

HIV/AIDS: Knowledge, attitudes and practices among adolescents in Nimule, South Sudan

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Background: HIV is an infectious virus commonly transmitted through body fluids mostly semen and blood. It causes a serious and non-curable disease with grave consequences especially in sub-Saharan Africa. In South Sudan the prevalence rate of HIV was estimated at 2.7% in 2016. The treatment options are scarce and educational programs limited. This is of great concern since limited knowledge and awareness of HIV is a major risk factor particularly, among young people.

Method: A cross-sectional survey using self-administered questionnaires among adolescents was carried out in November 2016.

Results: Sixty-five students participated in the study. In general they had good knowledge about HIV/AIDS with the majority having heard of HIV. Majority stated that HIV spreads through sex (82%), blood transfusion (95%), and from mother to child during pregnancy and delivery (66%). Several misconceptions were present with 43% responding that HIV can be transmitted through mosquito bites and 18% stating that the virus can be spread through shaking hands, hugging and living in the same house.

Conclusion: Though the respondents showed fair knowledge about HIV/AIDS, there are still some areas in which they lack knowledge especially regarding spread of the disease and practice. More information about HIV/AIDS and sexual education should be made available.

Keywords: HIV/AIDS; knowledge, awareness, infections, South Sudan.

INTRODUCTION

Acquired Immune Deficiency Syndrome (AIDS) is caused by the human immunodeficiency virus (HIV) that weakens the immune system, making the body susceptible to opportunistic diseases that often leads to death^[1].

Common risk factors of acquiring HIV infection include unprotected sex, sharing injecting equipment, use of contaminated blood, and the risk of HIV transfer from mother to child^[2].

HIV/AIDS is of global concern with Africa being the most affected continent with 25.7 million people living with HIV (PLHIV) in 2016 accounting for 64% of the global burden of HIV^[3]. Young people are particularly vulnerable being responsible for more than half of all new infections worldwide. Every day, 6,000 young people become infected with HIV – more than five every minute. The majority of young people are infected sexually^[1].

In South Sudan the prevalence rate of HIV was estimated at 2.7% in 2016, with 16,000 new infections annually and about 200,000 people living with HIV/AIDS^[3]. The number of PLHIV on treatment in South Sudan is very low, with a total of 7,986 people on antiretroviral

therapy. The level of stigma and discrimination of PLHIV in the country remains very high for example, some say that those with the disease should not be allowed to work with healthy persons and HIV can be transmitted through mosquito bites^[4].

The aim of the current study was to investigate the level of stigmatization due to HIV/AIDS, knowledge of spread and protection against HIV/AIDS, and identify gaps which needs to be addressed in order to decrease risk of HIV/AIDS.

METHODOLOGY

The research was conducted at Hai Kanisa primary school in Nimule, South Sudan in November 2016. This was a cross-sectional study using a self-administered questionnaire. Students aged 13-20 years were eligible for the study. From primary 6 to primary 8, 65 pupils were randomly selected all of them agreeing to participate in the study. The questionnaires covered demographic information, knowledge, attitudes, and practices toward HIV/AIDS.

Chi-square tests were used to compare the responses based on gender. The analyses were done using Stata version 12 and Microsoft excel.

Table 1. Knowledge on protection from HIV, by gender

	Males n (%)	Females n (%)	p-value
Do you know how to protect yourself from HIV?			
Yes	32(76)	22(96)	0.64
No	10(24)	1(4)	
How can you protect yourself from HIV?			
a. Avoid unprotected sex			
True	28(67)	14(61)	
Not true	14(33)	9(39)	
b. Loyalty to one partner			
True	33(79)	19(83)	0.70
Not true	9(21)	4(17)	
c. Getting circumcised			
True	21(50)	7(30)	0.13
Not true	21(50)	16(70)	
d. Avoid places where HIV positive people stay			
True	26(62)	10(43)	0.15
Not true	16(38)	13(57)	
e. By using condoms			
True	40(95)	21(91)	0.53
Not true	2(5)	2(9)	
f. Abstinence from sex till marriage			
True	32(76)	23(100)	0.01
Not true	10(24)	0(0)	
g. By safe blood transfusion			
True	26(62)	15(65)	0.79
Not true	16(38)	8(35)	
h. Protecting yourself from insect bites e.g. mosquito			
True	19(45)	9(39)	0.63
Not true	23(55)	14(61)	
AIDS is a God's punishment for immorality			0.004
Yes	7(17)	12(52)	
No	32(76)	8(35)	
Not sure	3(7)	3(13)	

RESULTS

A total of 65 students participated in the study, 65% boys and 35% girls. The mean age of participants was 16.7 years and all were Christians.

Most of the students had heard about HIV/AIDS (77%), most from school (46%), the media (25%), or parents (25%) The majority (91%) correctly identified that HIV/AIDS can kill, that it can spread from one person to another (91%), in particular through sexual intercourse with infected person (82%), and that a blood test will tell you if someone has the disease (80%). Most also knew that HIV/AIDS can spread from mother to child during pregnancy and childbirth (66%) and during breastfeeding (72%). Several misconceptions were present with

14% responding that HIV can be transmitted through eating and drinking from same plate and cup and 18% responded that the disease can be transmitted through shaking hands, hugging, and living with infected person in the same house. More than half of the pupils said HIV can be transmitted through kissing. Significantly more girls (70%) than boys (36%) responded that HIV can be transmitted through mosquito bites ($p=0.02$). However, only 38% stated that there were treatment options for HIV.

More female students (96%) than male students (76%) stated that they knew how to protect themselves from getting HIV/AIDS ($p=0.05$) (Table 1). The great majority of both boys (95%) and girls (91%) agreed that

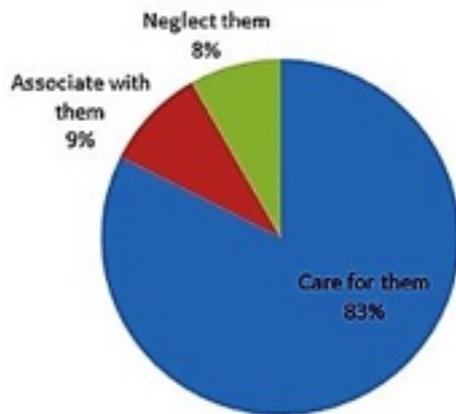


Figure 1. Ways PLHIV/AIDS are treated in the community (Credit: Michael Bol Jool Dit)

using condoms can protect one from getting HIV. Most respondents said safe blood transfusion can protect the person from getting the disease (62% of the boys and 65% of the girls) and more girls than boys responded that abstinence until marriage could protect one from getting HIV ($p=0.01$). Almost half the pupils, said that avoiding insect bites can protect one from getting HIV. Also significantly more girls thought that HIV is a punishment from God ($p=0.004$).

Most participants responded that the people living with HIV/AIDS in their communities are treated well (Figure 1). However a large number (60%) said that they would not associate with a close friend if he/she got HIV.

The majority of the boys (79%), but only 17% of the girls have had sexual intercourse (Table 2). 79% of the boys responded that they had their sexual debut before the age of 17 years, the few sexually active girls also had their debut at a young age. Most of respondents had sex with persons of the same age. Of the sexually active respondents 37% did not use any protection and 24% were drunk during sex relationships. Among the non-sexually active respondents, 61% said they would wait until marriage before engaging in sexual activity.

DISCUSSION

In general, the students had a good knowledge about HIV/AIDS with the majority having heard of HIV. However, several misconceptions were present. Some of respondents said the disease can spread through eating and drinking from same plate and cup (14%), that the disease can be spread through shaking hands, hugging and living in the same house (18%), or can be transmitted through mosquito bites (43%). In comparison only 1% of students in an Ethiopian study thought that HIV can be transmitted through sharing of meals, clothes and latrines [5]. In a study from Northern Uganda 17% of the respondents thought that HIV can be transmitted by sharing food and 34% by mosquito bites [1].

Table 2. Sexual practice by gender

	Males n (%)	Females n (%)	p-value
Have you had your first sexual intercourse?			<0.001
Yes	33(79)	4(17)	
No	9(21)	19(83)	
If yes,			
a. How old were you?			0.09
5-8	2(6)	0(0)	
9-12	6(18)	3(75)	
13-16	18(55)	1(25)	
17-20	7(21)	0(0)	
b. How many people did you have sex with?			0.84
<3	16(49)	2(50)	
4-7	12(36)	1(25)	
8-11	5(15)	1(25)	
c. Were you drunk when you had sex?			0.23
Yes	9(27)	0(0)	
No	24(73)	4(100)	
d. Do you use condom during sex?			0.02
Always	11(33)	1(25)	
Some times	5(15)	3(75)	
Never	17(52)	0(0)	
e. From where do you get condoms?			0.15
Shop	4(12)	2(50)	
Hospital	28(85)	2(50)	
NGOS	0(0)	0(0)	
Others	1(3)	0(0)	

A favorable attitude towards PLHIV/AIDS is important to make them comfortable within society and helping them to seek treatment. The pupils of Hai Kanisa primary school have somewhat mixed responses regarding attitude towards people with HIV or AIDS. While on one hand most reported that PLHIV are well cared for in the community their own attitudes was less sympathetic as they responded that they will definitely not associate with such people. A negative attitude needs to be addressed especially among young people who are expected to promote positive attitudes toward PLHIV/AIDS in their communities.

In the current study pupils exhibited poor sexual practices with infected people with most of them responding that they never use condoms during sex, engaging in early sexual debut and having multiple sexual partners. In other studies, a similar low use of condoms has also been reported; 38% of males and only about 15%

females according to a study in Northern Uganda use condoms during sex ^[1]. The majority (84%) of Sudanese and Bantu Somalian women in Sudan reported not having used condoms before with 61% refusing to use condoms though they sense the danger of getting HIV with their spouses ^[6]. In a South African study the use of condoms was much more common with 91% saying that they use condoms ^[7] and an Ethiopian study also reported a relative high use of condoms among responders (77%) ^[5].

CONCLUSION

The respondents in the current study showed a fair knowledge of HIV/AIDS, though there are some gaps especially regarding the spread of the disease and sexual practices.

Possible ways of addressing this include enhanced health education concerning HIV/AIDS and making condoms available by the government and NGOs which are the main sources.

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