DISPOSITION TO VOLUNTARY COUNSELING AND TESTING FOR HIV/AIDS AMONG STUDENTS OF OSUN STATE UNIVERSITY, OKUKU CAMPUS, NIGERIA

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Abstract

Due to the significant increase in student enrollment in Nigerian tertiary institutions, many students now live off campus. The custom of male and female students living together is prevalent. Despite this, attitudes toward and use of voluntary counseling and testing services are abysmally poor, thereby making this study apt. The majority of research findings have shown that different population groups utilize voluntary counseling and testing services at varying rates. Thus, the study investigated how Osun State University students felt about volunteer HIV/AIDS counseling and testing. The theoretical basis of this study was anchored on the health belief model. The study was exploratory and used mixed-methods research. The survey method through the questionnaire and in-depth interviews was used to collect data. A total of 180 students were sampled using the questionnaire while 15 students were interviewed. The quantitative data was analyzed and presented in frequency and simple percentages, while the qualitative data were illustrated in verbatim quotations thematically. The findings show that only 18% of the respondents knew their HIV status, 43% did not know theirs, and the remaining 39% did not respond to this. Data revealed a poor attitude on the part of students toward VCT in spite of the couple's lifestyle among the students. The foregoing therefore calls for

Corresponding Author: Musediq Olufemi Lawal, Email: flawal2005@gmail.com renewed efforts towards improving youth awareness about HIV/AIDS, with specific emphasis on (a) the trending cohabitation among unmarried youth and (b) their perceived risk of HIV infection. The necessary recommendations were made accordingly.

Keywords: Voluntary Counseling and Testing, HIV/AIDS, Vulnerability, Students, Osun

Introduction

HIV/AIDS is a destroyer of human lives, which could be seen as a "death trap' threatening many countries all over the world (Eremie & Kennedy, 2016). HIV is the human immunodeficiency virus, while AIDS is acquired immunodeficiency syndrome. The effect of the disease is rated fatal and destructive to human physical, cognitive, and psychosocial growth and development for both children and adults, irrespective of race, creed, poor, and rich. (Detels, Wu, & Wu, 2019). In 2022, there were about 39 million HIV-positive individuals in the world. Out of these, 1.5 million were children under the age of fifteen, and 37.5 million were adults. Furthermore, 53% were women and girls (Kumah, Boakye, Boateng and Agyei, 2023, UNICEF, 2023, WHO, 2023). The concern about HIV/AIDS cannot be isolated from its devastating effects on the economic, social, political, and technological development of any nation like Nigeria, which has a high prevalence rate.

Human Immunodeficiency Virus (HIV) has persisted as a disease of public health importance since 1981, when it was identified and characterized (Awofala & Ogundele, 2018). In fact, it is known as one of the most important public health crises in the world. HIV has claimed more than 35 million lives, with over a million people dying from HIV-related causes worldwide (WHO, 2023). Nigeria, the most populous country in Africa, has 1.9 million people with HIV who are aged 15-49, making it the third-highest HIV burden (Ukaegbu, Alibekova, Ali, Crape, & Issanov 2022). HIV prevalence was 2.1% among adults aged 15-49 years in Nigeria, which corresponds to approximately 2 million people living with HIV (NACA, 2019, Bassey & Miteu, 2023). Meanwhile, knowledge of HIV status is critical in the prevention and treatment of HIV/AIDS because (a) it helps an individual to make an informed decision about getting tested for HIV, (b) assess personal risk for HIV and further develop a risk reduction strategy that leads to behavior change, and (c) subsequently contributes to the reduction of HIV transmission (Sambou, Dai, Zhao, Hong, Basnet, Marley, Sambou, Fadoua, & Naveed, 2022, UNAIDS, 2023). Various preventive strategies have been employed to curb the spread of HIV infection, as there is presently no cure. These strategies are abstinence, avoidance of multiple sexual partners, condom use, voluntary counseling and testing (VCT),

and treatment of HIV-infected individuals form the cornerstones of HIV prevention (Detels, Wu, & Wu, 2019, Costa, Viscardi, Feijo, & Fontanari, 2022).

The Working/Approaches in Voluntary Counselling and Testing of HIV/AIDS

VCT refers to the process by which an individual, couple, or family receives HIV testing and confidential dialogue on HIV prevention, treatment, care, and support (Odimegwu, Imo, & Amoo, 2020). It is the confidential dialog between a person and a care provider aimed at enabling the individual to make a decision to have an HIV test or not (Ikechebelu, Udigwe, Ikechebelu, & Imoh, 2006; WHO, 2010). VCT has many approaches and methods, but generally, the intervention includes four activities, such as pre-test counseling on the testing process, riskbehavior assessment, each participant's informed consent, and post-test counseling based on the test result (Denison, Fonner, Kennedy, & Sweat, 2018). HIV counseling and testing is the gateway to treatment, care, support, and prevention interventions for those who have HIV. For people with negative test results, counseling aims at prevention messages tailored to the client's or patient's risk behavior(s) and provides referrals to prevention interventions, such as male circumcision clinics and support groups (Xu, Ma, Chu, Chen, Miao, Xia, & Zhuang, 2020). Early diagnosis of HIV infection through VCT equally leads to risky behavior change. VCT as a measure aims at giving education about living with HIV, avoiding infecting others, and to uninfected people on how to maintain their sero-negative status. It assists in the early detection of HIV infection. It also assists individuals in accessing intervention and support services, including the management of infectious diseases. It equally aids infected individuals in assessing their personal risks and adopting riskreduction behaviors. It does not work only at the individual level but also provides strength to prevention efforts, particularly at the community level.

It was further stressed that when VCT is accessible, it offers avenues for negatively tested individuals to protect partners and future children against diseases like HIV/AIDS. On the other hand, failure to utilize VCT services often results in missed opportunities for early medical treatment, care, support, and prevention (Alem *et al.*, 2020). Despite the increased campaign for voluntary counseling and testing (VCT) for HIV/AIDS in Nigeria, only a few young people participate in this activity (Nwockocha & Eyango, 2009, Adeleye & Yalma, 2020). Meanwhile, scholars have noted the alarming increase in the number of youths of opposite sexes living together under the camouflage of a lack of hostel accommodation in Nigerian higher institutions of learning (Kasim & Falola, 2017, Jiya & Zhir, 2019). This act is referred to as cohabitation, which is described as the situation in which two persons of opposite sex, without being

conventionally or formally wedded, reside mutually and enjoy all or some of the values of a marital relationship (Ojewola & Akinduyo, 2017, Muhinat, 2022; Aun *et al.*, 2023; Oladejo & Oseni, 2024).

The attendant risk in this is unrestrained fun and sexual activities, which may cause distraction and exposure to sexually transmitted diseases like HIV/AIDS. Meanwhile, scholars have not relented in the process of researching cohabitation (Kasim & Falola, 2017; Ojewola & Akinduyo, 2017, Jiya & Zhir, 2019). Uncontrolled practice of couples' lifestyles among the students of tertiary institutions thus makes their midst the appropriate research setting for the appreciation of students' disposition to voluntary counseling and testing for HIV/AIDS.

Health Belief Model

The study derives its theoretical strength from a health belief model. The underlying concept of the Health Belief Model (HBM) is that health behavior is determined by personal beliefs or perceptions about diseases (e.g., HIV/AIDS) and the strategies available to decrease their occurrence. The Health Belief Model (HBM) suggests that people's beliefs and attitudes significantly influence their health-related actions. Variations in utilization behavior can be explained by four variables: individual perception of vulnerability to disease, perceived severity of the disease, perceived benefits of actions to reduce severity, and potential obstacles. People must consider the benefits of preventing diseases and the costs and inconveniences of seeking healthcare services.

Demographic factors, such as age, gender, and ethnicity, also affect the perceived threat and benefits of diseases. Cues to action, such as media information, advice from others, or the illness of a friend or family member, also influence decision-making regarding preventive action. The model is premised on an individual's subjective assessment of the health situation, especially with regard to health service utilization (e.g., VCT), in that by taking a particular action, an individual's susceptibility or vulnerability would be reduced, or if the disease had already occurred, its severity would be reduced to the lowest possible minimum.

The model is based on the understanding that a person will take health-related action, such as making use of a condom, as related to the context of the present analysis. If the person perceives that a negative health condition like HIV/AIDS can be avoided by taking a certain action and is convinced that the action is likely to be effective and beneficial. In addition, cues to action, which refer to a

variety of stimuli in the environment (e.g., media information, advice from others, the illness of a friend or family member), are said to influence the perceived threat and perhaps trigger one's decision-making with regard to taking preventive action.

Method

This study adopted an exploratory design consisting of quantitative and qualitative methods. The data for the study was primary in nature, and it was sourced through a questionnaire and in-depth interview. A questionnaire was adopted as the instrument for the general survey, which captured the entire group of students. Some students identified as engaging in cohabiting or 'couple lifestyle' were involved in In-depth interview (qualitative method). Students of the Faculty of the Social Sciences at Osun State University, Okuku Campus, who have spent at least two academic semesters on campus were selected as respondents in the study. The basis of this criterion is the involvement of students with rich ideas about the subject matter of this study to facilitate a positive research outcome. A total of 180 students were sampled across the departments (Economics, Geography, Political Sciences, and Sociology) within the faculty. The selection of the respondents involved systematic random sampling of 15 students across 200 to 400 levels in each of the departments making 45 students from each department within the faculty and a total of 180 students altogether. A total of fifteen students who were IDIs were conducted among 15 students who were co-habiting were involved in the in-depth interview method. The data generated through the questionnaire was analyzed using a simple percentage to express findings. The information collected through the interview was content-analyzed.

Results and Discussion of findings

Data on the socio-demographic characteristics of the respondents revealed that 52% were female and 48% were male. The figure above shows 2% of the respondents were less than 18 years of age; this was followed by those in the age cohort of 18–22 years (51%), 22–26 years (33%), and above 23 years (14%). The entire population of respondents declined to comment on their sexual lifestyle. They equally asserted that they don't engage in cohabitation with people of the people of the opposite gender. In line with the assurance of anonymity and confidentiality at the base of this study, the students who are engaging in a couple lifestyle volunteered to provide the needed information as required in this study.

Table 1: Source of Information about VCT and HIV/AIDS

Source of Information	Frequency	Percentage
Radio programme	22	12.0
Television service	32	18.0
Internet	92	51.0
Seminars/Workshops	11	6.0
Fluid Safes driving Student's work	23	13.0
Total	180	100.0

Source: Field Survey, 2023

Knowledge of Voluntary Counselling and Testing

A substantial proportion of the respondents (81%) have heard about voluntary counseling and testing (VCT) for HIV/AIDS before. Among this category, most of them (44%) heard about VCT first about 10 years ago, and 19% of them heard of it about 13 years ago. To others, information about VCT was heard about 8 years ago (23%) and 5 years ago (14%).

The sources of information about VCT included the radio program (12%), television service (18%), internet (51%), seminars and workshops (6%), and health talks during Student Week (13%). Only 41% knew the place where the service is provided within their area; 46% did not know, while the remaining 11% did not respond. The submissions of the participants in the in-depth

Table 2: Disposition to Voluntary Counselling and Testing For HIV/AIDS

Statement	Mean
Knowledge of HIV/AIDS status t hrough VCT will prepare one's mind on how to	4.2
regulate sexual behaviour (safe sexual behaviour)	
Regulations of sexual behaviour will assist in controlling the spread of	3.6
HIV/AIDS and not necessarily through VCT.	
Immoral behaviour like exposure to sensitive parts of the body is likely to stop	3.8
or be reduced through regulations regulation of sexual behaviour	
Emotional support and advice on what to do next is possible through VCT.	3.2
VCT offers avenue for negatively tested individuals to protect partners and	4.0
future children against HIV/AIDS.	
Usage of VCT to checkma te the spread of HIV is a common issue under	3.4
discussion in Nigeria.	
HIV/AIDS is a disease noted as incurable by the orthodox medicine but curable	3.2
through herbal remedy hence the needless of VCT.	
There is no need for VCT since the people infected with HIV/AIDS are easily	2.8
identified through their physical appearance.	
VCT and constant reference to HIV/AIDS are tools for discouraging	2.6
uncontrolled sex activities.	
Conflicting information about the causes of HIV/AIDS and related technicality	2.4
remains an effective weapon being used to torment every human being.	

Source: Field Survey, 2023

interview were equally aligned with the positions of the respondents in the general survey. Only 18% of the respondents knew their HIV status; 43% did not know theirs, while the remaining 39% did not respond to this.

According to the table, the respondents were of the view that knowledge of HIV/AIDS status through VCT will prepare one's mind on how to regulate sexual behavior (safe sexual behavior). The data further noted that regulations on sexual behavior will assist in controlling the spread of HIV/AIDS, but not necessarily through VCT. Other positions, as revealed by the table, included the fact that immoral behavior like exposure to sensitive parts of the body is likely to stop or be reduced through regulation of sexual behavior. Emotional support and advice on what to do next is possible through VCT; VCT offers avenues for negatively tested individuals to protect partners and future children against HIV/AIDS; the use of VCT to checkmate the spread of HIV is a common issue under discussion in Nigeria; HIV/AIDS is a disease noted as incurable by orthodox medicine but curable through herbal remedies; hence the needless use of VCT. They, however, disagreed with the position that VCT is not necessary since people infected with HIV/AIDS are easily identified by their physical appearance. They further affirmed that VCT and constant reference to HIV/AIDS are not tools for discouraging uncontrolled sex activities and that conflicting information about the causes of HIV/AIDS and related technicalities are not weapons for tormenting every human being.

Usage and Non-usage of Voluntary Counselling and Testing for HIV/AIDS

Only 25% of the respondents affirmed that they knew someone who have made use of VCT before. The relationship between the respondents and the individuals they knew have used this service before included, friend (9%), cousin (20%), nephew (28%), neighbor (35%) and self (22%). The distance of VCT center to their place of residence is less than 1 kilometer (7%), between 1 to 3 kilometers (23%) and more than 3 kilometers (31%). The remaining 39% could not ascertain this. Only 23% of the respondents was willing to make use of

Table 3: Rationale for the Usage of VCT Services

Response	Frequency	Percentage
Free of charge	38	21.0
To enhance good health and sustainable living	43	24.0
To have peace of mind over my health status	70	39.0
Conviction that it will always be negative since I'm	29	16.0
always careful about my dealings		
Total	180	100.0

Source: Field Survey, 2023

VCT in the nearest future while the remaining 77% was not sure of the usage of this service. For those that are willing to make use of the service. The rationale for this as stipulated is as shown in the table below.

According to the data above, the respondents were willing to make use of VCT because it is free of charge (21%), the outcome of VCT will enhance good health and sustainable living (24%), enable peace of mind (29%), and they have the conviction that their HIV status will definitely be negative (16%). In the words of one of the participants in the in-depth interview:

I only went for this service accidentally. The organizers brought the program to the town where I was staying with my parents on one Friday. Their stand was erected in between the town hall and the central mosque of the town. I saw a few people going to them but stood to eavesdrop on what they were saying. Based on impulse, I moved closer and submitted myself for testing. I was asked to come back for the result after the Jumat prayer. By the time I came back, my mind was in turmoil because of the uncertainty of what was likely to come out of the test. But eventually, it showed that I was negative (Male IDI/300 Level/FSS-UNIOSUN/10/11/2023).

Table 4: Rationale for non-usage of VCT Services

Source of Information	Frequency	Percentage
Going for VCT service is akin to facing firing squad	63	35.0
Uncertainty about the results	36	20.0
History of poor handling of information by the medical staff	50	28.0
Absence of trust on the efficacy and quality of service being rendered to the people	31	17.0
Total	180	100.0

Source: Field Survey, 2023

On the other hand, those who were not willing to make use of VCT expressed their position as follows: coming for testing is like facing a firing squad (35%), uncertainty about the results (20%), a history of poor handling of information by the medical staff (28%), and a lack of trust about the efficacy and quality of service being rendered to the people (17%). This was further stressed by another participant involved in an in-depth interview. According to her:

The HIV/AIDS issue is quite confusing and complicated. Imagine the fact that HIV/AIDS is not contracted through sexual intercourse. Not everybody is aware of this. In a situation where one is tested and confirmed HIV positive, the shock and devastating effects of such information are unimaginable. It will, more or less, amount to a death sentence. What will my people say about it? What about the social stigma in the entire family? On the basis of this, I'm always very scared to volunteer myself for VCT (Female IDI/400 Level/FSS-UNIOSUN/13/11/2023)

Another participant noted that:

I have heard of a controversial situation where specimens were mishandled and wrongly given to people who were not HIV positive, thereby creating apprehension. I will never live to know the outcome of this if I find myself in such a situation of being given an HIV-positive result instead of an HIV-negative result (Male IDI/300 Level/FSS-UNIOSUN/13/11/2023).

In another submission:

There is an absence of confidentiality on the part of the officials handling the services. I know of a lady who was tested positive, but the information was leaked out by the supporting staff of the organization handling this service. The noise and the spread of information about this eventually resulted in depression and, subsequently, the death of the lady (Female IDI/300 Level/FSS-UNIOSUN/10/11/2023).

Supporting the above, another participant revealed that:

There was a case of a colleague of my uncle who was working on a World Health Organization project on tuberculosis in one of the local government areas in Oyo State. He handled a case involving a lady who was our family friend and had tuberculosis. The lady was advised to come for an HIV test but bluntly refused. We got information about this from the wife of that official, who was a teacher. This shows that the matter was revealed by the official to his wife when he got home. One can imagine the number of people the wife must have informed about this matter. Where, then, is confidentiality? Where is the emotional security of the people

Table 5: Possibility of Individual Vulnerability to HIV infection

Response	Frequency	Percentage
It is highly poss ible for those who are sexually careless or	36	20.0
carefree		
Individuals who are uncomfortable with VCT but still refuse to	40	22.0
participate in regular STDs testing		
Drinking affects decision-making abilities, but abstaining may	32	18.0
decrease the risk of HIV/AIDS.		
Habits of engaging in sexual activities with multiple partners	47	26.0
A sexually active individual that is not in a monogamous	25	14.0
relationship		
Total	180	100.0

Source: Field Survey, 2023

going for such testing? It is in light of these happenings that I have resolved not to go for VCT, no matter how accessible and available it is (Female IDI/300 Level/FSS-UNIOSUN/21/11/2023)

The above table shows that there is a high possibility of individuals being vulnerable to HIV infection when they are sexually careless or carefree (20%); those individuals who are uncomfortable with VCT but still refuse to participate in regular STDs testing are likely to be vulnerable to HIV infection (22%); drinking affects decision-making abilities, but abstaining may decrease the risk of HIV/AIDS (18%); those with habits of engaging in sexual activities with multiple partners (26%); and a promiscuous person who is not in a monogamous relationship will be vulnerable to HIV infection (14%).

Concerns over HIV Status in the face of Couple lifestyle on Campus

Information on belief in vulnerability to HIV/AIDS revealed a myriad of responses from the participants in the in-depth interview. According to their responses, it is obvious that these people have done a little bit of research about the basic HIV prevention strategies. In the words of none of them:

I have always engaged in less risky sexual behavior. I don't have sex with my partners, despite being together for the past two years without a condom. We search for information on the internet on how to use both male and female condoms in order to reduce the risk of sexually transmitted diseases and the possibility of HIV and viral hepatitis. So, every time I have sex, it must be with a condom (Male IDI/400 Level/FSS-UNIOSUN/21/11/2023).

It was further asserted that:

I don't have more than one girlfriend, and I ensure that my girlfriend is not involved in multiple sexual activities. I engage in this in order to safeguard myself because the more sexual partners, the more likely one is to have a partner with poorly controlled HIV or a partner with sexually transmitted infection (Male IDI/300 Level/FSS-UNIOSUN/19/11/2023).

Another position on this issue revealed thus:

I have read a lot about the likely symptoms of STDs and get tested whenever I notice the symptoms and am treated accordingly. This is based on my prior knowledge of STDs as capable of increasing the risk of getting HIV or transmitting it to others. I equally ensure that I don't share injection drug equipment, such as needles or syringes, with anyone, no matter how close such a person is to me (Female IDI/400 Level/FSS-UNIOSUN/21/11/2023)

In another instance, a participant noted that:

HIV can be prevented both before and after sexual interactions by taking certain drugs. This is commonly known as PrEP, or pre-exposure prophylaxis. It is a daily oral drug used to reduce the risk of HIV infection. I turned to this out of self-assurance and in response to an experience that colleagues from other universities had shared (Male IDI/300 Level/FSS-UNIOSUN/22/11/2023)

In the response of another participant:

My partner and I have a plan to get married after graduation, and our relationship is known to our family. This is because we have been together before securing admission to the university. We have been living together since our admission; sexual intimacy is part of it, but I take charge of reproductive health issues, including STDs and related matters, due to my prior training as an auxiliary nurse before our academic sojourn at Osun State University. I run every test to ensure our health status, despite the fact that we are faithful to one another (Female IDI/400 Level/FSS-UNIOSUN/22/11/2023).

Discussion of Major Findings

The disposition of voluntary counseling (VCT) for HIV/AIDS among the students of Osun State University is low and not encouraging. The unique aspect

of this is the general awareness of VCT and its services. In consonance with the findings of Uzochukwu (2011), high knowledge of VCT does not reflect on the attendance at VCT clinics. This is because the majority of them neither approved of VCT for HIV/AIDS nor were willing to avail themselves of the services. This is in spite of their affirmation of the fact that (a) people infected with HIV/AIDS are not easily identified through their physical appearance, (b) VCT and constant reference to HIV/AIDS are not tools for discouraging uncontrolled sex activities, and (c) conflicting information about the causes of HIV/AIDS and related technicalities are not weapons for tormenting every human being.

The reasons given as accounting for refusal to utilize VCT services are, however, in variance with the earliest findings (Onyemachi et al., 2021). which reported that ignorance, cost of VCT, inadequacy of VCT centers, stigmatization, parental pressure, cultural belief, inadequate motivation, and religious belief were the factors affecting the acceptance of VCT services. This study, however, corroborated the positions of Onyemeachi et al. (2021), whose position showed a high prevalence of non-uptake of VCT among the students. In line with Onyemachi et al.'s reports, the present study revealed that a significant number of respondents reported fear of a positive result as one of the main reasons for low VCT uptake.

Implications for Health Education and Sexual Counselling

Preventing risky behaviors connected to HIV/AIDS and providing voluntary counseling are essential components of preventive care (Maduakolam *et al.*, 2022), but this is restricted due to a series of unfolding factors (Ezegbe *et al.*, 2019). The study suggests that adolescents' perceived risk for HIV infection and utilization of voluntary counseling and testing (VCT) is low. This is in spite of unrestricted sexual activities, especially through the emerging trend of cohabitation among the student populace. The implications of this are precarious for the productivity of these future leaders.

Issues raised as the cause of their refusal to participate despite their appreciation of the positive effects of VCT are worthy of consideration. It will be a great disservice to see the facts raised by the respondents as misconceptions about VCT. What should be taken into cognizance about this is that their stance may be a result of a lack of knowledge about the support and care that may be available to them after positive VCT results.

Conclusion and recommendations

For young people to be ready for a safe, productive, and meaningful life in the face of HIV, STIs, unwanted pregnancies, and gender inequalities, comprehensive sexuality education is necessary (Odimegwe *et al.*, 2020; Ezegbe *et al.*, 2019). Health education remains an integral part of the overall prevention of risky behaviors among adolescents. In an attempt to eradicate HIV, there is a need to educate adolescents on the prevention of risky behavior.

Specific attention should be given to how to improve the knowledge of young people about VCT for HIV/AIDS, and its benefits should be intensified. Sexual and reproductive health education should be included in their curriculum. There is a need to engage health workers to change their attitude and stop being judgmental, as this cultural factor is a barrier to the utilization of VCT services by youth.

VCTs for HIV/AIDS centers should be established on campuses where young people will readily access them and feel free to attend. The VCT staff should be trained on the specific needs of the youth, especially on the issue of reproductive health services for young people.

Colleges and universities in Sub-Saharan Africa should strengthen counseling and testing centers where students can access information on HIV and check their sero-status. Colleges and universities should have trained school counselors for individual and group counseling for freshmen and old students in each semester.

VCT should be encouraged by college and university administrators in various countries around the world. Counselors should strictly adhere to confidentiality as professional ethics so that students will feel free to test their sero-status.

Counselors in government institutions should collaborate with college and university counselors in facilitating training sessions for voluntary counseling and testing for students.

References

Adeleye, A.S. & Yalma, R.M. (2020). Knowledge, Attitude and Practice of HIV Counselling and testing (HCT) among Undergraduate Students of University of Abuja, Nigeria.

Alabi, Y.L., Jimoh, A.A.G., & Balogun, O.R. (2010), Factors in the rate of acceptance of HIV/AIDS voluntary counselling and testing (VCT) among youths in

- Kwara state, Nigeria. *Research Journal of Medical Sciences* 4(3):152-156.
- Alem, A.T., Sisay, M.M. & Alemayehu, A.M. (2020). Factors Affecting Voluntary HIV/AIDS Counseling and Testing Service Utilization Among Youth in Gondar City, Northwest Ethiopia. HIV AIDS (Auckl). 12:667-673; https://doi.org/10.2147/HIV.S267494
- Aun, T.T., Ajala, T.M., Adaaku, J.M., Lawal, A.B. & Odun-ayo D.T. (2023). Causes and Consequences of Cohabitation among Tertiary Institution Students in Kwara State, Nigeria, *International Journal of Management, Social Sciences, Peace and Conflict Studies (IJMSSPCS)*, 6(1),
- Awofala, A.A. & Ogundele, O.E. (2018). HIV Epidemiology in Nigeria. *Saudi Journal of Biological Science*, 25(4), 697-703.
- Bassey, A.E. & Miteu, G.D. (2023). A review of current trends in HIV epidemiology, surveillance, and control in Nigeria. *Annals of Medicine and Surgery* (Lond). 12;85(5):1790-1795. doi: 10.1097/MS9.000000000000000004
- Costa, A.B., Viscardi, L.H., Feijo, M. & Fontanari, A.M.V. (2022). HIV Voluntary Counseling and Testing (VCT-HIV) effectiveness for sexual risk-reduction among key populations: A systematic review and meta-a n a l y s i s . e C l i n i c a l M e d i c i n e; 5 2: https://doi.org/10.1016/j.eclinm.2022.101612
- Denison, J.A., Fonner, V.A., Kennedy, C.E. & Sweat, M.D. (2018). HIV Counseling and Testing, Prevention of HIV. In: Hope, T.J., Richman, D.D., Stevenson, M. (eds) Encyclopedia of AIDS. Springer, New York, NY. https://doi.org/10.1007/978-1-4939-7101-5_243
- Detels, R., Wu, J., Wu, Z. (2019). Control of HIV/AIDS can be achieved with multistrategies, *Global Health Journal*, 3(2), 29-32, https://doi.org/10.1016/j.glohj.2019.06.001.
- Eremie, M.D. & Kennedy, M. (2016). Empirical Review of HIV/AIDS Awareness, Attitudes and Sexual Activities among College and University Students, *Kuwait Chapter of Arabian Journal of Business and Management Review*, 5(6), 32-38.
- Ezegbe, B.N., Enyenwa, B. & Ogbonna, G.L. (2019). Perception of risk behaviours influencing HIV and AIDS prevention and control among secondary school adolescents in Enugu State, Nigeria. *Global Journal of Health Science*. 11(6):10.
- Jiya, J. & Zhir, A.D. (2019). Factors Influencing Cohabitation Among Undergraduate Students of Federal University of Technology Minna, Niger State, Nigeria: Implications for Counselling, *Journal of Education and Practice*, 10(9), 20-25.
- Kasim, O.F. & Falola, O. (2017). Cohabitation and Students' Academic Performance in Selected Tertiary Institutions in Ibadan, Nigeria, *African*

- *Journal for the Psychological Study of Social Issues*, 20(2):188-197.
- Kumah, E., Boakye, D.S., Boateng, R. & Agyei, E. (2023). Advancing the Global Fight Against HIV/Aids: Strategies, Barriers, and the Road to Eradication. *Annals of Global Health*. 27;89(1):83. doi: 10.5334/aogh.4277.
- Maduakolam, I.O., Ogbonnaya, N.P., Ndubuisi, I.F., Ekechukwu, E.N.D., Okoronkwo, I.L., & Onwujekwe, O. (2022). Effects of a structured health education on prevention of HIV risky behaviours among adolescents in Nigeria a pragmatic randomized controlled trial. *Libyan Journal of Medicine*, 17(1). https://doi.org/10.1080/19932820.2022.2128414
- Muhinat, B.B. (2022). Causes and Consequences of Cohabitation among Students of Federal Polytechnics Offa, Kwara State, Nigeria. Equilibrium: *Jurnal Pendidikan*, 10(1), 9-15.
- National Agency for the Control of AIDS (NACA, 2019). Nigeria Prevalence Rate NACA Nigeria. [online] Naca.gov.ng. Accessed at https://www.naca.gov.ng/nigeria-prevalence-rate/
- Nwokocha, E.E. & Eyango, V. (2009). Attitudes and Behaviour of Nigerian University Students towards Voluntary HIV Counselling and Testing, *Nigerian Journal of Sociology and Anthropology,* 7(1):43-58. DOI: 10.36108/NJSA/9002/70(0110)
- Odimegwu, C.O., Imo, C.K. & Amoo, E.O. (2020). HIV voluntary counselling and testing and behaviour changes among youths in Nigeria. *Journal of Biosocial Science*. 52(3):366-381. doi:10.1017/S0021932019000506
- Ojewola, F.G. & Akinduyo, T.E. (2017). Prevalence and Factors Responsible for Cohabitation among Undergraduates of Adekunle Ajasin University, Ondo State, Nigeria, *American Journal of Educational Research*, 5(6), 650-654
- Oladejo, S.Y. & Oseni, B.M. (2024). A Sociological Analysis of Cohabitation among Students in a Selected Nigerian University. *Sciendo*, 17(28), 12-23.
- Onyemachi, P., Awa, M., Ejikem, M. & Enukeme, J. (2021) Prevalence and Predictors of Non-Uptake of HIV Voluntary Counseling and Testing among Undergraduates of Tertiary Institution in Abia State, Nigeria. *Open Journal of Statistics*, 11, 19-35. doi: 10.4236/ojs.2021.111002.
- Sambou, M.L., Dai, J., Zhao, X., Hong, T., Basnet, T.B., Marley, G., Sambou, A., Fadoua, E.H. & Naveed, M. (2022). Determinants of Voluntary Counseling and Testing Service Uptake Among Adult Sub-Saharan Africans: A Systematic Review and Meta-Analysis. *Public Health Review*, 3:43:1604065. doi: 10.3389/phrs.2022.1604065.
- The United Nations Program on AIDS/HIV (UNAIDS, 2023). Global HIV Statistics Fact Sheet. Retrieved from https://www.unaids.org/sites/default/files/media_asset/UNAIDS_FactSheet_en.pdf

- Ukaegbu, E., Alibekova, R., Ali, S., Crape, B. & Issanov A. (2022). Trends of HIV/AIDS knowledge and attitudes among Nigerian women between 2007 and 2017 using Multiple Indicator Cluster Survey data. *BMC Public Health* 22, 440 (2022). https://doi.org/10.1186/s12889-022-12865-y
- UNICEF (2023). Global and regional trends. Available at https://data.unicef.org/topic/hivaids/global-regional-trends/Uzochukwu, B., Uguru, N., Ezeoke, U., Onwujekwe, O. & Sibeudu, T. (2011). Voluntary Counseling and Testing (VCT) for HIV/AIDS: A study of the knowledge, awareness and willingness to pay for VCT among students in tertiary institutions in Enugu State Nigeria, Health Policy, 99(3), 277-284, https://doi.org/10.1016/j.healthpol.2010.11.007.
- World Health Organization (WHO, 2023). HIV and AIDS: key facts. World Health Organization. Published 2023. Accessed August 7, 2023. https://www.who.int/news-room/fact-sheets/detail/hiv-aids.
- Xu, Z., Ma, P., Chu, M., Chen, Y., Miao, J., Xia, H. & Zhuang, X. (2020). Understanding the Role of Voluntary Counseling and Testing (VCT) in HIV Prevention in Nantong, China. *Biomed Res Int.* doi: 10.1155/2020/5740654.