Evaluation of knowledge of HIV Testing Services (HTS) among Traders at Selected Markets in Enugu State, Nigeria

Bennett Urama and Omeke Uzochukwu Linda

1 USAID Global Health Supply Chain-Procurement and Supply Management Project, Nigeria
2 St. Theresa’s Catholic Church, Ibagwa Aka, Nigeria

Abstract

Background: Enugu State has an estimated population of 4.4 million and HIV prevalence of 2.1%; higher than South East prevalence by 0.2% and the national HIV prevalence by 0.7%. The assessment aimed to determine the awareness of traders in Nkwo Ibagwa-Aka and Afor Unadu markets in Enugu State on availability of HIV testing services at health facilities in their localities.

Methodology: Cross-sectional survey was carried out among 160 traders from the two markets. A semi-structured questionnaire was self-administered to randomly selected traders. 80 respondents completed the questionnaires from each market. Data was analyzed using Microsoft Excel 2019.

Results: Respondents were majorly below the age of 40 years; 52% males and 48% females. Participants were on various educational levels and had different knowledge perspectives on importance of HIV testing. The participants had reasons for undertaking or putting off HIV testing. Among those that undertook HIV testing, there were reasons for disclosing or declining to disclose their status.

Conclusion and Recommendations: General awareness of HIV testing and unwillingness to test is high and might be a rate-limiting step to attaining the first 90 of the UNAIDS 90-90-90 goals. The state government should intensify effort to improve uptake of HIV testing services.

Keywords: HIV testing services; South East geo-political zone; HIV/AIDS; UNAIDS

Background

Sub-Saharan Africa, with more than two-thirds of all people living with HIV globally [1], is the hardest hit region in the world by Human Immunodeficiency Virus infection and acquired immune deficiency syndrome (HIV/AIDS) [2]. Based on the estimate by the Joint United Nations Program on HIV/AIDS (UNAIDS), there are about 37.9 million people living with HIV globally [1] with an estimated 25.6 million in Sub-Saharan Africa by the end of 2018. In Nigeria, an estimated 1.9 million people were living with HIV/AIDS with prevalence at 1.4% in 2018, while there were about 53,000 AIDS related deaths and over 1,30,000 new infections occurring in 2018 [2,3]. Prior to the latest survey, the Nigeria HIV/AIDS Indicator and Impact Survey (NAIIS) that was conducted in 2018, Nigeria HIV disease burden was about 3.2 million with national HIV prevalence estimated at 3.4% (NACA, 2012) [4].

The 2018 Nigeria HIV/AIDS Indicator and Impact Survey (NAIIS) was a national household-based survey that assessed the prevalence of Human Immunodeficiency Virus (HIV) and related health indicators [3]. Home-based HIV counseling and testing services were provided to people who participated in the survey using a serological rapid diagnostic testing algorithm based on Nigeria’s National HIV Testing Guidelines, with laboratory confirmation of seropositive samples using a supplemental assay [3].

HIV prevalence estimates from the NAIIS result varied by state with Enugu State among the top seven states with highest prevalence [3]. Enugu state is in South East geo-political Zone of Nigeria and has an estimated population of 4,411,119 (2,154,432 - males and 2,256,688 - females) [5]. Based on the 2018 Nigeria HIV/AIDS Indicator and Impact Survey (NAIIS), HIV prevalence rate
in Enugu State is 2.1%. The prevalence is higher than the South East geo-political Zone average of 1.9% and the country’s average of 1.4%.

HIV testing is the first step in maintaining a healthy life and preventing HIV transmission for people with undiagnosed HIV. It is recommended as one of the ways of reducing the spread of HIV, and as an initial step to enrolment in care and treatment [6]. Knowledge of HIV testing is critical to ending AIDS as a public health threat, as only informed citizens will demand HIV testing and counseling and reduces risky behaviors [6]. Early diagnosis of the infection and commencement of antiretroviral therapy reduces the spread of infection, morbidity and mortality due to AIDS [7]. Awareness about HIV/AIDS has been created through the media, workshops, and peer education and printed materials [8]. The purpose of this assessment was to assess the level of awareness of traders in selected local markets (Nkwo Ibagwa-Aka and Afor Unadu) in Enugu State on availability of HIV testing services at health facilities in their localities.

**Methodology**

A cross-sectional survey was carried out among 160 traders (n=160) in the age range of 15 years to above 50 years from Nkwo Ibagwa-Aka and Afor Unadu, Enugu State Nigeria. Informed consent was obtained from the selected respondents. Data collection was carried out during the festive period in December 2019 using semi-structured questionnaire. The semi-structured questionnaire was self-administered to the traders that were randomly selected from different sections of the markets. There were 80 respondents each from the markets and the respondents completed the questionnaires without interference of the research team. The questionnaire included sociodemographic data of the respondent’s, knowledge on HIV and AIDS, and other variables. Data were checked for completeness, cleaned up, entered and analyzed with Microsoft Excel 2019. Respondents’ sociodemographics and other variables were summarized using descriptive statistics and expressed as percentage.

**Results**

Table 1 shows the socio-demographic information of the respondents from the two markets. Response was obtained from all 160 respondents sampled in the 2 markets. The respondents were majorly below the age of 40; 52% (83) were males and 48% (77) females. 38% (61) had primary education, 60% (96) had received secondary education while only 2% (3) had tertiary education.

Table 2 shows the respondents knowledge about HIV and other variables. About 13% (21) acknowledged it is important to go for HIV testing whether one is ill or not, 60% (96) admitted they will not on their own go for HIV testing without ill health while 27% (43) claimed they had done HIV testing.

One hundred and sixty (100%) of the participants have heard about HIV or the disease called AIDS and heard of HIV testing services. Of the number that revealed they will not go for HIV testing on their own, 17% (27) believed they will be unable to cope with knowing they are HIV positive; 20% (32) were concerned about the result being shared without their consent in event they test positive of HIV; 30% (48) claimed they make consistent use of condoms and don’t need to get tested; 20% (32) said they rarely have sex, so don’t need HIV testing; 10% (16) assumed they do not require HIV testing because their blood samples had been taken in a hospital when they were ill; 3% (5) claimed they hardly fall sick, thus are naturally immune to HIV infection.

### Table 1: Socio-demographic information of the respondents (n=160).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>83</td>
<td>52%</td>
</tr>
<tr>
<td>Female</td>
<td>77</td>
<td>48%</td>
</tr>
<tr>
<td>Age group</td>
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</tr>
<tr>
<td>1-30 years</td>
<td>50</td>
<td>31%</td>
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<tr>
<td>30-40 years</td>
<td>77</td>
<td>48%</td>
</tr>
<tr>
<td>41-50 years</td>
<td>20</td>
<td>12%</td>
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<tr>
<td>50 and above</td>
<td>13</td>
<td>8%</td>
</tr>
<tr>
<td>Educational level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>61</td>
<td>38%</td>
</tr>
<tr>
<td>Secondary</td>
<td>96</td>
<td>60%</td>
</tr>
<tr>
<td>Tertiary</td>
<td>3</td>
<td>2%</td>
</tr>
</tbody>
</table>

97% (155) of those that claimed they had done HIV testing said they tested negative of HIV while 3% (5) did not want to disclose their result.

**Discussion**

The assessments found that all the respondents had knowledge of HIV/AIDS and are aware of available free HIV testing services in state government owned and private health facilities with funding support from international donors and development organizations. This finding is consistent with several other studies that have reported that the level of awareness on HIV/AIDS is high in Nigeria [8-12]. Cohall et al. [13] in 2001 noted that levels of awareness do not necessarily reflect an understanding of how HIV can be transmitted or prevented. Although respondents in this study demonstrated awareness about HIV or the disease called AIDS and HIV testing services, significant percentages (60%) were unwilling to test in absence of ill health; only 13% acknowledged importance of testing regardless of health status while 27% reported to have tested for HIV. It is apparent from this study that the main reason most people in this area would go for HIV testing is because it is a prerequisite for church weeding. Significant percentage (43%) of the respondents that tested for HIV reported they undertook the testing because it is requirement for church wedding churches in the area; 22% underwent HIV testing prior to blood donation; 10% to know their status; 15% on doctor’s recommendation and 10% was to overcome worry and apprehension. The respondents don’t seem to demonstrate a perfect knowledge of how HIV is transmitted, 3% of the respondents had erroneous belief that they are immune to HIV hence would not require HIV testing; 10% assumed they do not require further testing because their samples had been taken in previous hospital visit; 20% reported they rarely have sex, so do not need HIV testing; 30% reported they use condoms consistently and do not need to get tested. Psychological and emotional reasons are other factors that affect HIV testing among the respondents. 20% were concerned their result could be shared with their relatives without their consent while 17% reported they will be unable to cope with knowing they are HIV positive. Significant percentages (97%) of those that have tested for HIV were willing to disclose and this will aid in controlling the disease while 3% were unwilling.

**Conclusions and Recommendations**

General awareness of HIV testing as well as unwillingness to test is high among the respondents. This might be a rate-limiting step to attaining the first 90 of the UNAIDS 90-90-90 goals and fast-tracking the national response towards ending AIDS in Nigeria by 2030. With the high HIV prevalence rate in Enugu State as revealed by the
NAIIS result, the state government should encourage people that are unaware of their HIV status and those at increased risk of acquiring HIV to go for HIV testing since they are critical to an effective HIV response. The state government should also increase access to HIV testing through Prevention of Mother-to-Child Transmission Services (PMTCT) - enabling millions of children to be born HIV-negative through effective testing and treatment for them and their mothers. There is need to increase enlightenment campaigns to improve uptake of HIV testing with special focus in areas with prospect of producing high yield. Self-testing and assisted partner notification should also be properly utilized to increase HIV diagnosis among men. Efforts should also be focused on minimizing the risk of HIV transmission thus contributing to moving Nigeria closer to controlling the HIV epidemic.

References