

ORIGINAL ARTICLE

Characteristics of clients accessing HIV counseling and testing services in a tertiary hospital in Sagamu, Southwestern Nigeria

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Abstract

Introduction: Client-initiated HIV testing and counseling has helped millions of people learn their HIV status. Nevertheless, global coverage of HIV testing and counseling programs remains low. This study describes the characteristics of clients who accessed HIV counseling and testing (HCT) services in Olabisi Onabanjo University Teaching Hospital, (OOUTH) Sagamu.

Materials and Methods: A retrospective study of the clients accessing HCT services in OOUTH. Data was collected from clients using a client intake form. Pre-test counseling, HIV screening and post-test counseling were carried out. Informed consent and confidentiality were ensured. Data obtained were analyzed using SPSS 10.0.

Results: A total of 2607 clients accessed our HCT services between May 1st 2008 and April 30th 2010. The clients were between the ages of 1 year and 90 years. The mean age was 33.3 ± 15.26 . The median age was found to be 32.0 years, with the modal age being 30.0 years. 73.7% (1828) were non-reactive (negative result), 25.9% (643) were reactive (positive result), while 0.3% (8) were indeterminate. Among the reactive results, 9.3% (242) were males while 15.1% (394) were females.

Conclusion: A fair uptake of HCT services was noted. More females accessed services than males. More positive results were seen among females than males ($P < 0.05$).

Recommendations: Upscale of HCT services to involve Sexually transmitted infections clinics and free-standing, client-initiated testing centers is necessary. Continuous AIDS education and risk reduction should be promoted.

Key words: Counseling and testing, HIV infection, Sagamu, uptake

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Introduction

For over two decades, client-initiated HIV testing and counseling has helped millions of people know their HIV status. Nevertheless, global coverage of HIV testing and counseling programs remains low, particularly in rural areas.^[1-3] This has necessitated a global drive for increased provision of HIV testing through a wider range of effective and safe options.

In 2007, The World Health Organization (WHO) and Joint United Nations Program on HIV/AIDS (UNAIDS) issued guidance on provider-initiated HIV testing and counseling (PITC) in health facilities to increase uptake and improve access to HIV health services. HIV testing is a critical entry point to life-sustaining care for people living with HIV, and

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service delivery models need to be expanded to testing in antenatal care, sexually transmitted infection clinics, in-patient wards, as well as free-standing, client-initiated testing centers. People who test HIV negative should receive counseling on how to reduce exposure to HIV and stay negative.^[4]

There are multiple challenges to HCT. There may be limited access and this may be due to the fact that HCT is not seen as priority by policy makers, ignorance about the services and its benefits by the populace, apparent lack of evidence of reducing HIV transmission, limited technical and financial capacity to provide HCT, counselors and healthcare workers having other roles to play--therefore, limited time for HCT, and burnout (emotional exhaustion) due to non-availability of support systems for counselors. A study involving 600 youths from North-central Nigeria identified ignorance, poverty, inadequate number of HCT centers, stigma, and discrimination as major limitations to the uptake of counseling and testing services in the three senatorial districts studied.^[5] These findings are similar to those from other studies in Northern Nigeria and other parts of sub-Saharan Africa where marital disharmony, incurable nature of the disease, and the cost of treatment were also identified as limiting factors to HCT uptake.^[6,7]

HIV is highly stigmatized in most countries (visiting an HCT site is inferred as being HIV positive), social reflections (issues of confidentiality, i.e., HCT providers not trusted), and reflection by families or communities (client's or patient's family feels betrayed/humiliated when family member goes for HCT). HIV thrives in an atmosphere of secrecy; the stigma is often a barrier to care and support as well as testing services.^[8,9]

Challenges to HCT may also present due to gender inequalities. Women are increasingly at risk of HIV infection at very young ages. Nearly 52% of the global total of people living with HIV are women. In sub-Saharan Africa, 76% of the young persons (aged 15–24 years) living with HIV are female. In the same sub-region, 60% of all people living with HIV are women and girls.^[10-12] More than two and a half decades into the epidemic, gender inequality and the low state of women remain two of the principal drivers of HIV infection.^[13,14] About 53% of adolescent girls who were respondents in a study and were living in poor urban areas characterized by high risk of HIV and partner abuse indicated that they had experienced unwanted, unprotected vaginal sex. About 25% indicated that they were unable to discuss condom use with their partners.^[15] There is violence against women who access HCT without consent of their spouses, discrimination against HIV positive women who are often wrongly accused of bringing the infection into the home, and women being abused, abandoned, and divorced by husbands or disowned by family members if their HIV status becomes known.^[16,17] HIV positive people are subject to discrimination in the workplace, educational institutions, and places of worship.

HCT, however, presents with benefits to the client, the couple, and the community as a whole. It empowers the client to make informed decision to know their HIV status, empowers the uninfected person to protect himself or herself from becoming infected with HIV, assists infected persons to protect others and to live positively and seek other support services, and offers the opportunity for treatment of HIV and associated illnesses.

There are four basic HCT designs; these are stand-alone HCT, hospital-based HCT, household-member HCT, and door-to-door HCT. Previous studies have shown that the hospital-based HCT diagnosed the largest proportion of HIV infected individuals, although some other designs such as house-hold member and door-to-door HCT have a wider coverage in reaching the largest proportion of previously untested individuals.^[18] This study describes the characteristics of clients who accessed HCT services at the Department of Community Medicine and Primary Care, Olabisi Onabanjo University Teaching Hospital (OOUTH).

Inclusion criteria

All consenting clients presenting for HCT services at the community medicine counseling and testing center within the teaching hospital, between May 1st 2008 and April 30th 2010, were included in the study.

Materials and Methods

Background to study

This study was conducted in the HCT Unit situated in the Department of Community Medicine and Primary Care, OOUTH, Sagamu, Ogun State.

The OOUTH is located in Sagamu local government area in the diversely populated South-western region of Nigeria at the intersect of two major highways connecting Lagos to the north and the east of the country. The town has a population of about 253,000 by the 2006 census. Majority of this population belong to the Yoruba ethno-linguistic group dominant in Ogun state with a significant population of non-indigenes predominantly Hausa and other tribes from all over Nigeria. Major religious groups are Islam, Christianity, and traditional religion. The people's main occupation is trading in farm products and kolanuts. Sagamu is a semi-urban community with some social amenities and infrastructures like motor able roads, water supply, electricity, telecommunications, schools, and markets.

OOUTH, Sagamu, is one of the centers being supported for free access to HIV care by Institute of Human Virology Nigeria (IHVN) among others.

With the aid of a client intake form, information was collected from clients who voluntarily walked in or were

referred into the HCT room of the IHVN site at OOUTH, between May 1st 2008 and 30th April 2010.

The HCT room consists of two trained counselors and a laboratory scientist for the verification of the result. Clients' and patients' confidentiality was assured during HCT sessions. The HCT consists of the three components: the pre-testing session, the HIV screening using the rapid test, kits and the post-testing session.

Prior to the pre-testing, the consent of the client or the subject was obtained and the confidentiality of results was also assured to him or her. Information was collected on the age, sex, pre-test session type (individual, couple, or group), marital status, education, pregnancy status of client, number of children alive, how client got to know of the HCT services, and main reasons for attending HCT site.

HIV screening was done using rapid test kits: Stat Pak HIV 1/2 (manufactured by Chembio Diagnostic Systems, Inc. 3661 horseblock rd. Medford, New York 11763 USA, lot no 44032411), Determine (manufactured in the USA lot no 14019K100) Unigold (manufactured by Trinity Biotech Plc., IDA Business Park, Bray, Co. Wicklow, Ireland, lot no T159018) and Double gold (manufactured by Trinity Biotech Plc., IDA Business Park, Bray, Co. Wicklow, Ireland) The test was carried out on blood collected via finger-prick using a sterile lancet. Controls for the test were obtained from the central hospital laboratory for specificity and sensitivity. A positive or negative result must be obtained from a minimum of two separate kits.

Post-test counseling and disclosure plan, sensitization of partner for testing, and referral details of clients were also noted.

Data analysis

Data was analyzed using SPSS 10.0. Chi square (X^2) and P values were obtained following bivariate analysis of data. Results were also presented in Table 1.

Findings

Age and gender distribution

A total of 2607 clients accessed our HCT services within this period. The clients were between the ages of 1 year and 90 years. The mean age was 33.3 ± 15.26 years. The median age was found to be 32.0 years, with the modal age being 30.0 years.

More females than males accessed this HCT site for the period under study, 54.7% (1425) were females while 45.3% (1182) were males.

Pretest session type: Individual/couple/group

For the pre-test session type, 93.3% (2418) presented as

individuals, 6.3% (163) presented as couples, while 0.4% (11) presented as a group.

Marital status

The distribution by marital status of the clients was as follows: never married single 31.4% (804), cohabiting 3.4% (86), steady partner (not cohabiting) 5.0% (129), married in a monogamous setting 37.9% (972), married in a polygamous setting 15.3% (392), separated/divorced 3.5% (90), and widowed 3.5% (90).

Educational status

Educational status of the clients: 8.1% (206) were illiterate, 4.4% (112) were able to read, 23.6% (600) had primary education, 37.5% (955) had secondary education, 15.8% (401) had university education, 0.2% (5) can read Nigerian languages, and others 10.3% (263).

On the HIV status of different educational classes, Of the 643 who were HIV positive, 12.3% (79) were illiterates, 4.7% (30) are able to read, 0.3% (2) can read Nigerian languages, 34.8% (224) had primary education, 33.6% (216) had secondary education, 7.3% (47) had university education, and others 7% (45). There is significant difference in the HIV status of the different educational classes, P is 0.0, P less than 0.05

Pretest disclosure plan

Respondents were asked about their disclosure plan before the test, 7.2% (148) will not disclose, 88.7% (1812) planned to disclose, and 4.0% (82) were unsure.

HIV status

The distribution of clients by the results of the HIV screening test, 73.7% (1828) were HIV negative, 25.9% (643) were HIV positive, and indeterminate results were 0.3% (8).

Gender distribution of HIV positive clients

9.3% (242) of the male clients and 15.1% (394) of the female clients were HIV positive. There is significant difference in the HIV status of the clients that accessed the HCT services in this facility from May 2008 to April 2010.

HCT post disclosure plan

Respondents were asked after the test if they would disclose, a larger percentage 94.4% (2198) planned to disclose to their spouses and relations, 4.0% (92) will not disclose, and 1.6% (38) were not sure whether to disclose or not.

When clients were asked to whom they would disclose their HIV results, 54.5% (1192) will want to disclose to their sexual partner, 8.3% (182) will disclose to their father, 12.3% (270) will disclose to their mother, 2.5% (55) will disclose to their friend, 0.9% (20) will disclose to their colleagues,

Table 1: Socio-demographic features and HIV sero-prevalence of clients accessing HCT services in OOUTH between May 1st 2008 and April 30th 2010

Socio-demographic features	Clients (n)	HIV prevalence (%)		Statistics (χ^2), P value
		Positive (%)	Negative (%)	
1. Gender				
Male	1119 (45.7)	242 (38.1)	877 (48.3)	$\chi^2 = 19.61, P = 0.00, P < 0.05$
Female	1332 (54.3)	394 (61.9)	938 (51.7)	
	2451 (100.0)	636 (100.0)	1815 (100.0)	
2. Age group(in years)				
0-14	213 (8.7)	40 (6.3)	173 (9.6)	$\chi^2 = 110.65, P = 0.00, P < 0.05$
15-24	389 (15.9)	45 (7.1)	344 (19.0)	
25-34	804 (32.9)	237 (37.3)	567 (31.3)	
35-44	536 (21.9)	191 (30.0)	345 (19.1)	
45-54	281 (11.5)	89 (14.0)	192 (10.6)	
55-64	123 (5.0)	31 (4.9)	92 (5.1)	
>/65	99 (4.0)	3 (0.5)	96 (5.3)	
	2445 (100.0)	636 (100.0)	1809 (100.0)	
3. Marital status				
Never married single	746 (31.2)	98 (15.8)	648 (36.6)	$\chi^2 = 155.52, P = 0.00, P < 0.05$
Cohabiting	77 (3.2)	26 (4.2)	51 (2.9)	
Steady partner (not cohabiting)	116 (4.9)	14 (2.3)	102 (5.8)	
Married monogamous	918 (38.4)	269 (43.4)	649 (36.6)	
Married polygamous	362 (15.1)	125 (20.2)	237 (13.4)	
Separated/divorced	85 (3.6)	47 (7.6)	38 (2.1)	
Widowed	87 (3.6)	41 (6.6)	46 (2.6)	
	2391 (100.0)	620 (100.0)	1771 (100.0)	
4. Educational status				
Illiterate	193 (8.1)	53 (8.6)	140 (8.0)	$\chi^2 = 105.06, P = 0.00 P < 0.05$
Able to read	101 (4.3)	30 (4.9)	71 (4.0)	
Primary	556 (23.4)	224 (36.3)	332 (18.9)	
Secondary	898 (37.9)	216 (35.0)	682 (38.9)	
University	378 (15.9)	47 (7.6)	331 (18.9)	
Can read Nigerian languages	5 (0.2)	2 (0.3)	3 (0.2)	
Others	241 (10.2)	45 (7.3)	196 (11.2)	
	2372 (100.0)	617 (100.0)	1755 (100.0)	
5. Couple type				
Married	123 (72.8)	46 (90.2)	77 (65.3)	$\chi^2 = 12.03, P = 0.00, P < 0.00$
Pre-marital	39 (23.1)	3 (5.9)	36 (30.5)	
Pre-sexual	2 (1.2)	0 (0.0)	2 (1.7)	
Sex-partner	5 (3.0)	2 (3.9)	3 (2.5)	
	169 (100.0)	51 (100.0)	118 (100.0)	

3.3% (73) will disclose to their spiritual leaders, while 18.1% (397) will disclose to others (relations), and for those not applicable constitute.

Discussion

HIV counseling and testing (HCT) is a key intervention for HIV/AIDS control, and new strategies have been developed for expanding coverage in developing countries. HCT increases knowledge of HIV status, encourages safer sex, and is an entry point for HIV care and treatment services. Increasing HCT coverage can reduce HIV-associated denial,

stigma, and discrimination, and mobilize communities to respond to the HIV epidemic.^[18]

HIV counseling and testing in the clinical settings model follows the following steps: step 1-offer HIV test routinely, step 2-provide pretest counseling if your client accepts the test, steps 3 and 4-administer the test and provide post-test counseling.^[19]

The United Nations and other institutions have been adapting testing policy to promote the offer of routine HIV Testing and Counseling by healthcare providers. With this approach, testing is provider-initiated rather than client-initiated, giving clients the ability to “opt-out” if they do not

want to get tested. The routine offer of testing integrates HIV screening into mainstream health service delivery, dramatically increasing the number of individuals benefiting from improved treatment, care, and prevention services.^[20]

Knowledge of HIV infection is necessary to access many forms of HIV-related support, care, and treatment. Programs are in place to increase the access to antiretroviral drugs in general and in particular, to prevent mother-to-child transmission. Further, where treatment, care, and support have become more widely available, stigma and discrimination, which have always been disincentives to HIV testing, have reportedly decreased. Given that, the changing landscape of the HIV/AIDS epidemic has resulted in new opportunities as well as new imperatives to increase knowledge of HIV status.^[21]

Hospital-based HCT most readily identified HIV-infected individuals eligible for treatment, whereas home-based strategies more efficiently reached populations with low rates of prior testing and HIV-infected people with higher CD4 cell counts. Providing HCT to HIV-positive individuals is also important for HIV prevention, and so hospital-based HCT appears to be a reasonable strategy for advancing both treatment and prevention goals.^[18]

The HCT population benefits include the reduction of stigma, mobilizing communities to respond to the epidemic, or community-wide reductions in HIV transmission. Increasing HCT coverage would reduce future HIV treatment costs by averting new HIV infections. Identifying infected individuals for treatment can be achieved through offering services to groups known to have high HIV prevalence. How HCT may reduce HIV transmission is more contentious. Whereas two randomized control trials of HCT have reported strong preventive effects, other studies have found little or no impact on risk behavior or HIV incidence, particularly in HIV-negative clients.^[18]

The HIV prevalence in this study was found to be 25.9%; this is comparable with the hospital-based HCT study in Uganda, which was found to be 27%.^[18]

The high prevalence of HIV infected individuals in this study is not surprising because a high percentage, 41.7% (1072), of the clients were referred to the site by healthcare workers as previously mentioned in the findings even though 35.3% (907) of the clients voluntarily walked in for the HCT services.

More females (54.7%) accessed HCT services than males, which is in keeping with research findings from Northern Nigeria where female gender and formal education predicted a positive attitude towards uptake of HCT services.^[6,22] Clients with primary and secondary education were found

to have higher HIV status than other educational status; this is because they form the majority of clients accessing HCT services in this institution.

More females were found to be significantly infected compared to males ($P = 0.00$, $X^2 = 19.61$). This is not surprising in view of the anatomical nature of the female genital tract and the higher efficiency of the male-female transmission of the HIV virus. This also emphasizes the gender dimensions to the HIV epidemic in sub-Saharan Africa as documented in literature.^[10-12,23,24]

It could also be indicative of the predisposition of women to sexual coercion and violation of their sexual and reproductive rights.^[14-16]

A larger percentage, 74.7% (480), of those infected (both males and females) were in the sexually active age group. This has been well documented in various studies around the world.^[25,26] This could also be as a result of the willingness of sexually active young people to go for counseling and testing due to a perceived risk of HIV infection.^[25,27,28] More married clients were found to be HIV positive ($X^2 = 155.52$, $P = 0.00$, $P < 0.05$)

Majority (63.5%) of those who accessed this facility for HCT services had not been previously tested. 36.3% (936) that accessed this HCT services were found to have been previously tested, which is higher than values from previous studies.^[25,29] This is due to referrals from other health institutions, being a tertiary health center for the state. There is significant difference between those that are previously tested and HIV results ($X^2 = 133.49$, $P = 0.00$, $P < 0.05$).

Upscale of HCT services to involve STI clinics and free-standing, client-initiated testing centers is necessary.^[17,26] Increased awareness of HIV and risk reduction should be promoted. It is important that HIV education should be intensified among young people.^[25-27,29-31] HCT provides an opportunity for this to be achieved.^[32]

Conclusion

A fair uptake of HCT services was noted. More females accessed services than males. More positive results were seen among females than males ($P < 0.05$).

The high prevalence of HIV infection in this hospital-based study challenges the realization of the UNAIDS/WHO call for universal access to HCT by 2010. However, all those found to be infected or sero-positive can access care immediately in the teaching hospital and this further reduces HIV transmission.

Recommendations

Upscale of HCT services to involve STI clinics and free-standing, client-initiated testing centers is necessary. Continuous AIDS education and risk reduction should be promoted.

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