

## HIV/AIDS Awareness Amongst Female Adolescents in Owerri

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### Abstract:

**Objective:** The objective of this study was to ascertain the level of awareness, knowledge and attitude of female secondary school students to the disease.

**Method:** Pre tested structured questionnaires were distributed to randomly selected female students of four secondary schools in Owerri .

**Results:** The mean age of the students was 15.7 years. All the students knew about the disease getting most of their information from television (31.7%) and radio (27.2%).The aetiological agent of HIV/AIDS was known by 76.3% of the students while blood test was correctly identified as the best method of diagnosis. Only 49.8% mentioned the condom as a method of prevention .The routes of transmission mentioned were blood transfusion 91%,sharing of needles and syringes 91.9% and sexual intercourse 85.2% and mother to child transmission by 69.3% of the students.

Methods of prevention of mother to child transmission mentioned were the use of anti retroviral drugs in pregnancy( 41.6%),avoidance of breast feeding( 53%), giving anti retroviral drugs to the newborn (34.2%) and delivery by caesarean section( 19.4%) .The use of strong antibiotics in pregnancy was wrongly identified as a method of preventing mother to child transmission by 47.1% of the students..

**Conclusion:** The level of awareness is high but there still exists large gaps in knowledge which suggest that more effort should be put into imparting more detailed information to the students.

**Key words:** HIV/AIDS , awareness, knowledge ,female, secondary , students .

### Introduction

HIV/AIDS was first reported in 1981 in California U.S.A. following the occurrence of Kaposi's sarcoma and pneumocytis carinii pneumonia in a group of homosexuals. The first case reported in West Africa was in 1982<sup>1</sup> while the first case recorded in Nigeria was in 1986<sup>2</sup>. Since then HIV/AIDS has not only spread in homosexuals and heterosexuals alike but has risen to the status of the most important public health problem of the century spreading fast and leaving in it's wake dead parents orphaned children and overstretched grandmothers. In some communities it has decimated villages and dealt a severe blow to the workforce leaving a shattered economy. By the year 2003

estimates showed that about 38 million people were infected with the virus; of these 25 million (66%) were in sub Saharan Africa with about 10% of the worlds population<sup>3</sup>.

Millions of people die yearly from HIV/AIDS and presently it is the leading cause of death in adults in Africa<sup>4</sup>.Prevalence rates of 37.8%, 25.7% and 6.1% are recorded in Botswana, South Africa and Nigeria respectively<sup>5</sup>.

There is as yet no known permanent cure and the major method of halting it's relentless spread is the prevention of new cases. Success in this regard depends on information dissemination knowledge and change in sexual behaviour of the populace. This has been largely successful in the developed countries where the rate of spread and prevalence rates have fallen consistently. Efforts are being made in developing countries but the results are less

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Table 1:Age distribution and Aetiology

Age (yrs)	No	%
<14	15	6.5
14	32	13.9
15	46	19.9
16	59	25.5
17	49	21.2
18	17	7.3
>18	13	5.7
Total	257	100.0

  

Aetiology:		
Cause	No	%
Virus	190	76.3
Bacteria	23	9.2
Mosquitoes	22	8.8
Dirty environment	5	2.0
Witches	1	0.5
Don't know	8	3.2
Total	249	100.0

encouraging with increases in prevalence rates being recorded in some countries<sup>6</sup>

A "core group of transmitters"<sup>7</sup> in the age range 15-24 years has been identified . They are a particularly vital group in the control of HIV/AIDS as they are highly active, have multiple sexual partners and engage in risky sexual behaviour<sup>8-10</sup>.In this group the females are about twice as susceptible as the males<sup>5</sup>. The objective of this study is to find out the level of awareness and attitude to HIV/AIDS amongst female secondary school students who belong to this vulnerable group.

### Method

Four secondary schools were randomly selected for this study. Two of the schools were government owned, the others were privately owned. A structured pre tested questionnaire was administered by a research assistant to randomly selected students of the schools. The questionnaires contained questions on age and sex of the children. In addition questions about knowledge, awareness, attitude, methods of

infection and prevention, and modes of transmission were asked. The answers were either Yes, No, or Don't know. The study was not anonymous .

### Results

The results from the three hundred questionnaires distributed to the female students are presented. Of these two hundred and fifty seven of the returned questionnaires (a response rate of 85.7%) were suitable for analysis.

The age range of the respondents was 10-24 years with a mean of 15.7years. (Table 1) Most (76.3%) of the students knew that the disease was caused by a virus though 9.2% thought it was caused by bacteria and 9.8% by mosquitoes.

### Awareness and Attitude(Table2)

All the students were aware of the disease but only 35.7% knew that a person could test positive for HIV/AIDS and still look normal. The commonest sources of information were television (31.7%) radio ( 27.2%)and hospital

Table 2: Awareness of and attitude to HIV/AIDS (N =243)

Aware of HIV/AIDS	No	%
YES	257	100.0
Source of Information		
Television	77	31.7
Radio	66	27.2
Hospital/Health sources	57	23.5
Magazines/Newspapers	24	9.9
Friends	11	4.5
Parents	7	2.9
Churches	1	0.3
Attitude to HIV/AIDS positive people (N=251)		
Treat like others	126	50.2
Avoid them	96	38.2
Isolate them	29	11.6
Employment of HIV positive people (N=249)		
YES	39	15.7
NO	209	84.3

and health sources (23.5%). Parents churches and magazines were unimportant sources of information.

About half (50.2%) said that HIV/AIDS positive people should be treated like other people while the rest said they should either be isolated or avoided. Only 12.0% would eat from the same plate with an HIV/AIDS positive person while only 15.7% of the respondents would employ people who are HIV positive.

Diagnosis, Prevention and Routes of Transmission. (Table 3)

The best method for diagnosis was identified by 79.4% of the students. The use of condom for prevention was correctly identified by 49.8% of the respondents while douching, strong antibiotics were mentioned as preventive measures by 15.7 and 21.1% of students respectively.

Most (91.9%) respondents correctly identified sharing razors, blood transfusion (91%) sexual intercourse (85.2%) as modes of transmission. Mother to child transmission was mentioned by 69.3% of the respondents.

HIV/AIDS and pregnancy (Table 4)

That mothers could infect their children was known by 68.8% of respondents while only 51.4% knew that a positive mother could have a negative child. Avoidance of breast feeding was identified by 53%, while the use of antiretroviral drugs in pregnancy was recorded by 41.6% of the students as methods of preventing mother to child transmission (MTCT). Delivery by caesarean section was mentioned by only 19.4% while the use of strong antibiotics in pregnancy was wrongly identified as a preventive measure in 47.1% of the students.

Discussion

The major findings in this study is the very high level of awareness which is however not associated with an in depth knowledge of the disease.

The major drawback in the study was the lack of anonymity which may have influenced the responses of the students but should not invalidate the results.

The high level of awareness in this study is consistent with what has been found in other studies in Nigeria. In spite of this only 35.7%

knew that someone who tested positive for the virus could look normal. This is lower than the 42.3% recorded by Anyakogbe et al<sup>12</sup> but higher than 13.4 % recorded by Oyo-lta et al<sup>14</sup>. Just under a quarter (23.7%) did not know the correct aetiology of HIV/AIDS. This is less than the 31.2% recorded in Calabar<sup>14</sup>.

The major sources of information were the mass media, television (31.7%) and radio (27.2%). These findings are similar to those from other centers<sup>11,12</sup>. Magazines, parents and churches contributed poorly to the creation of awareness. The poor reading culture has been blamed for the poor showing of magazines<sup>14</sup>. The churches ranked last (0.3%) as sources of information

fact that pentecostal churches concentrate on claiming to cure all ailments rather than giving adequate information.

The study also demonstrated a poor attitude towards people who are HIV positive. Only about half (50.2%) of the students wanted them to be treated like others. This is similar to 57.7% in one study<sup>16</sup>. HIV positive people would be denied employment by 84.3% of the students, while only 12% would eat from the same plate. This compares favourably with 28%<sup>16</sup> who said they would not share utensils. These prejudices are the result of misinformation and as was suggested<sup>14</sup> there is a need to build on the awareness created by the mass media with a more person to person health educational

Table 3: Diagnosis ,prevention and routes of transmission

Diagnosis (N=238)		
Method mentioned	No	%
Blood test	189	79.4
Scan,X Ray,Urine ,Don't know	49	20.6
Prevention		
Condom use (N=211)	105	49.8
Douching (N=222)	21	11.1
Strong antibiotics (N=190)	40	21.1
Prayers (N=214)	61	28.5
Traditional medicine (N=191)	12	6.3
Routes of Transmission		
Mother to child (N=199)	138	69.3
Sharing razors ,needles etc (N=222)	204	91.9
Sexual intercourse (N=209)	178	85.2
Blood transfusion (N=211)	192	91.0
Kissing (N=199)	64	32.1

in this study just as in the study from Nnewi<sup>15</sup>. The inadequate contribution made by churches in this highly religious area may be due to the negative and intolerant attitude of the churches to the disease. Most churches insisting on a negative HIV test result as a precondition for wedding or infant baptism. It has also been suggested<sup>15</sup> that the poor showing of the churches may be due to the

approach. by teachers and parents.

There is poor knowledge of the preventive potential of condoms with only 49.8% acknowledging it. This may not be unrelated to the campaign against it by the dominant religion in this area which preaches only abstinence and mutual fidelity, arguing that the promotion of condoms would encourage

Table 4: HIV/AIDS and Pregnancy

Knowledge	No	%
Mother can infect child (N=250)		
YES	172	68.8
Positive mother can have negative child (N=249)		
YES	128	51.4
Methods of preventing mother to child transmission		
ART in pregnancy (N=209)	87	41.6
No breast feeding (N=200)	106	53.0
Delivery by C/Section (N=191)	37	19.4
ART to newborn (N=196)	67	34.2
Strong antibiotics in pregnancy (N=204)	96	47.1

\*ART Anti retro viral therapy

sexual promiscuity. This position does not recognize the reality on ground with 80% of students who have had sex admitting to having multiple sexual partners<sup>10</sup>, often without using the condom<sup>8</sup>

Routes of transmission except mother to child transmission (MTCT) were well recognized as in other studies<sup>11,12,14</sup>. Sharing of needles and razors was mentioned by 91.9% of the students while blood transfusion and sexual intercourse was mentioned by 91% and 85.2% respectively as means of transmission.

With regards to pregnancy the students knowledge was poor. Only 51.4% knew that a positive mother could have a negative child while 68.8% knew that a child could be infected by the mother in pregnancy. There was also poor knowledge of methods of preventing MTCT with only 19.4% knowing

that caesarean section reduces transmission rate.

#### Conclusion

Although the level of awareness is high the result shows that in depth knowledge still lags behind. This could be addressed by the introduction of reproductive health studies in school curricula. Meanwhile it has resulted in attitudinal positions which hinder the ready acceptance of those who test positive. The poor knowledge of HIV/AIDS as it interfaces with pregnancy is disturbing as many of the adolescents would soon become mothers. Better knowledge would not only protect them but where infection has occurred it would allow them seek and avail themselves of preventive interventions that would be critical to the survival of their children.

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