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HIV/AIDS KNOWLEDGE, ATTITUDE AND PRACTICE AMONG HIGH SCHOOL STUDENTS IN BANJUL, THE GAMBIA

Matthew Anyanwu, Adama Awasom-fru and Yauba A.*

Gambia.

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Corresponding author: Yauba A.
Gambia.

ABSTRACT

Background: Among young people living with HIV, nearly 80% (4 million) live in Sub-Saharan Africa. Adolescence remains the most vulnerable group thus understanding their knowledge of the disease is vital. **Objectives:** To determine whether the students are aware of various aspects of HIV such as, definition, causes, prevention and treatment. To assess the attitude of students towards an HIV infected person. To assess the sexual behaviour of the students. **Methods:** A cross sectional study was done in four randomly selected high schools in Banjul, and structured questionnaires were administered to 544 grade 11 students. **Results:** Approximately, 98% of our study population have heard about HIV/AIDS and 43.7% knew that HIV causes AIDS and majority (51.7%) had no idea. Almost all (94.5%) knew sexual intercourse can transmit infection and 93.0% beliefs condom use can prevent transmission. However, a third were sexually active (29.6%), a fifth (20.0%) have used a condom with a significant number (10%) of them engaged in unsafe sexual act. Approximately, 33% believed douching after intercourse could prevent transmission. Many (89.2%) knew about mother to child transmission where as 43.4% and 36.8% felt transmission could be by mosquito bites and kissing respectively. A good number (79.2%) would continue being friends with infected person while 89.3% would not mind being thought by an infected teacher. **Conclusion:** The study suggests remarkable level of awareness about HIV but with some misconception on mode of transmission. They had a positive attitude towards PLHIV. A significant number engaged in unsafe sexual practices.

KEYWORDS: HIV/AIDS, knowledge, attitude, practices, grade 11 students, Banjul.

INTRODUCTION

The adolescent defined by world health organization (WHO) as a period between 10 to 19 years[1] is a period composed of varied measures of transformation in the evolution of human development. The neuron-endocrine developmental changes have a lot of implication in the physical, behavioural and emotional manifestation of the adolescence age.[2-4] This phase of life is transitory and unfortunately engulfed with experimental activities. Some may be harmful others of unknown short term consequences which invariably may impact in the formation of adult life. Some other scholars working elsewhere has reported the influence of peer group, and the attitude and practises of significant adults in the adolescent lives such as teachers and parents, societal pressure, norms and values and economic situations in moulding the character and behavioural patterns which may be carried onto adulthood.[2,5] External influences, differ among cultures and societies, including changing roles, responsibilities, relationships and expectations.[4]

Regarding HIV transmission, some adolescence experimental life style may predispose to risky sexual behaviour and use of illicit drugs.[3] Sexual contacts (heterosexual or bisexual/ homosexual) and IDU (intravenous drug use) are well established cardinal routes of HIV transmission which adolescents are more vulnerable.[2-4] Also it has been reported that they do have poor health – seeking behaviour and less likely to seek medical help or counselling.[4] The combination of these would be a potential fertile ground for new HIV infection. In the current WHO guidelines on HIV prevention, the adolescent is still classified as vulnerable group of new HIV infection.[4]

Since 2010, the annual number of new infections among adults (15+) has remained static at an estimated 1.9 million [2015 range of 1.7 million–2.2 million]. However, due to intensive efforts to eliminate mother-to-child transmission of HIV infection, the results have shown steep declines in the annual number of new HIV infections among children, (0 to 14 year) from 290 000

[250 000–350 000] in 2010 to 150 000 [110 000–190 000] in 2015. Therefore older adolescents (15+) particularly female still contribute significantly in the acquisition of new HIV infection. Currently it was estimated that, they continue to present the highest number of new cases of HIV reported in Africa with about 50% or 7000 young people aged 15-24 years being infected each day, and globally 10 million people aged 13 -24 years infected in the last decade.[2,3] The level of accurate knowledge adolescents have about the cause and nature of HIV/AIDS, the methods of spread and the preventive measures will greatly influence their attitude towards the disease entity itself and people living with it, as well as result in a change in their sexual behaviours in favour of abstinence or at least a lower practise of unsafe sex.[1,2]

Young adults are also at risk as a result of high risky sexual behaviours, attitudes, and constraints of the societies in which they grow up.[3,4]

Increasing knowledge of HIV/AIDS can be a powerful means of fostering positive attitudes and building safe practices among populations. It is well established in the available literature that a clear understanding about knowledge, attitudes and practices (KAPs) among any population is very important for planning to control or prevent the spread of HIV.[4,5]

A study conducted in Greece, after 15 years of prevention activities among young people, investigated level of knowledge, attitudes, beliefs, behaviour and practices of high school students towards HIV/AIDS. The results of the study shown students had a satisfactory level of knowledge and have adopted relatively safe behaviour.[5,6] A similar study in Kenya found a correlation between knowledge and the transfer of this knowledge to change of behaviour.[6,7]

In a study conducted in Tanzania, 93.7% knew how HIV is transmitted, 50% of students reported to have experienced sexual intercourse, however, few students reported to have used condoms in their last sexual contacts.[8]

In a similar study conducted in South African, they concluded that the awareness on HIV/AIDS was high among secondary school adolescents, but the knowledge of the disease was still poor as 30.0% of them beliefs HIV/AIDS could be cured.[9]

In another study conducted in Ghana, there was an inconsistent level of AIDS knowledge with significant gender difference. Although over 90% of the students knew where to access HIV Counselling and testing (HCT) services, 45% of them had never done HIV test.[7,10]

In the literature some studies have been conducted in many countries assessing attitude of secondary school students towards HIV/AIDs patients as stigma and discrimination is a key factor driving the epidemic. In a study with 120 students across 6 selected secondary schools in Nigeria[9] showed that, there was high positive attitude towards PLHIV as only 15% and 18% said they would drive them away and boycott them respectively.

Another Nigeria study carried out in the secondary schools showed all the students had heard about HIV, and had a fairly good knowledge about the disease. Despite this knowledge, only 55% were willing to be tested. However, none had been tested for HIV. HCT is an essential first step to treatment. A healthy carrier is not known unless sero-status is assessed. If sero-status is unknown, sexual partners are at risk of being victims of HIV infection, thereby increasing new infection rate and prevalence of the disease.

In a study conducted in Gabon[4], less than half of the students showed positive attitudes on issues such as: buying items from an HIV positive shopkeeper or food seller.

In another study in Lao People's Democratic Republic,[10] nearly half of the surveyed students (45.3%) said that they would be willing to continue studying in a school with HIV-positive friends and 41.3% said they would continue attending a school with HIV-positive teachers.

Although similar studies have been conducted in many countries, this was the first of its kind to be done in high schools in The Gambia. Assessing accurate level of knowledge and attitude of high school students towards HIV patients may prompt tangible changes in the implementation strategy of the HIV prevention response programmes in the Gambia.

METHODOLOGY

This was a cross sectional study involving high school students. The study population consisted of all males and females attending the targeted schools. The sample size was calculated using the formula: n= (1.96) 2PN (1- P) 0.042N+ (1.96)2P (1-P), where N = total number of grade 11 students; P was set at 60% reflecting the level of awareness observed in other studies. Substituting these values in the above formula resulted to sample size of about 544 students.

A tested structured questionnaire was used for data collection. Direct observer interview was conducted and filled questionnaires were reviewed for accuracy and completeness. Data was entered in EPI and was exported to Stata for analysis. Summary statistics was used to estimate various aspects of awareness and attitudes. The results were presented in text, tables and graphs.

RESULTS

Four of the five high schools in the Greater Banjul region were selected and the study question was administered to a total of 544 grade eleven students.

Table 1: The socio-demographic characteristics of the study population.

Variable	N (%)
Age group (years)	
10-15	7 (1,29)
16-20	480 (88,24)
>20	57 (10,48)
Sex	
Female	211 (38,79)
Male	333 (61,21)
Marital status	
Single	504 (92,65)
Married	30 (5,51)
Divorced	2 (0,37)
Widowed	8 (1,47)
Family status	
Monogamy	209 (38,42)
Polygamy	207 (38,05)
Single parent	128 (23,53)
Parents level of education	
University	141 (25.92)
Secondary	174 (31.99)
Primary	52 (9.56)
None	171 (31.43)
Others	6 (1.10)
Religion	
Muslim	472 (86,76)
Christian	72 (13,24)
Alcohol intake	
Yes	18 (3,31)
No	526 (96,69)
Tobacco intake	
Yes	12 (2,21)
No	530 (97,79)

The majority (61.2%) of the students was male and 88.2% of them were within the age range of 16-20 years. Majority of the respondents were single (92.7%) and a significant proportion of them came from a polygamous family (38.1%). Majority (66.7%) of the students have parents who have attained some level of formal education. However, a significant number (33.3%) of the respondents have parents who have never been to school. It was prudent to note that 97% of the students neither smoke cigarette nor consume alcohol.

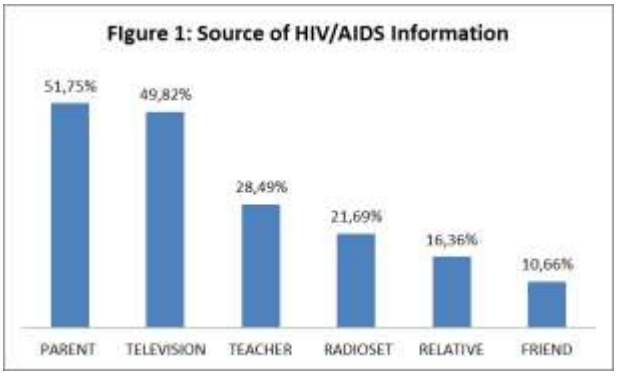

Figure 1: Source of HIV/AIDS Information.

Most of them heard about HIV/AIDS from their Parents (51.8%) and Television (49.8%).

Table 2: Knowledge and attitude of basic aspects of HIV/AIDS.

Variable	N(%)
Have You Ever Heard About HIV/AIDS?	
Yes	537 (98,71)
No	7 (1,29)
What Causes HIV/AIDS?	
Virus	405 (74,45)
Bacteria	17 (3,13)
Parasite	12 (2,21)
Punishment From God	9 (1,65)
Others	5 (0,92)
Fungi	4 (0,74)
No Idea	92 (16,91)
AIDS Causes HIV?	25 (4,63)
HIV Causes AIDS?	236 (43,70)
No Idea	279 (51,67)
Can You Recognise An HIV/AIDS Patient?	
Yes	157 (29,29)
No	379 (70,71)
How Do U Feel About HIV Infected Patients	
They Will Die Shortly	194 (35,66)
Yes	350 (64,34)
No	
They Are Promiscuous	
Yes	118 (33,27)
No	363 (66,73)
They Are Being Punished By God	
Yes	54 (9,93)
No	590 (90,07)
I Will Tell My Friends To Avoid Him/Her	
Yes	113 (20,77)
No	431 (79,23)
If Your Teacher Is HIV/ Will Change Class	
Yes	58 (10,66)
No	486 (89,34)
HIV/AIDS has a cure	
Yes	213 (39,15)
No	221 (60,85)

About 98.7% have heard of HIV and 74.5% of the respondents knew that virus is the cause of HIV infection, 16.1% of respondents had no idea and the rest of respondents had misconceptions about the cause. Only 43.7% knew that HIV causes AIDS and majority (51.7%) had no idea. Additionally, a good number (70.7%) believed that HIV/AIDS patients may not be recognized on the street and about 39% believed there is cure. A good number (79.2%) would continue being friends with infected person while 89.3% would not mind being thought by an infected teacher. Above 30% of the students believed that HIV patients are promiscuous and will die shortly.

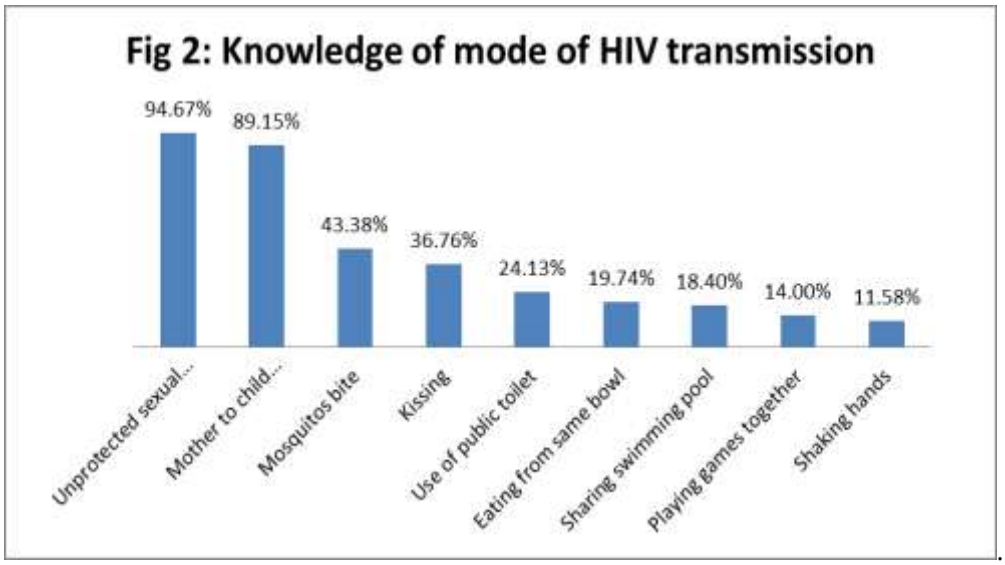

Figure 2: Knowledge of mode of transmission.

Majority (95%) of the students knew that unprotected sexual intercourse is a mode of transmission of HIV and a good number agreed transmission could be from a pregnant woman to an unborn child (89.1%). However, a significant proportion believed that the virus can be transmitted via mosquito bites (43.4%).

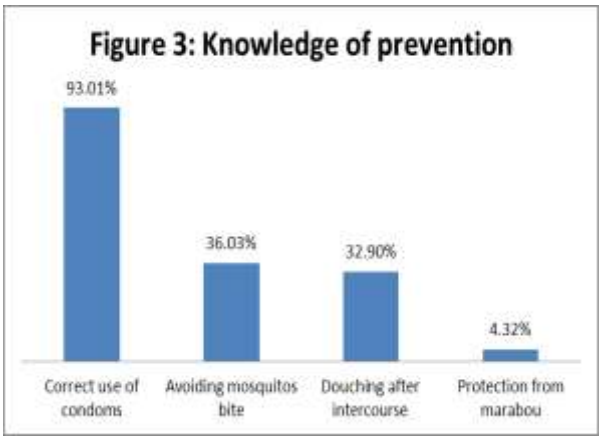

Figure 3: Knowledge of Prevention.

Majority (93%) knew that correct condom use can prevent transmission of HIV. A significant number (36%) still believed that mosquitoes bite is a major route of HIV transmission. That douching after intercourse (32.9%) can prevent HIV transmission.

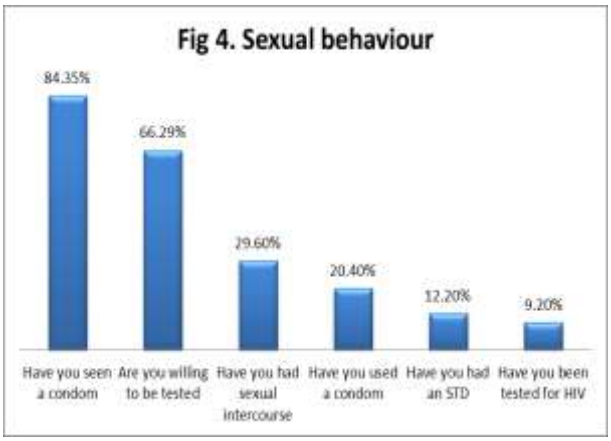

Figure 4: Sexual Behaviour.

Majority (>80%) were aware of role of Condom in the prevention of HIV infection, 30% had sexual intercourse and significant number (10%) did not use condom.

DISCUSSION

In our study, it is evident the students had good knowledge with regards to the basic aspects of HIV/AIDS though with some misconceptions. About a quarter of students in this study did not know the aetiological agent of HIV/AIDS similar with the findings in the study in Nigeria[6] and less than half of students knew that HIV was the causative agent of AIDS consistent with finding in Ghana[7] where only about half knew HIV causes AIDS. Additionally, almost half of the students felt HIV/AIDS patients look differently from

other people. This shows a deficiency in the knowledge of students on the basic aspects of HIV and thus a deficiency on the current health education programs.

According to UNICEF, surveys from 60 countries indicated that "more than 50% of young people aged 15–24 years had serious misconceptions about how HIV/AIDS is transmitted".[11] However, it was observed that, the majority of students in this study exhibited a good level of knowledge of HIV transmission. Almost all the students agreed that unprotected sexual intercourse is a means of transmission. The awareness of sex as the major route of transmission is also high among different study groups in Nigeria.[6,9,12] However, there were misconceptions with a significant proportion of students believing that HIV/AIDS can be transmitted by mosquito bites and kissing. This believe is a common misconception as several other studies in the sub-region have indicated similar findings such as in Gabon, Ghana, Nigeria.[4,13,1]

With regards to preventive methods, the majority of the students knew that the use of condoms during sexual intercourse could prevent HIV. Similar findings were reported in previous studies.[4,14] On the contrary, other studies such as the one done in India showed that only a few of the students had knowledge about condoms as a means of protection.[15] Surprisingly, about a third of the students felt that douching after sexual intercourse can prevent you from having HIV. This erroneous believe can lead to damaging consequences. Research has shown that not only does douching not prevent one from getting HIV; it can also lead to other STIs.[16] This ignorance should, therefore, be taken very seriously by public health officials.

Concerning treatment, surprisingly a low but significant number of students believed that HIV has a cure, but the majority knew that drugs could reduce mother to child transmission. This is in contrast to a study carried out in Nigeria where the majority knew AIDS to be untreatable, and half, knew drugs could reduce mother to child transmission.[6] This finding is worrisome because it could cause the students to involve in risky behaviours with the notion that HIV if acquired is curable.

Regarding sources of information, although almost all the students have heard about HIV/AIDS, almost half heard about HIV from their parents. This is in contrast to other studies where parents have played a negligible role in talking to their children about the disease such as a study done in Turkey.[17,18]

Positive attitudes towards infected patients were seen among the students with a majority of them willing to be friends with an HIV patient, and willing for an infected teacher to teach them.[10,19] However, about a quarter of students showed negative attitudes towards PLHIV. This finding might be due to the fact that adequate emphasis may not have been paid to removing the stigma associated with the disease, and might in fact be a reflection of the attitude of other members of the community to the disease and those affected. This also reflected in the unwillingness of a significant proportion of students to be tested for the disease. Almost a third of the students were reported to be sexually active which was significant and 10% did not use condom. This unsafe sexual practice put them at risk of acquiring sexually transmitted infections including HIV.

CONCLUSION

The study demonstrated some degree of good knowledge and positive attitudes of high school students towards PLHIVs in the Gambia. However, there are notable misconceptions of public health interest. The use of self-administered questionnaire which might lead to social desirability bias was a potential source of limitation in this study. However, the anonymity of the questionnaires hopefully encouraged students to be honest in their responses. Therefore, we believe this study might be a reasonable source of information for researchers and policymakers.

AUTHORS' CONTRIBUTIONS

AA, conceived the idea of the study and participated in its design. AA collected data from the programme registers and AA entered the data into a dedicated database. YA and MA took part in data cleaning and analysis. MA wrote the first draft of the manuscript. all authors read and approved the final manuscript.

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DISCLOSURE OF INTERESTS

The authors declare no conflict of interest.

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