# Knowledge, Attitude and Practices on HIV/AIDS, its Transmission and Prevention among Primary School Pupils in Rural Kisarawe

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#### **ABSTRACT**

**Objective:** To determine level of knowledge of HIV/AIDS and its transmissions, demographic factors influencing level of knowledge, rate of condom use and attitude toward condoms use and sexual activities among primary school pupils

**Design:** Descriptive cross-sectional study

**Setting:** the study was conducted in rural areas of Kisarawe district in Coast region. Six primary schools were involved

Subjects: grade six and seven pupils were involved in the study

**Results**: The study involved 334 pupils from five primary schools. 48.8% were males and 51.2% females. Most students were of 15-16 age group. Majority of pupils had high knowledge on HIV/AIDS and its transmission (76%). Males were more knowledgeable than females on prevention (69.9% vs. 61.4%) and results were significant. Forty two percent (42%) of pupils have had sexual intercourse and in most cases with their fellow pupils (57.1%). Age group in which most pupils started to engage in sexual activities was 11 to 14 years (65.7%). 32.9% of pupils were forced into sexual intercourse and females were more coerced than males (58% vs. 15.7%) and results were statistically significant.

Only about 28.6% of pupils reported condom use in their last sexual intercourse. Furthermore 61.1% of pupils considered condoms ineffective in preventing HIV transmission. Among interviewed pupils 25 (7.5%) reported to have suffered from STI,

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## **INTRODUCTION**

AIDS is a pandemic affecting people in all continents. Data from UNAIDS shows that in the year 2004, 40 million people were living with AIDS and three million death occurred due to AIDS. Africa is the worst continent affected by HIV/AIDS, two third of people living with the disease are reported to be in Africa with 29 million people infected by HIV. Nine percent of people aged 15 – 24 are HIV positive<sup>1</sup>.

Tanzania is ranked 15<sup>th</sup> among 25 countries mostly hit by HIV/AIDS pandemic. More than 12 % of adult population is infected. About 9.7% of the total population is living with HIV/AIDS. Over 50% of patients with AIDS occupy hospital beds. Due to HIV/AIDS life expectancy has been reduced to 47 years from 56 years, which was projected in absence of HIV<sup>2</sup>.

Data from family life education KAP survey in 1999 involving 18,564 primary school

pupils from 20 regions of Tanzania mainland showed that boys were more aware than girls in many aspects of family life education. Regarding HIV/AIDS and its transmission, 38% were fully aware while 49% knew condom use and abstinence as methods of STD prevention. The bivariate analysis showed significant relationship between knowledge of condom use and abstinence as methods of STDs prevention with knowledge of HIV transmission, education level of respondent, residence and parents' education for both boy and girls<sup>3</sup>.

Various studies done in the country among grade six and seven pupils indicated sexual activities in this group. One survey done showed 80% of boys and 63% of girls to have been sexually active. This put them at risk of contracting HIV/AIDS and other STDs. The same survey showed 33% of boys and 25% of girls had past STDs experience<sup>4</sup>.

#### **MATERIALS AND METHODS**

# Study area

The cross sectional descriptive study was conducted in August 2005 at some villages of Kisarawe district, one of the districts in the Coast region, Tanzania. Five schools were involved in the study; Masaki, Kibuta, Kauzeni, Kisanga and Kazimzumbwe primary schools

### **Study Population**

Pupils in sixth and seventh grade in public primary schools in rural areas of Kisarawe district were involved. These pupils were selected because most of them are in puberty stage and hence most likely to engage in sexual activities.

# **Data Collection and analysis**

Multistage sampling method was used to obtain representative sample. Structured Swahili questionnaires were used to collect information on; sociodemographic characteristics, knowledge and attitude toward HIV/AIDS, knowledge on HIV/AIDS preventive measures, any involvement in sexual activities, attitude toward condom use and if they have ever contracted any STDs. Data were analyzed with EPI INFO 2002 software.

## **RESULTS**

Study population consisted of 334 pupils with 48.8% males. Majority of students were of age group 15-16 years.

TABLE 1. STUDY POPULATION DEMOGRAPHICS

	Frequency	Percentage	
Age			
<12	9	2.7%	
13-14	101	30.2%	
15-16	180	53.9%	
>17	44	13.2%	
Sex			
Male	163	48.8%	
female	171	51.2%	
Class			
Six	197	59.2%	
Seven	136	40.8%	
Religion			
Muslims	286	85.6%	
Christians	46	13.8%	

Eighty nine percent (89%) of pupils knew HIV as a cause of AIDS. Majority of pupils

(76%) had good knowledge and only 1.2% were completely ignorant on transmission of HIV/AIDS. Although relation was not significant (p=0.2221), majority of males had higher knowledge than females (77.3% 74.9%). Regarding knowledge on prevention of HIV/AIDS, males had significant (p=0.0347) higher knowledge than female (69.9% vs. 61.4%). Overall knowledge on HIV/AIDS comprises knowledge on cause, transmission and prevention. Overall scale was made from these three components. Eighty one percent (81%) had good overall knowledge on HIV/AIDS. Overall knowledge was not significantly related to age, sex, class or parents' education

One hundred and forty pupils (42%) reported to have had sexual intercourse before. Out of 140, 57.1% had sex with their fellow pupils, 4.3% reported having sex with their teachers

TABLE 2. AGE AT WHICH STUDENT HAD THEIR FIRST SEX

AGE	FREQUENCY	PERCENT
≤10	18	12.9%
11-14	92	65.7%
≥15	30	21.4%
	140	100.0%
TOTAL		

Table 2 shows majority (65.7%) of student had their sexual debut at 11-14 age-group

Thirty three percent (33%) of pupils were coerced into their first sexual intercourse while 67% agreed. Almost 58% of females were forced into their first sexual intercourse compared to males who only 15.7% were forced to sex and relationship was statistically significant (p=0.000001). Regarding condom use on the last sexual intercourse, only 28.6% reported condom use. Compared with females, males had higher rate of condom use than females (30.1% vs. 26.3%) though relationship was not statistically significant (p=0.6). Reasons for not using condoms are shown in the table 3 below. Most common reasons for not using condoms in the last sexual intercourse were trusting the partner (44%) and not having condoms (32%)

TABLE 3. REASON FOR NOT USING CONDOMS IN LAST SEXUAL INTERCOURSE

EAST SEXOAL INTERCOORSE				
REASON	Frequency	Percent		
I TRUST MY PARTNER	44	44.0%		
CONDOM REDUCE	10	10.0%		
PLEASURE				
MY PARTNER REFUSE	9	9.0%		
I DIDN'T HAVE	32	32.0%		
CONDOM				
I DIDN'T LIKE ITS	5	5.0%		
SMELL				
Total	100	100.0%		

Majority of interviewed pupils (61.1%) regarded condoms as ineffective tool in prevention of HIV/AIDS. Reasons mentioned for condom ineffectiveness were as follows; they may burst (45.6%), condoms are for pregnancy protection only (31.9%) and condoms have pores (22.5%).

When asked if they have suffered any STI (Sexual Transmitted Infection) or experienced symptoms such as genital discharge and itching, or genital ulcers; 7.5% admitted experiencing those symptoms hence STI.

Multiple responses question revealed health workers (61%), teachers (54%), parents (53%), mass media (46%) and peers (29%) as common sources of information on HIV/AIDS. Religious leaders were least mentioned source of information (9%). On credibility, health workers were mentioned as most credible source of information on HIV/AIDS.

# **DISCUSSION**

Analysis of findings from this study showed majority of students (76%) had high knowledge on transmission of HIV/AIDS and 88.9% knew causes for AIDS. Males had higher knowledge than females (77.3% vs. 74.9%) though results were not significant. Furthermore males had higher knowledge than females on prevention of HIV/AIDS (69.9% vs. 61.4%) and results **₹**₩**5%** of statistically significant. Study done in Poland showed existing high level of knowledge on HIV/AIDS among primary school students<sup>5</sup>. In contrast one study done before revealed 38% of pupils were knowledgeable on HIV/AIDS transmission, males were more knowledgeable than females on many aspects of family life education which includes HIV/AIDS<sup>3</sup>. Low level of knowledge on transmission of HIV was observed also

by study done in Mtwara, Tanzania<sup>6</sup>. High levels of knowledge on HIV/AIDS observed in this study might be due to intensive education campaigns on media and school program regarding HIV/AIDS.

Despite high levels of knowledge on HIV/AIDS among pupils, still they reported engaging in risky behaviours, 42% of pupils have had sexual intercourse and in most cases partners were their fellow pupils (57.1%), their teachers (4.7%) and other adults were also involved. Usual age of sexual debut is between 11 and 14 years (65.7%). Among pupils who have had sexual intercourse, 32.9% were forced. Females were more forced into sex than males (58% vs. 15.7%) and results were significant. High sexual activity was also observed in study done in Mwanza, 80% of boys and 63% of girls were sexual active. Forced sex was reported by 47% of girls. 50% of primary school females had previously had sex with adults, including teachers and relatives<sup>4</sup>. Similar findings were observed in Poland, pupils were of high knowledge but still engaging in risky sex behaviours<sup>5</sup>. Study done in rural Tanzania revealed one fifth and almost half of boys reported sexual experience<sup>7</sup>. Furthermore similar results were observed in Kilimanjaro and Arusha<sup>8</sup>.

Low rate of condom use was found in this study, only 28.6% of pupils reported condom use. Though not statistical significant males reported higher condom use than females (30.1% vs. 26.3%). Reasons given for not using condoms included trusting partner (44%) and not having condoms (32%). A study in Mwanza found 30% condom use among sexual active primary school pupils<sup>4</sup>. Many students (61%) considered condoms as ineffective in preventing HIV transmission, this may have attributed to low condom use in this study.

Pupils reported to have suffered from STI. Low prevalence was of STI was observed in studies done in Zimbabwe and Tanzania, where prevalences of gonorrhoea was 1.9% and 0.1% respectively, in these studies urine sample was taken for STI testing<sup>9,7</sup>. Another study done in Mwanza revealed 33% of boys and 25% of girls to have had past STI experience. Reason for this wide difference in prevalence might be due

difference in methodology as our study did not use urine samples to confirm STI.

Most common sources of information regarding HIV/AIDS were health workers (60.5%), teachers (54.2%) and parents (53.3%). Least favoured source was religious leaders. Furthermore health workers were most trusted source of information study done in Arusha Tanzania showed media ranked as first source of reproductive health information. Religious leaders and friends played minor roles. Health workers were most credible source of information<sup>10</sup>.

## **CONCLUSIONS**

Despite high level of knowledge on HIV/AIDS, still pupils are engaged in risky sexual activities. Rate of condom use is also low though 42% of pupils are sexually active. Coercion into sex and sexual relation with adults is common especially among girls.

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