize these students on the importance of getting involved in such a discussion. Such interactions will likely lead to awareness that might motivate an individual to undertake such activity as the study also found. As Table 3 reveals, this relationship is significant at 0.001. Of the total number of respondents who have had a discussion on VCT, 57.5% intended to undergo the test probably due to their level of awareness on the issue and the benefits derivable from such activity. This study considers 42.5% as high for respondents who although they had discussed VCT were unwilling to take the test; it may be necessary to investigate further what variables intervene between awareness and the intention not to use VCT facilities.

Table 3: Discussion about VCT and respondents' intention to undergo VCT

	Intention to undergo VCT			Total	
		Yes	No		
Discussion about VCT	Yes	Count	69	51	120
		% within discussion	57.5%	42.5%	100%
	No	Count	78	121	199
		% within discussion	39.2%	60.8%	100%
Total	Count	147	172	319	
	% within discussion	46.1%	53.9%	100%	
Significant value	0.001				

It is not surprising that 60.8% of those who have not had a discussion on VCT do not intend to undergo the test. This study states that this is in fact commendable because an individual is supposed to act on any issue only on the basis of sufficient information. Interestingly, 39.2% of respondents who have never discussed VCT signified their intention to be tested. It is possible that this category of respondents may have generated some information on VCT through other means such as the mass media and different sensitization strategies that may not necessarily have involved discussion. The benefits of undertaking VCT were clearly stated by one of the respondents in an in-depth interview:

The knowledge of your HIV status removes fear from one's mind. Before undertaking the test, there is obvious fear and wondering about

what the outcome of the test might be. If the test result indicates HIV negative, there is a whole lot of relief and mental refreshment. If the result is otherwise, you will just go and kill yourself, which is a better option, especially if the person does not have financial capacity to cater for him/herself including buying the necessary drugs.

The implication of the preceding statement is that beyond the knowledge of VCT and its importance, there is need to re-orientate these students on the availability of antiretroviral therapy (ART) which is virtually free at designated government owned medical facilities. This study however attempted to ascertain the percentage of respondents who had had a discussion on VCT and actually undertook such counselling and testing; Table 4 reveals an association at a significant value of 0.001.

Table 4: Discussion about and respondents' actual involvement in VCT

	Undergone VCT			Total	
		Yes	No		
Discussion on VCT	Yes	Count	44	117	161
		% within discussion	27.3%	72.7%	100%
	No	Count	10	195	205
		% within discussion	4.9%	95.1%	100%
Total	Count	54	312	366	
	% within discussion	14.8%	85.2%	100%	
Significant value	0.001				

Table 4 shows that 27.3% of respondents who have had a discussion on the thematic issue underwent VCT compared with 4.9% of the respondents who had never discussed VCT but underwent such counselling and testing. The relationship between discussion and actual undertaking of VCT could further be demonstrated by the high percentage of respondents who had neither discussed VCT nor undergone counselling and testing (95.1%). Further analysis of Table 4 indicates that visible gaps still exist between discussion and respondents' undertaking of VCT. For instance, 72.7% of respondents who reported having discussed VCT still had not undertaken it.

The wide discrepancy between the intention to undergo (Table 3) and the actual undertaking of VCT (Table 4) among respondents may not be unconnected to doubts about the authenticity of the claims regarding confidentiality. It is interesting to note that 57.5% of those who had had a discussion on the issue intended to go for VCT while less than half of that

percentage (27.3%) actually went for the exercise. One respondent expressed his views thus during an in-depth interview:

I feel VCT is open and its confidentiality is not really guaranteed. In the first place, everybody would know you are going for the test and they will keep asking questions because they want to know your status. They might even go as far as finding out test result from the staff in the clinic.

As a result, some students who are fully aware of the importance of knowing their HIV status prefer not to undergo VCT than face the stigma that may arise from the publicizing of their test results. Over-confidence in being HIV-negative is another reason why some students who are aware of VCT refuse to participate in it. For instance, one of those interviewed commented:

I know I do not have HIV; undergoing the test is unnecessary. Moreover, HIV does not jump into people just like that; it is rather a function of attitudes. I feel I am very healthy and undergoing VCT is for people who are not sure of themselves.

The negative implication of such a notion cannot be overstated. This study argues that the perception expressed by the above interviewee is not only subjective but also can undermine the importance of VCT. Moreover, the fact that HIV has several modes of transmission suggests that being certain about one's status may be misleading unless VCT has taken place. Another respondent who would rather not go for VCT for fear of testing positive noted:

I do not need to undergo such testing to know my status... I cannot afford to bear the cost of being HIV positive.

Dealing with the issues raised by these respondents is critical to achieving attitudinal and behavioural change towards VCT. Therefore, recommendations that target inherent factors affecting perception, attitude and behaviour among young people and in particular university students would go a long way to re-sensitizing this vulnerable group. For instance, mechanisms should be put in place to ensure that VCT is really voluntary and confidential with stiff penalties for any infractions. In addition, increased awareness of the efficacy of ART for the effective management of HIV/AIDS will increase the rate of VCT among the general population and students in particular. Mass training of students that have undergone VCT, to later serve as peer educators, should be undertaken as a means of promoting awareness of VCT, given the role of peer influence in reshaping attitudes and behaviour.

Discussion

Although a substantial number of respondents reported an awareness of VCT and an intention to be involved in the exercise, a much lower percentage had actually undergone such counselling and testing. The discrepancy between knowledge, intention and behaviour was a function of several interacting factors that discouraged individuals from undergoing VCT. This gap would have been less visible in situations where emphasis is placed on value-expectancy with a clear recognition of the reality of susceptibility especially among young people who are classified as one of the most vulnerable groups in HIV/AIDS literature (Shokunbi *et al.*, 2006; Juarez and LeGrand, 2005; Smith, 2004), the importance of early HIV-detection and pathways to management of the virus.

This negative association between awareness and action will persist, unless VCT facilities show genuine and demonstrable competence in terms of professional skills and equipment, mainly because knowledgeable (VCT related) individuals would prefer not to undergo a test whose result may be invalidated by inadequacies. As a result, many people do not use VCT services (Adewole and Lawoyin, 2004), despite the fact that it is a cost-effective mechanism for preventing HIV transmission (Adejuwon *et al.*, 2008). The latter assertion will, however, be valid in situations where respondents are not only aware of the existence of VCT facilities but also the intricate issues surrounding the exercise. For instance, prospective VCT-facility clients may be discouraged from undergoing counselling and testing on realization of the unreliability of testing kits and the likely non-confidentiality of their test results. Not only could both serve as a disincentive for participation, but they could also act collectively to precipitate misplaced stigma and discrimination assuming that these concepts are acceptable in HIV/AIDS discourse.

This study argues that the critical role of an ethically approved VCT-process in empowering people to participate in counselling and testing cannot be overemphasized. For the most part, it concretizes the validity and reliability of test results and that way discourages falsity that may support inconsistency in behaviour. The danger of acting on the basis of falsehood related to HIV test results is that individuals may begin to act in a manner that depicts their purported false-status. While it may be argued in some quarters that the client is expected to exercise caution in sexual activities and other activities that are linked to HIV transmission despite the client's leaning on the HIV-status divide, it may be a sufficiently discouraging factor in future participation in similar activity even in situations where it is necessary.

Another finding indicated that there is a consistent positive relationship between respondents' age and undergoing VCT. This age-behaviour interaction can be explained mainly by the fact that older students are more likely to have encountered or are encountering situations that either expose them to behaviour that increases their vulnerability to the epidemic such as premarital sex,

marriage and pregnancy or activities that require VCT as a condition for applying for jobs, grants and scholarships.

Conclusion

In view of the increasing importance of voluntary counselling and testing for HIV/AIDS in effective management of the disease including ART, this study investigated students in a Nigerian university in order to understand the issues affecting participation in VCT. Factors such as the perception of not being at risk of contracting HIV, stigma and discrimination, the fear of testing positive to the virus, inaccessibility to testing facilities, non-confidentiality of results and loss of confidence in the VCT processes among others are central to students' apathy towards VCT. Consequently, even when knowledge of these facilities and their importance is obvious, undergoing VCT is still undermined by these real and imagined inadequacies, thus leading to a mismatch between awareness and action.

This study argues quite forcefully that campaigns geared towards the reduction of HIV/AIDS prevalence in Nigeria will achieve the desired goal only when young people and tertiary school students in particular are made an integral component of intervention programmes. It is therefore strongly suggested that efforts should not be spared to repackage and deliver VCT services in such a manner that it becomes not only attractive but also inherently persuasive. This will make it possible to change perceptions and attitudes that have hitherto undermined the use of available facilities by university students classified among the most vulnerable groups in Nigeria.

References

- Adewole, D. and Lawoyin, T. 2004. Characteristics of volunteers and non-volunteers for voluntary counseling and testing among male undergraduate students. *African Journal of Med. and Medical Sciences*, 33(2):165-170.
- Adewole, I. F.; Odutolu, O. and Sagay, A. S. 2006. "Prevention of mother to child transmission of HIV". In O. Adeyi; P. J. Kanki; O. Odutola and J. A. Idoko eds. *Aids in Nigeria: A Nation on the threshold*. Harvard Center for Population and Development Studies.
- Ajuwon, A. J.; Titiloye, M. A; and Oshiname, F. O. 2008. "Effects of peer education on use of voluntary counseling and testing for HIV among young persons in Ibadan, Nigeria." *Findings of a collaborative research of the Department of Health Promotion and Education, College of Medicine, University of Ibadan, Nigeria and the Joint Clinical and Research Center, Kampala, Uganda*.
- Ajuwon, A. J.; McFarland, W.; Hudes, E. S.; Adedapo, S.; Okikiolu, T. and Lurie, P. 2002. "HIV-related behaviour, sexual coercion and implications for prevention strategies among female apprentice tailors, Ibadan, Nigeria". *AIDS and Behaviour*, vol (6) 3: 229-235.

- Ajzen, I. and Fishbein, M. *Theory of Planned Behaviour/Reasoned Action*. Accessed on April 3, 2008. http://www.tcw.utwente.nl/theorieenoverzicht/Theory%20clusters/Health%20Communication/theory_planned_behavior.doc/
- Avert. 2005. *HIV/AIDS in Nigeria*. Retrieved February 26, 2005. <http://www.avert.org/hiv/aidsinnigeria/>
- Barnett, T. and Whiteside, A. 1999. "HIV/AIDS and Development: Case studies and a conceptual Framework". *European Journal of Development Research*, 11(2).
- Becker, M. H. 1974. *The Health Belief Model and Personnel Health Behaviour*. San Francisco: Society for Public Health Education, Inc.
- Community Life Project (CLP). 2001. *Community Level Health Interventions against HIV/AIDS from a Gender Perspective*. Lagos.
- Enosolease, M. and Offor, E. 2005. "Acceptance rate of HIV testing among Women seeking induced Abortion in Benin City, Nigeria". *African Journal of Reproductive Health*. 8(2): 86-90.
- Federal Ministry of Health (FMOH). 2002. *HIV/AIDS: What it means for Nigeria (Background, Projections, Impact, Interventions, and Policy)*. First edition.
- Hammarckjolo, M. 2002. "HIV/AIDS: Is the Worst yet to Come?" In SIDA Studies No. 7, *One Step Further – Response to HIV/AIDS*. 180-204.
- Isiugo-Abanihe, U.C. 2005. "Sociocultural aspects of HIV/AIDS infection in Nigeria", *African Journal of Medicine and Medical Science*, 34: 45-55
- Kanki, P. J. and Adeyi, O. 2006. "Introduction". In O. Adeyi; P.J. Kanki; O. Odutola and J.A. Idoko (eds.), *AIDS in Nigeria: A Nation on the threshold*. Harvard Center for Population and Development Studies.
- Lamprey, P. 2002. "Facing the HIV/AIDS pandemic". *Population Bulletin*. Vol. 57. No.3
- LeGrand, T. and Juarez, F. 2005. "Factors influencing boys' age at first intercourse and condom use in the shantytowns of Recife, Brazil". *Studies in Family Planning*, 36(1):57-70.
- National HIV Seroprevalence Sentinel Survey: Process and Findings, 2005.
- National Population Commission (NPC) Nigeria and ORC Macro. 2004. *Nigeria Demographic and Health Survey 2003*. Calverton Maryland.
- Odutolu, O.; Ahonsi, B. A.; Gboun, M. and Jolayemi, O. M. 2006. "The national response to HIV/AIDS". In O. Adeyi; P.J. Kanki; O. Odutola and J.A. Idoko eds. *Aids in Nigeria: A Nation on the threshold*. Harvard Center for Population and Development Studies.
- Population Reference Bureau. *The 2005 World Population Data Sheet*.
- Population Reference Bureau. *The 2009 World Population Data Sheet and summary report*: www.prb.org/Publications/DataSheets/2009/2009wpds.aspx. accessed August 28, 2009.

- Quinn, T. 1992. "Screening for HIV Infection: Benefits and Loss". *England Journal Med.* (327): 486-488.
- Rosenstock, I. 1966. Why People Use Health Services. *Milbank Memorial Fund Quarterly*, 44. July.
- Sesay, A. 2003. "The African Child and Youth and HIV/AIDS: Our Tragedy, Our Future". *Codesria Bulletin*. Special Issue 2, 3 & 4.
- Shokunbi, W. A.; Ajuwon, A. J. and Omole, G. T. 2006. "Questions young persons in Nigeria frequently ask about HIV/AIDS". Developed with grant support from MacArthur Foundation.
- Smith, D. J. 2004. "Premarital sex, procreation, and HIV risk in Nigeria". *Studies in Family Planning*, 35(4):223-235.
- Sweat, M; Gregorich, S. 2000. "Cost effectiveness of VCT in reducing sexual transmission of HIV in Kenya and Tanzania". *LANCET*, (356): 113-121.
- Taylor, S.; Pelow, L. and Sears, D. 2006. *Social Psychology*, 12th ed. USA, Pearson Education.
- UNAIDS. 1999. "Knowledge is Power: Voluntary HIV Counseling and Testing in Uganda". *Joint United Nations Programme on HIV/AIDS*, Geneva.
- UNAIDS. 2000. "Voluntary Counseling and Testing". *Joint United Nations Programme on HIV/AIDS: Technical Update*, Geneva.
- UNAIDS. 2001. "Consultation on STD Intervention for Preventing HIV: What is the evidence?" Geneva. <http://www.unaids.org/publications/documents/general/consultSTD E. pdf>, Accessed Oct. 4, 2006.
- UNAIDS. 2004. Report on the Global HIV/AIDS Epidemic. Geneva. <http://www.unaids.org/region/subsaharanafrica/contents.pdf/>. Accessed Feb. 26, 2006.
- UNAIDS. 2005. Report on the Global HIV/AIDS Epidemic. Geneva. <http://www.unaids.org/region/subsaharanafrica/contents.pdf/>. Accessed Feb. 26, 2006.
- World Health Organization (WHO). 1999. *Guidelines for Sexually Transmitted Infections Surveillance*. Geneva.
- World Health Organization (WHO). 2000. *WHO HIV/AIDS information*. Geneva. <http://www.who.org/regions/subsaharanafrica/contents.pdf/> Accessed Feb. 26, 2006.
- World Health Organization (WHO). 2001. *Prevention of Mother-to-Child Transmission of HIV: Selection and Use of Nevirapine*. Geneva