

**Research Article**
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## Knowledge of Sexually Transmitted Infections among in-School Adolescents in a Selected School in the Rural Area of Ikeduru, Imo State

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**ABSTRACT**

**Introduction:** This study investigated the knowledge of sexually transmitted infections among in-school adolescents in the rural area of Ikeduru Imo State. The study also identified the extent to which the adolescents are aware of the mode of STIs transmission.

**Materials and Method:** A total sample of 278 students in Senior Secondary classes was used for the study. Cross-sectional descriptive design was adopted for the study. Administered questionnaire comprising open-ended and closed-ended questions served as instrument for data collection.

**Results:** Results obtained showed that majority of the respondents, 220 (79.1%) are aware of STIs yet 43(15.5%) do not have knowledge of types of STIs. Further finding showed that 130(46.8%) of the respondents identified HIV/AIDS as the main type of STIs individuals are exposed to. A good number of the respondents 152 (54.7%), had the view that STIs are transmitted by having sexual activity with fellow students who are infected. The respondents' main knowledge of the complications of STIs 62(22.3) was infertility. However, the popular reason 87(31.3%) of the respondents had for preventing STIs was to avoid pregnancy.

**Conclusion:** The fact that a good number of the in-school adolescents had poor knowledge of different types of STIs as well as the mode of transmission underscores the need for health workers to intensify sex education to in-school adolescents in the rural areas.

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**Introduction**

Sexuality is a natural gift from God. Studies have shown that some individuals, especially adolescents, regardless of gender, tend to engage in multiple sexual partners even before marriage thereby expose themselves to sexually transmitted infections (STIs). Unmarried young individuals especially in-school adolescents in the age groups of 15 and above are considered to be at risk of STIs more than the older adults. This is because of the likelihood of engaging in unprotected sexual activity with multiple sexual partners. Most times, these adolescents seem not aware that such activities may expose them to STIs which if not effectively managed could lead to innumerable complications. The problem is that most adolescents are not aware of the several types of STIs they are exposed to by engaging in multiple sexual partners. HIV/AIDS remains the common STIs adolescents are aware of, probably due to the high level of awareness created by the media and government agencies especially in the urban areas [1-5]. The disheartening thing to note is that most times,

adolescents may be aware of the various causes and consequences of (STIs) but yet, they still engage in activities like oral sex, anal sex and others that may expose them to STIs without minding the medical, social and other problems their actions may cause them. Studies have shown that health workers and others concentrate healthcare services including reproductive health in the urban areas to the utter neglect of the rural areas. The effect is that most adolescents may not be aware of how to access healthcare services including how to protect themselves from sexually transmitted infections as well as adequate treatment if infected so as to prevent complications. This is necessary because adolescents may be exposed to STIs with both ulcerative and non-ulcerative conditions that are capable of heightening transmission of HIV and AIDS [6-9]. Therefore, emphasizing the knowledge of types of STIs, mode of transmissions and their complications is important when planning interventions to promote sexual health among adolescents who may likely indulge in unprotected sexual activity. Further studies have supported the need for researchers to identify the extent to which adolescents are aware of how to protect themselves against STIs so as to recommend to school administrators, the types of reproductive healthcare services

adolescents require to maintain healthy reproductive health [10-17]. This is necessary to guide healthcare workers and others who may be interested in the reproductive health of adolescents on the types of services adolescents especially those in the rural areas may need. The problem is that culturally, it is a taboo for parents to discuss sexual health with their children. Even in the educational institutions, administrators forbid all discussions on sex education to adolescents especially females. As such, adolescents get their sources of information on sexual health including STIs from sources like the media, peer groups, internet and others [18-20]. This study assessed the knowledge of the types, mode of transmission, complications of STIs and the various ways of preventing STIs among in-school adolescents in the rural areas.

## Materials and Method

### Study Area

The study area is Ikeduru Local Government Area. It is located in the Western part of Imo State in South-eastern Nigeria, West Africa. It is one of the 27 Local Government Areas of Imo State, Nigeria. It has an area of 204km<sup>2</sup> (2006 census). The main occupations of residents are farming, and trading. Some of the roads are well constructed while others are still under construction.

There are several schools located in Ikeduru. Most of the schools are non-boarding. The students attend schools from their respective homes. There are also few boarding schools where the students live in the school premises with peers. Most of the boarding schools are not mixed. They are either boys or girls schools while the non-boarding schools are mainly mixed schools, consisting of both boys and girls. In the boarding schools, few teachers live in the school premises where there are available houses, while majority of others live outside the school premises.

### Study Design

The design used was cross-sectional descriptive study. The study investigated the knowledge of in-school adolescents on sexually transmitted infections.

### Sample and Sampling Technique

Using simple random sampling by balloting, a boarding school was selected for the study. In the selected boarding school, all the students totaling 278 were studied.

### Instrument for Data Collection

Questionnaire consisting of both structured and unstructured questions were used for data collection. The questionnaire was administered by the researchers so as to maintain uniformity in the information generated. Thereafter, data were analyzed with simple percentages.

### Ethical Consideration

Ethical committee of Imo State University Teaching Hospital approved the study. Thereafter, a letter for permission to conduct the study was written to the Head Ministry of Education. The approval of the letter enabled the researchers to seek the consent of the principal of the selected school for the research to commence. This enabled the researchers to administer the questionnaire to the respondents without any hindrance. A verbal consent for voluntary participation was obtained from each respondent. All the respondents were assured that the study will not involve any invasive procedure. Therefore, the anonymity of the respondents was maintained and none of their names was mentioned in the course of the research.

## Results

**Table 1: respondents who are aware of STIs**

Awareness	Frequency (F)	Percentages
Yes	220	79.1
No	58	20.9
Total	278	100

Results in table 1 show that majority of the respondents, 220 (79.1%) are aware of STIs while only 58(20.9%) are not aware.

**Table 2: sources where respondents got information on STIs**

Sources of information	Frequency (F)	Percentages
Television	20	7.2
Radio	65	23.4
Newspaper	8	2.9
Parents	14	5.0
Fellow students in School	135	48.6
Nearby neighbours/Friends	29	10.4
Siblings	2	0.7
Textbooks	5	1.8
Total	278	100

Table 2 shows that the respondents got information on STIs from several media but as much as 135(48.6%) got their information from fellow students. The table also contains other areas where the respondents got their information.

**Table 3: Respondents' knowledge on the causative agents of STIs**

Causative agents	Frequency	Percentage
Human Immunodeficiency Virus	172	61.9
hepatitis A,B,C,D,E	44	15.8
Neisseria Gonorrhoea	74	26.6
Chlamydia Trachomatis	27	9.7
treponema pallidum	24	8.6
Human papilloma virus	11	4
Total	278	100

The respondents identified several causative agents of STIs as recorded in table 3. From this table, a good number of the respondents 172(61.9%) identified human immunodeficiency virus as the main cause of STIs.

**Table 4: Respondents' knowledge on modes of STI transmission**

Modes of transmission	Frequency (F)	Percentages
Transmitted by dogs	88	27.5
By touching/hugging infected persons	48	15.0
by sexual activity with fellow students who are infected	152	71.6
By hugging strangers	23	7.2
Kissing an infected person	77	24.1
Do not know	19	5.9
Total	320	100

Multiple choice

Table 4 shows that the respondents were aware of various modes of STIs transmission. Majority of the respondents 152(71.6%) identified having sexual activity with fellow students who are infected as the mode of transmission of STIs.

**Table 5: knowledge of respondents on common types of STIs individuals are exposed to**

Types of STIs individuals are exposed to	Frequency (F)	Percentages
HIV/AIDS	130	46.8
Gonorrhoea	71	25.5
Chlamydia	3	1.1
Candidiasis	7	2.5
Syphilis	21	7.6
Genital warts	3	1.1
Do not know	43	15.5
Total	278	100
Total	278	100

Table 5 contains several STIs the respondents identified that individuals are exposed to. From this table, 130( 46.8%) of the respondents recognized HIV/AIDS as the main STIs individuals are exposed to. However, as much as 43(15.5%) stated that they are not aware of STIs individuals are exposed to.

**Table 6: Respondents' knowledge on complications of STIs**

Complications	Frequency (F)	Percentages
Blindness	18	6.5
Miscarriage	11	4.0
Infertility	92	33.1
brain damage	6	2.2
Cancer of the cervix	43	15.5
Death	78	28.0
Heart disease	17	6.0
Kidney disease	13	4.7
<b>Total</b>	<b>278</b>	<b>100</b>

Table 6 shows that the respondents have knowledge of several complications that can result from STIs. The result in the table shows three common complications the respondents are aware of. These are: infertility, cancer of the cervix, and death with 92(33.1%), 43(15.5%) and 78(28.0%) respectively.

**Table 7: Respondents' reasons on why STIs should be prevented**

Reasons	Frequency (F)	Percentages
To finish ones education	83	29.9
To avoid being pregnant	87	31.3
To avoid dying	78	28.0
To enable one to marry	30	10.8
Total	278	100

Table 7 contains reasons the respondents gave on the need to prevent STIs. The result shows that the respondents had three common reasons on the need to prevent sexually transmitted infections. These are: to finish ones education, to avoid being pregnant, and to avoid dying with 83(29.9%), 87(31.3%), and 78(28.0%) respectively.

**Table 8: respondents' suggestions on how to prevent STIs**

Suggestions	Frequency (F)	Percentages (%)
Abstinence	36	12.9
Stay with only one boy friend	86	30.9
Use condom	33	11.9
Get married early	45	16.2
Keep your hair neat	17	6.1
Avoid kissing	20	7.2
Do not eat with infected persons	16	5.8
Do not use things in common with people	25	8.9
Total	278	100

The respondents suggested various ways of preventing STIs as contained in table 8. The most common suggestion 86(30.9%) of the respondents advanced was to stay with only one boyfriend.

### Discussion of Findings

The study examined the knowledge of STIs among in-school adolescents in a rural community girls' secondary school. The finding showed that majority of the respondents, 220(79.1%) had good knowledge of STIs but that a good number of them 135(48.6%) got information about STIs from fellow students. The fact that the respondents got most of the information they have about STIs from fellow adolescents could mean that they may not have got the correct information they need about STIs . Adolescents, especially in the rural settings where reproductive healthcare services may not be easily available, need correct information about STIs so as to prevent themselves from being exposed to such infections. This finding agrees with that of (1-3) where it was observed that most information on reproductive health obtained by adolescents usually come from their peers. As such, a good number of adolescents do not have the right information on how to prevent sexually transmitted infections thereby, they expose themselves to the risk factors of STIs.

The main STIs that a good number of the respondents 172(61.9%) identified as the common STI that individuals can be exposed to was HIV. The respondents had limited knowledge on other types of STIs. This probably gave rise to the respondents' poor knowledge on the cause and mode of transmission of STIs as shown by 88(27.5%) and 48(15.0%) of the respondents who still view STIs as being transmitted by dogs and touching/hugging infected persons respectively. Also the fact that 19(5.9%) of the respondents indicated that they do not know types of STIs confirm lack of knowledge of STIs by some of the respondents. This finding agrees with that of (6) which found that most adolescents lack knowledge of different types of STIs they are exposed to. Also the finding is in contrast with that of (5) which confirmed that adolescents have good knowledge of several types of STIs they are exposed to.

The point that the respondents focused on three common reasons like to finish one's education, to avoid being pregnant, and to avoid dying as their explanations for supporting the prevention of STIs indicates the respondents' preparedness to avoid risk factors that could expose them to infection. These reasons which center on reproductive health issues may have emboldened the respondents to list infertility, cancer of the cervix, and death as the common complications that can result from STIs. This further suggests the respondents' willingness to embrace measures that



can protect them from STIs complications. This agrees with the views of (8,9,11) that in-school adolescents in the rural areas where healthcare services are not usually available, show willingness to benefit from any intervention strategy that would prevent STIs.

The suggestions the respondents made on how to prevent STIs which include: staying with only one boy friend, getting married early, and not using things in common with people reveal the respondents' lifestyles in the rural areas. These lifestyles, which are capable of exposing adolescents to STIs need to be addressed. In all, the findings in this study reveal the fact that in-school adolescents in the rural areas lack good knowledge of the types, causes, effects and complications of Sexually transmitted infections. However, majority of them are mainly aware of HIV and AIDS as the sexually transmitted infection adolescents are exposed to.

Bearing in mind the findings in this study, it is obvious that in-school adolescents especially those in the rural areas, are prone to the risk factors of STIs and as such, there is the need for sensitization programmes on the dire consequences of STIs. Furthermore, reproductive healthcare services including sex education should be provided to adolescents especially those in the rural areas.

It is therefore recommended that seminars and public enlightenment campaigns using radio, television and others should be adopted to sensitize these adolescents on all types of sexually transmitted infections. This is necessary so as to provide the adolescents with the correct information on STIs that would motivate them to avoid the risk factors of STIs and also prevent them from obtaining incorrect information on STIs from wrong sources. Consequently, sex education should be included in students' curriculum since culturally, sex education in homes is considered as a taboo.

### Conclusion

In general, the studies reported similar low levels of knowledge and awareness of sexually transmitted infections, with the exception of HIV/AIDS. Although, as shown by some of the findings on condom use, knowledge does not always translate into behaviour change, adolescents' sex education is important for STIs prevention, and the school setting should play an important role on this. Beyond HIV/AIDS, attention should be paid to other infections such as chlamydia, gonorrhoea and syphilis among adolescents.

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