Students’ Knowledge of HIV/AIDS and their Attitude towards Sexual Behaviour - A Comparative study of Form 1 and Form 4 secondary school students in Coast Region, Kenya

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Abstract
National AIDS Control Council and the Ministry of Education Science and Technology in Kenya developed the 2004 Education Sector Policy on HIV and AIDS. The policy was intended to reduce HIV/AIDS infection and stigmatisation of people living with HIV in the education sector. However, it is not known how implementation of the policy has affected students’ knowledge and their attitude towards sexual behaviour in secondary schools in Coast Region of Kenya. The research study investigated the students’ knowledge of HIV/AIDS and their attitude towards sexual behaviour in secondary schools in coast region of Kenya. The target population was 108693 respondents in 362 public secondary schools in the Coast Region of Kenya. Purposive and random sampling methods were used to choose the participants. The samples comprised of 388 students of which 193 were Form 1 and 195 were Form 4 students in 13 secondary schools. The validity of the questionnaires was checked experts at Chuka University. Test-retest method was used to compute reliability coefficient from the data collected from the pilot study. Reliability coefficient for the instruments was 0.8. The descriptive statistics used were frequencies and percentage. Chi-square statistics was used to test the hypotheses in the study. The hypotheses testing were done at α = 0.05 levels of significance and the analyses was done using SPSS computer programme version 20.0. The findings showed that there was a positive relationship between Form 1 and Form 4 students’ knowledge of HIV/AIDS in secondary schools in Coast Region of Kenya. The study also revealed that there was negative relationship between Form 1 and Form 4 students’ attitude towards sexual behaviour. It was recommended that secondary schools should enhance the teaching of HIV/AIDS education in order to reduce HIV infection AIDS among secondary students in Coast region, Kenya.

Keywords: Attitude, Knowledge, sexual behaviour.

Introduction
The HIV and AIDS policy in Kenya was a result of the Dakar Framework for Action Education for All (DEFA). The policy was adopted from the international community during the world education forum in Dakar, Senegal in 2000 (UNESCO, 2000). This forum was preceded by the declaration of commitment on HIV and AIDS by the United Nation General Assembly Session (UNGASS), which set targets of reducing HIV and AIDS infection among 15-24 year olds. The declaration called for vastly expanded access to information and education on HIV and AIDS necessary to develop skills required to reduce vulnerability to HIV infection by the youth (United Nations Children Education Fund, UNICEF, 2009).

According to Ruto, et al (2009), under the guidance of National AIDS Control Council (NACC), the Ministry of Education Science and Technology (MoEST) in Kenya developed the 2004 Education Sector Policy on HIV and AIDS.
The policy spelt out provisions in eight areas that education must achieve that included; access to education for all children; access to relevant information; privacy and confidentiality; and gender responsiveness. The HIV/AIDS education include; providing education on the prevention methods of HIV infection, promoting abstinence and faithfulness, promoting reductions in the number of sexual partners; encouraging delays in the onset of sexual activity among adolescents, promoting the correct and consistent use of condoms, ensuring consistent availability of condoms, strengthening programmes in sexually transmitted diseases treatment and control, encouraging voluntary counselling and testing (GoK & UNICEF Kenya Country Office Study, 2000; GoK, 2012). The policy is also guided by the Constitution of the Republic of Kenya, Bill of Rights, Education Act, Teachers’ Service Commission (TSC) Act and Code of Regulations among others (Republic of Kenya, 1999; Republic of Kenya, 2010; TSC, 2014). The HIV and AIDS policy if implemented has the ability to cut down HIV infection and effect among secondary students in Kenya.

Teachers are expected to play a major role in the provision of information on HIV and AIDS in order to promote awareness which results in behaviour change among students (Madzivanyika, 2013). Previous researches regarding students’ knowledge of HIV/AIDS and sexual behaviour has had contradictory results. Fawole, Ogunkan and Adegoke (2011) reports that many students in Nigeria had high knowledge of HIV/AIDS but majority of them were involved in risky sexual behaviour. Youth in India were reported to be aware of the HIV and AIDS but a higher percentage of them were still engaged in risky sexual behaviour (Nath, 2009). According to Boyce, Doherty, Fortin and Mackinnon (2002), in Canada youth knowledge and risky sexual behaviour increased from one academic level to the next. In other research reports, educational intervention was reported to have had a positive impact on the students’ knowledge of HIV/AIDS and their sexual behaviour (Selim & El-Shereef, 2010; Ndegwa, et al., 2002). According to Bekeny (2009), secondary school students’ knowledge, attitudes and behaviour in relation to HIV/AIDS improved after students were taught about HIV/AIDS.

**Statement of the Problem**

Human resource is a major factor in harnessing environmental conservation and renewable energy innovations for sustainable development (HECREISD). This is because educated population is required in achieving the objectives of HECREISD. However, the information in the media show that HIV and AIDS is threat to students who are looked upon to play important role in environment HECREISD objectives as role models and future implementers of HECREISD objectives. It is not known HIV/AIDS education affect secondary school students’ knowledge of HIV/AIDS and their attitude towards sexual behaviour in Coast Region of Kenya. The present study compared students’ knowledge of HIV/AIDS and Attitude towards sexual behaviour between F1 and F4 students in Coast Region, Kenya.

**Objectives of the study**

The study purposed to-

1. To find out if there is a difference between Form 1 students with knowledge of HIV/AIDS and Form 4 students with knowledge of HIV/AIDS among students in secondary schools in coast region, Kenya.
2. To find out if there is a difference between Form 1 students with positive attitude towards sexual behaviour and Form 4 students with positive attitude towards sexual behaviour among students in secondary schools in coast region, Kenya.

**Research Hypotheses**

The following null hypotheses were tested at \( \alpha = 0.05 \) level of significance;
H0: There is no significant relationship between Form 1 students with knowledge of HIV/AIDS and Form 4 students with knowledge of HIV/AIDS among students in secondary schools in coast region, Kenya.

H0: There is no significant relationship between Form 1 students with positive attitude towards sexual behaviour and Form 4 students with positive attitude towards sexual behaviour among students in secondary schools in coast region, Kenya.

Methodology
The study adopted a descriptive survey research design. The target population was 108693 respondents in 362 public secondary schools in Coast Region, Kenya. The selection of schools was done using simple random sampling methods while selection of schools was done using simple random sampling methods. The samples comprised of 388 students of which 193 were Form 1 and 195 were Form 4 students in 13 secondary schools. Data was collected using questionnaires. The pilot study was carried out in three schools in Kilifi County within the Coast Region, Kenya. The test re-test method was used during the pilot study to obtain data that was used to compute reliability correlation coefficient. The questionnaire measuring attitude and the test measuring knowledge each yielded a reliability coefficient of 0.8. The research tool was developed and validated before use with help from other members from the Department of Education.

The researcher obtained letter from Chuka University that was used to obtain permission to carry out the study from National Commission for Science, Technology and Innovation (NACOSTI). The data collected from the field was analyzed using frequencies, percentages and Chi-square statistics. The data in the study was analysed using statistical package for social sciences (SPSS) computer programme version 20.0. The result was presented using frequency, percentages distribution tables and bar graphs.

Results of the Study and Discussion
The study was set to compare Form 1 and Form 4 students’ knowledge of HIV/AIDS and their attitudes towards sexual behaviour in secondary schools in the Coast Region of Kenya. Information was collected from 388 respondents and the data analysis generated the following results:

Students’ Knowledge of HIV/AIDS
The hypothesis one sought to find out whether there was a significant relationship between F1 students’ knowledge of HIV/AIDS and F4 students’ knowledge of HIV/AIDS among students in secondary schools in Coast Region, Kenya. The researcher used data generated from previous research study to establish students’ knowledge of HIV/AIDS (Thuo et al., 2016A & Thuo et al., 2016 B). Table 1 shows the summary of the findings.

Table 1 Students’ Level of Knowledge on Sexual Behaviour

<table>
<thead>
<tr>
<th>Statements</th>
<th>Form 1</th>
<th>Form 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV only infect people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All people who are HIV positive got it through sexual intercourse</td>
<td>142 (75.6%)</td>
<td>137 (70.3%)</td>
</tr>
<tr>
<td>A person can get HIV and AIDS by sharing clothes, utensils with an infected person</td>
<td>171 (88.6%)</td>
<td>176 (90.3%)</td>
</tr>
<tr>
<td>A person can get HIV through bites from insects such as mosquitoes, lice, bedbug</td>
<td>136 (70.5%)</td>
<td>142 (72.8%)</td>
</tr>
<tr>
<td>People who are HIV positive are always sickly</td>
<td>27 (14%)</td>
<td>172 (88.2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Information captured in Table 1 showed that 45.6% of Form 1 students and 36.9% of Form 4 students indicated that condoms do not protect people from getting infected with HIV. The information in Table 1 also revealed that 60.6% of Form 1 and 58.9% of Form 4 students knew that petroleum jelly was not a good lubricant for condoms. Majority (86%) of Form 1 students indicated that insect bites can transmit HIV compared to 11.8% of Form 4 students. In order to test the stated hypothesis, the data was analysed using descriptive statistics and Chi-square test. The results are shown in Figure 1 and Table 2.

Table 2 Chi-square test between Students’ Knowledge of HIV/AIDS

<table>
<thead>
<tr>
<th></th>
<th>Form 1 students</th>
<th>Form 4 students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square</td>
<td>121.290</td>
<td>126.405</td>
</tr>
<tr>
<td>df</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results in Table 2 show that there is a significant relationship between Form 1 and Form 4 students’ knowledge of HIV/AIDS ($\chi^2 = 121.290$, df =1, $p<0.05$; $\chi^2 = 126.405$, df =1, $p<0.05$). The Null hypothesis which stated that there is no significant relationship between Form 1 students’ knowledge of HIV/AIDS and Form 4 students’ knowledge of HIV/AIDS was therefore rejected.

The findings of the research study are consistent with that of other researchers that showed that students in secondary schools have high level knowledge of HIV/AIDS (Bekeny, 2009; Madeline, et al., 2011; Fawole, et al., 2011). The results in Figure 1 for Form 1 students contradicted the findings of Majelantle et al. (2010) who indicated that majority of Form 1 students indicated that insect bites can transmit HIV.
According to their findings, primary school level students were likely to have less knowledge about HIV and AIDS and also about HIV transmission and prevention in Botswana. In the present study, the Form 1 students had not benefited much from secondary school education and therefore most of their knowledge of HIV/AIDS could have been obtained in primary school.

The results in Table 3 showed that 64.2% of Form 1 and 57% of Form 4 students believed that peer influence played an important role when students engage in sexual intercourse, 45.1% of Form 1 students and 54% of Form 4 students felt that it was not easy for a person to have only one sexual partner throughout his/her life. The findings in this study were consistent with findings of Chinsembu et al (2004) which indicated that a high percentage of adolescents reported having had sexual intercourse and a significant percentage reported having had sexual intercourse with more than one sexual partner in Namibia.

The results in Table 4 also showed that 68.9% of Form 1 and 76% of Form 4 students believed that it was important for everybody to be tested for HIV. Another 76% of Form 1 and 54% of Form 4 students believed that there was confidentiality in VCT centres. These results are consistent with the findings by Abebe and Mitikie (2009) which showed that a high percentage of students had positive attitudes towards VCT in Ethiopia. However, in the present study, the percentage of students with confidence in VCT declined as students moved from one education level to the next in secondary schools. In order to test the
stated hypothesis, the collected data was analysed using descriptive statistics and Chi-square test. The results are shown in Figure 2 and Table 4.

Figure 2: Students’ attitude towards sexual behaviour

![Bar chart showing attitude towards sexual behaviour]

Form 1 students' attitude towards sexual behaviour: 62.2% positive, 37.8% negative
Form 4 students' attitude towards sexual behaviour: 42.1% positive, 57.9% negative

The results in Table 4 showed that there is a significant relationship between Form 1 students and Form 4 students attitude towards sexual behaviour among secondary schools in Coast Region of Kenya ($\chi^2 = 11.446$, df = 1, $p<0.05$; $\chi^2 = 4.928$, df = 1, $p<0.5$). The null hypothesis which stated that there is no significant relationship between Form 1 students’ attitude towards sexual behaviour and Form 4 students’ attitude towards sexual behaviour among secondary school students in Coast Region of Kenya was rejected.

Information in Figure 2 and in Table 4 showed that the relationship between Form 1 students and Form 4 students’ attitude towards sexual behaviour was a negative relationship. The percentage of students with negative attitude towards sexual behaviour increased as students moved from one academic level to the next. The findings are consistent to that of Boyce et al (2002) that revealed that in Canada youth knowledge and risky sexual behaviour increased from one academic level to the next. Fawole et al (2011) also reported that many students in Nigeria had high knowledge of HIV/AIDS but majority of them were involved in risky sexual behaviour. However, Fawole et al (2011) findings are inconsistent with results of Form 1 students in this research because majority of Form 1 students (88.3) had high knowledge of HIV/AIDS and majority of them (62.2) had positive attitude towards sexual behaviour.

To shed more light on the relationship between Form 1 and Form 4 students’ attitude towards sexual behaviour the respondents were requested to indicate whether they had ever visited VCT. The data obtained is summarised in Table 5.

Table 5 Students’ Response VCT

<table>
<thead>
<tr>
<th></th>
<th>Form 1 Students Visited VCT</th>
<th>Form 4 Students Visited VCT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>89</td>
<td>46.1</td>
</tr>
<tr>
<td>No</td>
<td>86</td>
<td>44.6</td>
</tr>
<tr>
<td>Confidential</td>
<td>18</td>
<td>9.3</td>
</tr>
<tr>
<td>Total</td>
<td>193</td>
<td>100</td>
</tr>
</tbody>
</table>
Results in Table 5 revealed that 46.1% of Form 1 students and 49.2% of Form 4 students had visited VCT. Thus despite the fact that more Form 1 students had positive attitude towards sexual behaviour compared to Form 4, approximately the percentage of those who had visited VCT for Form 1 and Form 4 was equal. Information from Table 5 also showed that 9.3% of Form 1 and 10.8% of Form 4 students felt that information sought by the researcher was confidential. The respondents were also requested to indicate if they would disclose their status to the school community if they were HIV positive. Figure 3 shows the summary of the participants’ responses.

The results in Figure 3 showed that 56.4% of Form 1 students compared to 35% Form 4 students would disclose their HIV status if they were HIV positive. The finding further confirmed that as students progressed from Form 1 to Form 4 their sexual behaviour deteriorates and their confidence towards VCT become low. According to Ngotho (2005), most students shun HIV test primarily because of the fear of knowing their status and the stigma associated with being HIV positive in Kenya.

**Conclusion and Recommendation**

The findings of the research study showed that there is a positive relationship between Form 1 students’ knowledge of HIV/AIDS and Form 4 students’ knowledge of HIV/AIDS among secondary school students in Coast Region of Kenya. The HIV/AIDS and life skill education equip pupils and students with appropriate knowledge and secondary school education should strive to maintain this high standard of HIV/AIDS knowledge. The study however, revealed that there was a negative relationship between Form 1 students’ attitude towards sexual behaviour and Form 4 students’ attitude towards sexual behaviour. The percentage of Form 1 students with positive attitude towards sexual behaviour was higher than that of Form 4 students with positive attitude towards sexual behaviour. According to Thuo (2016), education in Kenyan secondary schools is geared towards passing of examination and this neglected holistic development of students through education. The pressure to perform could therefore have resulted in students cramming knowledge on HIV/AIDS to pass examination and this explain why there was high percent of Form 4 students with high knowledge of HIV/AIDS but with negative attitude towards sexual behaviour. The HIV/AIDS and life skill education in secondary schools should therefore emphasis more on behaviour change than in impacting knowledge of HIV/AIDS.

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**Figure 3:** Students HIV status disclosure

<table>
<thead>
<tr>
<th>Form 1 HIV status disclosure</th>
<th>Form 4 HIV status disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>56.4</td>
<td>65</td>
</tr>
<tr>
<td>43.6</td>
<td>35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>yes</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>56.4</td>
<td>43.6</td>
</tr>
<tr>
<td>35</td>
<td>65</td>
</tr>
</tbody>
</table>
References


