

STIs AND HIV AND AIDS SERVICES NEEDS OF ADOLESCENTS IN ENUGU STATE OF NIGERIA

Amelia Ngozi Odo, & Tr. Prof. E.S. Samuel
Department of Health and Physical Education
University of Nigeria, Nsukka

Abstract

The purpose of the study was to investigate Sexually Transmitted Infections (STIs), and HIV and AIDS services needs of adolescents in Enugu State. Three specific objectives with the three corresponding research questions were formulated and two hypotheses were postulated to guide the study. The survey research design was adopted for the study. The population for the study was all adolescent girls in Enugu State. Multi-stage sampling procedure was employed to select 400 adolescents using Yaro Yamen formula for sample size. The instruments for data collection were researcher's designed questionnaire and focus group discussion guide. The validity of the instruments and reliability of the questionnaire were established, and a reliability coefficient of 0.7 was deemed reliable. Means and standard deviations were used for data analysis. The t-Test and analysis of variance were used to test the hypotheses at .05 level of significance. The findings of the study revealed that all STIs and HIV and AIDS services are important needs of adolescents. There was no significant difference in the mean responses of the adolescents based on gender while there was significant difference in the means responses with level of education. Scheffe's test analysis indicated that the difference was between tertiary and secondary education. It was concluded that adolescents in Enugu State need STIs and HIV and AIDS services regardless of their gender and that educational level of attainment influenced adolescents' responses on their STIs and HIV and AIDS needs. Based on the findings, it was recommended that adequate sexuality information and education should be provided in schools and communities through youth organizations to enlighten every adolescents irrespective of educational qualification, how to protect, prevent and manage STIs and HIV and AIDS.

Keywords: STIs, HIV, AIDS, Services, Needs, Adolescents.

Introduction

Sexually Transmitted Infections (STIs), HIV and AIDS among adolescents have become a serious health challenge globally especially in developing countries. Each year, globally, an estimate of 333 million new cases of curable STIs occur with the highest rates among 20-24 year old, followed by 15-19 year olds most of which occur in developing countries (WHO, 2015). Moreover, UNFPA (2008) recorded that one in 20 adolescents contracts a sexually transmitted disease each year, and half of all cases of HIV infection take place among people under age 25. It has also been reported that 1,000,000 conceptions and 350,000 sexually transmitted infections (STIs) occur each day among adolescents, about 50 per cent of the conceptions were unplanned and about 25 per cent were definitely unwanted, resulting in about 150,000 induced abortions and 500 deaths every day.

STIs generally are diseases transmitted from an infected person to another through sexual contact (Samuel, 2010, Ogundele, 2004). This definition implies that one can contract STIs through unprotected sexual contact with the infected person. Sexually Transmitted Infections connote all disease or infections that can be spread through sexual contact. Such diseases include but not limited to the following: gonorrhoea, Chlamydia, candidiasis, herpes genitalis, syphilis, trichomoniasis, chancroid, genital warts and Human Immuno-deficiency virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS). Though, they are called STIs there are other ways through which some of these diseases could be spread. Other modes of transmission generally include, through infected blood transfusion or transfusion of unsafe blood, use of unsterile injection needles, and razors and through mother to child transmission, especially in the case of HIV and AIDS.

HIV means Human Immuno-deficiency virus. It is a virus that causes Acquired Immune Deficiency Syndrome (AIDS). Ajali and Inya-Agha (2006) stated that HIV weakens the immune system by destroying lymphocytes, a type of white blood cell that wards off infection. When the immune system has been weakened by HIV, the actual disease, AIDS sets in. The authors further

stated that AIDS is actually not a single disease, but a collection of infections and malignancies that occur if infection is by Human Immunodeficiency Virus (HIV). Some STIs can be treated if detected early, while some can only be managed. Untreated STIs can lead to pelvic inflammatory disease, adverse pregnancy out-come, cervical cancer, infertility, among others (Naidoo, Wand, Abbia & Ramjee, 2014). Prevention and management of STIs and HIV and AIDS are therefore, necessary among all including adolescents.

Adolescents are young people transiting from childhood to adulthood. They are young ones between the ages of 10-19 years (UN, 2008). According to Onuzulike (2007), an adolescent is a young boy or girl in the process of developing from child into adult and spans between ages of 13 and 18 years. Kaplen (2004) opined that adolescents are young people between the ages of 11 and 24 years. Adolescent as used in this paper refers to a person within the developmental stage of transition from childhood to adulthood, between the ages of 10 and 24 years, who may be in school or out-of-school. This is due to the fact that in some people, development starts early and they attain full development early while some start late and attain full development late. Moreover, an individual's actual maturity may not correspond to the chronological age and young people within this age range are faced with many reproductive health challenges due to their developmental characteristics which include physical, emotional, social, and intellectual characteristics.

Adolescents, including adolescents in Enugu State, are exposed to unhealthy sexual behaviours such as unsafe sex, rape, and multiple sexual partners. These behaviours predispose them to many sexual and reproductive health problems including STIs and HIV and AIDS. These problems could be prevented through quality services aimed at prevention and treatment of STIs and HIV and AIDS. Prevention of HIV infection could be achieved through HIV testing, effective sex education, use of condoms, media campaigns and public awareness, prevention of mother-to-child transmission of HIV, identifying most-at-risk groups and strengthening prevention programmes among them. Avert International (2012) opined that the high HIV prevalence reported among high-risk groups like adolescents, as well as their link to the general population should place these individuals at the centre of HIV prevention programmes. STIs and HIV and AIDS prevention and management programmes should address adolescents' services needs.

Enugu State is one of the thirty-six States of Nigeria. It is located in the South-Eastern zone of Nigeria. Enugu State is made up of seventeen Local Government Areas (LGAs), some of which are commercial areas that attract visitors who come for one business transaction or the other. Adolescents in these areas take advantage of this to engage in hawking and commercial sex working. These expose them to unsafe sex, thus predisposing them to STIs, including HIV and AIDS. Moreover, some cultures in Enugu State promote harmful practices such as female genital mutilation and sexual violence against women including adolescents which also promotes the transmission of STIs and HIV and AIDS. It is, therefore, against this backdrop that this study was directed at answering three questions thus:

1. What are the STIs and HIV and AIDS services needs of adolescents in Enugu State?
2. What are the STIs and HIV and AIDS services needs of adolescents in Enugu State based on gender?
3. What are the STIs and HIV and AIDS services needs of adolescents in Enugu State based level of education?

In addition, the study tested the following null hypotheses at .05 level of significance.

1. There is no significant difference in the mean responses of adolescents regarding the STIs and HIV and AIDS services needs based on gender.
2. There is no significant difference in the mean responses of adolescents regarding the STIs and HIV and AIDS services needs based on level of education.

Methods

The survey research design was adopted for the study. The population of the study consisted of all adolescents in Enugu State. The Yaro Yamen formular for sample size was employed to arrive at a sample size of 400 adolescents. The multi-stage sampling procedure was employed to select 400 adolescents. The instruments for data collection were researcher's designed STIs and HIV and AIDS Services Needs Questionnaire (SHASNeQ) and Focus Group Discussion Guide (FGDG). These

instruments were validated by three experts from the Department of Health and Physical Education, University of Nigeria, Nsukka. The reliability of the SHASNeQ was established using split-half method and Cronbach Alpha statistic. A reliability coefficient of .70 was obtained and this was considered high enough. Anaekwe (2007) asserted that when a reliability coefficient is .67 and above, it is reliable. The copies of the questionnaire were distributed to the respondents in the communities that were selected through Youth Organizations in churches and schools. Focus group discussions were conducted at Local Government level. The ten LGAs that were used for the study had one focus group discussion each. Data collected with SHASNeQ were analyzed using means and standard deviations, while data from focus group discussions were thematically analyzed. The t-Test and ANOVA statistics were used to test the null hypothesis at .05 level of significance.

Results

Table 1

STIs and HIV and AIDS services needs of adolescents (n=381)

S/N	Items	X	SD	Decision
1	Sexually Transmitted Infections counseling services	3.46	.895	Important
2	STIs screening services at youth centers	3.26	.881	Important
3	HIV voluntary counseling and testing (VCT) services	3.40	.895	Important
4	Information on the preventive measures of STIs and HIV and AIDS	3.68	.650	Very Important
5	Free treatment services for STIs	2.17	.840	Important
6	Free treatment services for STIs	2.17	.840	Important
7	Free screening services	3.35	.737	Important
	Average Mean	3.35	.737	Important

Table 1 shows that the average mean response value of 3.33 is greater than the criterion mean value of 2.50. This implies that adolescents rated STIs, and HIV and AIDS need services as important needs. The table also reveals that only information on the preventive measures of STIs and HIV and AIDS ($\bar{X} = 3.68$) was rated as very important, while others: sexually transmitted infection counseling services (3.46), STIs screening services at youth centers (3.26) HIV voluntary counseling and testing (VCT), (3.40), free treatment services for STIs (3.17), and separate antiretroviral therapy (ART) services (3.35) were regarded as important services needs by the adolescents. The table also shows that the standard deviations range from .650 to .895, indicating that the responses of the respondents are not close to one another.

Table 2

STIs and HIV and AIDS Services Needs of Adolescents Based on Gender (n=381)

S/N	Items	Males (n=123)			Females (n=258)		
		X	SD	Decision	X	SD	Decision
1	Sexually Transmitted Infections (STIs) counseling services	3.63	.682	Very important	3.38	.971	Important
2	STIs screening services at youth centers	3.41	.767	Important	3.17	.921	Important
3	HIV voluntary counseling and testing (VCT) services	3.56	.715	Very Important	3.33	.939	Important
4	Information on the preventive measures of STIs and HIV and AIDS	3.74	.625	Very Important	3.66	.661	Very Important
5	Free treatment services for STIs	3.33	.721	Important	3.09	.882	Important
6	Separate Anti-Retroviral Therapy (ART) services	3.08	.775	Important	2.98	.853	Important
7	Free screening services	3.36	.737	Important	3.34	.738	Important
	Average Mean	3.44	.717	Important	3.28	.852	Important

Data in Table 2 show that the average mean response value of male adolescents is slightly higher than that of female adolescents (males = 3.44 > females 3.28), indicating that STIs and HIV and

AIDS services needs are important needs of adolescents. The table also shows that while males regarded the following items: sexually transmitted infections (STIs) counseling services (3.62), HIV voluntary counseling and testing (VCT) services (3.56), and information on the preventive measures of STIs and HIV and AIDS (3.74) as very important services needs, female adolescents were of the view that only information on the preventive measures of STIs and HIV and AIDS (3.66) is very important need. However, both male and female adolescents indicated that important needs are STIs screening services at youth centres (males=3.41> females 3.17), free treatment services for STIs (males = 3.33> females 3.09), separate ART services (males = 3.08> females 2.98) and free screening services (males = 3.36> females 3.34). The standard deviations for males range from .625 to .775 and from .661 to .971 for females. These imply that the responses of both males and females are not close to one another.

Table 3
STIs and HIV and AIDS Services Needs of Adolescents Based on Level of Education (n=381)

S/N	Items	Primary Education (n = 2)			Secondary Education. (n = 119)			Tertiary education (n = 260)		
		X	SD	Dec.	X	SD	Dec.	X	SD	Dec.
1	Sexually transmitted infections counseling services	2.50	2.121	Important	2.95	1.186	Important	3.69	.589	Very Important
2	STIs screening services at youth center	2.50	2.121	Important	2.88	1.043	Important	3.42	.728	Important
3	HIV voluntary counseling & testing (VCT)	2.50	2.121	Important	2.87	1.089	Important	3.65	.611	Very important
4	Information on the preventive measures of STIs and HIV and AIDS	4.00	.000	Very Important	3.67	.678	Very Important	3.68	.640	Very Important
5	Free STIs treatments services	2.50	2.121	Important	2.98	.974	Important	3.26	.746	Important
6	Separate Anti-Retroviral therapy (ART) services	3.00	1.414	Important	2.98	.974	Important	3.10	.746	Important
7	Free screening services	4.00	.000	Very Important	3.40	7.40	Important	3.32	.736	Important
Average Mean		3.00	1.414	Important	3.10	.955	Important	3.45	.685	Important

Table 3 show that the average means response value of respondents with tertiary education (3.45) is slightly higher than those with secondary (3.10) and primary (3.00) education. The average mean response value are above the criterion mean value of 2.50, indicating that STIs and HIV and AIDS services needs of adolescents are important. The table further reveals that all the respondents indicated that the item: information on the preventive measures of STIs and HIV and AIDs (primary = 4.00> tertiary = 3.68> secondary = 3.67) is a very important need. STIs counseling services (tertiary = 3.69> secondary = 2.95> primary = 2.50) and HIV voluntary counseling and testing (tertiary = 3.65> secondary = 2.87> primary = 2.50) were regarded as very important services needs by respondents with tertiary education, and important services needs by those respondents with secondary and primary education. Free screening services (primary = 4.00> secondary = 3.40> tertiary =3.32) was regarded as very important need by respondents with primary education, while those with secondary and tertiary education indicated that this was an important STIs and HIV and AIDS services need. Important services needs for all the respondents include STIs screening service at youth centres (tertiary = 3.42> secondary = 2.88> primary = 2.50), free STIs treatment services (tertiary =3.26> secondary = 2.98> primary = 2.50), and separate ART services (tertiary = 3.10> primary = 3.00> secondary = 2.98). The table also shows that their standard deviations range from .000 to 2.121. This implies that the responses of the respondents are far apart.

Table 4
Summary of t-Test Analysis testing the Null Hypothesis of No Significant Difference in the STIs and HIV and AIDS Services Needs of Adolescents Based on Gender.

Item	Gender	n	\bar{X}	SD	t-cal	df	P-Value	Decision
STIs and HIV and AIDS Services needs	Male	123	24.11	3.209	2.864	379	.004	Significant
	Female	258	22.94	3.976				

Table 4 shows the t-calculated value of 2.864 and corresponding P-value of .004. Since the P-value is less than .05 level of significance at 379 degrees of freedom, the null hypothesis of no significance difference is therefore rejected. This implies that male and female adolescents' services needs differed.

Table 5
Summary of Analysis of Variance Testing the Null Hypothesis of No Significant Difference in the STIs and HIV and AIDS Services Needs of Adolescents Based on Level of Education.

Item	Source of Variance	Sum of squares	df	Mean squares	F-value	P-value
STIs and HIV and AIDS Services Needs	Between Groups	536.937	2	268.469	20.720	.000
	Within Groups	4897.635	378	12.957		
	Total	5434.572	380			

Table 5 shows the calculated F-value of 20.720 and the P-value of .000. It shows that the P-value is less than .05 level of significance at 2 and 378 degrees of freedom. Therefore, the null hypothesis is rejected. This implies that there was significant difference in the STIs and HIV and AIDS services needs between male and female adolescents. Scheffe's test is further presented in Table 6 to show where the significance lies.

Table 6
Scheffe's Post-Hoc. Analysis of Group Mean Scores Based on Level of Education on the STIs and HIV and AIDS Services Needs of Adolescents.

Dependent Variable	(I) Level of education	(J) Level of Education	Mean Difference (I-J)	P-value
STIs and HIV and AIDS services Needs	Primary education	Secondary education	-.588	.974
		Tertiary education	-3.127	.474
	Secondary education	Primary education	.588	.974
		Tertiary education	-2.539*	.000
	Tertiary education	Primary education	3.127	.474
		Secondary education	2.539*	.000

*The mean difference is significant at the .05 level.

Table 6 shows the mean difference from the paired mean comparisons for the three levels of education (primary, secondary and tertiary education) with their corresponding p-values. From the Scheffe's table, the paired means indicates a significant difference between tertiary and secondary education ($F = -2.539$, $P\text{-value} = .000$).

Discussion

The findings of the study showed that adolescents in Enugu State rated STIs and HIV and AIDS services needs as important needs. The finding was not surprising because of the fact that adolescents are sexually active and most of them engage in unprotected sex which can result to STIs

and HIV and AIDS. It is therefore, obvious that adolescents need to be provided with services that will protect them, prevent and manage STIs and HIV and AIDS. This finding is in line with Kamau (2006) assertion that adolescents need sexual and reproductive health services like voluntary counseling and testing services, STIs screening services and information about prevention of HIV and AIDS, STIs and unwanted pregnancy. Responding during focus group discussion, one of the participants said “these services are important to us and should be made affordable since most of us are still dependants”.

Results of the study showed that both male and female adolescents indicated that STIs and HIV and AIDS services are important needs of adolescents and there was also no significant difference in their mean responses. The finding was surprising because of the inherent cultural differences in gender roles especially concerning sexual issues. The finding disagreed with that of Erulka, Onoka, and Phiri (2005) who found out that girls were more particular about sexual and reproductive health services and where they get the services. However, in a conversation during the FGD, majority of the male participants were of the opinion that contraceptives should not be distributed openly to adolescents. One of them said “it is a personal issue and should be confidential as far as the person is not married”. This implies that the distribution of condom and other contraceptives to adolescents are not needed unless, this is done privately. The argument was that if distributed openly, it will further label them as “sexually immoral”.

The study also revealed that adolescents irrespective of level of education indicated that all the listed STIs and HIV and AIDS services were important needs of adolescents. These findings were due to the fact that every adolescent despite educational qualifications experiences the same developmental changes and is also faced with sexual and other reproductive health challenges, which could be effectively managed with the provision of these reproductive health services such as STIs and HIV and AIDS services. Level of education can, however, influence one’s perception and utilization of reproductive health services, but that does not mean that the services are not needed by the individual. There were also no educational disparities in the responses of the participants of the FGD but there was significant difference in the STIs and HIV and AIDS services needs of adolescents with primary, secondary and tertiary education. Table 6 showed that the difference was with tertiary and secondary education. This finding was expected because education increases ones level of knowledge which affects one’s decision. This is in line with the findings of Azuh (2011) that the higher the level of education, the more likely one gets to use health care services. The difference might also be as a result of the fact that adolescents with tertiary and secondary education may have been more exposed to literature or studies related to sexuality education and prevention and management of STIs and HIV and AIDS.

Conclusions

Based on the findings and discussions, it was concluded that:

1. Adolescents in Enugu State rated STIs and HIV and AIDS services as important needs.
2. There was no significant difference in the STIs and HIV and AIDS services needs of adolescents based on gender.
3. There was significant difference in the STIs and HIV and AIDS services needs of adolescents based on level of education. The difference was between tertiary and secondary education.

Recommendations

Based on the conclusions, the following recommendations were made:

1. Adolescents should be provided with adequate STIs and HIV and AIDS services to meet their needs.
2. Adequate sexuality information and education should be provided in schools and communities through youth organizations to enlighten every adolescents irrespective of educational qualification, how to protect, prevent and manage STIs and HIV and AIDS.

References

- Ajali, U. & Inya-Agha, S. (2006). *HIV and AIDS: Scientific, health and social aspects*. Enugu: Rhyce Kerex Publishers.
- Anaekwe, M.C.(2007). *Basic research methods and statistics in education and social sciences*. Onitsha: Sofie Publicity and Printing Limited.
- Avert International. (2012). HIV and AIDS prevalence. Retrieved 18th January, 2013 from <http://www.avertinternational.org/>
- Azuh, D. (2011). Socio-demographic factors influencing health programme usage by pregnant mothers in Nigeria: implication for policy action. Retrieved 2nd May 2015 from <http://www.uaps2011.priceton.edu/papers/110940>
- Erulkar, A.S., Onoka, C.J., & Phiri, A. (2005). Characteristics of youth-friendly reproductive health services most important to adolescents in Kenya and Zimbabwe. *African Journal of Reproductive Health*, 9(3).
- Kamau, A.W. (2006). Factors that influence access and utilization of preventive reproductive health services by in-school adolescents in Kenya. Retrieved 4th February, 2013 from pub.uni-bielefeld.de/publication/2305119.
- Kaplen, P.S. (2004). *Adolescence*. Boston: Houghton Mifflin Company.
- Naidoo, S., Wand, H., Abbia, N.A. & Ramjee, G. (2014). High prevalence and incidence of STIs among women living in Kwazulu-Natal, South Africa. *AIDS Research and Therapy*. Retrieved 22nd April, 2015 from <http://www.aidsresearchtherapy.com/content/11/1/31>
- Nworgu, B.G. (2006). *Educational research. Basic issues and methodology*. Ibadan: Wisdom Publisher Ltd.
- Ogunleye, A.C. (2013). Adolescents' reproductive health right and economic development in Nigeria. *Global Advanced Research Journal of Educational Research*. Retrieved 30th April, 2015 from <http://www.garj.org/garjerr/index.htm>
- Onuzulike, N.M. (2007). *Contemporary health matters*. Owerri: Con publishers.
- Samuel, E.S. (2010). *Human sexuality and family health education*. Nsukka: Afro-Orbis Publishing Co. Ltd.
- UN (2008). Definition of adolescent. Retrieved 17th February, 2015 from <http://www.undesadspd.org/youth.aspx>
- UNFPA (2008). Reproductive health of women. Retrieved 30th April, 2015 from <http://www.unfpa.org>
- WHO (2015). Maternal, newborn, child and adolescent health. Retrieved 30th April, 2015 from http://www.who.int/maternal_child_adolescent/topics/maternal/reproductive_health/en/