

Sexual experiences of adolescents and young adults living with HIV attending a specialized clinic in Accra, Ghana

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SUMMARY

Background: We assessed sexual experiences among adolescent and young adults living with HIV (AYALHIV) attending the adolescent HIV care clinic in Korle Bu Teaching Hospital (KBTH)

Design: Cross-sectional study conducted in 2015.

Setting: HIV clinic at KBTH

Participants: AYALHIV who attended the adolescent HIV care clinic

Interventions: AYALHIV were interviewed with a structured questionnaire to obtain data on their socio-demographic characteristics and sexual experiences. The data was analyzed with STATA version 13.

Main outcome measures: sexual experiences of adolescents and young people living with HIV

Results: Of 101 participants, 60.4% (61/101) were males. The mean age of respondents was (18±3.2) years with an average age at sexual debut (16.2±4.2) years. A third of the respondents (34/101) had had sex before and out of them 76.5% (26/34) were males. Seventeen percent (4/23) had multiple sexual partners and 38.1% (8/21) of sexually active use condom at last sexual intercourse. Eighty-six percent (87/101) of respondents knew their HIV status, 66.7% (58/87) of them were males. There was a significant association ($p<0.05$) between being male and knowledge of HIV positive status. Knowledge of a respondents' HIV positive status was found to be positively associated with ever using condom.

Conclusion: Sexual experience prevalence is high among AYALHIV. More males were sexually active, not using condom and had multiple sexual partners. Safer sexual practices such as consistent use of condoms, need to be intensified especially during counselling sessions. This could contribute to the reduction in prevalence of HIV among the adolescents in the country.

Keywords: adolescents, young people, HIV, sex education, sexual experience

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INTRODUCTION

Adolescence is a critical transition period from childhood to adulthood characterized by key development experiences. During this period, young people develop their self-identity, explore their sexuality and go through rapid hormonal changes which can make them vulnerable.¹

The eagerness of many young people to experiment with sexuality and sexual orientation may make them particularly vulnerable to sexual exploitation resulting in some of them getting infected with sexually transmitted infections (STIs) including HIV.² Young people are therefore likely to be involved in risky sexual behaviours such as premarital sex, multiple sex partners and unprotected sex during this stage of their lives.³

According to the World Health Organization (WHO), about 30% of all new HIV infections occur among young people ages 15-25 years globally.⁴ Sub-Saharan Africa remains the most affected region.⁵ Although the prevalence of HIV in other age groups has decreased, the 2016 HIV sentinel report for Ghana revealed that the prevalence of HIV among the 15-24 age group still stands at 1.1%.⁶ Also, the prevalence for 15-19 age group remains at 0.6% with an increase in AIDS-related deaths among adolescents.⁶ This is an indication that more adolescents are becoming sexually active.

Prevention and early intervention programmes addressing sexual behaviour in young people and changing one's sexual behaviour through sex education could be effective in decreasing the transmission of HIV/AIDS among individuals.^{7,8} The WHO's implementation guidance for health providers on adolescent HIV care stipulates that knowledge of adolescents' HIV positive status is very essential in order to increase their access to antiretroviral therapy (ART).

This will in turn support Adolescents HIV prevention choices with the ultimate goal of improving their health. Adolescents need special attention that would assist in causing a positive behavioural change with regards to the management of HIV. These include adherence to anti-retroviral therapy (ART) and the adoption of safer sexual lifestyles among HIV-positive adolescents who are aware of their positive status.^{9, 10}

In 2012, an Adolescent Care Programme was established at the HIV clinic within the Korle Bu Teaching hospital to provide comprehensive HIV/AIDS care and management of opportunistic infections for adolescents and young adults living with HIV (ALHIV). It was also established to address their needs and expectations that were not met at the adult HIV clinic. As part of the programme, social gatherings are organized twice in a year, where issues on disclosure, adherence to therapy, reproductive and sexual health among others are addressed. As at December 2016, there are over 200 HIV positive adolescents and young persons who access care at the clinic and 94% of them were found to have been infected perinatally.

HIV/AIDS epidemic remains a public health challenge to Ghana's socioeconomic development. Therefore, there is the need to address the issues of sexual behaviour among adolescents particularly to ascertain whether the recommended measures which include abstinence and condom use are being practiced among them.

This study aimed at assessing the sexual experiences of adolescents and young adults living with HIV who visit the HIV clinic of the Korle Bu Teaching Hospital, four years after the implementation of the Adolescent Care Program in the hospital. The study would provide information on appropriate lifestyle interventions to put in place for these young people.

METHODS

Study Design and Setting

A cross-sectional study was carried out among adolescents and young adults who accessed the HIV clinic at the fevers unit in 2015.

The study site was the Fevers Unit of the Korle Bu Teaching hospital, a tertiary referral hospital in the southern part of Ghana.

The Fevers Unit serves as a national referral centre for patients infected with HIV. The unit serves as the infectious disease unit of the department of medicine at the Korle-Bu Teaching hospital. It has specialists and resident doctors who provide both in and out-patient clinical services for patients with infectious diseases. The Unit currently provides antiretroviral therapy (ART) services for over 7000 active persons living with HIV (PLHIV). The adult out-patient clinics are conducted thrice a week (Monday, Wednesdays and Fridays).

The Adolescent HIV Care clinic is organized on Thursdays and serves as a transitional phase for adolescents who have been discharged from the pediatricians' special clinic at age thirteen and young adults who are yet to be enrolled into the adult clinic. A Thursday clinic is conducted from 7:00am to 3:00pm by doctors for adolescents (10-19 years) and young adults (20-24) living with HIV (AYALHIV). These AYALHIV are provided with non-nucleoside reverse transcriptase (NNRTI) based regimen as first line ART and protease-inhibitor based regimen as second line according to national guidelines.

The unit currently provides care for a little over 160 adolescents and 80 young adults living with HIV. This clinic deals purposely with clinical issues pertaining to these group of people. There are health educators and trained counsellors and psychologist that assist with peculiar issues confronting adolescents and young adult attending the clinic on Thursdays. Sample size calculation was based on the clinic attendants over the study period. Approximately 125 out of the total 240 adolescents and young adults enrolled in the clinic.

Study population and Participant Selection

Every HIV positive young person, thirteen years and above enrolled in the Thursday adolescent HIV Care clinic and receiving medical care for their infection from the clinic was eligible for enrolment. Young people whose parental consent could not be sought; those who did not assent as well as those who were very sick were excluded from the study.

Adolescents and young adults living with HIV coming for routine review at the clinic were approached for participation in the study. Prior to enrolment, adolescents and young adults who attended the clinic and were more than 16 years were approached alone by two trained research assistants who explained the purpose and significance of the study to them.

Adolescents who were below 16 years and their care givers were also approached by two trained research assistants who explained the purpose and significance of the study to them and the care givers.

After the briefing, they were invited to voluntarily participate in the survey on their sexual experience. Those above 16 years were enrolled after consent had been obtained from them. For those below 16, consent was sought from their caregivers and assent was sought from the adolescents before they were enrolled in the study. If parental consent was denied, the person was not enrolled.

Data Collection

A standard questionnaire was administered to those who could not read and understand the content of the questionnaire, and for those who could, the questionnaire was self-administered. The administered questionnaire was a modified one with selected questions from the CDC youth behavioural surveillance questionnaire. Modifications included local context specific socio-demographic questions and information on HIV status. The questionnaire was used to obtain information on the participants' demographics (age, gender, occupation, marital status, educational level, religion and ethnic background), parent information (HIV status, whether they are alive or dead), HIV status (dates of HIV diagnosis and disclosure, whether respondent is on antiretroviral medication or not and date of ARV initiation), sexual experience and sexual partner preference where applicable (number of sexual partners, age at first sexual intercourse, condom use, knowledge of reproductive health as well as their sexual orientation).

Data Management and Analysis

Data collected was entered, cleaned and coded with Microsoft Excel. It was then analyzed with STATA Version 13, Texas USA. For sexual experiences, ever had sex referred to any respondent who had had sex at least once in their lifetime. Sexually active referred to one who had sex at least twice in the past six months. Rarely refers to one who has had sex only once in the past six months. Sometimes refers one who has had sex two to four times in the past six months but not in the last month. Often refers to one who has had sex four or more times in the past six months and at least once in the past month.

Demographic characteristics of respondents were presented in tables as percentages and frequencies as appropriate. Chi-square test of proportions was used to determine any significant association between one's knowledge of HIV positive status and sexual experience, and receiving sex education and sexual experience at p -value < 0.05 .

Ethical Consideration

Ethical approval was obtained from the Ethical and Protocol Review Committee of University of Ghana Medical School (MS-Et/M.6-P.5.3). Permission was also obtained from the Korle Bu Teaching Hospital and the Fevers unit for this study. A written informed consent was obtained from each of those aged 16 years and above, who were willing to participate. For those who were less than 16 years, an assent was sought as well as consent from their care givers. Confidentiality was ensured by using codes and not names in filling the questionnaires. The completed questionnaires were kept under lock and key. Data files were also stored as password protected documents on the principal investigator's computer.

RESULTS

Out of the 125 AYALHIV approached, 101 participated in the study giving a response rate of 81%. Out of the 101 respondents, 61 (60.4%) were males, and a majority of them 91(82%) were still in school at the time of the study. (Table 1). The ages of the respondents ranged from 13–25 years with a mean age of 18.0(\pm 3.2) years.

Table 1 Socio-demographic characteristics of adolescents living with HIV who accessed an HIV clinic, Accra, 2015

Variable	Frequency (%)
Age	
13-15	24 (23.8)
16-19	46 (45.5)
20-25	31 (30.7)
Gender	
Male	61 (60.4)
Female	40 (39.6)
Occupation	
Employed	10 (10.0)
Unemployed	8 (8.0)
Schooling	83 (82.0)
Highest education level attained	
Primary	9 (9.0)
Junior High	51 (50.5)
Sec/Tech	28 (27.7)
Tertiary	13 (12.8)
Religion	
Christian	91 (90.0)
Muslim	10 (10.0)
Ethnicity	
Akan	44 (45.4)
Ga	16 (16.5)
Ewe	18 (18.5)
Others	19 (19.6)

Of the 101 HIV positive adolescents and young adults studied, 86.1% (87/101) knew their HIV status. From table 2, knowing your HIV status was associated to sex, thus the odds of a male knowing their positive status was 7.3 (95% CI 1.9 – 28.4; p -value 0.002) compared to a female. The average age at sexual debut was (16.2 \pm 4.2) years. A third of the respondents (34/101) had had sex before and out of them 76.5% (26/34) were males.

The odds of a male HIV adolescent ever having sex was 2.97(95%CI: 1.17- 7.50, p-value 0.019) compared to a female. Having multiple sexual partners, being sexually

active and condom use was not found to be associated with sex (p>0.05).

Table 2 Knowledge on HIV positive status and reproductive health variables among adolescents living with HIV who accessed an HIV clinic, Accra, 2015

Factor	Male (%)	Female (%)	Total (%)	p-value
Do you know your HIV status				0.001*^
Yes	58 (95.1)	29 (72.5)	87 (86.1)	
No	3 (4.9)	11 (27.5)	14 (13.9)	
Are you on ARVs				0.820^
Yes	54 (88.5)	34 (85.0)	88 (87.1)	
No	4 (6.6)	4 (10.0)	8 (7.9)	
Don't know	3 (4.9)	2 (5.0)	5 (5.0)	
Do you know your parents' status				0.286
Yes	21 (34.4)	18 (45.0)	39 (38.6)	
No	40 (65.6)	22 (55.0)	62 (61.4)	
Have you heard about reproductive health				0.479
Yes	56 (91.8)	35 (87.5)	91 (90.0)	
No	5 (8.2)	5 (12.5)	10 (10.0)	
Have you ever had any sex education				0.162^
Yes	59 (91.8)	36 (90.0)	95 (94.1)	
No	2 (8.2)	4 (10.0)	6 (5.9)	
Source of sex education				0.064^
Counsellor	23 (37.7)	10 (25)	33 (32.7)	
Parent/Guardian/teacher	27 (44.2)	13 (32.5)	40 (39.6)	
Media	9 (14.8)	14 (35.0)	23 (22.7)	
Friends	2 (3.3)	3 (7.5)	5 (5.0)	

*-significant value (p-value<0.05) ^ - Fischer's exact value

Table 3 Sexual practices among adolescents living with HIV who accessed an HIV clinic, Accra, 2015

Variable	Male	Female	Total	p-value
Ever had Sex				0.019*
Yes	26 (42.6)	8 (20.0)	34 (33.7)	
No	35 (57.4)	32 (80.0)	67 (66.3)	
Sexually active				0.245
Yes	15 (46.0)	6 (15.0)	21 (20.8)	
No	46 (54.0)	34 (85.0)	80 (79.2)	
Number of sexual partners				0.341^
One	12 (80.0)	7 (87.5)	19 (82.6)	
>One	3 (20.0)	1 (12.5)	4 (17.4)	
How often do you have sex				0.408^
Rarely	9 (50.0)	3 (42.9)	12 (48.0)	
Sometimes	7 (38.9)	4 (57.1)	11 (44.0)	
Often	2 (11.1)	0 (0.0)	2 (8.0)	
Frequency of condom use				0.254^
Rarely	7(31.8)	1 (11.1)	8 (27.6)	
Sometimes	10 (45.5)	3 (33.3)	13 (44.8)	
Often	5 (22.7)	3 (33.3)	8 (27.6)	
Condom use at last sexual intercourse				0.63^
Yes	5 (33.3)	3 (50.0)	8 (38.1)	
No	10 (66.7)	3 (50.0)	13 (61.9)	

NB:- some refused to answer number of partners though they had ever had sex) *-significant value (p-value<0.05) ^ - Fischer's exact value

Condom use at the last sexual intercourse was 38.1% and higher proportion of females used condom than males. Knowledge of a respondents' HIV's positive status was found to be associated with ever using condom and ever

having sex. The other sexual practices were not found to be associated with knowledge of HIV status (Table 4). Those who knew their HIV status had 1.12 odds of ever having sex compared to those who did not know their status (95%CI; 1.12-1.43; p<0.01).

Table 4 Association between knowledge of HIV positive status and sexual practices of adolescents living with HIV who accessed an HIV clinic, Accra, 2015

Variable	Do you know your HIV status - n (%)		Total	p-value
	Yes	No		
Ever had sex				0.004*
Yes	34 (39.1)	0 (0)	34 (33.6)	
No	53 (60.9)	14 (100)	67 (66.4)	
Frequency of having sex[#]				0.148
Rarely	12 (48.0)	0 (0)	12 (48.0)	
Sometimes	11 (44.0)	0 (0)	11 (44.0)	
Often	2 (8.0)	0 (0)	2 (8.0)	
Ever used a condom[#]				0.032*
Yes	16 (53.3)	0 (0)	16 (53.3)	
No	14 (46.7)	0 (0)	14 (46.7)	
Frequency of condom use[#]				0.233
Rarely	8 (27.6)	0 (0)	8 (27.6)	
Sometimes	13 (44.8)	0 (0)	13 (44.8)	
Often	8 (27.6)	0 (0)	8 (27.6)	
Number of sexual partners[#]				0.371
1	30 (88.2)	0 (0)	30 (88.2)	
>1	4 (11.8)	0 (0)	4 (11.8)	

*-significant value (p-value<0.05)

[#]Mantel-Haenszel continuity correction applied

DISCUSSION

The study sought to access the sexual experience of adolescents living with HIV who attended the HIV adolescent clinic. We found that mean age of sexual debut was 16 years with a third having had sex before and only 27.6% often used condom. Condom use at the last sexual intercourse was 38.1%. This study was conducted with a population which has been thought to be sexually inactive because of their HIV status. However, the study revealed, the adolescents and young adults are sexually active and are involved in risky sexual behavior.

The information from the study can serve as basis for tailoring services such as counselling offered to these people towards addressing these problems and making them safe. From this study, 4 out of 5 adolescents (86.1%) who received clinical care at the HIV clinic knew about their HIV status. This high proportion is an indication that most care givers are now taking up their responsibility of disclosing their children's status to them, probably with some or no help from the healthcare providers. Earlier study in 2014 showed 52.9% had knowledge of their HIV status compared to current study of 2015 of 86.1%.¹¹

According to WHO, in sub-Saharan Africa the percentage of females who know their status is generally higher than the males.¹² In contrast, our study found 95% of males knew their status as opposed to 72% females. This is in contrast to other studies including Ikpeme and Dixon-Umo where some adolescent females had their status disclosed to them by healthcare professionals' while seeking medical care.^{13,14} In our setting, males have been seen to be more emotionally stable at a younger age than their female counterparts thus had their status disclosed to them earlier than the females. Majority of the adolescents (94.1%) had received sex education. Of the 95 respondents that received sex education, 33.7% had received sex education from counsellors, followed by parents/guardians (26.3%) and then on social media (22.1%). The higher proportion of adolescents receiving sex education from counsellors is evidence that some parents and guardians still experience discomfort sometimes in discussing sexuality with their children. Some of them perceive this as encouraging sexual behaviour and experimentation among adolescents.^{15,16} Another study by Lebeso et al in 2010 also identified barriers such as cultural norms and social values. As a result, most of these adolescents indicated that they feel more comfortable talking about sex education to their counsellors (also referred to as health educators) at the HIV clinic and therefore tend to open up to them.¹⁷

Most of the adolescents irrespective of knowing their HIV status, still engaged in risky sexual behaviours such as being sexually active and not using condoms often.

Only 24% (8 of 34) of those who had had sex reported that they use condoms often. This low frequency of condom use depicts a very high probability of getting more people infected with HIV. This is a problem because of the infectious nature of the HIV/AIDS virus and many young people having been noted to engage in early sexual experiences. This behaviour is likely to expose more people to HIV especially where they are less likely to use condoms.¹⁸ This poses a serious threat to public health since research has proven that consistent use of condom provides protection from HIV and other STDs.^{19,20} In addition, our findings are similar to some studies in Uganda which found that sexually active adolescents who knew their HIV status were less likely to use condoms and other contraceptives.^{21,22}

From the study, ever having sex and ever using a condom were found to be associated with knowledge of HIV positive status ($p < 0.05$). Less than half of those who had sex used condom though they knew they were HIV positive. This trend has been seen in other studies in sub-Saharan Africa. Regardless of their HIV positive status, some adolescents living with HIV have been found to still engage in risky lifestyles compared to the general population.²⁵ Having observed a similar trend among Zimbabwean adolescents, Mabhunu recommended that this gap in knowledge and action can be resolved by promoting healthy sexual behaviour through effective educational programs leading to critical thinking and decision making among the youth.²⁷

In all, about one-third (34 of 101) of the respondents were involved in risky sexual behaviour with males forming three-quarters of this population (26 of 34). A higher proportion of males were sexually active, not using condom and had multiple sexual partners. Even though some of these risk factors showed no significant difference in gender, other studies have shown that males are more likely to engage in risky sexual behaviours than females.^{23,24} Safer sexual practices such as consistent use of condoms, need to be intensified especially during counselling sessions. This could contribute to the reduction in prevalence of HIV among the adolescents in the country.

Some limitations to this study are as follows; even though trained interviewers were used and confidential interview settings were ensured, the sensitive nature of questions associated with sexual behaviours and practices might have been underreported because of social desirability bias. Also, this was a facility-based cross-sectional study, generalization from the results of this study should be made with caution.

CONCLUSION

One-third of AYALHIV attending the Thursday Adolescent care clinic were involved in risky sexual behaviour. More males were sexually active, not using condom and had multiple sexual partners than the females.

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