Original Article

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

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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

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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.\textsuperscript{1 - 4} 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 \textsuperscript{5}. 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 \textsuperscript{6}, however, majority of HIV infections are acquired among health workers through unprotected sex\textsuperscript{7}.

According to van Dyk\textsuperscript{8} 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.\textsuperscript{9}

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 \textsuperscript{10, 11}. In Nigeria, acceptance rates of VCT among students of tertiary institutions ranged from 8.3\% to less than 30\% \textsuperscript{12-14}. 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 \textsuperscript{15}. 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 1: Sociodemographic characteristics**

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

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

<table>
<thead>
<tr>
<th>Source</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic media</td>
<td>46</td>
<td>19.3</td>
</tr>
<tr>
<td>Print</td>
<td>61</td>
<td>25.6</td>
</tr>
<tr>
<td>Colleagues</td>
<td>74</td>
<td>31.1</td>
</tr>
<tr>
<td>Seminar</td>
<td>57</td>
<td>23.9</td>
</tr>
</tbody>
</table>

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

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

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

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

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes</th>
<th>No</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Will you be willing to test with your spouse?</td>
<td>223 (93.7)</td>
<td>15 (6.3)</td>
<td></td>
</tr>
<tr>
<td>Will you be willing to disclose your result to your spouse?</td>
<td>225 (94.5)</td>
<td>13 (5.5)</td>
<td></td>
</tr>
<tr>
<td>Will you be willing to tell your colleague?</td>
<td>75 (31.5)</td>
<td>163 (68.5)</td>
<td></td>
</tr>
<tr>
<td>Will you be willing to treat a patient with HIV/AIDS</td>
<td>232 (97.5)</td>
<td>6 (2.5)</td>
<td></td>
</tr>
</tbody>
</table>

**Table 5:** Association between sociodemographic variables and willingness for HIV screening

<table>
<thead>
<tr>
<th>Variables</th>
<th>Willingness to screen for HIV</th>
<th>No Willingness to screen for HIV</th>
<th>X2 (P-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-40</td>
<td>162(90.5)</td>
<td>17(9.5)</td>
<td>0.106 (0.75)</td>
</tr>
<tr>
<td>41-60</td>
<td>40(88.9)</td>
<td>5(11.1)</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>101(95.3)</td>
<td>5(4.7)</td>
<td>5.357 (0.21)</td>
</tr>
<tr>
<td>Female</td>
<td>114(86.4)</td>
<td>18(13.6)</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>100(95.2)</td>
<td>5(4.8)</td>
<td>3.766 (0.05)</td>
</tr>
<tr>
<td>Married</td>
<td>110(88.0)</td>
<td>15(12.0)</td>
<td></td>
</tr>
<tr>
<td>Tribe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Esan</td>
<td>93(92.1)</td>
<td>8(7.9)</td>
<td>0.611 (0.44)</td>
</tr>
<tr>
<td>Others*</td>
<td>122(89.1)</td>
<td>15(10.9)</td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical doctors</td>
<td>110(94.0)</td>
<td>7(6.0)</td>
<td></td>
</tr>
<tr>
<td>Nurses</td>
<td>84(84.8)</td>
<td>15(15.2)</td>
<td>5.891 (0.05)</td>
</tr>
<tr>
<td>Others**</td>
<td>21(95.5)</td>
<td>1(4.5)</td>
<td></td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christianity</td>
<td>208(90.8)</td>
<td>21(9.2)</td>
<td>1.690 (0.19)</td>
</tr>
<tr>
<td>Others</td>
<td>7(77.8)</td>
<td>2(22.2)</td>
<td></td>
</tr>
</tbody>
</table>
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


