

HIV testing among youths in a Nigerian local population

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Summary

Background: Voluntary HIV testing enables infected individuals to access treatment early and adopt safe sexual practices. Young people aged 15-29 have the highest prevalence of HIV in Nigeria¹. Yet most of them remain untested.

Objectives: To determine the attitude of youths to voluntary HIV testing and examine various factors that can influence it.

Methodology: Multi-staged sampling method was used to choose 400 youths aged between 15 and 29yrs in Sagamu and data was collected from them. Three hundred and ninety three (393) well filled questionnaires were analysed.

Result: Male to female ratio was 1:1 (196males, 197 females). Of the 393 respondents, 309 (78.6%) had a positive attitude to HIV testing. Seventy-eight (19.8%) indicated that they were aware of Voluntary Counselling and Confidential Testing. Forty-five respondents (11.5%) had been tested for HIV before. Of the 45 previously tested respondents, 10 (22.2%) went for voluntary HIV test. The major reasons given for not having been tested were: 166 (47.6%) believed that they couldn't have HIV, 60 (17.4%) indicated it had not occurred to them to be tested, 38 (10.9%) had no time while 27 (7.9%) feared the stigma attached to HIV. Of the 348 who had never been tested, 237 (68.2%) would like to do it but if it were free, 278 (79.9%) of the respondents would do it. Single youths, those with at least secondary school education and youths who knew someone with HIV were more likely to desire an HIV test ($p < 0.05$). Youths who were willing to care for people living with HIV/AIDS were more willing to be tested (70.5%) compared with those who were not (65.0%).

Conclusion: Majority of the youths have a positive attitude to HIV testing.

Key-words: HIV, Voluntary testing, Nigerian Youths.

Résumé

Introduction: Test du dépistage volontaire du VIH permet aux individus infectés d'avoir accès au traitement précoce et d'adopter des pratiques sexuelles. Les jeunes âgés de 15 – 29 ont la prévalence du VIH la plus élevée au Nigéria. Malheureusement, la plupart d'eux restent non prouvés.

Objectifs: Décider le comportement des jeunes face au test du dépistage volontaire de VIH et étudier des facteurs

divers qui peuvent l'influencer.

Méthodologie: La méthode d'échantillonnage multi-étape était utilisée pour choisir 400 jeunes âgés entre 15 – 29 ans à Sagamu et leur données ont été recueillies. Trois cents quatre-vingt-treize questionnaires bien remplis ont été recueillies. Trois cents quatre-vingt-treize questionnaires bien remplis ont été analysés.

Résultats: Proportion sexe masculin et sexe féminin était 1:1 (196 sexe masculin, 197 sexe féminin). Parmi les 393 personnes sondées, 309 soit 78,6% avaient une attitude positive face au dépistage pour le VIH. Soixante-dix-huit soit 19,8% ont fait savoir qu'ils avaient connaissance de l'activité de conseil volontaire et épreuve confidentielle. Quarante-cinq personnes interrogées soit 11,5% ont été eu le test du dépistage pour le VIH avant. Parmi les 45 répondants précédemment examinés, 10 soit 22,2% ont accepté test du dépistage volontaire pour le VIH. Des raisons les plus importantes pour n'avoir pas été subi le test du dépistage du SIDA étaient: 166 soit 47,6% croyaient qu'ils ne pouvaient pas avoir le VIH, 60 soit 17,4% disaient qu'ils ne leur est pas, venue à l'esprit de subir le test du dépistage du SIDA, 38 soit 10,9% n'avaient pas le temps tandis que 27 soit 7,9% avaient peur de la honte liée au VIH. Parmi les 348 qui n'avaient pas subi au test du dépistage du SIDA, 237 soit 68,2% voudraient le faire dans le cas où le test est gratuit, 278 soit 79,9% des sondés voulaient le faire. Des jeunes célibataires, ceux avec enseignement secondaire du moins et des jeunes qui connaissent quelqu'un atteint du VIH sont plus vraisemblable en faveur pour le test du dépistage du SIDA ($P < 0,05$). Des jeunes qui sont disposés à soigner les individus atteints du VIH/SIDA sont plus prêt à subir le test du dépistage du SIDA (70,5%) par rapport aux ceux qui ne sont pas (65,0%).

Conclusion: La plus grande partie des jeunes avaient une attitude positive à l'égard du test du dépistage du VIH.

Introduction

Globally, more than 50% of new HIV infections occur among young people aged 15 to 24years². A young person is infected every 14seconds and about 6000 young people are infected everyday³. In Nigeria, the first case of AIDS was reported in 1986 and the disease has since grown to epidemic proportions. Presently more than 3 million Nigerians are living with the virus and the highest rate of infection occurs among youths aged 15 to 24years, the susceptibility increases till 29years of age¹. The main

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mode of HIV transmission in Nigeria is heterosexual¹. Several studies have shown that high-risk sexual practices such as sexual activity at an early age, unprotected sex and multiple sexual partners are common among young people^{4,6}. However, young people are more likely to adopt and maintain safe sexual practices than older people who are already set in their ways⁶. Therefore, it has been suggested that reducing infection among young people will ultimately result in fewer infections among all age groups⁶.

Voluntary HIV testing serves as a gateway to care and prevention. Early detection of HIV positive status would not only enable early institution of antiretroviral therapy, it would encourage adoption of safer sexual practices by infected people who otherwise would have been spreading the disease unknowingly⁷ and it could be a strong motivator to adopt safer sexual practices by those who are negative⁸. For HIV testing to be an effective strategy in HIV control, it must be widely accepted by majority of the target group.

Most of the attitude and acceptability studies of HIV testing conducted among Nigerians have been among adults and were usually hospital based^{9,11}. Although a study assessed the acceptability of HIV test among male University undergraduates¹², the result of the study cannot stand proxy for the opinion of the average Nigerian youth who may not be as well educated. This community-based study therefore assessed the awareness and attitude of youths to voluntary HIV testing and examined the factors that may influence its acceptance by the group.

Methodology

The study is a descriptive cross sectional study that was conducted in Sagamu town between the months of April and May, 2004. Sagamu is a suburban town and the local government headquarters of Sagamu local government area, Ogun State. People of the Yoruba tribe mainly inhabit it although people from other tribes also live there. The major occupations of the people are farming and trading (especially in kolanut). Private and public health institutions as well as local traditional healers provide health care for the people. While VCCT services were available at no cost at the Teaching Hospital (under a special HIV project), and at a subsidised price of N300 (\$2.22) at a Youth Centre (Sagamu Community Centre), the cost of HIV testing ranged from N700 (\$5) to N1000 (\$7.14) at the laboratories.

Young people aged 15-29years was the study population. The sample size for the study population was determined using the formula, $n = z^2pq/d^2$, where z is 1.96 at 95% confidence interval, p is an assumed prevalence of 50% and d is the tolerable standard error. The calculated minimum sample size was 384. The figure was rounded up to 400. The town is made up of 11 wards. Five wards (5) were randomly selected out of the 11 wards in Sagamu.

Two streets were chosen from each ward and forty questionnaires were administered on each street (20 males and 20 females). The 5th year medical students were trained as interviewers to assist with data gathering. Structured questionnaire was used to gather information about the demographic characteristics of the respondents, their sexual practices, history of testing for HIV, awareness and beliefs about voluntary HIV testing. Some factors that may influence acceptance of HIV testing among youths were examined and willingness to test was also examined in the context of their sexual practices.

The questionnaires were analysed using Statistical Package for Social Sciences version 10. Seven questionnaires were discarded because they were incompletely filled. The results are presented as frequency tables and percentages. Chi-square was used to assess the influence of various factors on the attitude of the youths to HIV testing. P value less than 0.05 was accepted as being statistically significant.

Results

Table 1 shows that 393 respondents were involved in the study (196males, 197 females). Ninety seven percent (97.3%) were below 25yrs of age. Eighty-eight percent (87.8%) were single, 12% were married. Sixty eight percent were Christians while 31% were Muslims. Seventy seven percent (76.8%) had at least secondary school education; only 8.9% had no formal education.

Forty-five respondents (11.5%) indicated that they had been tested for HIV before. There was no gender difference in history of testing for HIV ($p > 0.05$). Of those that had been tested, 28% were tested while they were sick, 18.8% just wanted to check, 9.4% for blood transfusion/donation, 9.4% during pregnancy and 5.4% had premarital HIV screening. More than half (53.3%) of those that had been tested had it at the teaching hospital, 22.2% at private clinic, 11.1% at private laboratory and 8.9% at Sagamu Community Centre (an NGO in Sagamu that work with youths). Among those that had not done the test, the various reasons given for not taking the test included belief that they couldn't have HIV (47.6%), it had not occurred to them (17.4%), 10.9% said they had no time while 7.9% feared having the virus and the stigma attached to the disease. Other reasons were; they were not asked to do it, fear of being pricked with a needle, not knowing it was important.

Almost 80% felt it was advantageous to know their HIV status but only 25.6% could cite a specific reason for the test. Although 78 respondents (19.8%) indicated that they had heard about Voluntary Counselling and Confidential Testing (VCCT) before, only 6 (13.3%) indicated that it involved both counselling and confidentiality. Of the 78 respondents who had heard about VCCT, 57.7% could correctly name a VCCT centre in the town. Some had misconception about HIV testing such as forceful detention of those who are sero-positive in the hospital till they die. After the interviewer explained

Table 1 Socio-demographic characteristics of respondents

Variable	Males N-196		Females N-197		Total 393	
	N	%	N	%	N	%
Age (yrs)						
15-19	75	38.3	84	42.6	159	40.5
20-24	119	60.7	105	53.3	224	57.0
>25	2	1.0	8	4.1	10	2.5
Marital Status						
Single	181	92.3	164	83.2	345	87.2
Married	15	7.7	32	16.2	47	12.0
Separated/Widowed	-	-	1	0.5	1	0.2
Religion						
Christianity	130	66.3	140	71.3	269	68.4
Islam	65	33.2	55	27.7	121	30.8
TraditionalWorshippers	1	0.5	2	0.1	3	0.8
Tribe						
Yoruba	153	77.3	174	88.4	327	83.2
Ibo	37	19.7	15	7.6	53	13.5
Hausa	3	1.5	5	2.5	8	2.0
Others	3	1.5	3	1.5	5	1.3
Educational Status						
None	20	10.2	15	7.6	35	8.9
Primary	33	16.2	21	10.7	54	13.7
Secondary	116	59.2	121	61.4	237	60.3
Tertiary	27	13.8	40	20.3	67	17.4

Table 2 Attitude of respondents to HIV testing

Variable	Males N-196		Females N-197		Total N-393		P value	
	N	%	N	%	N	%		
History of HIV testing								
Yes	24	12.2	29	14.7	53	13.4	>0.05	
No	172	87.8	168	85.3	340	86.6		
df - 1,								
X ² - 0.52,								
Reasons for non testing								
No personal risk	72	41.9	90	53.6	162	47.6	>0.05	
Not occurred to me	28	16.3	31	18.5	59	17.4		
No time	18	10.5	19	11.3	37	10.9		
Fear of having HIV	10	5.8	6	3.6	16	4.7		
Stigma	9	5.2	2	1.2	11	3.2		
Don't know where to test	10	5.2	2	1.2	12	3.5		
Others	22	12.8	14	8.3	36	10.6		
Advantages of testing								
Good to know status	118	60.2	90	45.7	208	52.9		
Early treatment	14	7.1	18	9.1	32	8.1		
Protect partner/children	13	6.6	28	14.2	41	10.4		
Others	13	6.6	15	7.6	28	7.1		
None	37	18.9	39	19.8	76	19.3		
I don't know	1	0.5	7	3.6	8	2.0		

P value < 0.05 is significant

about the concept of VCCT, some of the respondents were quite sceptical that the result of HIV testing could be kept confidential.

Out of the three hundred and forty-eight (348) who had not been screened, 68.2% would like to have the test, 24.7% would not like it while 7.4% were undecided. Of the 237 who were willing to take the test, 86.1% were willing to pay for the test. Twenty six percent (26%) were willing to pay N100 (\$0.74), 8.1% would pay N101-N200 (\$0.74-\$1.48), and 22% would pay N201-N300 (\$1.48-\$2.22) while 27.8% would be willing to pay any amount. If it were free, the proportion of those who would like to do the test increased from 68.2% to 79.9%. Those who could compel them to be tested included parents (21%), spouse/partner (21%), doctor (15%), while 33.3% said nobody.

Some factors that could influence the attitude of the youths to HIV testing were examined. Although more males reported willingness to test compared to the females (71% vs. 65%) and the proportion of those who were willing to have the test increased with age, the effect of gender and age were not statistically significant. The single youths were more willing to have the test compared to the married ($p < 0.005$). Youths who had at least secondary school education were more willing to be tested compared to those who have primary school or no formal education ($p < 0.05$).

The influence of the sexual practices of the youths, their HIV risk perception, history of knowing someone who had or has HIV and their attitude to people living with HIV/AIDS on willingness to be tested were also examined. Two hundred and sixty two respondents (67%) were sexually active. Of those who were sexually active, 40% reported having multiple sexual partners in the past one-year while only 43.5% of them used condom regularly. Neither history of sexual activity, number of sexual partners or regularity of condom use among the sexually active was significantly related to their willingness to be tested ($p > 0.05$).

Despite the prevalence of high-risk sexual practices such as premarital sex, multiple sexual partners and unprotected sex among the respondents, only 8.7% felt they were at risk of HIV. Males were more likely to think so ($p < 0.05$). Though it was not statistically significant, a higher proportion of those who felt they were at risk of HIV were willing to be tested compared to those who were not (80.6% vs. 70.3%). Twenty two percent of the youths knew somebody who had HIV. Forty four percent could live with and care for somebody with HIV/AIDS. Knowing somebody with HIV was significantly related to willingness to be tested ($p < 0.05$) and those who were supportive of people who have AIDS were more willing to be tested (70.5%) compared to those who were not supportive (65%).

Discussion

Findings from this study show that majority of the youths have a positive attitude towards HIV testing. Though wide acceptability of HIV testing ranging from

70% to 96% had been reported in many hospital based studies^{9-11,13}, acceptability in most community based studies have been low^{13,14}. In Nigeria, only 8.3% of counselled male undergraduates accepted to be tested¹² while in Zambia, only 6.5% of the 4,812 respondents who were invited for HIV testing came¹⁴. Though majority of this study population expressed a positive attitude to HIV testing, only 11.5% had been tested. Even among those that had been tested, voluntary HIV testing was uncommon. The major indications for testing were medical reasons.

Various factors may contribute to the low prevalence of voluntary HIV testing among youths in this population. Awareness of VCCT among the respondents was quite low. Contrary to the finding among youths in Kenya and Uganda¹⁵, most of the youths in this study were not aware of VCCT, many could not correctly cite a VCCT centre neither did they know the specific benefits of voluntary HIV testing. It is therefore not surprising that it had not even occurred to many of them to go for voluntary testing. Even when they are aware of voluntary testing, youths may not seek testing because they place low priority on it¹⁶. In this study, almost 30% indicated that they had no time or it had not occurred to them to go for testing.

Youths who do not perceive themselves to be at risk may not accept voluntary HIV testing^{13,17}. Similar to the finding among rural villagers in Tanzania¹⁷, perceived lack of vulnerability was the major reason for non-testing given by the youths in this study. It is therefore worrisome that many of the youths with risky behaviour wrongly perceived themselves not to be at risk. In contrast to this finding, among American adolescents in a substance abuse centre, the major reasons for non-testing were fear of being under increased stress and fear of becoming suicidal¹⁶.

Concern about confidentiality and cost of testing may influence whether an individual will go for testing or not¹⁵. In Zambia, concern about confidentiality was a deterrent for people who desired testing¹⁴. It is notable that in this study, those who did not believe that the result of the test could be confidential insisted that they would not go for testing. This supports the report of Goldsmith that the belief that others would find out about the test result without their consent may prevent young people from seeking HIV test¹⁸. Cost of the test may limit access to it. Similar to the finding in Uganda, where 24% of untested youths cited cost as a reason for not seeking HIV test¹⁵, in this study, a higher proportion of the youths would be willing to be tested if the test were free and even those who were willing to pay offered to pay much less than the cost of the test in the laboratories.

In communities where HIV prevalence is low, people may not go for testing because they are not confronted with the reality of the disease. Similar to the finding of Opt and Loffredo among college students¹⁹, respondents who knew someone with HIV/AIDS were more willing to be tested. However, knowing that AIDS is real may not

be enough, youths may not go for HIV testing in environments where infected people are stigmatised, not unexpectedly youths who had a positive attitude to PLWHA were more willing to be tested compared to those who had a negative attitude. This corroborates the finding of other researchers that fear of stigmatisation and isolation may limit acceptability of HIV testing²⁰.

Unmarried youths and those with higher level of education were more willing to be tested. Some married people may fear the effect of a positive HIV status on their marriage stability¹¹. The positive influence of educational status supports the result from other studies that higher educational level positively influence acceptance of HIV testing¹⁴. Educated people may have access to factual information and thereby dispel with misconceptions surrounding HIV testing. Although it was not commonly mentioned as a hindering factor, the test would be more acceptable to some youths if it does not involve needle prick. Youths have been shown to prefer the rapid, saliva HIV antibody test to serological test^{12,21}.

In conclusion, many youths have a positive attitude to voluntary HIV testing. Willingness to test however may not result in actual uptake of the service because many youths lack adequate information about voluntary testing, many have false perception that they are not at risk of HIV or they may place low priority on the test. Low level of education, stigmatisation and the cost of the test may also hinder acceptability of the test by some youths. Therefore innovative strategies need to be put in place to translate a positive attitude to practice²².
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