

Knowledge and Acceptance of HIV/AIDS and Voluntary Counseling and Testing among Secondary School Students in Orlu, Imo State, Nigeria

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Abstract

Voluntary HIV Counseling and Testing (VCT) is a process by which an individual undergoes counseling to enable him or her to make informed choices about being tested for HIV. This study was conducted to assess knowledge and acceptance of HIV/AIDS and voluntary counseling and testing (VCT) among secondary school students in Orlu, Imo State, Nigeria. The study adopted descriptive survey design a sample size of 300. Data collection was by the use of questionnaire and analyzed using percentage and presented using tables. The findings showed that all the respondents (100%) have heard of HIV/AIDS with few respondents (35.4%) stating their schools as source of information, other stated sources were their peers (20%) television and radio (17%). They respondents possess a high knowledge of HIV/AIDS and VCT. Majority (66%) of the respondents correctly identified HIV as the virus that causes AIDS, 66.7% of the respondents correctly identified AIDS as an acronym for Acquired Immune Deficiency Virus. Majority (75%) of the respondents were aware of HIV voluntary counseling and testing (VCT) but majority (85%) fail to undergo the HIV test as a result of a myriad of factors including fear of a positive test result, afraid of stigma and discrimination from employers, friends, and even family. It was recommended that there should be integration of HIV counseling and testing services into other healthcare services by all public health facilities and encourage private health facilities to follow suite. This will increase the chances of contact of the youth with HIV counseling and testing services. Also government should put in place measures to protect the rights of people living with HIV/AIDS (PLWHA) e.g., laws to protect HIV positive from losing their jobs. Also, implementation of schedule routine HIV counseling and testing (yearly) as part of the school health services was also recommended.

Keywords: Knowledge; Acceptance; Human immunodeficiency virus; Acquired immune deficiency syndrome; Voluntary counseling and testing

Introduction

Acquired immunodeficiency syndrome (AIDS) was first recognized in the United States in the summer of 1981. In 1983, human immunodeficiency virus (HIV) was isolated from a patient with lymphadenopathy, and by 1984 it was demonstrated clearly to be the causative agent of AIDS [1]. Today, HIV/AIDS has become an infection of great epidemiological concern all over the world [2]. AIDS has killed over 25 million people since it was first recognized in 1981, making it one of the most destructive epidemics in recorded history. According to a report by the Joint United Nations program on AIDS (UNAIDS) in; sub-Saharan African is the worst hit region in the world with about 24.5 million people living with the virus [3]. Nigeria has the third-largest number of people living with HIV in the world amounting to 2.9 million. Infection levels vary radically across this large country from 1.3% in the south west to 4.9% in Northern and central states [3].

About one in four persons in the world are adolescents. The world health organization (WHO) for statistical purpose defined "adolescent" as those persons between the age of 10 and 19 years [4]. The

adolescents are mostly seen in secondary schools. Among the problems adolescents/secondary school student's face is the risk of HIV/AIDS; with adolescents accounting for 45% of all new HIV infection each year [3].

One of the numerous strategies developed to combat the epidemic is HIV counseling and testing. HIV counseling and testing is often referred to as the gateway to HIV prevention; care to increase the coverage of services around HIV/AIDS. The most widely implemented model of HIV counseling and testing (HCT) is generally referred to as voluntary counseling and testing (VCT), where young Person's specifically seek the HIV test [4]. The reported number of health facilities providing HIV counseling and testing increase to 95,300 in 2008 (119 countries), up from 30,500 in 2007 (81 countries) and 21,900 in 2006 (52 countries). In Nigeria, there were about 736 facilities with HIV counseling and testing in 2007, this increased to 897 in 2008 [5]. Despite these reported increase in the availability of HIV counseling and testing centers, knowledge of HIV status remains inadequate as revealed by the study conducted by Abubarkar et al. [6].

A closer look into the burden of the HIV/AIDS epidemic on adolescents reveals that their number is about a quarter of the world population, yet contributes nearly half of all new cases of HIV infection each year [4]. Since adolescents account for such a larger proportion of the population, it is only reasonable that issues bordering on this age group be taken seriously. Certain factors such as

early sexual debts, inaccurate information about the disease are risk factors for this age group. For instance, in Nigeria, the median age at first sex was estimated as 19 years among males and 18 years among females and it is much lower in the north, as low as 16 years [2]. Only about 23% of young people between 15 and 24 years old have a comprehensive knowledge about HIV/AIDS. Other risk factors include unprotected sex, multiple sex partners, and inadequate sex education.

There are correlations between the incidence of HIV infection and voluntary counseling and testing [7]. This is based on the fact that VCT provides a risk factor assessment, knowledge of HIV status and counseling on how to cope with the result. With accurate knowledge of how to prevent the infection, an individual can adopt healthier lifestyles. On the strength of the fore-going and the high incidence of HIV among adolescent, the researcher is motivated to investigate on the knowledge and acceptance of HIV counseling and testing among secondary school students in Orlu, Imo State.

Materials and Methods

The study adopted a non-experimental design and was conducted on secondary school students in Orlu, Imo State. Orlu Local Government Area is one of the 27 L.G.As of Imo State. The L.G.A. came into existence in 1976 with its headquarters in Amaifeke Community. Orlu is located about 39 Kilometers South of the Imo State capital, Owerri. The L.G.A. has the following boundaries: on the North it is bounded by Ideato, on the South by Nkwere, on the East, Isu L.G.A. and on the West, by Orsu L.G.A of Imo State and Ihiala L.G.A. of Anambra State. Orlu L.G.A covers an approximately area of 202 square kilometers, with a population of almost 220,000. The people of Orlu are settled in well-defined groups called autonomous communities (e.g., Amaifeke, Umuna, Owerre-Ebeiri, Ihioma, Umuowa, Umutanze, Okporo etc.).

There are 53 secondary schools in the area with a total of about 21,569 students. The target population was 1,212 which consist of all the SS1, SS2 and SS3 secondary school students in Urban Secondary School, Umuna; Community Secondary School, Owerre-Ebeiri; Girls Secondary School, Ihioma and St. Joseph Secondary School, Umuna in Orlu, Imo State, Nigeria. Sample size of this research was gotten through the use of Taro Yamane Formular which resulted to 300, simple random sampling technique was adopted for the study.

A self-designed and self-administered questionnaire was used to elicit responses from the respondents. Data generated from the instrument were tailed and converted to percentages. They were presented in frequency (Tables 1-6).

Socio-demographic variables	Responses	Percentage (%)
Sex		
Male	102	34
Female	198	66
Religion		
Christianity	278	93
Islamic	22	7
Traditional religion	-	-
Class/Level of Study		

Senior secondary one (SS1)	76	25.3
Senior secondary two (SS2)	106	35.3
Senior secondary three (SS3)	118	39.4
Ethnicity		
Hausa	12	4
Ibo	250	83
Yoruba	38	13

Table 1: Socio-demographic data of respondents showing sex, religion, class and ethnicity.

Results

The demographic characteristics showed that 34% of the respondents were males while 66% were females. Majority (93%) of the respondents were Christians, 39.4% and 35.3% were in SS3 and SS2 respectively. Most of respondents (83%) were mainly Ibos.

Research question 1: What is the knowledge of HIV/AIDS and VCT among secondary school students in Orlu, Imo State, Nigeria?

Options	Frequency	Percentage (%)
Awareness of HIV/AIDS		
Yes	300	100
No	0	-
Sources of information		
School	106	35.4
Church	28	9.3
Radio and television	51	17
Peers	60	20
Parents and relatives	5	1.7
Health institutions	40	13.3
Others (books, journals, magazine etc.)	10	3.3
NB: Principal source		

Table 2: Awareness versus first source of information on HIV/AIDS.

Awareness of HIV/AIDS showed that all the respondents have heard of HIV/AIDS with majority (35.4%) stating their school as first source of their information. Very few (13.3%) of the students stated health institutions as well as the church (9.3%) as their first source of information.

Respondents' knowledge of HIV/AIDS revealed that majority (66%) of them correctly identified HIV as the virus that causes AIDS. Also majority (66.7%) of the respondents correctly identified AIDS as an acronym for Acquired Immune Deficiency Virus. A few of the respondents (1.7%) wrongly stated that AIDS is the virus that causes HIV.

Knowledge of HIV/AIDS	Frequency	Percentage (%)
Meaning of HIV/AIDS and causative organisms		
HIV is the acronym for human immunodeficiency virus	190	63.3
AIDS is the virus that causes HIV	5	1.7
HIV is the virus that causes AIDS	198	66
AIDS is an acronym for acquired immune deficiency syndrome	200	66.7
Transmission of HIV		
Sharing a meal with an infected person	30	10
Touching an infected person/ shaking hands	50	16.7
Sharing infectious needle/syringe with an infected person	180	60
Mosquito bites	100	33.3
Sharing toilets with others	5	1.7
For an infected mother to her unborn child	300	100
Sexual intercourse with an infected person	300	100
Treatment for HIV/AIDS		
HIV cannot be cured	300	100
No treatment whatsoever is available	40	13.3
HIV vaccination is available	0	0
Treatment allows infected persons live normal lives	300	100
NB: Multiple responses		

Table 3: Respondents' knowledge of HIV/AIDS.

Awareness of VCT	Frequency	Percentage (%)
Yes	225	75
No	75	21
Source of information		
Parents and relatives	4	1.8
School	66	29.3
Mass media	34	15.1
Peers	13	5.8
Church	22	9.8
Health workers	86	38.2

Table 4: Respondents' awareness of VCT and sources of information.

All the respondents identified sexual intercourse with an infected person, and also through an infected mother to unborn child as sources of transmission of HIV/AIDS. Sixty percent identified sharing infectious needle syringe with an infected person and 33.3% noted mosquito bites as source of transmission of HIV/AIDS. Very few respondents 16.7% opined that HIV is transmitted by touching of an

infected person/shaking hands. However, 10% and 1.7% of the respondents identified sharing a meal with an infected person and sharing toilet with an infected person as ways by which HIV/AIDS could be transmitted.

All the respondents indicated that HIV/AIDS cannot be cured and also that treatment that allows positive persons to live a normal life. Very few (13.3%) of the respondents were of the view that no treatment whatsoever is available for HIV. None of the respondents indicated that HIV vaccination is available.

Reasons for seeking VCT	Frequency	Percentage (%)
To know one's status	300	100
To prevent the spread of the infection	212	70.7
To begin treatment as early as possible	220	73.3
If a person wants to get married	176	58.7
If a person is sick	253	84.3

Table 5: Respondents' knowledge on reasons for seeking VCT.

Awareness of VCT and source of information revealed that majority (75%) of them were aware of HIV voluntary counseling and testing

(VCT). Out of 225 (75%) of the respondents that have heard of VCT, majority (38.2%) received the information from health workers, 29.3% got theirs from their school. Very few (15.1%) got their information from mass media.

NB: Multiple responses

Respondents’ knowledge on reasons for seeking VCT revealed that all agreed that a student may undergo VCT to know their status. Majority (84.3%) indicated that the reason for seeking VCT is when a person is sick. Also, majority (73.3% and 70.7%) indicated that the reason for seeking for VCT to begin treatment as early as possible and to prevent spreading the infection to others respectively (Table 7).

Reasons for not having done HIV test	Frequency	Percentage (%)
Fear of a positive test result	255	100
Afraid of stigma and discrimination	225	88.2
It has no cure anyway	195	76.5
Treatment is costly and not readily available	225	88.2
I don't care to know	180	70.6
Can't have HIV infection	57	22.4
I am not worried about dying from AIDS related illness since one could die from accident or any other illness	38	14.9
HIV does not exist	20	7.8
NB: Multiple Responses		

Table 7: Responses on barriers to HIV test.

Respondents’ acceptance of HIV test revealed that most of the respondents (85%) have not gone for HIV test before, only a few (15%) of the respondents had undergone the test previously.

Barriers to HIV voluntary counselling and testing revealed that out of the 255 respondents who had never had HIV test, all of them (100%) stated their reasons for not having had the test include fear of a positive result and stigma as well as discrimination to those with HIV/AIDS. Majority 88.2% have their reasons as the treatment is costly and not readily available. More than seventy percent (76.5%) affirmed that it has no cure whereas 70.6% of the students don't care to know their HIV status. Few (22.4%) believed that they can't have the infection while 14.9% are not worried about dying from the infection since one could die from accident and other illness. Also, 7.8% believed that HIV does not exist so there is no need going for HIV test.

Discussion

Knowledge of HIV/AIDs and voluntary counseling and testing

Knowledge about HIV and AIDS is the initial step required in order for one to consider going for VCT. The study revealed that all students are aware of HIV/AIDS. For most participants, the schools as well as their peers were the primary sources of HIV and AIDS. Similar to other studies, such as the study by Grant, schools appear to play a central role in the dissemination of HIV/AIDS information [8]. This is indicated in the findings of the study in which 45.6% of the students as

Research question 2: What are the barriers to HIV Voluntary Counseling and Testing among secondary school students in Orlu, Imo State?

Have you ever tested for HIV	Frequency	Percentage (%)
Yes	45	15
No	255	85
Total	300	100

Table 6: Respondents’ acceptance of HIV test.

compared to 25.6% of those that were not at school acknowledge that they had a “great chance” of contracting the HIV virus. The family contributed very little (10.7%) as a source of HIV/AIDS information by the students in this study, as there were concerns regarding possibility of being misunderstood (either as being sexually active or living with HIV).

Coupled with high awareness on HIV/AIDS, this study found that the participants possessed extensive knowledge regarding HIV transmission and treatment. Sexual transmission as well as mother-to-child transmission was mentioned by all the students as common mode of HIV transmission. Other modes of HIV transmission as indicated by the participants include blood and blood contacts through barbing saloon, pedicure/manicure, intravenous drug use, tattooing, circumcision as well as through blood transfusion. This high level of knowledge about HIV and AIDS among adolescents is confirmed by findings of earlier studies conducted by Pettifor et al. [9] and in Malawi by Mwale [10]. Secondary school students especially SS2 and SS3 have high knowledge of 95% and 99% respectively. In addition, in earlier studies, sexual transmission of HIV was also considered the major mode of HIV transmission by students [11].

The study also revealed that students possess high knowledge about VCT as well as its benefits. Participants in a study by Anderson and George acknowledge the role played by VCT in preventing the spread of HIV, facilitating timely access to antiretroviral treatment as well as enabling people living with HIV an opportunity to live positively, thereby prolonging their lives. In addition getting married as well as

having multiple partners was mentioned as major reasons for seeking the test.

However, like earlier studies on adolescents and VCT, such as those conducted by Mwale and Francis, these studies found that the high levels of knowledge about VCT and its benefits did not translate to actual HIV testing. Information alone is not sufficient to enable an individual react to the specific health-related behavior change [9,12].

Acceptance and barriers to HIV voluntary counseling and testing

Seeking preventive behavior especially VCT is not dependent on information alone. A myriad of factors would encourage secondary school students to adopt this behavior skill. Majority (85%) of the participants had never done HIV test before. This finding is not surprising considering the social implications of a positive HIV test. People who are HIV positive may face considerable stigma and discrimination from employers, friends and even family. This finding agrees with those from a previous study by Joseph, which reported that greater number (66.7%) of the youths had never undergone VCT before [13]. Some reasons for poor uptake of VCT in this study includes fear of positive test result, stigma and discrimination of treatment and unavailability of drugs as well as the fact that it has no cure. Other reasons the participant stated is that they don't care and some believe they can't be infected with the virus while some believed that HIV does not exist and that they are not worried about dying from AIDS related illnesses since one could die from accident/illness. The above finding again agrees with the study done by Joseph where the participant reported that fear of a positive result as well as stigma and discrimination made them not to take the test.

Conclusion

This study shows that knowledge of HIV/AIDS and VCT does not translate to actually taking the test. Removing fear and discouraging stigma as well as discrimination against people with the disease could improve the uptake of HIV test by the youths.

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