

Students' Knowledge of HIV/AIDS and Their Attitude Towards Sexual Behaviour in Coast Region, Kenya

Daniel Njane Thuo, & Veronica K. Nyaga

Department of Education and Resource Development, Chuka University

Email: dnjanethuo@gmail.com

ABSTRACT

The HIV/AIDS and life skill education in Kenyan secondary schools 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 of HIV/AIDS and their attitude towards sexual behaviour in secondary schools in Coast Region of Kenya. The research study therefore investigated the relationship between 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. Questionnaires and test were used to collect the data. The validity of the instruments was checked by other experts in the field of research at Chuka University. The instruments were piloted in three secondary schools in Kilifi County within the Coast Region of Kenya to establish their reliability. Test-retest method was used to compute reliability coefficient from the data collected from the pilot study. Reliability coefficient of the instruments was 0.8 for each instrument. The descriptive statistics used were frequencies and percentage. Chi-square statistics was used to test the hypotheses in the study. The hypotheses testing was done at $\alpha = 0.05$ level of significance. The data collected in this study was analysed using Statistical Package for Social Sciences (SPSS) computer programme version 20.0. The research findings established that there was a positive relationship between the percentage of Form 1 students' with high knowledge of HIV/AIDS and their attitude towards sexual behaviour in secondary schools in Coast Region of Kenya. It was therefore recommended that HIV/AIDS and life skill education be enhanced in secondary schools in order to cut down HIV infection among the secondary school students. The study findings also revealed that there was negative relationship between Form 4 students' with high knowledge of HIV/AIDS and their attitudes towards sexual behaviour in secondary schools in Coast Region of Kenya. It was therefore recommended that secondary school education should be geared towards inculcating positive attitude towards sexual behaviour among students in secondary schools in Coast Region of Kenya.

Key Words: Attitude, Knowledge', Sexual behaviour, Stigmatization, Life skill, education

INTRODUCTION

Agbemenu (2009) reported that sex education that was to address HIV and AIDS was first taught as a subject on its own but this module changed when the concepts were integrated within other teaching subjects in Kenyan secondary schools. The withdrawal of sex education as a subject was due to the outcry by the society against it in schools. According to AVERT (2010), failure to implement sex education gave rise to integration of sex education in other subjects and also

introduction of life skills education in secondary school curriculum.

Life skills education and HIV/AIDS education in many countries has been reported to have succeeded in reducing incidence of risky sexual behaviour among students (Henderson, Wight, Raab, Abraham, Buston & Scott., 2002; Chinsembu, Siziya, Muula & Rudatsikira., 2004). It has also been reported that students' knowledge and perception on HIV/AIDS increased depending on when students were taught about HIV and AIDS (Jahanfar, Lim, Loh, Yeoh & Charles, 2008; Madeline, Felicia, Pierre, Sagina, Sonal, Warren-Jeanpiere, & Sandra, 2011). Selim and El-Shereef (2010) showed that students had satisfactory knowledge about AIDS in a study carried out in Egypt. A statistically significant improvement in students' knowledge of HIV and AIDS was revealed after implementation of HIV/AIDS education in the same study (Selim & El-Shereef, 2010). The success of HIV/AIDS education was determined by successful implementation of the programme in schools among the intervening countries. However, studies by other researchers showed that as students' knowledge of HIV/AIDS increased, their sexual behaviour remained risky or the same.

According to Boyce Doherty Fortin and Mackinnon (2002), students' knowledge of HIV/AIDS and their risky sexual behaviour increased as students moved from one academic level to the next in a study carried out in Canada. Bekeny (2009) in a study carried out in Yaoundé-Cameroon found out that HIV/AIDS interventions in schools impact moderate behaviour changes, and that there was weak correlation between HIV/AIDS education and students' attitudes towards People Living with HIV (PLHIV).

A study by Fawole, *et al* (2011) showed that 73.6% of students in Nigerian Universities had high knowledge of HIV/AIDS but majority of them were involved in risky sexual behaviour. Mongkuo, Mushi, and Rollinda (2010) found out that most of the students surveyed in South-Eastern United States were knowledgeable about HIV/AIDS and understood the risky behaviour associated with HIV/AIDS. However, it was willingness to associate with PLHIV which was the predictor of students' willingness to practice safe sex. In a survey carried out in 2005 among students in South Africa, most (82%) of the youth males and 83% of females viewed themselves as being at no/or small risk of HIV infection despite the high HIV infection rate in that country (Kermyt, Beutel & Maughan-Brown, 2007). According to Nath (2009), Youth in India were found to be aware of the HIV and AIDS but a higher percentage of the males reported engaging in premarital sexual activity compared to females. The study also revealed that condom awareness among the youth was fairly high but condom usage was reported to be low.

Adimora, Mitchell and Yotebieng (2009) showed that students did not see themselves as susceptible to HIV and AIDS and believed condom effectiveness in preventing HIV to be low in a study that was carried out in Nairobi, Kenya. According to Abebe and Mitikie (2009), students in Ethiopia had knowledge on VCT services but very few of them had undergone VCT. World Health Organisation (WHO, 2007) reported that in general adolescents between the age of 10 to 19 years and particularly girls were at high risk of getting infected with HIV. Report by other researcher show that many of the young people do not seek voluntary counselling and testing (VCT) services until they develop symptoms of AIDS in Kenya and that majority of the youth were engaged in

risky sexual behaviour more than any other age group in Kenya (Waithaka & Bessinger; 2001; Kiragu, 2001; Onyando & Otieno, 2003). However, these studies were carried out long time ago and there was need to re-evaluate the success of sex education and life skill education in Kenyan secondary schools.

Statement of the problem

Human resource is a major factor in Harnessing Science, Research and Technology for Sustainability development (HSRTSD). This is because educated population is required in achieving the objectives of HSRTSD. However, the information in the media show that HIV and AIDS is threat to students who are looked upon to play important role in achieving HSRTSD objectives and future implementers of HSRTSD 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 investigated secondary school students' knowledge of HIV/AIDS and their Attitude towards sexual behaviour in Coast Region, Kenya.

Objectives of the study

The study purposed to;

Investigate the relationship between Form 1 students' knowledge of HIV/AIDS and their attitude towards sexual behaviour in secondary schools in coast region, Kenya.

Investigate the relationship between Form 4 students' knowledge of HIV/AIDS and their attitude towards sexual behaviour in secondary schools in coast region, Kenya.

Research Hypotheses

The following null hypotheses were tested at $\alpha = 0.05$ level of significance;

H₀₁: There is no significant relationship between the percentage of Form 1 students with high knowledge of HIV/AIDS and their attitude towards sexual behaviour in secondary schools in coast region, Kenya.

H₀₂: There is no significant relationship between the percentage of Form 4 students with high knowledge of HIV/AIDS and their attitude towards sexual behaviour 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 participants were selected using purposive and simple random sampling methods. The sample comprised of 388 students of which 193 were Form 1 and 195 were Form 4 students in 13 secondary schools from Coast Region, Kenya. Data was collected using test to get students' knowledge of HIV/AIDS and questionnaire to get students' attitude towards sexual behaviour. The students who did the test also filled the questionnaire that measured their attitude towards sexual behaviour. 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 test and questionnaire yielded a reliability coefficient of 0.8 each. The research tools were developed and validated before use with help from other members in 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 results were presented using frequency, percentages, tables and bar graphs.

RESULTS AND DISCUSSION

The study was set to investigate the relationship between 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 and Their Attitude towards Sexual Behaviour

The Null hypothesis one sought to find out whether there was a significant relationship between the percentage of Form 1 students with high knowledge of HIV/AIDS and their attitude towards sexual behaviour in secondary schools in Coast Region of Kenya. The researcher used test and questionnaire to collect the data from the same respondents which was analysed using descriptive statistic and Chi-square test. The data used had been collected in the previously published research studies (Thuo, 2016; Thuo *et al.*, 2016a & Thuo *et al.*, 2016b). The results were summarised in Figure 1.

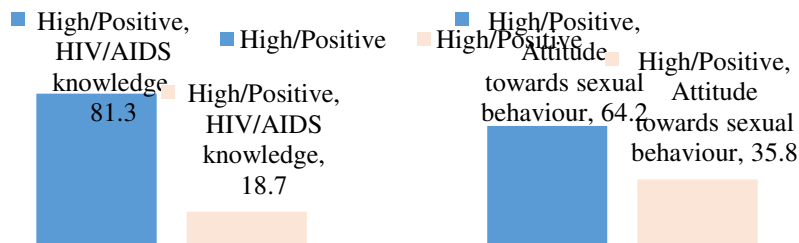


Fig 1: Relationship between Form 1 students' knowledge and their attitude towards sexual behaviour

Figure 1 shows that 83.3 % of Form 1 students had high knowledge of HIV/AIDS and 64.2% had positive attitude towards sexual behaviour. However 18.7% of the Form 1 students had low knowledge of HIV/AIDS but 35.8% of them had negative attitude towards sexual behaviour an indication that some of the students with High knowledge of HIV/AIDS had negative attitude towards sexual behaviour. In order to test the stated hypothesis, the data was subjected to Chi-square test and the results were summarised in Table 1.

Table 1: Chi-square Test between Form 1 Students' Knowledge and Their Attitudes

	Students' HIV/AIDS knowledge	Students' attitude towards sexual behaviour
Chi-square	75.860	15.674
df	1	1
Asymp. Sig.	.000	.000

The information in Table 1 shows that there is significant relationship between Form 1 students knowledge of HIV/AIDS and their attitude towards sexual behaviour in secondary schools in Coast Region of Kenya ($\chi^2 = 75.860, df = 1, p < 0.05$; $\chi^2 = 15.674, df = 1, p < 0.05$). The Null hypothesis that stated that there is no significant relationship between the percentage of Form 1 students with high knowledge of HIV/AIDS and their attitude towards sexual behaviour in secondary schools in Coast Region was rejected.

The findings are consistent with that of Henderson *et al* (2002) that showed that education is necessary in reducing the spread of HIV/AIDS among the students in East Scotland. Visser (2005) also found out that learners' knowledge of HIV and AIDS increased and their attitudes were more positive after students were taught HIV/AIDS education in a study carried out in South Africa. Chinsebu *et al* (2004) in a study carried out in Namibia observed that secondary school students' risky sexual behaviour reduced after they were taught about HIV/AIDS. However it should be noted that Form 1 students in this study had just started secondary school education and that much of the HIV/AIDS and life skill education and sexual behaviour could only be attributed to what they learned in primary school. To shed more light on relationship between Form 1 students' knowledge of HIV/AIDS and their attitude towards sexual behaviour, students were asked to indicate if they would disclose their HIV status if they were HIV positive. The results were presented in Fig 2.

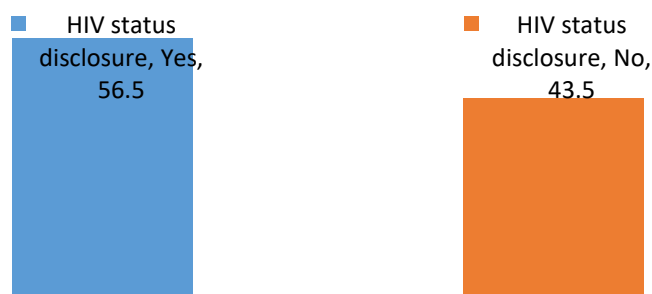


Figure 2: Form 1 status disclosure

The information in Figure 2 shows that 56.5% of Form 1 students would disclose their HIV status if they were HIV positive. Information in Figure 2 also revealed that 43.5% of Form 1 students stated that they can not disclose their HIV status if they were HIV positive. However, information in Figure 1 showed that 64.2% of Form 1 students had positive attitude towards sexual behaviour and 33.8% had negative attitude towards sexual behaviour. Information from Figure 1 and Figure

2 shows that there was significant number of Form 1 students who had positive attitude towards sexual behaviour but could not disclose their HIV status if they were HIV positive. According to Ngotho (2005) stigma associated with being HIV positive prevent students from disclosing their HIV status.

The Null hypothesis two sought to find out whether there was a significant relationship between the percentage of Form 4 students with high knowledge of HIV/AIDS and their attitude towards sexual behaviour in secondary schools in Coast Region of Kenya. The researcher administered test and then gave the same Form 4 students questionnaire to fill. The test and the questionnaire were similar to those of Form 1 students (Thuo *et al.*, 2016a & Thuo *et al.*, 2016 b). The results were summarised in Figure 2.

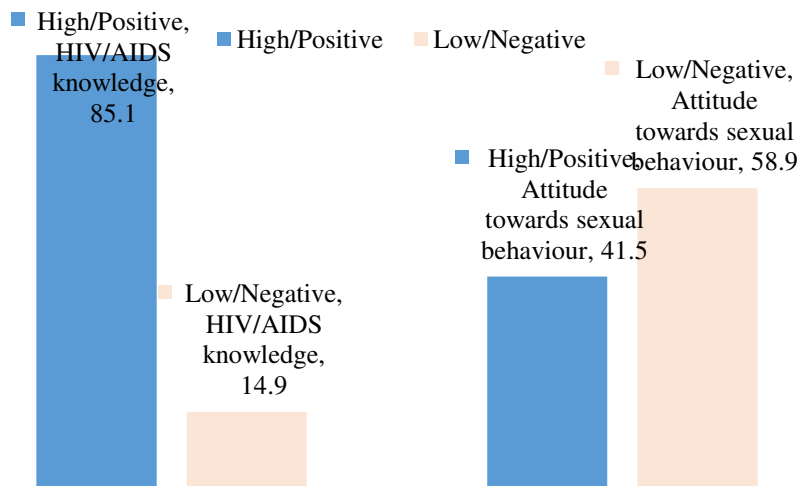


Figure 3: Relationship between Form 4 students' knowledge and their attitude towards sexual behavior

Figure 3 shows that 85.1 % of Form 4 students had high knowledge of HIV/AIDS and 41.5% had positive attitude towards sexual behaviour. However 14.9% of Form 4 students had low knowledge of HIV/AIDS but 58.9% of them had negative attitude towards sexual behaviour an indication that most of Form 4 students with high knowledge of HIV/AIDS had negative attitude towards sexual behaviour. In order to test the hypothesis, the data was subjected to Chi-square test and the results were summarised in Table 2.

Table 2: Chi-square Test between Form 4 Students' knowledge and their Attitudes

	Students' HIV/AIDS knowledge	Students' attitude towards sexual behaviour
Chi-square	96.251	5 .585
Df	1	1
Asymp. Sig.	.000	.018

The information in Table 2 shows that there was significant relationship between the percentage of Form 4 students with high knowledge of HIV/AIDS and their positive attitude towards sexual behaviour in secondary schools in Coast Region of Kenya ($\chi^2 = 96.251, df = 1, p < 0.05$; $\chi^2 = 5.585, df = 1, p < 0.05$). The Null hypothesis that stated that there was no significant relationship between the percentage of Form 4 students with high knowledge of HIV/AIDS and their attitude towards sexual behaviour in secondary schools in Coast Region was rejected.

The information in Figure 2 and Table 2 showed that there was a negative relationship between the percentage of Form 4 students with high knowledge of HIV/AIDS and their positive attitude towards sexual behaviour in secondary schools in Coast Region of Kenya. The result is consistent with that of other researchers. Boyce *et al* (200) in a study carried out in Canada observed that as students progressed from grade 7 to 11, their HIV/AIDS knowledge and their risky sexual behaviour increased. A study by Fawole *et al* (2011) showed that 73.6% of students in Nigerian Universities had high knowledge on HIV/AIDS but majority of them were involved in risky sexual behaviour. According to Nath (2009), Youth in India were found to be aware of the HIV and AIDS but a higher percentage of the males reported engaging in premarital sexual activity compared to females. The study also revealed that condom awareness among the youth in India was fairly high but condom usage was reported to be low. According to Sharlene, Maren and Gisela (2011), adolescents need correct information about their bodies, about sex and sexuality and about HIV and AIDS. They also need guiding values for their relationships especially with people of the opposite sex. With sound knowledge and good values, they are able to prevent sexually transmitted diseases including HIV. To shed more light on the relationship between Form 4 students' knowledge of HIV/AIDS and their attitude towards sexual behaviour, students were asked if they would disclose their HIV status if found to be HIV positive. The results were summarised in Figure 4



Figure 4: Students HIV status disclosure

The information in Figure 4 shows that 35.1% of Form 4 students would disclose their HIV status if they were HIV positive. Information in Figure 4 also revealed that 64.9% of the Form 4 students stated that they can not disclose their HIV status if they were HIV positive. The high percentage of Form 4 students who could not disclose their HIV status was most likely because majority of them could be sexually active and therefore feared stigmatisation associated with being HIV positive (Ngotho, 2005).

CONCLUSION AND RECOMMENDATION

The findings of the research study showed that there was a positive relationship between the percentage of Form 1 students with high knowledge of HIV/AIDS and their positive attitude towards sexual behaviour in secondary school in Coast Region of Kenya. The researcher therefore recommended that secondary school should implement the HIV/AIDS and life skill education to reduce HIV infection among secondary schools in Coast Region of Kenya. The study however, revealed that there was a negative relationship between the percentage of Form 4 students with high knowledge of HIV/AIDS and their positive attitude towards sexual behaviour in secondary schools in Coast Region of Kenya. Most of the students had negative attitude towards sexual behaviour despite their high knowledge of HIV/AIDS and the researcher recommended that HIV/AIDS and life skill education should also focus more on improving students' attitude towards sexual behaviour. This can be achieved by teaching students more about good cultural values concerning sex and sexuality and in providing holistic education that takes care of students' academic and moral needs.

REFERENCE

- Abebe, A., & Mitikie, G. (2009). Perception of High School Students towards Voluntary HIV Counselling and Testing, using Health Belief Model in Butajira.. *Ethiopia. J. Health.* 23(2); pp. 68-76.
- Adimora, A. A., Mitchell, E, M, H. & Yoyebieng (2009). Correlation of Condom use Among Sexually Active Secondary School Male Students in Nairobi, Kenya. *Journal of Social Aspect of HIV/AIDS*; 6(1), March; pp. 8-15.
- Agbemenu, K. A. (2009). *A Critical Examination of Comprehensive Sex Education Programmes Targeting Girls between the Ages of 14-18, In Kenya, East Africa.* Master's Thesis, University of Pittsburgh.
- AVERT (2010). *HIV & AIDS Stigma and Discrimination.* Retrieved from <http://www.avert.org/hiv-aids-stigma.htm>.
- Bekeny, Y. F. (2009). *HIV/AIDS Education in Secondary Schools: A Study of Government Bilingual High Schools in Yaoundé, Cameroon.* Unpublished masters thesis; University of Jyvaskyla.
- Boyce, W., Doherty, M., Fortin, C., & Mackinnon, A. (2002). *Canadian Youth, Sexual Behaviour and HIV/AIDS Study. Factors Influencing Knowledge, Attitude and Behaviours.* Toronto: Council of Minister of Education Report.
- Chinsebu, K. C., Siziya S., Muula A, S., & Rudatsikira, E (2004). Prevalence and Social Correlates of Sexual Intercourse among School Going Adolescents in Namibia. *Journal of Social Aspect of HIV/AIDS*; 5 (3) September, pp.127-135.
- Fawole, A. O., Ogunkan D. V., & Adegoke, G. S. (2011). Sexual Behaviour and Perception of HIV/AIDS in Nigeria. Tertiary Institutions: University of Ilorin, a Case Study; *Global Journal of Human Social Science*; 11(1) pp.64-72.
- Henderson, M., Wight, D., Raab, G., Abraham, C., Buston, K., Hart, G., & Scott, S. (2002) Heterosexual Risk Behaviour Among Young Teenagers in Scotland. *Journal of Adolescence*, (25) pp.483-494.
- Jahanfar, S. Lim, A. W., Loh, M. A., Yeoh, A. G., & Charles, A. (2008). Improvements of Knowledge and Perception towards HIV/AIDS among Secondary School Students

- after Two Hours Talk. *Med J Malaysia*, 63 (4) pp.287-292.
- Kermyt, G., A. Beutel M. & Maughan-Brown (2007). HIV Risk Perception and First Sexual Intercourse among Youth in Cape Town South Africa. *International Family Planning Perspectives*, 33 (3) pp.98–105.
- Kiragu, K. (2001). Youth and HIV/AIDS: “Can We Avoid Catastrophe?” *Population Reports*, Baltimore; Series L No. 12.
- Madeline, Y. S., Felicia P. H., Pierre W., Sagina, W., Sonal, P., Warren-Jeanpiere, L., & Sandra, J. (2011). HIV/AIDS Knowledge Scores and Perceptions of Risk among African American Students Attending Historically Black Colleges and Universities. *Public Health Reports*; September–October, 11 (26) pp.653-664.
- Mayock, P., & Byrne, T. (2005). *A Study of Sexual Health Issues, Attitudes and Behaviours: The Views of Early School Leavers*, Dublin; Crisis Pregnancy Agency No 8.
- Mongkuo, M. Y., Mushi, R. J. & Rollinda, T. (2010). Perception of HIV/AIDS and Socio-Cognitive Determinants of Safe Sex Practices among College Students Attending a Historically Black College and University in the United States of America, *Journal of AIDS and HIV Research*, 2(3) pp.32-47.
- Nath, A. (2009). HIV/AIDS and Indian Youth- A Review of the Literature (1980-2009). *Journal of Social Aspect of HIV/AIDS*; 6 (1) pp.1-7.
- Ngotho, D. K. (2005). Knowledge, Attitude and Practices on HIV among Nakuru Medical Training Centre Students, *Egerton Journal*; 4 (2 & 3) pp.100-118.
- Onyando, M. R., & Otieno, A. T. A. (2003). *Knowledge, Attitudes and Practice of Secondary School Adolescents Towards Voluntary*, Centre for the Study of Adolescence Counselling and Testing in Kenya. Working Paper No. 1 of 2003.
- Selim, E., M., A. & El-Shereef, E. A. A. (2010). Perceptions of Secondary Technical Schools Students in Assiut, Upper Egypt, About AIDS: Effect of an Educational Intervention. *Journal of Family and Community Medicine*: 17(1) pp.3-10.
- Sharlene, J., Maren, B. & Gisela, W. (2011). *Teaching about HIV and AIDS in Caribbean Secondary Schools*. Oxford: Macmillan Publishers Limited.
- Thuo D. N (2016). *Teachers’ Self-efficacy teaching HIV/AIDS education and students’ knowledge and attitude towards sexual behaviour in secondary schools in Coast Region of Kenya*. Unpublished Thesis: Chuka University.
- Thuo, Daniel Njane, Veronica K., Nyaga, David N. Bururia & Hilary K. Barchok (2016 B). Relationship between teachers’ motivation teaching HIV/AIDS education and students’ attitude towards sexual behaviour in secondary schools in coast region, Kenya. *Journal of education and practice Vol 7 No. 1, 2016*. P63-72.
- Thuo, Daniel Njane, Veronica K., Nyaga, David N. Bururia & Hilary K. Barchok (2016a). Relationship between teachers’ attitude towards teaching HIV/AIDS education and students’ attitude towards sexual behaviour in secondary schools in coast region, Kenya. *International Journal of Research in Education and Social Science. Volume 1, Issue 1 (March 2016)*. P33-44.
- Thuo, D., N., Barchok, H., K., Nyaga, V., & Bururia., D., D (2016a). The Relationship Between Teachers’ Motivation Teaching HIV/AIDS Education and Students’ Knowledge and Attitude towards Sexual Behaviour in Secondary Schools In Coast Region, Kenya. *Journal of Education and Practice*. Vol.7, No.1, 2016. pp. 63
- Waithaka, M., & Bessinger, R. (2001). Sexual Behaviour and Condom Use in the Context of

HIV Prevention in Kenya; *Population Services International*. Chapel Hill, North Carolina; pp.27516-3997.
World Health Organisation (1997). *Life Skills Education for Children and Adolescents in Schools*. Switzerland; WHO press.