



## ASSESSING THE AWARENESS, ATTITUDE, AND INTENTION OF ADOLESCENTS FOR HIV SCREENING SERVICES UTILIZATION IN OSOGBO, OSUN STATE, NIGERIA.

Olorunnisola A. A.<sup>1</sup>, Oyerinde O. O.<sup>2</sup>, Adewoye I. Y.<sup>3</sup>,

Ijanada A. J.<sup>4</sup>, Uwalaka C. H.<sup>5</sup>, and Omoyele O. O.<sup>6</sup>

<sup>1-6</sup>Department of Public Health, Babcock University, Ilishan-Remo, Ogun State, Nigeria.

### Cite this article:

Olorunnisola A. A., Oyerinde O. O., Adewoye I. Y., Ijanada A. J., Uwalaka C. H., Omoyele O. O. (2024), Assessing the Awareness, Attitude, and Intention of Adolescents for HIV Screening Services Utilization in Osogbo, Osun State, Nigeria. International Journal of Public Health and Pharmacology 4(1), 1-7. DOI: 10.52589/IJPHP-JB8QNPBG

### Manuscript History

Received: 12 Mar 2024

Accepted: 18 May 2024

Published: 18 Jun 2024

### Copyright © 2024 The Author(s).

This is an Open Access article distributed under the terms of Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0), which permits anyone to share, use, reproduce and redistribute in any medium, provided the original author and source are credited.

**ABSTRACT:** Information on efficient HIV prevention strategies especially among adolescents in the region is still crucial because more than 70% of all HIV cases worldwide are in Sub-Saharan Africa. This study assessed the awareness, attitude and Intentions of Adolescents for HIV Screening Services Utilization among secondary school students in Osogbo, Osun state, Nigeria. Using multi-stage sampling, 120 students were selected from Selected Secondary Schools (s1-s3). A semi-structured questionnaire was used to collect data to measure the awareness, attitudes and Intentions of Adolescents to utilize HIV Screening Services. The data were presented as descriptive statistics subjected to independent t-test statistics at  $p \leq 0.05$  level of significance. The mean age, for the respondents was  $15.73 \pm 1.461$ . Regarding awareness, About 70% of all students reported not to have individually sought information about HIV Screening at some period and the preferred source of information for the adolescents was in their schools. Further results showed a fairly high and positive attitude for the participants (76.66%) but the mean score for intention was  $26.11 \pm 5.386$ . The need to raise awareness of the target population through education is recommended.

**KEYWORDS:** Adolescents, Awareness, Attitude, HIV Screening, Intention Nigeria.



## INTRODUCTION

The spread of HIV/AIDS among the productive age group particularly young adults is a major public health concern in Nigeria [1]. Sub-Saharan Africa which accounts for just a little above 10% of the world's population is, however, the worst-hit region in the world. The region has a rapidly increasing rate of infection among adolescents. The ages between 15 and 24 years represent the highest at-risk group for the infection of the virus [2]. Research in Nigeria indicates that the lifestyles of students on university campuses put them at increased risk of contracting HIV. This is because the university environment has been shown to promote sexual activity among the general student population [3]. Access to HIV Screening is a major pillar of the National strategic framework adopted by Nigeria for HIV control. The federal government of Nigeria has introduced and implemented various programmes to increase the uptake of HCT. [4]. Notwithstanding these interventions, HIV testing uptake is still low (11% of women and men aged 15 to 49 years) and unknown to many Nigerians, due to the fear of the testing outcome and HIV-related stigma [5].

Screening for HIV could be through a variety of approaches including Provider-Initiated Testing and Counselling (PITC) as part of medical care, and Client-Initiated Testing and Counselling (CITC), often called Voluntary Counselling and Testing (VCT) [6]. Provider-initiated testing takes place in hospital settings, whereby the test would be performed unless patients/clients declined while client-initiated testing and counselling could be performed in various service delivery points ranging from health facilities, specially designed stand-alone sites, mobile outreach to communities and home-based settings; is a process by which an individual undergoes counselling to enable him/her take informed decision about been tested for HIV, assess their personal risk for HIV and develop a risk reduction strategies[7]. The main objective of this study is to assess the awareness attitude and intention of adolescents to utilize HIV screening services among secondary school students in Osogbo, Osun state, Nigeria.

### **Awareness, Attitude, and Intention of Adolescents to Utilize HIV Screening Services**

An appraisal of one's ideas about the repercussions of one's actions and the desirability of those results determine one's attitude [8]. Due to their negative attitudes towards preventive measures, such as finding out their HIV status, abstaining from sexual relationships, and using condoms during coitus, young people are especially vulnerable to HIV transmission. [9]. Findings from a study by Gadegbeku and Saka [10] indicated that another factor that significantly predicts the utilisation of HCT is the attitude of respondents towards HIV Screening services. It was revealed that individuals with discriminating attitudes and fear of stigma were less likely to utilise HIV Screening services. However, this finding is inconsistent with other findings in which participants had positive attitudes towards HCT and were more willing to seek HIV testing [11]. The study of Odu and Akanle [12] posited that there is a nexus between awareness intention and attitude; hence behaviour or practice is shaped by these variables. This implied that having enough education on prevention, transmission and other facts about HIV and AIDS could motivate logical safe sex behaviour. An individual's intention and attitude towards HIV/AIDS and HIV Screening services influences the use of HIV Screening services. A study also indicated that another barrier to the utilisation of HIV Screening services was the attitude and intention to use HCT services[13].

## **HIV/AIDS, HIV Screening Services in Osun State**

It is believed that over 30,000 persons in Osun State are HIV positive at this time, 13,500 of whom have not yet been diagnosed or started on treatment [13]. The HIV Treatment Surge seeks to swiftly close this gap and reach treatment saturation using more aggressive and creative approaches. Along with improving services for important populations and adolescents, the Surge also seeks to stop HIV from being passed from mothers to their offspring, guaranteeing a generation free of AIDS [14]. Awareness education in all secondary and tertiary institution has been identified as a measure to combat HIV and AIDS in the state. Other measures include HIV testing and counseling, and provision of anti-retroviral drugs.

## **METHODOLOGY**

The study was carried out in Osogbo, Osun state, Nigeria. The multi-stage sampling was employed to select 120 participants from two model public secondary schools. The first stage was the purposive selection of the two schools followed the random selection of 200 students from each of the schools.

Structured questionnaire was designed to collect data on awareness and attitude of the respondents. The data collected were subjected to descriptive and test statistics (using t-test). Frequency distribution was used to describe respondent's personal characteristics, while the psychometric scale measurement was employed to assess respondent's awareness of HIV/AIDS and HIV Screening services and attitudinal dispositions about the utilization of HIV Screening services. Every response to a measured variable was binary, with 0 denoting the incorrect response and 1 denoting the correct response. To develop a scale evaluating awareness, attitudinal dispositions, and intention, all the responses were combined. An aggregated point scale was used to measure awareness variables, an aggregated 52-point scale was used to examine attitudinal dispositions about HIV Screening services, and a 484-point scale was created by adding up all of the responses for the intention sub-domain. Mean scores were calculated for each variable based on these. The study employed the t-test to investigate any statistically significant variations in the two schools' means for HIV Screening services awareness and attitudes. Every test was calibrated to  $p \leq 0.05$ .

## **RESULT AND DISCUSSION**

### **Demographic Characteristics of the Participants**

From Table 1, There were more students in the middle adolescence (14 – 16 years) age bracket and the mean age of the students was between 14.5 years and 15 years. Gender distribution was 29.16% males and 70.83% females. It was also observed that the major proportion of the participants (66.66%) are from the Yoruba ethnic group. Christians also formed the greater proportion of the respondents (66.66%) schools.

**Table 3.1: Distribution of Demographic Characteristics of the Participants.**

VARIABLES	N=120	
	Frequency	Percent
Mean Age ( $\bar{X} \pm SD$ )	15.73±1.461	%
<b>Study Class</b>		
• SS 1	45	37.50
• SS 2	65	54.16
• SS3	10	8.33
<b>Gender:</b>		
• Male	35	29.16
• Female	85	70.83
<b>Religion:</b>		
• Christian	80	66.66
• Islam	40	33.33
<b>Ethnicity</b>		
▪ Yoruba	80	66.66
▪ Igbo	35	29.16
▪ Hausa	15	12.5

Source: *Field Survey, 2024*

**Awareness level, attitudinal disposition and perception of respondents to HIV and AIDS.**

Results in Table 2 shows awareness variable for S1 group measured on a 25-point scale reported a mean score of  $18.74 \pm 2.32$  while S2 group scored a mean of  $18.750 \pm 2.32$ . Comparing the two mean scores, there was no significant difference between these mean scores ( $p=0.958$ ) showing similarity in awareness level in the two schools. This result also indicated 75% awareness rating. Though high, it appears to be inadequate to generate sufficient conscious preventive behaviour among this age group especially if confronted with the choice of a risky sexual behaviour [6].

The participants in the S1 reported a mean score of  $6.30 \pm 0.98$  for attitudinal disposition while S2 scored a mean of  $6.30 \pm 0.98$  (Table 3). Comparing the two mean scores for attitudinal disposition about HIV and AIDS issues showed that there was no significant difference between the two schools ( $P=0.960$ ). Hence it may be contrived that the two schools appear to exhibit similarities in attitudinal dispositions. Attitudinal disposition scores also showed fairly high and positive attitude for the participants (Rated from mean scores at 79%). This shows that appropriate behaviour can be aroused among these students given adequate and appropriate education related to HIV and AIDS and communicated through appropriate channels.



**Table 3.2: Respondents' Awareness regarding the Utilization of HIV Screening Services**

VARIABLES	N=120		Level of Significance P-value
	Frequency	Percent	
<b>AWARENESS</b>			
<b>Ever heard about HIV Screening Services</b>			
Yes	65	54.17	
No	55	45.83	
<b>Source of Information</b>			0.379
Friends	25	20.83	
Parents	45	37.5	
Newspaper	5	4.16	
Textbooks	15	12.5	
Radio	2	1.66	
Internet	20	16.66	
Television	2	1.66	
Flyers	6	5.0	
<b>Ever sought information on HIV Screening Services</b>			0.433
Yes	70	58.33	
No	50	41.66	
<b>Where did you obtain such information?</b>			0.094
Library			
School	20	16.66	
Health center/Hospital	60	50	
Textbooks	2	1.66	
Parents	18	15.00	
Others	15	12.50	
	5	4.16	

Source: Field Survey, 2024

**Table 3.3: Respondents' Attitudinal disposition, and Intention to utilize HIV Screening services.**

VARIABLES	Maximum Points on Scale of Measure	N=120		Level of Significance P-value
		Frequency	Percent	
<b>Attitudinal Disposition scale</b>	53	Negative (0-26) 28	23.33 76.66	0.115
		Positive (27-52) 92		
<b>Intention</b>	48	Mean 26.11±5.386		0.108

Source: Field Survey, 2024



The results for awareness variable are presented revealed that 65% of the respondents had heard about HIV Screening Services, and almost half of the students reported having obtained their information from their parents. About 70% of all students across the four groups reported not to have individually sought information about HIV Screening at some period and the preferred source of information for the adolescents was in their schools. The level of attitude of the participants was measured with a 13-item scale. The results showed that 76.7% of the respondents expressed positive attitude toward HIV Screening Service with a mean score of  $30.73 \pm 5.381$ . The intention regarding the Utilization of HIV Screening Services was measured on a scale of 48-points for each adolescent. The analysis showed that the respondents have a mean score of  $26.11 \pm 5.386$ . There was no statistical difference in the distribution of the participants ( $p=0.108$ ). Combining this result with intention above, the need for raising awareness of the target population through education is again reaffirmed.

## CONCLUSION AND RECOMMENDATIONS

This study assessed the awareness, attitude and intention of adolescents to utilize HIV screening services among secondary school students in Osogbo, Osun state, Nigeria. Two secondary schools were selected and a total of 120 students were finally selected for the study from the two schools. The demographic factors examined in this study include age, gender, and religion affiliation of the respondents. Furthermore, the awareness level, attitudinal disposition, and intention of the respondents with respect to HIV screening services were measured and compared across the two schools.

Based on the findings, the secondary school education policy's inclusion of HIV screening services /education in the curricula and extracurricular activities is relevant and has the potential to successfully influence teenage behavior changes that will lower their risk of HIV from an early age. It should be encouraged to conduct research on efficient intervention strategies to support current awareness initiatives.

### *Declaration of conflicting interests*

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### *Funding*

The authors received no financial support for the research, authorship, and/or publication of this article.



## REFERENCES

- [1]. UNAIDS. (2018). Global report: report on the global AIDS epidemic 2018. Geneva, Joint United Nations Programme on HIV/AIDS. Retrieved from <https://reliefweb.int/report/world/global-report-unaid-report-global-aids-epidemic-2018>
- [2]. Wegbreit, J., Bertozzi, S., DeMaria, L. M., & Padian, N. S. (2016). Effectiveness of HIV prevention strategies in resource-poor countries: tailoring the intervention to the context. *AIDS*, 20(9), 1217–1235. <https://doi.org/10.1097/01.aids.0000232229.96134.56>
- [3]. WHO. (2014). Adolescent HIV Testing, Counselling and Care. Retrieved from [https://www.who.int/maternal\\_child\\_adolescent/documents/hiv-testing-counselling/en/](https://www.who.int/maternal_child_adolescent/documents/hiv-testing-counselling/en/)
- [4]. Perdana, M. V., Demartoto, A., & Indarto, D. (2017). Effects of Predisposing, Enabling, and Reinforcing Factors on the Uptake of Voluntary Counselling and Testing among Female Sex Workers in Grobogan, Central Java . *Journal of Health Promotion and Behavior*, 2(3), 242-256. <https://doi.org/10.26911/thejhp.2017.02.03.05>
- [5]. Pogue, K., Jensen, J. L., Stancil, C. K., Ferguson, D. G., Hughes, S. J., Mello, E. J., Burgess, R., Berges, B. K., Quaye, A., & Poole, B. D. (2020). Influences on Attitudes Regarding Potential COVID-19 Vaccination in the United States. *Vaccines*, 8(4), 582. <https://doi.org/10.3390/vaccines8040582>
- [6]. Oladeji, L. T. (2016). Perception, Attitude and Willingness of Civil Servants Towards HIV Counseling And Testing in the Ministry of Education Secretariat Ibadan, Oyo State. Retrieved from <http://adhlui.com.ui.edu.ng/handle/123456789/356>
- [7]. Omeonu, P. E., Agbede, C., & Emea, M. K. (2014). Assessing the awareness, attitude and perception of adolescents for HIV/AIDS education in Nigeria: the case study of Sagamu Remo Ogun State. *IOSR Journal of Nursing and Health Science*, 3(5), 85–88. <https://doi.org/10.9790/1959-03518588>
- [8]. UNICEF. (2019). Adolescents HIV Prevention. Retrieved from <https://data.unicef.org/topic/hiv/aids/adolescents-young-people/>
- [9]. Eagly, A. E., and Chaiken, S, Attitude strength, attitude structure and resistance to change. In R. Petty & J. A. Krosnick (E ds.), *Attitude strength: Antecedents and consequences*, Mahwah, NJ: Lawrence Erlbaum Associates, 1995, 413-432.
- [10]. Gadegbeku, C., & Saka, R. (2013). Attitude of the Youth towards Voluntary Counselling and Testing (VCT) of HIV / AIDS in Accra , Ghana. *Journal of Biology, Agriculture and Healthcare* 3(11), 133–141
- [11]. Odu, B. K, and Akanle F. F, Knowledge of HIV/AIDS and Sexual Behaviour among the Youths in South West Nigeria. *Humanity & Social Sciences Journal* 3 (1), 2008, 81-88.
- [12]. Verma, U. K., Nandan, D., & Shrotriya, V. P. (2014). Awareness regarding HIV/AIDS among adolescents of AGRA city. *National Journal of Medical and Allied Sciences*, 3, 20-23.
- [13]. Veterans Health Administration (VHA) (2018). Secondary HIV Prevention. Retrieved from <https://www.hiv.va.gov/pdf/secondary-HIV-prevention.pdf>
- [14]. Omeonu P.E and Kollie, Erhuvwukorotu S, Knowledge and attitude of Babcock University students on risk behaviours of HIV/AIDS acta SATECH 3(2), 2011, 135 – 142