

*Full Length Research Paper*

# HIV/AIDS knowledge of high school adolescents in Kenya

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The primary purpose of this investigation was to assess the level of human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) knowledge of high school adolescents in Kenya. As a subsidiary, objective of the investigation was to determine whether there was transfer of knowledge between boys and girls regarding their sexual behaviour. The results showed that adolescent high school students have a high level of knowledge of HIV/AIDS and that such knowledge transfers to the sexual relationship between boys and girls. The sample of the study consisted of 157 participants attending two high schools in Nairobi. Participants were administered a questionnaire based on HIV/AIDS transmission, infection and prevention. The method of data analysis used were frequencies, percentage and the chi-squared test. The study concluded that, even though the level of HIV/AIDS knowledge was high, there were identified misconceptions which would further justify the continued promotion of public education regarding HIV/AIDS. Unlike similar studies, this study found a correlation between knowledge and the transfer of this knowledge to change of behaviour. This study shows that public education does produce dividends in the prevention of HIV/AIDS transmission and the spread of the epidemic worldwide.

**Key words:** Avoidance, epidemic, infection, invulnerability, learning transfer, misconception, physical contact, transmission, human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS)

## INTRODUCTION

Human immunodeficiency virus (HIV) is the cause of acquired immune deficiency syndrome known as acquired immune deficiency syndrome (AIDS). As far as is known in medical history, it had no precedent prior to 1981, when it was discovered in the blood stream collected in 1959 (HIV AIDS, 2010; Wikipedia, 2013). The HIV makes an attachment on the white blood cells. Human immunodeficiency virus commonly referred to as HIV is used for maintaining immunity to disease. On contracting HIV, a person becomes vulnerable to diseases due to the weakening of the body immunity. From the time a person contracts HIV, he/she is infectious for the remaining of his lifespan (Mwamwenda, 2004; AIDS, 2013; Naswa and Marfatia, 2010). No wonder it has been asserted that

HIV/AIDS is the most dreaded disease in human history, and that while God forgives, HIV/AIDS does not (Mwamwenda, 204; AIDS, 2010; Wikipedia, 2013).

AIDS is a disease of the human immune system precipitated by HIV. It interferes with the body's system of resisting diseases, and therefore it is rendered rather feeble or powerless to infection. According to Summerfield (1990), AIDS is a condition that disempowers the body immune system from fighting diseases. As AIDS advances, the more the body succumbs to infection, which is referred to as opportunistic diseases that would not pose a threat to a non-HIV person.

In many parts of the world, HIV/AIDS has become a pandemic. Large areas are affected and the pandemic

continues to spread (Kibombo et al., 2007; Ebeniro, 2010; Janckie et al., 2011). According to Facents (2001), even though there has been a visible decline in conversion rate of HIV to AIDS, there has been an increase in the rate of contraction of HIV/AIDS. Since there is no cure, prevention remains the only sure way for combating the disease. Durojaiye (2009) reports that worldwide, 45% of people contracting HIV/AIDS are adolescents aged between 15 and 24 years. This is supported by other researchers who have found that adolescents aged 15 to 24 years constitute the largest population of HIV infected subjects (Szekeres, 2000; Milanzi and Komba, 2005; Ebeniro, 2010). In the USA, it is stated that adolescents constitute the largest HIV/AIDS invisible population (Szekeres, 2000). Present figures worldwide suggest there are 10.3 million HIV adolescents whose age range is from 15 to 24 (Naswa and Marfatia, 2010)

Given the challenge of HIV/AIDS that adolescents encounter, it is vital that their awareness of the risks associated with sexual behaviour is made clear, and the importance of applying this knowledge to real life experience (Njogu and Martin, 2003; Macintyre et al., 2004). Kabiru and Orpinas (2009) support this argument and state that, in view of the high rate of HIV in Sub-Saharan Africa, the quest for understanding forces that influence adolescent sexual behaviour is important. According to the African Population Health Research Center (2009), adolescence is an important period in human development where a person reaches sexual maturity, manifest in sexual engagement; thus encountering the possibility of contracting sexually transmitted diseases such as HIV. Kamala and Aboud (2006) conclude that adolescents who are at the most reproductive stage of their human development are more at HIV/AIDS risk than any other population group. For this reason and more, it deserves more attention in combating infection and transmission of HIV/AIDS.

The preceding narration partly served as a backdrop of the motivation to undertake an investigation of HIV/AIDS knowledge and high school adolescents in Kenya. Nevertheless, there is need to explore similar studies that have examined HIV/AIDS in association with adolescents, which will be briefly narrated in subsequent advocacy.

In 2003, Njogu and Martin studied Kenyan high school adolescents and found that their level of knowledge about HIV/AIDS was high, though it did not have transfer of learning in terms of their sex practices. Kabiru and Orpinas (2009a) undertook a similar study of 8,556 male and female adolescent high school students in Nairobi, Kenya, and that adolescents would benefit from sex education programmes because they become aware of the factors that predispose them to HIV/AIDS.

In an earlier study, Erikson et al. (1997) compared the HIV/AIDS knowledge of 326 Kenyan and 146 Swedish teenagers. Even though their level of knowledge was good, the spread of HIV/AIDS remained unaffected by

the survey. In a similar study, Kamala and Aboud (2006) investigated and assessed the knowledge about the prevention of HIV among 364 rural high school adolescents in Bukoba, Tanzania. The outcomes showed that 93% of the participants were familiar with the prevention of transmission, whereas 86% identified the mode by which transmission occurs. The number of males who had engaged in sexual intercourse was 63.5%, whereas that of females was 38.6%. Those who used condoms were 52.5%, with females being more than males. While their knowledge of HIV/AIDS was satisfactory and in some cases fairly high, the transfer of such knowledge in terms of sexual behaviour was rather low.

The African Population and Health Research Center (2009) carried out a huge study of 3,612 adolescents aged 12 to 25 years, randomly drawn from three types of secondary schools in Nairobi: single-gender, co-educational and both boarding and day secondary schools. Their knowledge of prevention of transmission was high but was not applied to their sexual behaviour practices, though a small number of them made transfer of such knowledge. For example, one fifth of sexually active boys used condom regularly; one third of the boys used condom irregularly, while others did not see the need for the use of condoms. It was therefore concluded that there was need for comprehensive sexuality education programmes, which equip adolescents to protect themselves against the scourge of HIV/AIDS.

Njogu and Martin (2003) investigated the persisting gap between HIV/AIDS and knowledge and prevention among Kenyan youth. This led to the conclusion that what is being advocated is: educating, motivating, persuading and enabling tactics should be the chief cornerstones of HIV/AIDS campaigns.

Kabiru and Orpinas (2009a) carried out a study of 3,556 male and female adolescent high school students in Nairobi, Kenya. Close to 50% of the males and 11% females reported being sexually active. The study concluded that adolescents would benefit from sex education programmes alerting them to the factors that predispose them to HIV/AIDS. In a similar investigation, Kabiru and Orpinas (2009b) made a study of correlation of condom use among 931 sexually active male high school students in Nairobi and their knowledge of HIV/AIDS. Of the total number of participants, 50% reported to be users of condoms. Their knowledge of HIV/AIDS was not significantly different. All participants were of the view that chances of contracting HIV/AIDS were rather low, if not non-existent.

According to Facente (2001), there has been a visible decline of the rate from HIV to AIDS, whereas there is increase in the contraction of HIV/AIDS. He further points out that, while adolescents are versatile regarding the risk and consequences of contracting HIV/AIDS, they still cling to the belief that personally they are unlikely to contract the disease. In a sample of 78 participants with a

mean of 15.9 years, 74% of the adolescents were deemed to have a good knowledge of HIV transmission. Of those who engaged in risk sexual activity, 80% of them did not think that they stood a chance of contracting HIV/AIDS.

Ayopo (2009) made a study of Nigerian adolescent students' perceptions of HIV/AIDS and their attitudes to prevention methods. The results were that the adolescents showed that they had positive perceptions and attitudes toward HIV/AIDS, and that they were also familiar with methods used for guarding against contracting HIV/AIDS. In another study, Durojaiye (2009) explored the Nigerian youth knowledge, perception and behaviour and practice in the City of Lagos. Their level of knowledge of HIV/AIDS stood at 8.3 out of 10 points. Close to 73.5% did not believe that they were at risk of contracting HIV/AIDS with those who had low perception of contracting HIV/AIDS, and there was no commitment to behaviour change.

In India, McManus and Dhar (2008) examined 251 adolescent high school girls' knowledge, perception and attitudes towards STI/HIV, safer sex and sex education in New Delhi. The knowledge that girls had regarding the transmission and prevention of HIV was good. About 22% of the participants did not believe that there was anything amiss with girls engaging in sex with boys, so long as they loved each other. There were 49% participants who thought condoms should not be made available to adolescents, as they foster their engaging in sex. It was their considered opinion that condoms are there for those who are married.

Singh and Jain (2009) also from India, studied secondary school adolescents' awareness of HIV/AIDS in the District of Gujarat. The sample comprised 755 participants drawn from 29 schools. Over 90% were familiar with the various ways HIV/AIDS is transmitted, and over 80% were familiar with various ways of guarding against its infection. Most participants were familiar with the knowledge that there is no cure for HIV/AIDS. There were also a few misconceptions reported that, HIV could be contracted as a result of mosquito bite and casual contact. Singh and Jain (2009) concluded their investigation by pointing out that sex education that includes HIV/AIDS would contribute to the lowering of HIV/AIDS transmission. This is particularly so for African adolescents (Mwamwenda, 2004). Macintyre et al. (2004) examined factors predicting risk perception. Their conclusion was that greater understanding of the correlation between adolescents and their community and adults in their lives is needed; programmes to change the environment influence adolescents opinion, make choices and act should all be part of the programme design. On the other hand, Lenono (2007) made a study of Love life counsellors' perception of the impact of HIV/AIDS on the sexual conduct of adolescents. The study aimed at examining the extent to which love life counsellors were of the view that Love life had an impact

on adolescents' sexual activity, and whether adolescents expressed their sexuality differently, as a result of HIV/AIDS. The study further investigated counsellors' perception of adolescents' use of condoms, being faithful to one partner and abstaining.

It was the view of the counsellors that adolescent had a change in their expression of sexuality, as a result of their awareness of HIV/AIDS. Such a change manifested itself by reduction in the adolescents' contracting HIV/AIDS. HIV/AIDS had impact on how adolescents conducted themselves sexually. Adolescents take seriously the danger of HIV/AIDS to one's life. Furthermore, they are adhering to the three principles of C-B-A standing for; Use of condom, Be faithful and Abstain. It was nevertheless noted that many adolescents find it rather difficult to abstain from sex altogether. According to Naswa and Marfatia (2010), an adolescent contracts HIV and remains infected and affecting others, so long as he/she lives. This is particularly so, as a result of the prolonged duration as a result of medical treatment, particularly by means of anti-retroviral. It was estimated that 36% male and 20% female had a comprehensive knowledge of HIV/AIDS. Comparatively, rural adolescents knew less about HIV than adolescents in rural areas.

Kibombo et al. (2007) reported that at one stage, there were 15% HIV/AIDS Ugandans, which as a result of intervention was reduced to 5%, an unprecedented success rate worldwide. Most of the decline on HIV infection was among adolescents aged 15 to 19 years. This is significant, taking into account that, in most parts of the world, adolescents aged between 15 to 24 years constitute the largest population of HIV infected persons (Durojaiye, 2009; Naswa and Marfatia, 2010).

In contrast, Kibombo et al. (2007) correctly argued that perception of being susceptible to contracting HIV/AIDS works as catalyst for undertaking the necessary precautionary measures for the prevention of HIV transmission. They undertook a study of 5,112 (from different parts of Uganda). Majority of participants perceived themselves to be vulnerable to HIV infection and guarded against engaging in sexual behaviour that would make them susceptible to contracting the disease. In the USA, Szekeres (2000) reports that adolescents aged 15 to 24 years constitute the largest HIV/AIDS invisible population. Over a decade ago, it was estimated that for every four American adolescents, one adolescent was infected with HIV/AIDS. Szekeres (2000) dares speculate that many American adults who are HIV/AIDS positive may have contracted the disease as they went through adolescence. Many of those infected with HIV are not even aware of their HIV status because they have not been tested. It is further pointed out that even those who have tested positive are not receiving the appropriate treatment for shortage of funds. Others are not receiving treatment, as a defence mechanism of denial that, they are not HIV infected regardless of what the tests may have shown.

The preceding review of literature and its various arguments informed the present investigation of HIV/AIDS knowledge and high school adolescents in Kenya. Apart from the knowledge of adolescents regarding HIV/AIDS, the investigation also examined the extent to which such knowledge informed the adolescents in cognitively predetermining their sexual practices.

## METHODOLOGY

### Sample

The study investigated 157 adolescent high school students consisting of 88 boys and 69 girls. Their age ranged between 16 to 18 years, drawn from two high schools in the City of Nairobi, Kenya. Participants were multilingual, as they spoke different ethnic languages spoken in Kenya. Their understanding of the English language used in the questionnaire was good. For the purpose of confidentiality, participants were not asked for their names or name of the school they were attending. They were, however, asked to indicate their gender and date of birth.

### Instrument

A twenty-five statements questionnaire on their knowledge of HIV/AIDS was administered for their responses. Questionnaire addressed issues related to the transmission, infection and prevention of HIV/AIDS which has reached epidemic proportion among adolescents in Kenya and elsewhere in Africa and the world at large. For each statement/question on HIV/AIDS they were three possible answers. The participants were asked to tick the most appropriate response regarding their knowledge of HIV/AIDS. The options were either "Yes", "No", "Do not know".

### Procedure

Two academics at the University of Nairobi were responsible for the collection of data. Permission to administer the questionnaire was sought from the Senior Management of the selected Schools. Following their consent, the questionnaire was administered after briefing participants that the questionnaire was to find out how much they knew about HIV/AIDS, and their participation was subject to their agreeing to participate.

### Data analysis

Two statistical analyses were used for the purpose of determining the adolescents' knowledge about HIV/AIDS. The first approach was to examine the frequencies in terms of the responses made to the questionnaire. These were converted into percentages on the assumption that the higher the percentage was a reflection of how well informed the participants were about HIV/AIDS. The minimum score expected was 50% and above. The second analysis was based on chi-square contingency Table. Whether responses were statistically significant was dependent on whether the chi-square means difference was significant. In the analysis of data, only 19 questions/statement were used. Six were rejected because participants perceived and interpreted them incorrectly.

## RESULTS

Table 1 is the results based on: frequencies, percentage,

chi-square and level of probability. The response to whether a subject would contract HI/AIDS if they shared a cigarette with an HIV/AIDS was negative in 92% of the answers. According to the  $\chi^2$  test (2df, N155) = 250, this was statistically significant with  $p < 0.001$ . When asked whether drinking from a glass used by an infected person would lead to contracting HIV/AIDS, 94% rejected this hypothesis with  $\chi^2$  (2df, N155) = 249, which was also significant with  $p < 0.001$ . The sharing of food with an HIV/AIDS person as a source of transmission was also rejected by 97%. This was further confirmed by the chi-square contingency Table  $\chi^2$  (2df, N155) = 277,  $p < 0.001$ . The use of a common toilet seat as source of HIV/AIDS was not accepted  $\chi^2$  (2df, N155) = 175,  $p < 0.001$  as one of the ways of being infected with HIV/AIDS. The  $\chi^2$  (2df, N155) = 87,  $p < 0.001$  which was significant. As regard kissing a person who is HIV/AIDS as source of infection, this was rejected by 66%. This was significant,  $\chi^2$  (2df, N155) = 136,  $p < 0.001$ . Taking care of an infected person as one of the ways HIV/AIDS can be transmitted was rejected by 76%. Calculation of  $\chi^2$  (2df, N155) = 210,  $p < 0.001$  was significant.

There is a belief that one can contract HI/AIDS by sharing clothes with an infected person. The majority of participants (89%) did not think that was the case;  $\chi^2$  (2df, N155) = 231,  $p < 0.001$ . Getting blood transfusion from an infected person was accepted as a correct narration by 96%. Acceptance level was significant,  $\chi^2$  (2df, N155) = 114,  $p < 0.001$ . The same held true for engaging in sexual behaviour with a person who is infected which was accepted by 95% of the participants. The chi-square acceptance of the statement was significant,  $\chi^2$  (2df, 155) = 156  $p < 0.001$ . Shaking hands with an infected person was not considered a source of transmission by 96%. This was significant,  $\chi^2$  (2df, N155) = 267,  $p < 0.001$ .

Mosquito bites were not considered as instrumental to being infected by 61%. Chi-square for those who reflected the role of mosquito in HIV/AIDS was  $\chi^2$  (2df, N155) = 63,  $p < 0.001$ . Whether there is a cure for HIV/AIDS, 75% did not think so. The rejection of the statement was  $\chi^2$  (2df, N155) = 63,  $p < 0.001$ . The belief that HIV/AIDS is God's punishment for engaging in sex out of wedlock was rejected by 57%, implying that the other 43% accepted that it was so. The chi-square was nevertheless significant in favour of the correct response,  $\chi^2$  (2df, N155) = 29.7,  $p < 0.001$ . Avoidance of HIV/AIDS persons was rejected by 63%. Avoidance of those who are infected was  $\chi^2$  (2df, N155) = 91,  $p < 0.001$ . Those taking a different stance was substantial. The chance of contracting HIV/AIDS was denied by 76% of the participants. The chi-square in terms of denial was  $\chi^2$  (2df, N155) = 210,  $p < 0.001$ .

Regarding the transfer of knowledge to sexual behaviour, participants responded to the question of whether there were attempts on their part to avoid having relationship with girls or boys for fear of HIV/AIDS transmission. The response showed that 96% of the

**Table 1.** Participants' correct responses frequencies, percentage, chi-squares and probability N = 366.

No.	Statement	Kenya N=102				South Africa N=164				Tanzania N=100			
		Freq	%	$\chi^2$	P	Freq.	%	$\chi^2$	P	Freq.	%	$\chi^2$	P
2	Sharing cigarette with AIDS person	81	79	97.5	0.001	148	90	245	0.001	85	85	115	0.001
3	Sharing a cup with AIDS person	87	85	123.6	0.001	150	93	253.7	0.001	84	84	121	0.001
4	Sharing food with infected person	100	98	121.6	0.001	156	95	290.7	0.001	87	87	135.5	0.001
5	Using same toilet seat AIDS person	88	86	125.7	0.001	143	87	207	0.001	85	85	121.7	0.001
6	Kissing an AIDS person	43	42	32	0.001	133	81	173	0.001	61	61	43	0.001
7	Taking care of AIDS person	98	96	81	0.001	127	77	185.6	0.001	68	68	47.6	0.001
9	Sharing clothes with AIDS person	93	91	153.9	0.001	138	84	201	0.001	77	77	102.7	0.001
10	Blood transfusion from AIDS person	102	100	136	0.001	150	91	264	0.001	100	100	136	0.001
11	Having sex an infected person	102	100	120.5	0.001	149	91	255	0.001	100	100	136	0.001
12	Shaking hands with AIDS person	98	96	152.5	0.001	149	91	252.5	0.001	-	-	-	-
13	Mosquito bite	88	86	108	0.001	76	46	59.6	0.001	-	-	-	-
14	There is no cure for AIDS	82	80	94.8	0.001	114	70	125.7	0.001	88	88	76.7	0.001
16	AIDS is punishment for engaging in sex outside marriage	52	51	14.5	0.001	92	56	43.5	0.001	71	71	68	0.001
17	AIDS persons should be avoided	94	92	113.4	0.001	115	70	117	0.001	80	80	102	0.001
21	Stand a chance of Contracting AIDS?	56	55	21	0.001	33	20	42.7	0.001	22	22	8.6	0.001
22	Careful in relationship with gender counterpart to avoid AIDS	98	96	80.5	0.001	144	88	240.9	0.001	73	73	74.5	0.001
23	Should AIDS children be in the same school with those who do not have AIDS?	73	72	73	0.001	105	64	86	0.001	67	67	70	0.001
24	Would you sleep with an AIDS person?	43	42	44.4	0.001	92	56	77	0.001	49	49	23	0.001
25	Would you sit next to an AIDS person?	83	81	207	0.001	143	87	219	0.001	67	67	57	0.001

participants were positive. Being careful in relationship to avoid transmission of HIV/AIDS  $\chi^2$  (2df, N155) = 268,  $p < 0.001$ . Such an overwhelming response was distinct in comparison to the contrary that has been reported repeatedly that there lack a correlation between HIV/AIDS knowledge and application to sexual behaviour.

In response to the question whether HIV/AIDS children should attend school with uninfected children, 73% participants ticked a positive response. Joint school attendance was  $\chi^2$  (2df, N155) = 63,  $p < 0.001$ . Whether one would share a bed with an HIV/AIDS person, the response of 59%

respondents was that there would be no problem doing so. Sharing a bed with an infected person was  $\chi^2$  (2df, N155) = 63,  $p < 0.001$ . Considerable proportion of respondents would not be prepared to do so. The last question sought to find out whether participants would feel comfortable sitting next to an HIV/AIDS person, to which 88% said they would have no problem doing so. Those who agreed to sitting next to an HIV/AIDS person was  $\chi^2$  (2df, N155) = 202,  $p < 0.001$ , which was statistically significant. In summary, there is clear evidence that the majority of participants had a high level of knowledge regarding HIV/AIDS. For

the 19 questions/statements on the questionnaire, there were only three questions where the level of statistical significance was on the side of the wrong answers. It was significant to note that there was transfer of knowledge to sexual behaviour. This conclusion is based on the response that participants indicated that they were careful in their relationship with members of the opposite sex for fear of HIV/AIDS transmission.

## DISCUSSION

Given that there is no cure for AIDS and the

devastating danger HIV/AIDS poses to human life, numerous studies have been carried out globally to identify various ways by which the transmission and infection of HIV/AIDS can be controlled, if not arrested to halt the carnage that has resulted in the millions of people around the world who have lost their lives. One of the most common ways has been based on public education in awareness, perceptions, attitudes and beliefs. This has been undertaken in the belief that a result of being knowledgeable about HIV/AIDS will lead people to guarding themselves against behaviour that would predispose them to the transmission of HIV/AIDS (Njogu and Martin, 2003; Macintyre et al., 2004; Lenono, 2007; Durojaiye, 2009).

It was in this context that the present investigation sought to establish the extent to which high school adolescents in Nairobi Kenya were knowledgeable about HIV/AIDS, and whether such level of knowledge would be related to their avoidance of behaviour associated with the spread of HIV/AIDS. Based on the findings of the present study, it was clear that most participants' knowledgeability ranged from 50% to over 90%, which is very similar with other studies reported in Kenya, Sub-Saharan Africa, India and the USA (Kibombo et al., 2007; McManus and Dhar, 2008; African Population Health Research Center, 2009; Ayopo, 2009; Naswa and Marfatia, 2010; Sutton et al., 2011). The investigation further examined the extent to which knowledge of HIV/AIDS was related to participants' sexual behaviour. Like and unlike other studies, the participants who had a high level of knowledge on HIV/AIDS matched the number of those who had a transfer of knowledge of HIV/AIDS to their being careful in their relationship with their gender counterparts, as a way of avoiding being HIV/AIDS infected (Summerfield, 1990; Kamala and Aboud, 2006; Lenono, 2007; Mwale, 2008; Singh and Jain, 2009).

There was nevertheless, a difference in the way some of the responses were given. For example, in response to the question of whether participants considered themselves vulnerable to being HIV/AIDS infected, the majority of respondents were more negative than positive, which according to the expected response was wrong. On the other hand, such a response did not come as a surprise, since similar responses have been reported in the literature, in the majority of cases (Njogu and Martin, 2003; Kabiru and Orpinas, 2009; Durojaiye, 2009; Opt et al., 2010). Though with responses to whether AIDS is a punishment from God; avoiding HIV/AIDS persons as far as possible and mosquito bite being a source of infection, correct responses were statistically significant, the difference was rather marginal compared to incorrect responses. Moreover, even where the overwhelming majority of participants had excellent knowledge of HIV/AIDS, the scores were not 100% correct. This means there were participants who did not have the expected knowledge of HIV/AIDS, thus justifying further and better strategies of public education on HIV/AIDS.

This is in line with what other researchers have reported in their findings (Njogu and Martin, 2003; Macintyre et al., 2004; Durojaiye, 2009; Singh and Jain, 2009; Jankie et al., 2011; Sutton et al., 2011).

## CONCLUSION

In summary, there is clear evidence that the majority of participants were very knowledgeable about HIV/AIDS, which is similar to what other researchers have reported from time to time. But this is not void of misconceptions on a number of questions, signifying the continued effort in the spread of public education among high school adolescents. It has also been reported that participants indicated that based on their HIV/AIDS knowledge, they are careful in their relationship with boys/girls, lest they contract HIV/AIDS. This is rather gratifying, given that this has been a less frequently reported phenomenon in the HIV/AIDS research literature.

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