

# HIV COUNSELLING AND TESTING SERVICES: WHAT DETERMINES THE PARTICIPATION OF YOUNG PEOPLE IN A COMMUNITY, SOUTH WEST NIGERIA?

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## ABSTRACT

HIV Counselling and Testing (HCT) has been shown to have preventive effects on HIV/AIDS. Despite its importance, participation remains low in some places where the service is obtainable. This study was carried out to determine the utilization of HTC services among young persons in Yemetu, Ibadan and South West Nigeria.

## METHODS

The study was a cross sectional survey of 221 residents aged 15 to 24 years. Semi-structured interviewer administered questionnaires were used to obtain information on socio-demographic characteristics and utilization of HCT services. Descriptive statistics were done. Associations were explored with the chi square test and predictors of knowing ones status was determined using logistic regression analysis at 5% level of significance.

## RESULTS

The mean age of the respondents was  $17.8 \pm 3.9$  years, about half, 54.3% were female, 45.7% were male (m: f = 1: 1.2), 83.3% were single, only 6.8% had tertiary education. Only 24% know their HIV status, 33.6% of respondents > 18 years know their status compared to 15.8% of those who were  $\geq 18$  years ( $p=0.002$ ). Among the respondents who were aware of a place to carry out HIV test, only 49.4% know their HIV status compared to 10.6% who do not ( $p<0.001$ ). Those that were aware of a place to get tested were about 8 times likely to know their status [OR=8.18 (3.66-18.30)]  $P<0.001$ .

## **CONCLUSION AND RECOMMENDATION**

The common belief that services will be utilized when they are available was not evident in this study. Sustainable HIV responses targeting young people should not be limited by assumed availability of services. Periodic awareness programmes should be undertaken in the community.

## **KEY WORDS**

Human Immunodeficiency Virus, HIV counselling and testing, young people, HCT, HIV awareness, HIV treatment.

## **INTRODUCTION**

The global estimation of people living with Human Immunodeficiency Virus (HIV) as at 2012 is 35.3 million with the heaviest burden of the disease in sub-Saharan Africa.(UNAIDS, 2013 ) Nigeria is ranked third among the countries with the highest Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) burden in the world, next only to India and South Africa and has an expanding population of People Living with HIV (PLHIV). Though the HIV prevalence fell from 4.4% in 2008 to 4.1% in 2010; the most recent HIV seroprevalence showed that the number of people living with the virus was still about 3.5 million while the estimated number of new infections was 388,864.(FMOH, 2010, NACA, 2011). With this large number of people living with the disease and increasing number of new infections, the main goal of the Nigerian National Strategic Plan (NSP) for HIV/AIDS is stopping further spread and possibly reversing it by 2015 with HIV counselling and testing as a priority intervention. (NACA, 2011, UNAIDS, 2002)

HIV Counselling and Testing (HCT) is an essential tool in battling and effectively controlling the infection, while combining it with knowledge of one's status. It has been shown to have preventive effects on HIV/AIDS thus making it the gateway to effective primary and secondary prevention and its multiple benefits has made it the cornerstone of prevention programmes in many countries. (Denison et. al., 2008, Bunnell et. al., 2006, Pronyk et. al., 2002, Liechty, 2004, Chimzizi et. al., 2004) There are two components of HCT: HIV counselling and HIV testing. The counselling process is based on confidentiality involving pre-test and post-test counselling. This enable people to make informed decisions about their own risk as well as provide support for those who are positive after the test. Testing involves blood analysis which separates the sero-positive from the sero-negative. Thus with HCT there is awareness of one's HIV status which results in changes or modification of risky sexual behaviour, increase access to HIV specific treatment, support and care as well as mobilise positive community efforts towards reducing the disease (Denison et. al., 2008, Bateganya et. al., 2007)

Despite availability of HIV Counselling and Testing services worldwide, about a decade ago only 10% of HIV infected individuals are aware of their HIV status (WHO, 2002). Uptake of HCT in sub-Saharan Africa is still low with reports of 12% to 56% among the general public. Some are aware of the disease and centres where the test can be conducted but fail to utilize these services. This might be largely due to the fear of stigmatization and discrimination that is associated with HIV/AIDS as well as the low risk perception of HIV infection among high-risk groups (deGraft-Johnson et. al., 2005, Hutchinson and Mahlalela, 2006). Therefore, this study was carried out to determine the utilization of HIV counselling and testing services among young people in Ibadan city South West Nigeria, where facilities exist in abundance.

## **METHODS**

### *STUDY AREA*

The study was carried out at Yemetu Alaadorin. Yemetu is located in Ibadan North Local Government Area, Ibadan. Ibadan is the state capital of Oyo State one of the six states in South West Nigeria. Ibadan North Local Government Area host federal state and local government health institutions. The University College Hospital is located opposite Yemetu. The state teaching hospital, Adeoyo Maternity Hospital is located in the heart of Yemetu. The Ibadan North Local Government Primary Health Care Centre at Gate is about 2.5 km from Yemetu. A public health facility donated to University College Hospital by the Kola Daisi Foundation is also located at Yemetu Alaadorin. There are also several private health facilities and health related Non-governmental Organisation in Yemetu, Ibadan. The topography of the area is undulating with hills occupying part of the land. It is a thickly populated old settlement but some of the hilly areas are now occupied by few high social class people. Majority of the people in the area are artisans, petty traders, mechanics, and are generally of low socio-economic class.

### *STUDY SETTINGS*

The study was a cross sectional survey carried out among 221 residents of Yemetu, Ibadan aged 15 to 24 years. Sample size formula for descriptive study was used. The sample size was based on a reference prevalence of 9.1%. This is the prevalence of sexually active young women who have been tested for HIV and know the results in Nigeria. (Nigeria Multiple Indicator Cluster Survey, 2011). All consenting young persons who are resident in the area were included. All friends, visitors and shop owners in the area were excluded.

### *CLUSTER SAMPLING METHOD WAS USED IN TWO STAGES.*

Stage 1- A ward (ward 3) was selected by simple random sampling from the list of wards in Ibadan North Local Government Area.

Stage 2 - All consenting young persons in the selected ward participated in the survey.

*DATA COLLECTION INSTRUMENT AND DATA MANAGEMENT:*

A semi-structured, self-administered questionnaire was used. Questionnaire was checked for omissions and errors after collection and correction was made where necessary. Data was analysed with SPSS version 21.0. Descriptive statistics was done. Association was explored with chi square test. Sociodemographic variables and other HIV related variables significant at least 10% were used in identifying the determinants of knowing ones HIV status using logistic regression analysis at 5 % level of significance.

## **RESULTS**

The mean age of the respondents was  $17.8 \pm 3.9$  years, of which 120(54.3%) were females, 101 (45.7%) were males, 184(83.3%) were single, only 15(6.8%) had tertiary education while 191(86.4%) had secondary education.

Table 2 shows responses to questions related to HIV, as shown 173(78.3%) had awareness on HIV. Only 116(52%) were satisfied with the information they received. Among the respondents, only 54(24.4%) knew their HIV status, 167(75.6%) did not know their status, while 142(64.3%) had no idea about places where voluntary testing and counselling are done in the local government area.

Figure 1 shows the sources of information about HIV. Out of the 173 respondents who had awareness of HIV, 100 (58%) of them got their information from teachers, 45 (26%) from relatives while 14 (8%) got their information from friends and parents respectively. None of the respondents received information on HIV/AIDS directly from the health care workers.

Table 3 shows the association between sociodemographic factors and knowing ones HIV status. In all, 36(33.6%) of respondents > 18 years knew their status compared to 18(15.8%) of those who were  $\geq 18$  years ( $p=0.002$ ). Among the single respondents 33(17.9%) knew their HIV status compared to 21(56.8%) of others who were married, widowed and divorced who knew their status ( $p<0.001$ ). In all, 59(29%) of respondents who agreed that establishing a clinic where HTC can be done knew their HIV status, while all respondents who do not want it did not know their status ( $p=0.001$ ). Among the respondents who were aware of a place to carry out HIV test, 39(49.4%) knew their HIV status compared to 15(10.6%) who do not ( $p<0.001$ ).

Table 4 shows the predictors of knowing HIV status. The only significant factor predicting knowing ones HIV status is awareness of a place to have the HIV test done [OR=8.18 (3.66-18.30)] $P<0.001$ .

## **DISCUSSION**

The guiding principle for HIV intervention globally is universal access to HIV treatment, support and care through HCT services. Knowledge of one's HIV sero-status facilitates seeking health care early and effective treatment, reducing AIDS-related morbidity and mortality, modify or change risky behaviours and also serve as an important gateway to prevention of mother to child HIV transmission among infected pregnant women.

This study showed that the uptake/ utilization of HCT services was low among the respondents, 78% were aware of HIV and heard information about it yet only 24.4% knew their HIV status, this is similar to a study conducted in Osun state, Nigeria where utilization of HCT services was also low (Amu et. al., 2013). Other studies conducted in Uganda and South Africa also recorded similar results. (Ross et. al., 2006, Shisana et. al., 2009). In this study more respondents who were 18 years and above knew their HIV status having accessed HCT services compared to those less than 18 years of age. Poor uptake of HCT among the younger people has been reported (Demisse et. al., 2009). Though, young people 15 to 24 years old are the most affected population and account for over 40% of all new HIV infections among adults (Babalola, 2007, FMOH, 2006, Yahaya et. al., 2010).

Respondents who are currently married, widowed or divorced are likely to have accessed HCT services thus are aware of their HIV status compared to respondents and this finding is consistent with reports of other authors which showed that being married is associated with positive uptake of HCT services and awareness of HIV status (Bwambale et. al., 2008, Solomon et. al., 2012). Awareness of a place to carry out HCT is also a determinant of uptake of HCT services as shown in this study. It is possible for those who know centres where the tests are being conducted to access it and have their tests done. Awareness of a centre where HCT is done has positive impact on willingness to have a test done (Sukari, 2008).

Poor participation in HCT services in this study is due to lack of awareness of a centre within the respondents' immediate location. Other studies from sub-Saharan Africa have shown factors like perceived risk of being infected, hospital-based, home-based and workplace-based testing, increased access to VCT compared to clinic-based VCT and health-care service factors such as cost, distance, perceived quality, and accessibility (Helleringer et. al., 2009, Menzies et. al., 2009).

Some studies have shown that having more HCT centres led to increase uptake (Centers for Disease Control, 2005, Matovu and Makumbi, 2007). Findings from this study revealed that despite the availability of numerous HCT centres uptake remained low. Also, none of the respondents who had received information on HIV/AIDS received it directly from the health care workers. The common belief that services will be utilized when they are provided was not evident in this study. Provision of services without creating adequate awareness will not yield appropriate results. Sustainable HIV responses targeted at young people should not be limited by assumed availability of services. Outreaches and awareness interventions preventing the spread of HIV/AIDS should be extended to even youths residing in areas where services exist in

abundance. Periodic awareness programme should be encouraged by health care facilities to their neighbourhood.

*Table 1: Sociodemographic Characteristics of Respondents*

<b>Variable</b>	<b>Number involved</b>	<b>Percentage (%)</b>
<b>Age</b>		
<18 years	114	51.6
≥18 years	107	48.4
<b>Sex</b>		
Male	101	45.7
Female	120	54.3
<b>Marital Status</b>		
Single	184	83.3
Others*	37	16.7
<b>Religion</b>		
Christian	112	50.7
Islam	109	49.3
<b>Tribe</b>		
Yoruba	212	95.9
Ibo	9	4.1
<b>Level of Education</b>		
Primary	15	6.8
Secondary	191	86.4
Tertiary	15	6.8

\* Others are married, widowed and divorced

Table 2: Responses to Questions Related to HIV

<b>Variable</b>	<b>Number involved</b>	<b>Percentage (%)</b>
<b>Had recent HIV awareness</b>		
Yes	173	78.3
No	48	21.7
<b>Ever satisfied with information received on HIV</b>		
Yes	116	52.5
No	76	34.4
<b>Know about HIV transmission</b>		
Yes	209	94.6
No	12	5.4
<b>Know where to get tested in the ward</b>		
Yes	79	35.7
No	142	64.3
<b>HIV status known</b>		
Yes	54	24.4
No	167	75.6

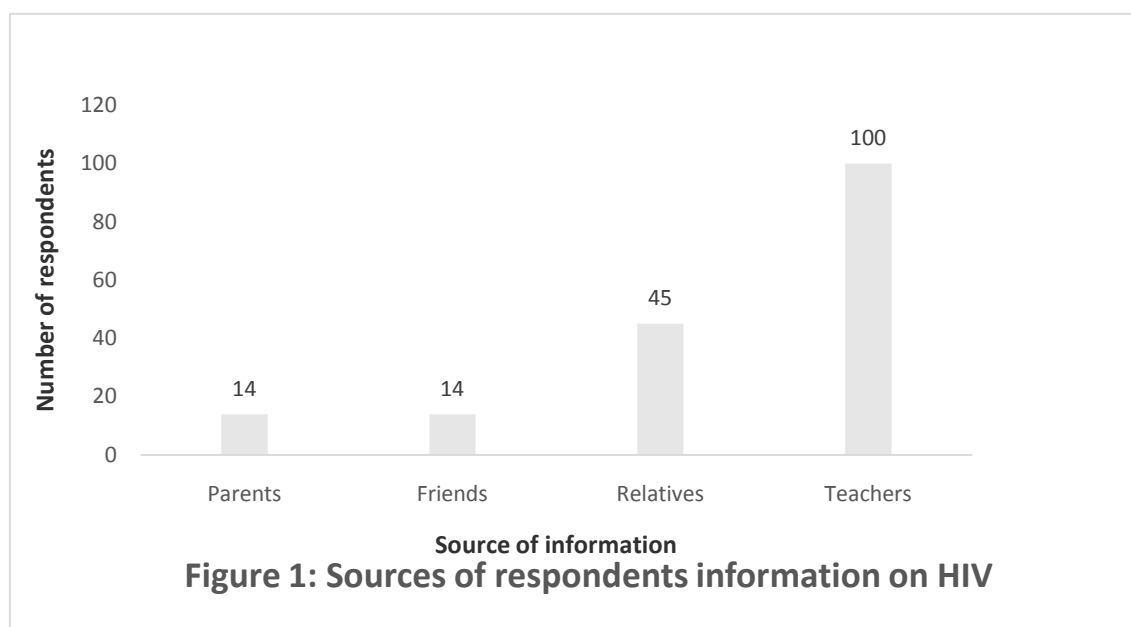


Table 3: Association between Sociodemographic Factors and HIV Status

Variables	HIV Status Known		Chi Square	P -Value
	Yes n(%)	No n(%)		
<b>Age</b>				
<18 years	18(15.8%)	96(84.2%)	9.530	0.002
≥ 18 years	36(33.6%)	71(66.4%)		
<b>Sex</b>				
Male	21(20.8%)	80(79.2%)	1.336	0.248
Female	33(27.5%)	87(72.5%)		
<b>Marital status</b>				
Single	33(17.9%)	151(82.1%)	25.145	<0.001
Others	21(56.8%)	16(43.2%)		
<b>Family type</b>				
Monogamous	17(56.7%)	13(43.3%)	0.019	0.889
Polygamous	3(60.0%)	2(40.0%)		
<b>Religion</b>				
Christian	24(21.4%)	88(78.6%)	1.111	0.292
Islam	30(27.5%)	79(72.5%)		
<b>Tribe</b>				
Yoruba	49(23.1%)	163(76.9%)	4.921	0.027



Ibo	5(55.6%)	4(44.4%)		
<b>Level of education</b>				
Primary	2(13.3%)	13(86.7%)	7.988	0.018
Secondary	44(23.0%)	147(77.0%)		
Tertiary	8(53.3%)	7(46.7%)		
<b>Access to regular information on HIV</b>				
Yes	31(23.3%)	102(76.7%)	0.229	0.632
No	23(26.1%)	65(73.9%)		
<b>Correct idea about HIV transmission</b>				
Yes	50(23.9%)	159(76.1%)	0.544	0.461
No	4(33.3%)	8(66.7%)		
<b>Need more testing centre</b>				
Yes	53(29.0%)	130(71.0%)	11.934	0.001
No	0(0.0%)	31(100.0%)		
<b>Had recent HIV awareness</b>				
Yes	46(26.6%)	127(73.4%)	2.004	0.157
No	8(16.7%)	40(83.3%)		
<b>Know where to get tested in the ward</b>				
Yes	39(49.4%)	40(50.6%)	41.395	<0.001
No	15(10.6%)	127(89.4%)		

Table 4: Predictors of Knowing HIV Status

Variable	Odds Ratio	95% CI	p-value
<b>Age</b>			
<18 years	0.503	0.21-1.22	0.128
≥18 years	1		
<b>Marital Status</b>			
Single	0.420	0.15-1.18	0.100
Others	1		
<b>Level of Education</b>			
Primary	1		
Secondary	3.739	0.60-23.42	0.159
Tertiary	6.915	0.73-65.45	0.092
<b>Tribe</b>			
Yoruba	0.173	0.03-1.13	0.066
Ibo	1		
<b>Aware of a place to have HIV test in the ward</b>			
Yes	8.182	3.66-18.30	<0.001
No	1		

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