

## Original Article

# Attitude of Health Care Professionals towards Voluntary Counseling and Testing for HIV/AIDS

Egbuchulem Kelvin Ifeanyi<sup>1</sup>, Adeleye O.A.<sup>2</sup>, Adekanbi Adesina Omololu Ayodele\*<sup>3</sup>, Evbuomwan Eronmwon A.<sup>4</sup>, King-Inneh O.A.<sup>5</sup>, Obiagwu Adaora<sup>6</sup>

1. Department of Surgery, University College Hospital, Ibadan, Nigeria.
2. Department of Community Health, School of Medicine, University of Benin, Benin, Nigeria.
3. Department of Obstetrics and Gynecology, University College Hospital, Ibadan, Nigeria.
4. Department of Internal Medicine, Igbinedion University Teaching Hospital, Edo State, Nigeria.
5. Department of Community Health, Faculty of Clinical Sciences, College of Medicine, Ambrose Alli University, Ekpoma, Nigeria.
6. Department of Community Health, University College Hospital, Ibadan, Nigeria.

Received: 2015/12/07

Accepted: 2016/02/20

---

### Abstract

**Introduction:** HIV counseling and testing are regarded as a vital preliminary interventional step aimed at reducing the spread of HIV infection. Therefore, the present study was designed to determine the attitude of health care professionals towards voluntary counseling and testing (VCT) for HIV/AIDS at Irrua Specialist Teaching Hospital.

**Materials & Methods:** In this descriptive cross-sectional prospective study, a self-administered structured questionnaire was used, which contained sections on bio-social variables aimed at fulfilling the objectives of the study. The study participants consisted of medical doctors, nurses, medical laboratory scientists, radiographers, social workers and pharmacists. The data were collated, inputted into a computer and statistical analysis was performed using SPSS software (ver, 22). Descriptive variables were summarized using percentages and proportions for the categorical variables. Moreover, bivariate analysis was performed to test the association between categorical variables using the chi square test and p value of < 0.05 was considered statistically significant. Multiple logistic regressions were performed to identify the predictive variables appropriate for the association between socio-demographic and willingness to go for screening.

**Results:** In the present study, questionnaires were administered and statistically analyzed. The study participants consisted of workers who were mostly females (55%) aged 21-30 years. Regarding the bio-social variables (47.8% of the participants were married, 52.5% were Christians, 96.2% were medical doctors, and 49.2% were of Esan extraction. The participants' marital status and occupation significantly influenced their attitude towards voluntary counseling and testing for HIV/AIDS. A good percentage of the respondents revealed a right attitude towards VCT of HIV/AIDS.

**Conclusion:** This study finding revealed that a good percentage of the respondents had a right attitude towards VCT of HIV/AIDS, while a lesser proportion was reported to have a negative attitude.

**Keywords:** Professionals, Counseling, Testing, HIV/AIDS

---

\*Corresponding author: Tel: +234 8033263396 email: sinaadekanbi@yahoo.com

## Introduction

Acquired immune-deficiency syndrome (AIDS) is a global pandemic, which is considered as one of the greatest humanitarian developmental issues facing the global community in recent times.<sup>[1 - 4]</sup> HIV counseling and testing is recognized as a vital preliminary interventional step aimed at reducing the spread of HIV infection. There is abundant evidence validating the roles of counseling and testing in impacting the behavioral changes and the coping strategies of individuals living with HIV/AIDS<sup>[5]</sup>. Health care workers are at the front lines of fighting HIV pandemic, which puts them at a high risk of HIV infection in the course of providing care for HIV infected patients<sup>[6]</sup>. However, majority of HIV infections are acquired among health workers through unprotected sex<sup>[7]</sup>.

According to van Dyk<sup>[8]</sup> testing for HIV is a personal decision, since it is normally followed by major life changing consequences. Voluntary and confidential HIV VCT provides essential knowledge and support to individuals at risk in regard with contracting HIV/AIDS. Furthermore, it can enable uninfected individuals to remain uninfected and infected ones to plan for the future and prevent HIV/AIDS transmission to others.<sup>9</sup>

VCT acceptability has been studied among various student populations. In Tanzania, for instance, 34.6% of students of health care professions and 43.3% of medical students had VCT<sup>[10, 11]</sup>. In Nigeria, acceptance rates of VCT among students of tertiary institutions ranged

from 8.3% to less than 30%<sup>[12-14]</sup>. However, no documented report of VCT acceptability has been reported among health care professionals in Nigeria.

In spite of the apparent knowledge of HIV/AIDS amongst health care workers, there is still HIV/AIDS phobia. Consequently, a sizeable number are not being tested for HIV. Health care workers need to know their HIV status first to protect themselves and secondly to protect their patients. Patients stand the chance of being exposed to HIV infection from health care worker if their health care provider is infected and not aware of his / her HIV status. The role of health care workers in achieving global health and development goals cannot be underestimated; positive health outcomes are directly related to health workers population and service coverage<sup>[15]</sup>. Hence, the need to evaluate the attitude of health workers to such health related issues as HIV is of significance.

As a matter of fact, this study seeks to find answers to the following questions: To what extent do health care workers use VCT services, why do health care workers opt for or against VCT, how are health care workers likely to react if their HIV test results is positive, how do health care workers relate to colleagues, friends and patients that have positive test results? Being able to provide answers to these questions will be of mutual benefit to both the health care professionals and their patients. Thus, the current

study mainly aimed to determine the attitude of health care professionals towards VCT for HIV/AIDS at Irrua Specialist Teaching Hospital.

## Materials and Methods

This study was a descriptive cross-sectional study designed to evaluate the attitude of health care workers towards voluntary counseling and testing of HIV/AIDS at Irrua Specialist Teaching Hospital (ISTH). The study was conducted between November 2008-October 2009. ISTH is a tertiary medical institution located in a rural area of Nigeria. The hospital is located in Irrua, Edo Central Senatorial District, along the Benin-Abuja highway at about 87 kilometres of north of Benin City, the Edo State Capital.

In order to collect the study data, a self – administered structured questionnaire was utilized as the study instrument, which contained sections on bio social variables aimed at fulfilling the objectives of the study.

The participants were medical doctors, nurses, medical laboratory scientists, radiographers, social workers and pharmacists ,whereas security officers, ward orderlies and administrative staffs were excluded from this study. Stratified random sampling technique was employed in order to select the health workers.

The study data were collated inputted into a computer and statistical analysis was performed using SPSS software (ver 22). Descriptive variables were summarized using percentages and

proportions for categorical variables and bivariate analysis was performed in order to test the association between categorical variables using the chi square test. (p value of < 0.05 was considered statistically significant).

The exposure variables were respondents' age, gender, marital status and occupation while the outcome variables included willingness to go for HIV screening, willingness to screen with spouse, reaction to a colleague whose test results is positive, and ever had screening for HIV.

Multiple logistic regressions were performed to identify the appropriate predictive variables for the association between participants' socio-demographic factors and their willingness to go for screening. The odds ratio was determined, and a 95% confidence interval was used for all the analyses.

Some key definitions in the analysis are as follows: Mode of transmission was graded correct or incorrect based on whether the respondents got 4 of the answers correct or not.

Definition of VCT was graded good knowledge or poor knowledge depending on whether the respondents gave a correct, incorrect, or a nil response.

## Result

Two hundred and thirty eight questionnaires were administered and statistically analyzed. The study participants consisted of mostly females (55%) aged 21-30 years, Regarding the bio-social variables, 47.8% of the participants were married, 52.5% were

Christians, 96.2% were medical doctors, and 49.2% were of Esan extraction as shown in (Table 1). Majority of the participants attributed their source

of information to interactions with colleagues (31%) and attendance at seminars (23.9%), (see Table 2).

**Table I:** Sociodemographic characteristics

Variable		Frequency (n=238)	Percentage
<b>Age</b>	21-30	107	47.8
	31-40	72	32.1
	41-50	35	15.6
	51-60	10	4.5
<b>Gender</b>	Male	106	44.5
	female	132	55.5
<b>Marital status</b>	Single	105	44.1
	Married	125	52.5
	Others*	8	3.4
<b>Tribe</b>	Esan	101	42.4
	Bini	34	14.3
	Afemai	41	17.2
	Yoruba	20	8.4
	Igbo	23	9.7
	Others**	19	8.0
<b>Religion</b>	Christian	229	96.2
	Muslim	5	2.1
	Other religion	4	1.7
<b>Occupation</b>	Medical doctors	117	49.2
	Nurses	99	41.6
	Others***	22	9.2

**Table 2:** The sources of information about VCT for HIV/AIDS by health care professionals

Source	Frequency	Percentage (%)
<b>Electronic media</b>	46	19.3
<b>Print</b>	61	25.6
<b>Colleagues</b>	74	31.1
<b>Seminar</b>	57	23.9

As it can be observed in Table 3, questions assessing participants' attitude and knowledge with respect to VCT showed that 99.2% of the participants considered VCT a necessary practice

that should be encouraged, while 68% experienced the counseling section, 90.3% knew their HIV status, and 90% were willing to be screened for HIV. Majority (97%) of those who

were unwilling for screening could not fathom a reason for their refusal. One hundred and nineteen (61.3%) participants underwent HIV screen once in a while, 93% were willing to have screening together with their spouse and discuss the test results with their spouse, and 97% of the

participants were willing to treat HIV infected patients (See Table 4). Furthermore, marital status and occupation of the participants significantly influenced their attitude towards voluntary counseling and testing for HIV/AIDS. ( $p = 0.05$ ) see (Table 5).

**Table 3:** Attitude and Knowledge questions about VCT for HIV and responses given by health care professionals

Questions	Responses	Frequency (%)
<b>Is VCT necessary?</b>	Yes	236 (99.2)
	No	2 (0.8)
<b>Should VCT be encouraged?</b>	Yes	236 (99.2)
	No	2 (0.8)
<b>Should VCT be mandatory?</b>	Yes	147 (61.8)
	No	71 (29.8)
	Undecided	20 (8.4)
<b>Have you received counselling on HIV?</b>	Yes	162 (68.1)
	No	76 (31.9)
<b>Do you know your HIV status</b>	Yes	215 (90.3)
	No	23 (9.7)

**Table 4:** Willingness questions about VCT for HIV and responses given by health care professionals

Questions	Responses	Frequency (%)
<b>Will you be willing to screen for HIV?</b>	Yes	215 (90.3)
	No	23 (9.7)
<b>Reason of not screening for HIV</b>	Fear	4 (1.7)
	Stigma	4 (1.7)
	Nil response	230 (96.6)
<b>Reason for HIV screening</b>	Know status	148 (62.2)
	Pregnancy	13 (5.5)
	Marriage	1 (0.4)
	Nil Response	76 (31.9)
<b>How often do you go for HIV screening?</b>	Frequently	53 (27.3)
	Once a while	119 (61.3)
	Not at all	22 (11.3)

Questions	Responses	Frequency (%)
Will you be willing to test with your spouse?	Yes	223 (93.7)
	No	15 (6.3)
Will you be willing to disclose your result to your spouse?	Yes	225 (94.5)
	No	13 (5.5)
Will you be willing to tell your colleague?	Yes	75 (31.5)
	No	163 (68.5)
Will you be willing to treat a patient with HIV/AIDS	Yes	232 (97.5)
	No	6 (2.5)

**Table5:** Association between sociodemographic variables and willingness for HIV screening

Variables	Willingness to screen for HIV	No Willingness to screen for HIV	X <sup>2</sup> (P-value)
<b>Age</b>			
21-40	162(90.5)	17(9.5)	0.106 (0.75)
41-60	40(88.9)	5(11.1)	
<b>Sex</b>			
Male	101(95.3)	5(4.7)	5.357 (0.21)
Female	114(86.4)	18(13.6)	
<b>Marital status</b>			
Single	100(95.2)	5(4.8)	3.766 (0.05)
Married	110(88.0)	15(12.0)	
<b>Tribe</b>			
Esan	93(92.1)	8(7.9)	0.611 (0.44)
Others*	122(89.1)	15(10.9)	
<b>Occupation</b>			
Medical doctors	110(94.0)	7(6.0)	5.891 (0.05)
Nurses	84(84.8)	15(15.2)	
Others**	21(95.5)	1(4.5)	
<b>Religion</b>			
Christianity	208(90.8)	21(9.2)	1.690 (0.19)
Others	7(77.8)	2(22.2)	

## Discussion

Majority of the participants in this study believed that counseling and testing for (HIV) is a measure that will assist in curbing the scourge of the disease: which is not unexpected, since the participants are knowledgeable in respect of the subject matter. However, lower number of individuals have been counseled in the past that is probably due to their awareness level of the disease, which makes them shun formal counseling sessions as well as self-testing practice [17]. A health worker can conduct the test on himself /herself unofficially. The forgoing stance is further corroborated by the population of the participants who know their HIV status, which is at par with the percentage who believed counseling and testing is a good health practice.

The disparity in HIV knowledge content and practice of counseling is not a strange development, it is in consonance with studies done elsewhere, [12, 16, 17, 18], better correlation is expected from the health care practitioners, although it is believed that relationship between human knowledge, awareness and other behavioral factors are complex; the relationship is not direct.

This observed difference, in support of self-testing, could be a result of lack of confidence in the confidentiality and quality of counseling and testing in the hospital they work in.

Majority of the participants received HIV-based information from professional colleagues as well

as attendance of seminars; this is not unexpected in the cohort due to interactions on topical issues at personal levels and the continuing medical education: a prerequisite to annual practice certification in the country provides a forum of exchange of ideas.

Majority of the participants (93%) were willing to have HIV screening together with their spouses; they are willing to treat HIV positive patient if the need arise, this is a good attitude to be encouraged in all and sundry.

Marital status and occupation can be mentioned as factors observed in this study to positively impact on willingness to have counseling and testing. Spousal persuasion is likely to be responsible for the observation; perceived higher risk of contracting HIV among medical practitioners and nurses is likely to be an impetus to counseling and testing. Other health workers are not as predisposed to occupational HIV infection; they are likely to be relatively indifferent to VCT.

## Conclusion

The study findings revealed that a good percentage of the respondents had the right attitude towards VCT of HIV/AIDS, while a lesser proportion had the negative attitude.

**Acknowledgment:** We would like to acknowledge Mr. Dapo Oyewole for the assistance rendered in making a success of this endeavor.

## References

1. HIV/AIDS, Conflict and Displacement; Conference report on the XVI International AIDS Conference Affiliated Event HIV/AIDS, Conflict and Displacement. Toronto Canada. Aug. 12, 2006 hosted by UNICEF and UNHCR, 2006.
2. Adekeye OA. Psycho-cultural variables as predictors of attitude of young people towards HIV Voluntary Counseling and Testing in South-Western Nigeria. Germany: VDM Verlag Publishers. 2010.
3. MAP Report 2004. AIDS in Asia Face the Facts: A Comprehensive Analysis of the AIDS Epidemic in Asia.2004.
4. Osagbemi MO, Joseph B, Adepetu AA, et al. Culture and HIV/AIDS in Africa: Promoting Reproductive Health in Light of Spouse-Sharing Practice among the Okun People, Nigeria. World Health & Population. Toronto: Longwood's publishing. 2007.
5. Admassu M, Yohannis F. Factor's affecting acceptance of voluntary counseling and testing among different professionals and community groups in north and south Gondar administrative zones, North West Ethiopia. Ethiopia Journal of Health Development. 2006;20(1):24-31.
6. Dieleman M, Biemba G, Mphuka S, et al. "We are also dying like any other people, we are also people": perceptions of the impact of HIV/AIDS on health workers in two districts in Zambia. Health Policy Plan. 2007; 22(3):139-148. E-pub 2007.
7. World Health Organization. Taking stock: health worker shortages and the response to AIDS. Geneva, World Health Organization. 2006.
8. Van-Dyk AC. HIV/AIDS, Care and counseling: A multidisciplinary approach. Cape Town: Maskew Miller Longman. 2001.
9. Basset MT. Ensuring a public health impact of programs to reduce HIV transmission from mothers to infants: the place of voluntary counseling and testing. American Journal of Public Health. 2002 92:347-51
10. Charles MP, Kweka EJ, Mahande AM, et al. Evaluation of uptake and attitude to voluntary counseling and testing among health care professional students in Kilimanjaro region, Tanzania. BMC Public Health.2009; 9:128 doi: 10.1186/1471-2458-9-128.
11. Vermeer W, Bos AE, Mbwambo J, et al. Social and cognitive variables predicting voluntary HIV counseling and testing among Tanzanian medical students. Patient Education Counseling. 2009.75: 135-140.
12. Adewole DA, Lawoyin TO. Characteristics of volunteers and non-volunteers for voluntary counseling and HIV testing among unmarried male undergraduates. African journal of medicine and medical sciences .2004;33: 165-170.

13. Ikechebelu IJ, Udigwe GO, Ikechebelu N, et al. The knowledge, attitude and practice of voluntary counseling and testing (VCT) for HIV/AIDS among undergraduates in a polytechnic in southeast, Nigeria. *The Nigerian Journal of Medicine*.2006;15: 245-249.
14. Ike SO, Aniebue PN. HIV/AIDS perception and sexual behavior among Nigerian University students. *Nigerian Journal of Clinical Practice* .2007;10: 105-110.
15. Anand S, Barnighausen T. Health workers and vaccination coverage in developing countries: an econometric analysis. *Lancet*. 2007; 369(9569):1277–1285.
16. Campbell S, Klein R. Home testing to detect human immunodeficiency virus: boon or bane? *Journal of Clinical Microbiology*. 2006; 44:3473–3476
17. Mbamara su, ObiechinaNJA, Akabuikie JC. Awareness and attitudes to voluntary counseling and testing (VCT) for human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) among law undergraduates in tertiary institutions in Anambra State, South-east, Nigeria. *International Journal of Medicine and Medical Sciences*. 2013;5 (6): 290-294
18. Iliyasu Z, Kabir M, Galadanci HS, et al. Awareness and attitude of antenatal clients towards HIV voluntary counseling and testing in Aminu Kano Teaching Hospital Kano, Nigeria. *The Nigerian Journal of Medicine*. 2005;14:27-32