

HIV/AIDS Awareness and Adolescent Students' Involvement in Sexual Relationships in Secondary Schools in Cross River State: The Rural-Urban Narratives

Bassey Edwin Okpa, Ph.D

Department of Educational Foundations, Faculty of Education,
National Open University of Nigeria, Abuja, Nigeria.
Email: edwinbassey@yahoo.com, ebassey@noun.edu.ng
Tel: 08036700985

Abstract

This correlational research is aimed at determining the relationship between HIV/AIDS awareness and adolescents' involvement in sexual relationships. The study was carried out in Cross River State. Three research questions guided the conduct of the research, while three null hypotheses were tested at 0.05 alpha level. All the 6449 SS2 students in the 18 public secondary schools in Calabar Municipality and Ogoja Local Government Areas constituted the population of the study. The sample used consisted of SS 2 students who were randomly drawn from ten secondary schools. The instrument for the data collection was a questionnaire named HIV/AIDS Awareness and Adolescents' Involvement in Sexual Relationships Questionnaire (HAAISRQ). One expert each in Health Education, Educational Psychology and Measurement and Evaluation validated the instrument. The reliability coefficient scores of 0.84 and 0.86 for HIV/AIDS awareness and involvement in sexual relationships were respectively obtained through the test-re-test method. The data collected were analysed using simple percentage, Pearson product Moment Correlation and t-test. The results obtained from the data analyses showed that there was a significant relationship between urban and rural secondary schools. It was further found that students in urban secondary schools were more involved in sexual relationships than their rural counterparts. It was recommended, among other things that more HIV/AIDS awareness campaigns should be done in the rural secondary schools while guidance and counseling services should be provided in all secondary schools and sexuality education should also be introduced in all our secondary schools.

Keywords: HIV/AIDS awareness, sexual behaviour, adolescent sexuality, sexual relationships, venereal diseases, etc.

Introduction

Acquired Immune Deficiency Syndrome (AIDS) is unarguably one of the world's most deadly diseases. Engleberg (2007) described it as the greatest scourge of modern times. AIDS is a human viral disease which destroys the human immune system thereby rendering the body incapable of defending itself from different infections or diseases. This may be the reason AIDS is described as an ill health which occurs in a situation where one is seriously sick because the immune system has been seriously destroyed by other infections (Nelson and William, 2007). AIDS is caused by the Human Immune Deficiency virus (HIV). The virus attacks and destroys the CD4+ T-Cells which are an important part of the human immune system (Unachukwu & Ebenebe, 2003; UNAIDS, 2008). AIDS was first discovered in 1981 in the U.S.A among homosexual men and users of intravenous drugs (Unachukwu, 2003; Dimbuene and Defo, 2011). It has been argued that AIDS appears to have had its origin in Central Africa as early as the 1950s. The recent isolation of African green monkeys infected with the Simian Immune Deficiency Virus (SIDV) which is related to HIV-1 and HIV-2 the strains that primarily caused AIDS, has given even more reasons to be afraid of the pandemic syndrome (Prescott et al, 1999; Abonia, Onayade, Ijadunola, Obiajunwa, Aina and Thairu, 2006; FMOH, 2007; Ajayi, Hellandendu and Odekunle, 2011).

Global public health campaigns offer great potential to raise awareness of and understanding about health issues. The World Health Organization initiated the annual World AIDS Day in 1988 and there have been national and regional HIV/AIDS awareness initiatives across the globe (Adeleke, Adekanye and Adefemi (2011). In Nigeria, media campaigns have reached and are still reaching out a large portion the target population. More exposure to these mass media programmes can help increase HIV/AIDS awareness (Ongwara and Odenyo, 2012) especially among adolescents in secondary schools. Major aspects of reproductive ill-health arise first during adolescence which is the time It is a time behaviours are adopted that may have major consequences later on. A study from Ghana by Appiah-Agyekum and Suapim (2013) raised important concerns about the reluctance of Senior High School girls to use condoms as a preventive measure and the need to reorient HIV/AIDS awareness interventions among them.

Similarly, another study by Samkange-Zeeb, Spallek and Zeeb (2011) reported low levels of awareness and knowledge of Sexually Transmitted Infections (STIs) among adolescents. Conversely, researchers reported that 99% of secondary school students in a Kenyan study indicated that they had heard about AIDS (Oljira, Berhane and Worku, 2011) and about a quarter of them had comprehensive HIV/AIDS knowledge in Ethiopia (Bastein, Kajula and Muhwezi,

2011). In the same vein, sexuality education and communication between parents and their children were identified (Dimbuene and Defo, 2011) as a protective factor for sexual and reproductive health among adolescents. Therefore, stakeholders such as parents and teachers should be involved in sexuality education of their wards right from the design of the intervention (Shrestha, Otsuka, Poudel, Yasuoka, Lamischhane and Jimba, 2013). Sexuality education aims to reduce the risks of negative outcomes of sexual behaviours. Parent-child sexuality communication has been identified as a protective factor for adolescent sexual and reproductive health, including HIV infection (Kassie Mariam and Tsui, 2008).

Likewise, school-based sexuality education is an effective medium to convey health information and skills on preventing STIs especially, HIV/AIDS and unwanted pregnancies among adolescents (Abiona, Onayade, Ijadunola, Obiajunwa, Aina and Thairu, 2006). The role of the family as a source of HIV knowledge, transmission and prevention strategies is of paramount importance. However, Dimuene & Defo (2011) revealed that families had been poorly integrated in the design and implementation of the first generation of HIV interventions and there was urgent need for policymakers to work together with families to improve the efficiency of those interventions. Studies have shown that comprehensive HIV/AIDS knowledge is associated with communication with guardians, parents and peers about sexual topics (Ajayi, 2011). However, some African countries considered it a taboo for teachers and parents to talk with students about sexual matters including STDs in schools and at home because of cultural and religious beliefs (American International Health Alliance (AIHA), 2008). Political pressure also keeps sexuality education out of classrooms as there is disagreement over what to teach, by whom, and to what extent (American International Health Alliance (AIHA), 2008). In a nutshell, creating AIDS awareness is more difficult due to cultural and religious beliefs.

The prevalence level of AIDS in Nigeria in 1986 when it was first diagnosed in a 13 year old girl was almost zero; but by 2005, 5% of the Nigeria population was infected with AIDS (Osotimehin, 2005). Many lives may have been lost and many children may have been made orphans, having lost their parents to the AIDS scourge. As its spread rages on, it is possible that many more people are at the risk of being infected- men and women, old and young. Osetimehin, (2005) however, lamented that adolescents were the most vulnerable to HIV/AIDS infection in Nigeria due to their sexual activities. This situation, according to the author, could spell doom for the Nigerian nation as her future generation was being compromised. Adolescents are found to be the most vulnerable group to AIDS infection. It is at this stage in human development that

the individual engages in all sorts of experimentation including sexual activity which is one of the easiest modes of transmitting the HIV Virus (Unachukwu, 2003). Unfortunately, AIDS is pandemic and it has no known cure at present (Bastenini, Kajula and Muhwezi, 2011).

There is the need therefore, to find ways of ensuring that its continued spread is checked or prevented. In another development, Adeleke, Bilkisu, Danjuma and Wasiu (2015) observed that the magnitude of the HIV epidemic and the prevailing lack of sexual health interventions targeting young people in Sub-Saharan Africa called for wider awareness and strategic approach-based advocacy. The authors further observed that although adolescents were pivotal to manpower development and technological advancement in Nigeria, HIV epidemic was on the increase among those vulnerable groups, thereby threatening the society as a whole when those groups were not adequately protected due to lack of sexuality education and rightful intervention programmes.

The authors used a cross-sectional descriptive study to assess the level of awareness and knowledge of and attitude towards HIV/AIDS issues among secondary school students in Eti-osa- Local Government Area of Lagos State, Nigeria. A stage-wise clustered sampling technique was used to select a sample of 343 respondents for the study. A structured questionnaire was used for the data collection. The result of the analysed data showed that half of the participants (165, 50.9%) lived with both parents and a little more than one-third (113, 34.5%) belonged to well-educated parents. Most participants (296, 91.9%) were very much aware of HIV/AIDS, while about 79 respondents (24.2%) of them had had a sexual experience. A greater portion of them (213, 64.%) discussed sexual matters with their parents and the majority (205, 63.9%) would care for their HIV/AIDS positive relatives. The study concluded that most of the respondents (76%) had very fair knowledge of HIV/AIDS and the information came principally from their parents. While less than 10% of the respondents got their awareness about HIV/AIDS from public media outlets.

Oljira, Berhane and Work (2011) saw education as an effective way of achieving success when awareness was created concerning the nature, causes, clinical presentation and mode of transmission of HIV/AIDS infection. According to Nelson (2007), WHO and UNAIDS had performed international studies on the effects of literacy on the HIV rate in 1998. The result showed that there existed a strong correlation between high literacy and a lower number of HIV infections. Literacy gives access to a lot of information which includes the subject of HIV, its transmission and protection. In short, higher literacy leads to a higher acquisition of HIV awareness (Nelson 2007). However, the reverse has been the case in Sub-Saharan Africa. In the geographical area, social change and development plus the

opportunity for high education have somehow encountered behaviors that may inflict a higher risk of contracting HIV. Well paying jobs and education support risk behaviour such as alcohol consumption and the use of prostitutes. For women, education and well paying jobs lead to a higher social mobility and an increased number of sexual partners (Nelson, 2007).

In 2000, the Federal Government of Nigeria set up the National Action Committee on HIV/AIDS (NACA) for the sole purpose of creating the needed awareness to curb the spread of the virus. To this end, Osotimehin (2005) believed that through education and awareness campaigns being mounted by the National Agency for the Control of AIDS (NACA) since its inception, the war against HIV/AIDS in Nigeria would be won. Consoling as this may sound, it is not yet clear how aware adolescents (the most vulnerable group to HIV/AIDS infection) are about issues relating to HIV/AIDS. It is also not certain how their level of awareness relates to their involvement in sexual relationships, one of the easiest means of HIV/AIDS transmission. The questions one may ask in the light of the above statements are: how aware are adolescents of issues relating to HIV/AIDS? How does their level of HIV/AIDS awareness relate to their involvement in sexual relationships? In other words, what is the relationship between HIV/AIDS awareness and involvement in sexual relationships among adolescents? This study was designed to answer those questions. The under stated research questions directed the conduct of this study.

What is the relationship between HIV/AIDS awareness and adolescent students' involvement in sexual relationships?

1. What is the difference in the relationship between HIV/AIDS awareness and adolescents' involvement in sexual relationships among rural and urban secondary school students?

The following null hypotheses were tested at 0.05 level of significance.

- 1) H_{O1} : There is no significant relationship between HIV/AIDS awareness and adolescents' involvement in sexual relationships among rural and urban secondary school students.
- 2) H_{O2} : There is no significant difference in the relationships between HIV/AIDS awareness and adolescent' involvement in sexual relationship among rural and urban secondary school students.

Methodology

The study was correlation research designed to determine the relationship between HIV/AID awareness and adolescents' involvement in sexual relationships among urban and rural secondary school students in Cross River

State. The area of study was secondary schools in Cross River State (Calabar Municipality and Ogoja Local Government Area). The population of the study consisted of all the Senior Secondary Class Two (SS2) students (totaling 6449) in all the 24 public secondary schools in Calabar Municipality and Ogoja Local Government Area of Cross River State. The Sample of the study however, was made up of 200 SS2 students from 10 public secondary schools from both Calabar Municipality and Ogoja Local Government Areas. In drawing the sample, the multistage random sampling technique was used to select 5 public secondary schools and 100 SS2 students from each of the two Local Government Areas under study.

A structured questionnaire code named HIV/AIDS Awareness and Adolescent Involvement in Sexual Relationship Questionnaire (HAAISER) was designed using a five point likert scale response option, and it was divided into three sections: A, B and C. Section A assessed the personal data of the respondents. Section B contained items used to determine the level of HIV/AIDS awareness among the respondents and section C contained items used to assess the respondents' level of involvement in sexual relationships between the school locations. The instrument was validated by an expert each in Health Education, Educational Psychology and Measurement and Evaluation. The test re-test method was used to determine the reliability coefficients of the various sections of the instrument. The reliability coefficients obtained were 0.84 for HIV/AIDS awareness and 0.86 for involvement in sexual relationships and school location. The data collected were analysed with simple percentage and independent t-test analysis.

Result and Discussion

The results elicited from the analysis of research questions 1 and 2 were presented in Table 1.

Table 1: HIV/AIDS Awareness level and adolescents' involvement in sexual relationships

S/no	HIV/AIDS awareness level	Students	%
1	High	99	49.5
2	Medium	75	37.5
3	Low	26	13.0
	Total	200	100

The first research question and purpose sought to assess the HIV/AIDS awareness level and adolescent students' involvement in sexual relationships among secondary school students. From the result shown in Table 1, it was found that 99 respondents, representing 49.5% of the respondents, ticked that their level of HIV/AIDS awareness and involvement in sexual relationships was high, 75 respondents representing 37.5% response showed that the HIV/AIDS awareness level and adolescent students' involvement in sexual relationships was still at the medium or average level and 26 respondents (13.5%) showed that the students' level of HIV/AIDS awareness and involvement in sexual relationship was still very low. The summary of the medium and low indicated that their level of HIV/AIDS awareness and involvement in sexual relationships was low but commendable. Looking further into the result of the analysis, a further deduction could be made.

Table 2: Correlation coefficient @ for HIV/AIDS awareness and involvement in sexual relationship among adolescent

Variables	HIV/AIDS awareness Mean (x) Score	Involvement in sexual relationship mean (x)	N	r
Overall	58.51	72.29	200	-0.69
Adolescents				
Urban	60.69	74.08	100	-0.48
Adolescents				
Rural	58.96	73.36	100	-0.48
Adolescents				

In Table 2, it was observed that an r of -0.69 was obtained for the relationship between HIV/AIDS awareness and adolescents' involvement in a sexual relationship. For the relationship between HIV/AIDS awareness and involvement in sexual relationships by adolescents in the urban areas, an r of -0.63 was obtained while an r of -0.48 was obtained in sexual relationship between HIV/AIDS awareness and involvement in sexual relationships by adolescents in the rural areas. It meant that there was a correlation between HIV/AIDS awareness and adolescents' involvement in sexual relationship in secondary schools in Cross River State.

The purpose was to examine how school location influenced HIV/AIDS awareness level and adolescents' involvement in sexual relationships between urban and rural secondary schools in Cross River State. The null hypothesis which stated that there was no significant difference in relationships between

HIV/AIDS awareness and adolescents' involvement in sexual relationships among urban and rural secondary school students yielded a t-value of 5.755 which was statistically significant at .05 probability level ($p < .05$). Based on that result, the null hypothesis was rejected while the alternate hypothesis was accepted. It implied that school location significantly influenced HIV/AIDS awareness level and adolescents' involvement in sexual relationships among urban and rural secondary school students used in this study. Since the mean score of students in urban schools was higher than their counterparts in rural schools, it followed generally that, students in urban schools tended to exhibit more HIV/AIDS awareness than their counterparts in rural schools.

Table 3: Independent t-test of school location on HIV/AIDS awareness level

School Location	N	Mean	Std Dev	t-Value	p-level
Urban	117	43.05	8.26	5.755	.000
Rural	83	37.43	11.69		

* $p < .05$

The result of the data analysis in Table 3 showed that the independent t-test analysis of the influence of school location on HIV/AIDS awareness level of adolescents' involvement in sexual relationships with a yielded t-value of 5.755 was statistically significant at .05 probability level ($p < .05$). Based on that result, the null hypothesis was rejected, while the alternate hypothesis was accepted. It implied that school location (urban – rural) significantly influenced HIV/AIDS awareness and adolescents' involvement in sexual relationships among secondary school students. Since the mean score of students in urban schools was higher than their counterparts in rural schools, it followed generally that students in urban schools tended to exhibit more HIV/AIDS awareness and they engaged in sexual relationships more than their counterparts in rural schools.

The results of this study indicated that there was a significant relationship between HIV/AIDS awareness and adolescents' involvement in sexual relationships. It implied that the adolescents' HIV/AIDS awareness was high while their involvement in sexual relationships was low in the rural schools but high in urban secondary schools. The trend was maintained among adolescents in the urban area who obtained HIV/AIDS awareness information from their parents and other mass media. The, low HIV/AIDS awareness was found to be associated with a high involvement in sexual relationships among the adolescent students in urban secondary schools.

Earlier researches conducted in this area by Jatau and Kajang (2002), Onuizulike (2003) and Unachukwu (2003) and American International health Alliance (AIHA) (2008) reported adolescents' low HIV/AIDS awareness and higher involvement in sexual relationship. Significantly, Unachukwu (2003) found that adolescents received awareness of the use, mode of transmission and nature of HIV/AIDS disease. According to this author, the adolescents' studies believed that HIV/AIDS was a punishment from God, and the origin was unknown. They also believed that HIV/AIDS could be a Whiteman's disease which was brought to Africa to control population growth. The reason for HIV/AIDS awareness, as found in this present study could be attributed to adolescents' misconception regarding the HIV/AIDS syndrome, as noted by Anyebe, Whiskey, Ajayi, Garba, Ochigho and Lawal (2011). Again, the reason for the high incidence of sexual relationships among adolescents also found in this study could be attributed to the fact that the adolescence stage of development was characterized by a high incidence of heterosexual relationship which could culminate into intimate sexual relationships (Chopra and Rollins, 2008; Hofmann, De Allegri, Sarker, Sanon and Bhler, 2009). The fact that adolescents also engaged in sexual relationships, could also be the reason for the high incidence of sexual relationships found among them in this study. Those explanations held for adolescents in both urban and rural areas, and could be as a result of a similarity in their experiences as adolescents. The result was in line with the study by Horstmann, Brown, Islam, Buck and Agins (2010) which showed that adolescent students in both rural and urban secondary schools had high levels of HIV/AIDS awareness and most of them are engaged in sexual relationships, but the urban secondary schools are more sexually promiscuous than the rural students. The difference was explained by some scholars to be the result of their exposure to pornographic films, while others were exposed to different sexual discourses on electronic media like films. Home videos, internet adult contents, among others. Most of these avenues are not readily available to rural secondary school students. The findings of this study, as stated above, were disheartening. They seemed to give evidence to the claim made by Osatimehin (2005) that we were far from winning the HIV/AIDS war in Nigeria because so many adolescents were already aware, and were involved in sexual relationships and as such, there was every need for stakeholders to rise and confront those challenges headlong.

Conclusion

Based on the findings of this work, one is left with no doubt that there is a high level of HIV/AIDS awareness among adolescent secondary school students in Cross River State. The study, therefore, concluded that the HIV/AIDS

awareness level was high among secondary school students and higher among urban secondary school students than in the rural secondary schools. It was further concluded that the rate of adolescents' involvement in sexual relationships was far higher among adolescent students in urban secondary schools than among rural secondary school students.

Recommendations

Based on the result and the findings of this study, the following recommendations were made.

1. All stakeholders in the campaign of HIV/AIDS- government, World Health bodies, non-governmental organizations, among others, should strengthen their campaign activities more in the urban communities and take the same campaigns further to rural communities so that the needed awareness could be created alongside the mitigation measures like abstinence, mutual fidelity and the use of condoms so that the adolescents would be protected.
2. Guidance counselors are needed in all secondary schools to help the school adolescents understand their sexuality so as to avoid being victims of sex related problems.
3. It was also recommended that sex and sexuality education should be introduced to primary and post primary levels to guide adolescent students on the danger of engaging in pre-marital sexual relationships.
4. There is the urgent need for parents and other social institutions (The church schools, social organizations) to come out fully and play their statutory obligation of repositioning our moral standards.

References

- Abiona, T. C. Onayade, A. A., Ijadunola, K. T., Obiajunwa, P.O., Aina, O. I., Thairu, I. N. (2006). Acceptability, feasibility and affordability of infant feeding options for HIV-infected women: A qualitative study in south-west Nigeria. *Maternal Child Nutrition*, 2: 135-144.
- Adeleke, I. T., Bilkisu, A. A., Danjuma, A. and Wasiu, A. A., (2015). HIV/AIDS awareness among secondary schools' adolescents in South-western Nigeria: a correlate to strengthen advocacy and strategic sexuality education programs. *American Journal of Health Research*, 5; 3 (1-1): 61-67
- Adeleke, I. T., Adekanye, A. O., Adefemi, S. A., (2011). Knowledge, attitudes and practice of confidentiality of patients' health records among healthcare professionals at Federal Medical Centre, Bida. *Nigerian Journal of Medicine*; 20(2): 228-235

- Ajayi, A. D., Hellandendu, J and Odekunle, F., (2011). Socio-demographic correlates of breastfeeding practices among mothers in Kogi state, Nigeria, *West African Journal of Nursing* 22 (1); 28-35.
- Ajayi, A. D., Hellandendu, J., Garba, S. N., Oyedele, E. A., Anyebe, E. E., Sani, D. K. (2011). Factors associated with the practice of exclusive breast feeding among mothers in Kogi State, Nursing and Midwifery Council of Nigeria. *Research Journal*; 1(1) 20-28.
- American International Health Alliance (ALHA)., (2008) Infant feeding practices of mothers of known HIV status in Lusaka, Zambia. *Health Policy and Planning* 18(2): 156-162.
- Anyebe, E. E., Whiskey, H., Ajayi, A. D., Garba, S. N., Ochigbo, C. E. and Lawal, H., (2011). Pregnant women's knowledge and awareness of prevention of mother-to-child transmission of HIV/AIDS and voluntary counseling and confidential testing uptake in selected health Centers in Zaria, Nigeria, *Nursing and Midwifery Council of Nigeria Journal* 1(1); 13-18.
- Apiah-Agyekum, N., Suapim, R. H. (2013). Knowledge and awareness of HIV/AIDS among high school girls in Ghana. *HIV/AIDS (Auckl)*; 5: 137-144.
- Bastein, S., Kajula, L. J., Muhwezi, W. W., (2011). A review of studies of parents-child communication about sexuality and HIV AIDS in sub-saharan Africa. *Reproductive Health*; 8: 25. Doi: 10.1186/742-4755-8-25.
- Chopra, M., and Rollins, N., (2008) Infant feeding in the time of HIV: rapid assessment of infant feeding policy and programs in four African countries scaling up prevention of mother to child transmission programs. *Arch. Dis. Child.*, 93: 288-291.
- Dimbuene, Z. T. and Defo, B. K., (2011). Fostering accurate HIV/AIDS knowledge among unmarried youths in Cameroon: Do family environment and peers matter? *BMC Public Health*. 2011; 11:348..
- Engleberg, N.C, (2007) Mechanisms of microbial Disease. 4th Edition USA: Lippincott Williams and Williams.
- Hofmann J., De Allegri M., Sarker M., Sanon M. and Bhler T., (2009). Breast milk as the "water that supports and preserves Life" Socio-cultural constructions of breastfeeding and their implications for the prevention of HIV. *International Journal of Nutrition* 2(5) 126-134
- Horstmann E., Brown J. Islam F., Buck J., Agins B. D., (2010) Retaining HIV-infected patients in care: where are we? Where do we go from here? *Clin Infect Dis* 2010, 50: 752-761.
- Jatace, A. A. & Kajang, Y. G. (2002). Knowledge, perception and AIDS and sexual behavior among part time students of Federal College of Education Pankshen, Nigeria *Journals of Health Education*, 10(1), pp. 111-125
- Kassie, G. M., Mariam, D. H., Tsui, A. O. (2008). Patterns of knowledge and condom use among population groups: results from the 2005 Ethiopian behavioural surveillance Surveys on HIV. *BMC Public Health*; 8:429.

- Nelson, K. E. (William, M. C. (2007) *Infectious Disease Epidemiology and Practice 2nd edition* London: John & Baltett publishers
- Oljira, L., Berhane, Y., and Worku, A., (2011) Assessment of comprehensive HIV/AIDS knowledge level among in-school adolescents in eastern Ethiopia, *J Int AIDS Soc* 2013;16(1): 17349.
- Ongwara, J T. and Odenyo, O., (2012). Level of knowledge on risks to HIV/AIDS among secondary school students in the Kusumu District, *Retrovirology*. 2012; 9:125.
- Onuzulike, N. (2002). Knowledge of etiology and preventive measures Acquired Immune Deficiency Syndromes (AIDS) among undergraduates in Imo State *Nigerian Journal of Health Education* 10(1), pp. 7-17.
- Samkange-Zeeb, F. N. Spallek, L. and Zeeb, H., (2011). Awareness and knowledge of sexually transmitted diseases (STDs) among school-going adolescents in Europe: a systematic review of published literature, *BMC Public Health*, 11:727.
- Shrestha, R. M., Otsuka, K., Poudel, K. C., Yasuoka, J., Lamischhane, M. and Jimba, M. (2013). Better learning in schools to improve attitudes toward abstinence and intentions for safer sex among adolescents in urban Nepal. *BMC Public Health*; 13: 244
- Unachukwu, G. C. & Ebenebe, R. C. (2003). Awareness of the etiology clinical presentation and epidemiology of HIV/AIDS among adolescents in Anambra State. *The Educational Psychologists*, 1(1), pp. 23-36.
- UNAIDS (2008) Uniting the world against AIDS; *Preventing new HIV infections: the key to reversing the epidemic*. http://www.unaids.org/en/knowledge_centre