



Prevalence of HIV Infection among Adolescents and Young People at a Tertiary Health Facility in Ekiti State, Southwest, Nigeria

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Authors' contributions

This work was carried out in collaboration among all authors. Author GOD designed the study, author OOO helped with data collection, gave assistance. All authors read and approved the final manuscript.

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ABSTRACT

Background: Nine out of every 10 of the world's 1.8 billion adolescents and young people (AYP) live in developing nations, Nigeria inclusive. In Nigeria as in the rest of sub-Saharan Africa, 1 out of every 3 persons is an adolescent or a young person. As at 2016, there were about 240, 000 AY)

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aged 10-19 years in Nigeria, which roughly makes 7% of the total number of people living with HIV (PLWH) in Nigeria. According to 2017 national survey, about 70% of the country's AYP lack knowledge of how HIV is transmitted or how it can be prevented. Since AYP, aged 10-19 years, constitute a significant proportion of the nation's burgeoning population, it is very important and critical to fully understand the dynamics of the HIV epidemic among AYP. This study aimed at determining the prevalence of HIV among AYP at a tertiary health facility in Ekiti State, Southwest Nigeria and comparing it with national and regional prevalence among same group.

Methodology: The study was a retrospective study of AYP, aged 13-20 years at Ekiti State University Teaching Hospital, Ado-Ekiti, Ekiti State, Southwest Nigeria. Convenience and consecutive sampling method was used in retrieving subjects' data. One hundred subjects whose ages were between 13 and 20 years were consecutively sampled over a period of six months, July to December, 2018.

Results: Out of the one hundred subjects retrospectively sampled, 46 (46%) were males, while 54 (54%) were females. Four (4%) of the subjects were 13 years of age, while 6(6%), 5(5%), 8(8%), 27(27%), 17(17%), 12(12%) and 21(21%) respectively were aged 14, 15, 16, 17, 18, 19 and 20 years. Three (3%) of the subjects were positive to HIV, 1 (%) was male, while 2 (20%) were female, thus giving a sero-prevalence rate of 3%. Disaggregation of the positive subjects reveals that 33.3% were male, while 66.7% were females.

Conclusion: Though the general prevalence of HIV in Ekiti State ranks among the lowest in Nigeria, group-specific interventions targeting the AYP should be put in place in the State to address the disproportionately high prevalence among the AYP in the State.

Keywords: HIV; AIDS; STDs; adolescents; teenagers; Ekiti.

1. INTRODUCTION

There are about 1.8 billion adolescent and young people AYP on earth today, thus constituting a significant proportion of the world's population-25% [1]. It's been estimated that 9 out of every 10 persons of these AYP live in the developing nations of the world. In Africa, 1 out of every 3 persons, is an adolescent or young person [2]. This is equally applicable to Nigeria- the largest black nation in the world- where 1 out of every 3 persons is an adolescent or young person [3-4]. Specifically, AYP aged 10-14, 15-19 and 20-24 years, respectively make up 12.3%, 8.8% and 7.2% of the Nigerian population [5-8].

With an estimated population of 200 million, the implication is that there are about 50-60 million AYP in Nigeria [9]. There were as at 2012, an estimated 5.4 million AYP living with HIV globally, with approximately 17% of them falling within the 10-14 years age-bracket. Though 75% of the 160, 000 AYP aged 10-19 years said to be HIV positive, were reported to have acquired their infection vertically- that is, through mother-to-child-transmission, a host of other factors drive the HIV epidemic among the AYP, generally but in Nigeria in particular.

Some of these factors include, having multiple sex-partners, sexual coercion, early initiation of sex (regarded as sexual debut at or before age 16), socio-cultural beliefs, lack of knowledge of

the modes of transmission of HIV and how it could be prevented. The 2017 national health survey revealed that only 29% of females and 28% of males, knew how HIV/AIDS could be prevented. A study in 2017 reported that 41.2% of AYP aged 15-24 years had sex-partners 10 or more years older than them, thus putting the young women at a significantly high-risk of contracting HIV from men who were old enough to be their uncles or even fathers.

In view of all these, it is not just desirable but imperative for the society to understand the dynamics of HIV epidemics among AYP. This study therefore aimed at determining the prevalence of HIV among the AYP at a tertiary health facility in Ekiti State, Southwest Nigeria.

2. METHODOLOGY

2.1 Study Location

The study was carried out in the city of Ado-Ekiti, Ekiti State, one of the thirty-six states of Nigeria. It's located on latitude 7^o 40' North of the Equator and Longitude 5^o 16' East of the Greenwich Meridian. Ado-Ekiti is about 200m above the sea level in the South but 500m in the North. The landscape is characterized by rounded inselbergs and steep-sided volcanic hills such as Olota rock. The terrains are gently undulating. The major rivers in Ado-Ekiti are Amu, Awedele, Ureje and Ogbese. The 2006 national census

conducted by the National Population Commission, Ado-Ekiti officially has a population of 308,321 [10].

2.2 Study Design

The research was a retrospective study in which data of adolescents and young adults aged 13-20 years at the Ekiti State University Teaching Hospital were consecutively sampled.

2.3 Data Retrieval

One hundred subjects whose ages were between 13 and 20 years were consecutively sampled over a period of six months, July to December, 2018, irrespective of the gender.

3. RESULTS

Out of the one hundred subjects retrospectively sampled in the study, 46 (46%) were males, while 54 (54%) were females (Table 1).

Table 1. Gender distribution of the subjects

Gender	Frequency
Male	46 (46%)
Female	54 (54%)
Total	100

Four (4%) of the subjects were 13 years of age, while 6(6%), 5(5%), 8(8%), 27(27%), 17(17%), 12(12%) and 21(21%) respectively were aged 14, 15, 16, 17, 18, 19 and 20 years (Tables 2 and 3).

Table 2. Distribution of subjects by age

Age	Frequency
13	4 (4%)
14	6(6%)
15	5(5%)
16	8(8%)
17	27(27%)
18	17(17%)
19	12(12%)
20	21(21%)
Total	100

Three (3%) of the subjects were positive to HIV, 1 (%) was male, while 2 (20%) were female, thus giving a sero-prevalence rate of 3% (Table 4). Disaggregation of the positive subjects reveals that 33.3% were male, while 66.7% were females.

4. DISCUSSION

Most HIV prevalence studies in Nigeria focus on adults, especially adults within the reproductive

age bracket [11]. Only a few focus on prevalence among the adolescents- defined by UNICEF [12] as age 10-19 years- but for the purpose of this study defined as people within the 13-20years age-bracket.

Table 3. Distribution of subjects by gender and age (years)

Age	Male	Female	Total
13	1	3	4
14	2	4	6
15	4	1	5
16	5	3	8
17	15	12	27
18	5	12	17
19	4	8	12
20	10	11	21
Total	46	54	100

Table 4. HIV test result

Age	Male	Female	Total
13	0	0	0
14	0	0	0
15	1	0	1
16	0	1	1
17	0	0	0
18	0	0	0
19	0	0	0
20	0	1	1
Total	1	2	3

The period of adolescence is the stage in life, when boys and girls begin to get a grasp of the concepts of sex and sexuality. It is also at this stage that a number of them begins to experiment with sex [11]. Several studies on age at sexual debut have shown that lots of teenagers and young adults debut sexually in their adolescence. Early sexual debut is generally understood to mean having had first sex at or before age 16 [13-14]. In a study conducted by Daramola et al., [15] among undergraduates in seven tertiary schools in Ekiti State, majority of those who had ever had sex, had their first sex between age 16-20 years. Many studies have established an association between early initiation of sex and unwanted pregnancy and the risk of contracting HIV/AIDS or other STIs [16-20].and the tendency in later life to have multiple sex-partners [21] or engage in other risky sexual behaviour [22-23].

Debuting sexually rather too early-in Nigeria the legal age for consent for sex is 18- isn't without its dire consequences for minors debuting

sexually as teenagers. Some the consequences are teenage/unwanted pregnancy, sexually transmitted diseases, becoming parents when they are actually still materially and financially dependent on their own parents and when they are emotionally and psychologically still immature to be a wife/husband or a parent.

Despite the fact that everybody has the need to avoid exposure to HIV/AIDS and other STDs and that adolescents are often involved in behaviours that put them at high risk of contracting HIV/AIDS and other STDs, they are often unable to access needful health information and services, owing to their age and socio-economic status [24]. Equally disturbing is the fact that most of the minors who venture into sexual experimentation and escapades lack proper knowledge of HIV/AIDS and other STDs.

In a study by Asaolu et al., [11] only 25% of the sampled adolescents had adequate knowledge of HIV/AIDS and only 40% knew their own HIV status. Adolescence period is typically- for quite a number of them- a period of sexual experimentation, social liberty, sexual vulnerability or exploitation. It's a period of sexual assault and abuse for teenagers, particularly in societies with weak institutions and laws. It's a stage that some may begin to experiment with hard drugs, liquor and cigarette. These all put them at real risk of contracting HIV/STDs, especially in parts of the world where there is high prevalence of HIV among the general populace.

In this present study, the overall HIV prevalence among the sampled adolescents and young adults was 3%. This is twice the national prevalence of 1.5% according to the National HIV/AIDS Indicator and Impact Survey (NAIIDS, 2019), more than four times higher than the prevalence among the general populace in Ekiti State, where the study was conducted [25].

This overall prevalence is comparable with the 2.9% overall national prevalence of HIV among adolescents aged, 10-19 [26].

5. CONCLUSION

Though the general prevalence of HIV in Ekiti State ranks among the lowest in Nigeria, group-specific interventions targeting the AYP should be put in place in the State to address the disproportionately high prevalence among the AYP in the State.

CONSENT

As per international standard, patient's written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

Ethical clearance for the study was obtained at the Ekiti State University Teaching Hospital, Ado-Ekiti, Ekiti State, Southwest Nigeria. Protocol number: EKSUTH/A67/2019/02/006.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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