

## Research Article

### Vulnerability of Female Agricultural Students to Sexually Transmitted Infections (STIs) In Ibadan South West Local Government, Oyo State, Nigeria

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**Abstract:** The paper investigated the vulnerability of female agricultural students to Sexually Transmitted Infections (STIs) in Ibadan South West Local Government Area of Oyo State, Nigeria. One hundred female final year students in OND and HND categories were randomly selected from the two Colleges of Agriculture in the study area. Data were collected using structured questionnaire. Data were analyzed with the use of descriptive (percentages, frequencies) and inferential (Chi-square at  $P=0.05$ .) statistics. Results reveal that 68.0% of the respondents were within the age range of 20-34 years, 92% single, 64% and 36% were Christians and Muslims respectively. Only 24% had adequate knowledge and awareness of STIs, while 76% perceived STIs to be of high prevalence among the respondents in the study area. There was a significant relationship between respondents' marital status ( $X^2=5.600$ ;  $p=0.00$ ) and vulnerability to Sexually Transmitted Infections. Hence, relevant stakeholders should mainstream reproductive health issues into school curricula and increase funding for STIs intervention programmes in order to reduce vulnerability of female students.

**Keywords:** vulnerable, infection, immunodeficiency, sexual

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#### 1. Introduction

Sexually Transmitted Infection (STI) remains a serious epidemic, threatening countries in the sub-Saharan Africa. It is an infection passed from person to person through intimate sexual contact with devastating health consequences. Although, some of the pathogens that cause it, especially Human Immuno Deficiency Virus (HIV) and syphilis, can be transmitted from mother to child during pregnancy and childbirth, and through blood products and tissue transfer (Nsiami, Sanders and Taylor, 2010). The prevalence of STI among youth globally is alarming, especially among those in tertiary institutions (Eyaufe et al, 2009). In the United States, about 19 million new infections are thought to occur each year. These infections affect men and women of all backgrounds and economic levels but almost half of new infections are among young people between ages 15 to 24 (U.S. Department of Health and Human Services, Office on Women's Health, 2009).

The story is not too different in Nigeria, a developing country in the sub-Saharan Africa. Results of many studies carried out in Nigeria have indicted young adults, indicating their carefree attitude towards unprotected sexual intercourse and multiple sex partners as contributing to high prevalence of sexually transmitted infections among them in the society (Araoye and Adegoke, 1996). The 1999 Nigeria Demographic Health Survey (NDHS) as cited in Omorie et al (2003) affirmed that the national median age of sexual debut was 17.8 years for women and 20.3 years for men. Also, the National HIV/AIDS and Reproductive Survey (FMOH, 2003), states that the median age at first sex among 15-24 years old was 16.9 years and 19.8 years in women and men respectively. These pointed

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to the fact that young women of school age especially post-secondary schools are exposed to sex earlier than men, which may make them more susceptible to sexually transmitted infections.

According to Omoregie et al (2003), it is evident that there is increased sexual activity and high- risk behaviours among students in tertiary institutions in Nigeria. The high prevalence rate of sexually transmitted infections (16.3% and 2.3% in the north and south respectively) and reported cases of HIV/AIDs (about 4 out of every 25 students) (Ankomah, 1999: NDHS, 1999) among this segment of our population has serious consequences and implications for the control and prevention of sexually transmitted infections (particularly HIV/AIDs) in Nigeria.

The colleges of Agriculture in Nigeria were established to provide adequate, relevant, functional junior, intermediate and high level manpower training for national agricultural development and for the graduates of the colleges to serve as productive change agents in the country's farming system at various agro- ecological zones of Nigeria (IAR&T, 1999). The health challenges associated with various types of infections transmitted sexually from one person to another, coupled with socio-economic implications may jeopardize the ultimate aim of establishing the mono- technics which is to service the country's agricultural sector.

All hands must be on deck now and no stone must be left unturned towards achieving resounding success in the new Federal Government Agricultural Programme which intends to resuscitate agriculture to its glorious years of the past as a very important sector of Nigeria economy.

The high prevalence of STIs (curable and non- curable) among female students in tertiary institutions especially agricultural based colleges is of concern to many stakeholders because of the implication it has on the country's agricultural development. It is against this background that this study is designed to investigate the factors pre-disposing female agricultural students to STIs and thus, the understanding of these factors will enable relevant stakeholders to design intervention programmes to reverse the ugly trend.

## **Objectives of the Study**

1. To determine the respondents' personal characteristics.
2. To determine the respondents' knowledge and awareness of STIs.
3. To ascertain the factors that make the respondents vulnerable to STIs.

## **2. Methodology**

The area of study is Ibadan South-West local government area of Oyo State. The local government is one of the five urban local governments in Ibadan and also one of the 33 local government areas in the state. It shares boundary with Ibadan South East Local government, Ido Local Government and Ibadan North West Local government. The local government is cosmopolitan and host one of the best Government Reserve Areas in the state (Iyaganku GRA), Oyo Agricultural Development Zonal office and the oldest agricultural research institute in Nigeria and even West Africa (Institute of Agricultural Research & Training), two Federal Colleges of Agriculture and different departments of the Federal Ministry of Agricultural and Rural Development.

## **Sampling procedure and Sampling Size**

Respondents for this study were drawn from two (2) Colleges of Agriculture in the study area; namely Federal College OF Agriculture and Federal College of Animal Health and Husbandry. The two colleges are located at Moor-Plantation, Ibadan. 50 female students

which comprised 25 final year students HND and 25 OND students were randomly selected in each college, making a total of 100 respondents in the two colleges. The colleges were purposively chosen because of their mandates to train and produce middle level agricultural personnel for the country.

Primary data was used to fulfill the objective of this study. Data were collected with the aid of structured questionnaire focusing on respondents' personal characteristics, prevalent rate of STIs awareness and STIs education on vulnerability of female students. Factors that make respondents vulnerable to STI and their knowledge and awareness level were measured by using a five point scale of strongly Agree (5), Agree (4), Undecided (3), Disagree (2), Strongly Disagree (1). Data collected was summarized using descriptive statistics such as frequency counts, means and percentages. Chi square was used to test the hypothesis on relationship between respondent's personal characteristics and their vulnerability to STIs

### 3. Results And Discussion

Result in Table 1 shows that a large proportion of the respondents (88%) were between the ages of 20- 24 years. This may be due to the fact that majority of the students admitted to the Colleges of Agriculture are those that have attempted to go to University but were denied admission due to strict entry requirements which make them to either take a clerical job earlier or stay at home over the years before gaining admission to the Colleges. Matured students also find it easier to gain admission into the College and the students' maturity explains their ability to cope with the rigorous training of the agricultural colleges.

Additionally, 92% of them were single while only 8% were married, which could be attributed to the fact that early marriage is not common among female students in the South West of Nigeria. This is also consistent with the report of Sule-Odu et al (2008) who observed the mean age of mothers of childbearing age in Nigeria to be 27.5 years. It was also observed that 64% of the respondents were Christians, while 80% were full time students.

T	able 1:	Personalics of Respondents
Variable	Frequency	Percentage
<b>Age</b>		
15-19	20	20.0
20-24	68	68.0
25-29	8	8.0
30-34	4	4.0
35 and above	0	0.0
<b>Marital Status</b>		
Single	92	92.0
Married	8	8.0
Divorced	0	0.0
Separated	0	0.0
<b>Religion</b>		
African Traditional Religion	0	0.0
Christianity	64	64.0
Islam	36	36.0
<b>Nature of Programme</b>		
National Diploma	72	72.0

Higher National Diploma	28	28.0
Full Time	56	56.0
Part Time	44	44.0

Source: Field Survey, 2017

Table 2 shows that 76.0% of the respondents indicated that there is a high prevalence of sexually transmitted infections among female agricultural students, while only 24.0% indicated a low prevalence of the infections. The high prevalence of sexually transmitted infections among the students could be attributed to their engagement in some risky sexual behaviours.

**Table 2: Prevalence of STIs among Female Agricultural Students**

Level of prevalence	Frequency	Percentage
High	76	76.0
Low	24	24.0

Source: Field Survey, 2017.

Table 3 shows the ranking of the respondents according to their level of knowledge and awareness of sexually transmitted infections. Majority (72.0%) of the respondents had average level of knowledge and awareness, while 4.0% had poor level of knowledge and awareness on STIs. Thus, students could still be vulnerable since the majority did not have adequate knowledge on STIs.

**Table 3: Respondents' Level of Knowledge and Awareness of Sexually Transmitted**

Level of Knowledge and Awareness	Frequency	Percentage
Adequate	24	24.0
Average	72	72.0
Poor	4	4.0

Source: Field Survey, 2017.

Table 4a indicates that low level of awareness and STIs education (mean=3.9) was the most important social factor that predisposes female agricultural students to STIs while western education (mean=3.0) was the least social factor that makes them susceptible to STIs. This finding shows that low level of awareness and STIs education is a major problem to students and effort /made to create awareness through radio, television, print media and other means of publicity are right steps in the right direction.

Table 4a: Social Factors that make Female students vulnerable to Sexually transmitted infections		ns
SN	Social factors	Mean Score
1.	Peer Influence exposes female students to STIs	3.6
2.	Western education makes female students susceptible to STIs	3.0
3.	Lack of care and good parental upbringing makes female students vulnerable to STIs	3.6
4.	The „culture of silence“ surrounding sexuality exposes female students to STIs	3.6
5.	Dereliction of parents roles on female students	3.6

makes them susceptible to STIs

6.	Low level of awareness and STIs education make female students vulnerable to STIs	32 (32.0)	36 (36.0)	4 (4.0)	28 (28.0)	0 (0)	3.9
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Source: Field Survey, 2017. Figures in parenthesis are percentages

SA=Strongly Agree, A =Agree, U= Undecided, D= Disagree, SD= Strongly Disagree

Table 4b shows that poverty level among female students (mean=3.6) and female students with low income (pocket money) (mean=3.6) were more vulnerable to sexually transmitted infections. This is in line with Kolawole (2013) who posited that students engage in illicit affairs for financial gain. From the above result, one could deduce that poverty is a major economic factor that pre-disposes female agricultural students to STIs in the study area. According to Ajayi (2008), poverty is a multi-faceted affliction. It goes beyond material deprivation to include insecurity, vulnerability and exposure to risks, shocks and stress. Amusat (2013) also affirmed that poverty is pervasive in the life of students of tertiary institutions in Nigeria. This means that the above finding can also be generalized to all female students in tertiary institutions in Nigeria.

**Table 4b: Economic Factors that make Female Student Vulnerable to Sexually Transmitted Infections**

Economic Factors	SA(5)	A (4)	U (1)	D (3)	SD(2)	Mean Score
Poverty level among female students that makes them vulnerable to STIs.	24 (24)	36 (36)	4 (4)	16 (16)	20 (20)	3.6
Economic disempowerment of female students exposes them to STIs.	16 (16)	28 (28)	28 (28)	24 (24)	4 (4)	3.0
Female students with low income/pocket money from home are vulnerable to STIs(32) by indulging in immoral activities.	32 (32)	28 (28)	12 (12)	20 (20)	8 (8)	3.6
The act of „income-boosting“ by engaging in multiple sexes by female students makes them vulnerable to STIs.	16 (16)	40 (40)	24 (24)	20 (20)	0 (0)	3.2

Source: Field Survey, 2017.

Figures in parenthesis are percentages

SA= Strongly Agree, A=Agree, U= Undecided, D=Disagree, SD =Strongly Disagree

Among the attitudinal factors that make female agricultural students vulnerable to STIs, promiscuity and prostitution (mean=4.1) ranked highest, followed by early access to sexual intercourse (mean=3.9) and followed by force sexual intercourse (mean=3.6). Female students falling in love indiscriminately (mean=2.8) ranked lowest. This means that indiscriminate falling in love of female agricultural students do not expose them to STIs. The finding on promiscuity and prostitution among female agricultural students was in line with Olugbile, Abu and Adedokun (2008) which confirmed that sexual promiscuity is very rampant in our (tertiary institutions) such as Polytechnics, Colleges of Agriculture, Universities and the average institution’s campus has several networks. Omoregie et al (2003) also stressed that there is increased sexual activity and high-risk behaviours among students in tertiary institutions in Nigeria.

**Table 4c: Attitudinal Factors that make Female Students Vulnerable to Sexually Transmitted Infections**

Attitudinal Factors	SA(5)	A (4)	U (1)	D (3)	SD (2)	Mean Score
Forced sexual intercourse expose Female students to STIs	32 (32)	32 (32)	20 (20)	16 (16)	0	3.6

Early access to sexual intercourse among female students increases their vulnerability to STIs	36 (36)	24 (24)	0 (0)	36 (36)	4 (4)	3.9
Female students who „fall in love“ indiscriminately would be vulnerable to STIs	8 (8)	32 (32)	36 (36)	24 (24)	0 (0.0)	2.8
Promiscuity and Prostitution among female students expose them to STIs	56 (56)	24 (24)	12 (12)	4 (4)	4 (4)	4.1
Douching (washing of the vaginal) make female student susceptible to STIs	16 (16)	16 (16)	20 (20)	32 (32)	16 (16)	2.9

Source: Field Survey, 2017. Figures in Parenthesis are percentage  
 SA=Strongly Agree, A= Agree, U=Undecided, D=Disagree, SD= Strongly Disagree

The Chi square analysis on Table 5 tested relationship between personal characteristics of the respondents and their vulnerability to STIs. Results show that marital status ( $X^2=5.600$ ,  $p=0.000$ ) of the respondents had a significant relationship with their vulnerability to STIs. This is not out of place as few respondents who were married were expected to be engaging in sexual intercourse which may expose them to STIs. The economic situation of the country also pre-disposes the non – married respondents to early sex which they could involve in so as to make ends meet or earn a decent living. According to the 1999 Nigeria

Demographic Survey conducted by Federal Ministry of Health (FMOH) in 2003, the mean age at first sex among 15-24 years old was 16.9 years and 19.8 years in women and men respectively. This point to the fact that young women of school age especially in post-secondary schools are exposed to sex earlier than men, which may make them more susceptible to sexually transmitted infections. Other variables such as age, religion, programme nature were not significant; as a result these variables did not affect the respondents vulnerability to STIs.

**Table 5: Relationship between respondents’ characteristics and their vulnerability to STIs**

Variable	Df	$\chi^2$	Significant	Decision
Age	4	27.92	0.432	Not significant
Marital status	3	5.600	0.000	Significant
Religion	2	36.14	0.321	Not significant
Programme nature	1	12.09	0.324	Not significant

Source: Field Survey, 2017.

**4. Conclusion And Recommendations**

This study concludes that the prevalence of STIs was high among female agricultural students. This is due to multiple sexual partners, engaging in heterogeneous sex habits and early access to sex. Also, socio- economic factors, low level of knowledge, awareness and education were some of the factors which predispose respondents to STIs. In view of this, it is recommended that;

- Policy makers at various governmental levels should mainstream issues of reproductive health (STIs/HIV/AIDS) into the country’s educational curricular at all levels
- Development agencies working in Nigeria and other non-state actors should intensify education, sensitization and awareness creation programmes in the school.
- Parent should enrich the capacity of their children and wards on reproductive health issues by breaking the “culture of silence” associated with sex.

- Funding of reproductive health activities by government and other donor agencies should be increased so as to cater for intervention projects and programmes tailored towards vulnerability reduction across all communities.
- Finally, economic empowerment that will reduce poverty, financial burden of female students such as scholarships and bursary programmes should be introduced.

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