## PREFERENCES OF STUDENTS AND TEACHERS ON HIV & AIDS INTERVENTION PROMOTION STRATEGIES IN SECONDARY SCHOOLS OF EMUHAYA SUB COUNTY, KENYA

BY

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# A THESIS SUBMITTED IN FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN EDUCATIONAL PSYCHOLOGY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

**MASENO UNIVERSITY** 

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## **DECLARATION**

This thesis is my original work and has not been presented in any other University for a degree or diploma.

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#### **ABSTRACT**

Emuhaya Subcounty has an HIV prevalence rate of 7.4% whereas Vihiga County and national prevalence are at 4.7% and 6% respectively. The youth aged 15 to 24 years especially the female are the most vulnerable. Youth in secondary school are within this age bracket thus are not exceptions despite HIV & AIDS education being taught in schools for almost two decades. Studies indicate that teachers and students were not involved in establishing strategies that could enhance outcomes of HIV & AIDS education programmes. This could be the reason why interventions including counselling, Voluntary Counselling and Testing, peer involvement, parental involvement and condom use promotion are ineffective and or underutilized in schools. Studies document that these interventions have the potential to promote HIV & AIDS preventive behaviour particularly abstinence and condom use, The purpose of this study was therefore, to establish HIV & AIDS intervention promotion strategies in secondary schools in Emuhaya Subcounty, Vihiga County, Kenya. Specific objectives were to: establish the preferred intervention promotion strategies from students' and teachers; determine differences in preferences of students and teachers; and of female and male students; establish factors that influenced choice of strategies; and identify the preferred strategies that have been addressed by the HIV & AIDS curriculum. For each intervention, preferred content, service providers and awareness creation strategies were key components of the promotion strategies. The study was guided by the Ecological Systems Theory as postulated by Urie Bronfenbrenner. A mixed method research design was used. The target population was 2960 form four students; and 359 teachers from 38 secondary schools. Systematic random sampling was used to select 13 schools while stratified random sampling selected 987 students on the basis of gender. Saturated sampling was used to select 180 teachers. However, 768 students and 135 teachers duly responded to the questionnaire. Questionnaire, Focus Group Discussion (FGD) guide and document analysis guide were used to collect data. The questionnaire and FGD guide were piloted in four (4) schools to check for reliability and dependability respectively. Face and content validity and credibility of the instruments were ascertained by measurement and evaluation experts. Quantitative data was analyzed using percentages, median, rank means, standard deviation; and Mann-Whitney U Test to establish group differences. Qualitative data was derived from the FGDs and document analysis. The findings of this study revealed that the respondents had varied preferences but their most preferred service providers included persons based in the school -the counsellor and peer educators, the home especially the mother and the health personnel; while their most preferred awareness creation strategies were notice boards and school counsellor referrals. There were significant differences in preferences on the basis of gender of students and between students and teachers in more than 60% of their preferences, however, their effect size were mostly negligible (r >.2) and in a few cases weak (.2 < r >.4) thus the statistical significance was not practically significant. Factors that contributed to choice of strategies included feasibility of the strategy, attitude of the respondents towards it, level of anonymity and cost of utilizing the strategy. The curriculum did not recommend the intervention promotion strategies that the respondents' preferred. The findings implied that for interventions to be successful the concerted efforts from school, home and health facilities and review of the curriculum were necessary. These findings could contribute to knowledge and practice on how best HIV & AIDS prevention programmes can be adapted so that they are more meaningful and appealing to youth in secondary schools.

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## LIST OF ABBREVIATIONS AND ACRONYMS

## **Abbreviations**

**AIDS** Acquired Immune Deficiency Syndrome

**CDC** Centre of Disease Control

**CRR** Centre for Reproductive Health Research

**FGDs** Focus Group Discussions

**GOK/ROK** Government of Kenya/Republic of Kenya (The two are synonymous)

**HIV** Human Immunodeficiency Virus

**IPPF** International Planned Parenthood Federation

**KDHS** Kenya Demographic Health Survey

**KICD** Kenya Institute for Curriculum Development

**KIE** Kenya Institute of Education

**MOH** Ministry of Health

NACOSTI National Council of Science Technology and Innovation

SCT Social Cognitive Theory
SLT Social Learning Theory

**SPSS** Statistical Package for Social Sciences

STDs Sexually Transmitted Diseases
STIs Sexually Transmitted Infections

**UN** United Nations

**UNAIDS** United Nations Program on HIV/AIDS

**UNESCO** United Nations Educational, Scientific and Cultural Organization

**UNICEF** United Nations Children's Fund

**USA** United States of America

**USAID** United States Agency for International Development

**VCT** Voluntary Counselling and Testing

WHO World Health Organization

**SD** Standard Deviation

## **Acronyms**

**FOCUS** FOCUS on Young Adults, United States of America

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#### **CHAPTER ONE**

## INTRODUCTION

## 1.1 Background of the Study

School based HIV & AIDS Education is a common and well-proven intervention for providing information and skills to enable young people embrace behaviour that would enhance HIV & AIDS prevention (Sani, Abraham, Denford & Ball, 2016; Sarma & Oliveras, 2012). The importance of providing skills and support systems to augment the knowledge that would enable the youth embrace behaviour that would enhance HIV &AIDS prevention has also been documented (UN, 2014). However, despite this, the youth including those in school are still among the most vulnerable populations to the HIV & AIDS.

In Kenya the parliament approved a national HIV & AIDS policy as Sessional Paper number 4 of 1997 (GOK, 1997). The aim of the sessional paper was to provide a policy framework for HIV & AIDS prevention and control efforts. The sessional paper singled out the youth as a priority population to enable mitigation of the scourge and emphasized the need to address sociocultural norms, values and beliefs; and highlighted the need for religious consensus on teachings about sexuality and socio-cultural practices. The sessional paper necessitated the Commission of Inquiry into the Education System in Kenya to recommend that HIV & AIDS syllabus should be included in the curricular of various education and training institutions. (GOK,1999a). HIV & AIDS education thus came into force in the formal education system in the year 2000 with its major purpose being behaviour development and change appropriate to the youth's stage of development. Initially, HIV & AIDS Education was taught as a stand-alone subject with a scheduled weekly lesson lasting 80 minutes. This went on up to 2003 when the national

curriculum was reviewed and HIV & AIDS aspects infused and integrated into various subjects in order enhance effectiveness towards reducing the ravaging effect of HIV & AIDS towards the youth (Omolo, 2012). However, the Kenya Health Demographic Survey (KDHS) exercises held since 1998 to 2013 still single out the youth as a vulnerable group (Government of Kenya (GOK), 1999; 2004; 2009 & 2014).

Studies have alluded to the fact that the HIV & AIDS Education programmes particularly in Kenyan schools promote abstinence while downplaying condom use promotion and underutilizing other interventions like counselling, Voluntary Counselling and Testing (VCT), peer involvement and parental involvement (Malanda, 2010). On the other hand teachers who are the major implementers of the program and learners the major beneficiaries have complained of not being involved in their capacity as major stakeholders to ascertain the practicability of the HIV &AIDS education programme (Nyinya, 2007; Ongunya; 2009). The present study thus sought to establish the preferences of students and teachers on intervention promotion strategies for HIV & AIDS prevention. The interventions focused on included counselling, VCT, peer involvement, parental involvement and condom use promotion.

Globally, approximately 36.9 million are living with HIV & AIDS; around 2 million people became newly infected with HIV while 1.2 million die of AIDS related illnesses annually. The statistics reveal that approximately 70% of people living with HIV & AIDS reside in developing countries especially in sub-Saharan Africa which accounted for 25.8 million of people living with HIV & AIDS globally. Unlike other regions, the majority of people living with HIV in sub-Saharan Africa (61%) were women (UNAIDS, 2015a; WHO, 2015a). Additionally,

approximately 80 % of infected women aged 15–24, live in sub-Saharan Africa where one in six adolescent deaths is attributed to HIV (UNAIDS, 2015b; WHO, 2015b). It is estimated that half of new HIV infections occur in individuals aged 15–24 and more than 90 % are sexually transmitted (Fonner, Armstrong, Kennedy & Sweat, 2014). Thus, sexually active young people in sub-Saharan Africa, particularly young women, are at high risk of HIV infection. Kenya is a developing country in sub Saharan Africa.

In Kenya, 1.7 million people have died due to HIV related complications. The HIV estimates and projections indicate that 1.6 million people are living with HIV and 101,560 new HIV infections occur annually. The Kenyan HIV epidemic displays variable epidemic dynamics in respect to modes of transmission, age and sex differentials. Sexual transmission accounts for 93.7% of the new HIV infections. The youth aged 15-24 years especially the female who account for 21% of new HIV infections annually are three times more likely to be infected as compared to their male counterparts due to biological, socioeconomic and cultural factors. The youth account for over 50% of the total Kenyan population. (Government of Kenya (GOK), 2013 a; 2013 b; 2014). The global and national statistics on HIV & AIDS prevalence point to the fact that the youth are a heterogeneous group in many aspects including their gender and their sexual behaviour – some are already sexually active while others are not. This implies that intervention strategies need to take into consideration the heterogeneity. There seems not to be clear documentation indicating that the HIV & AIDS education programme was subjected to a needs assessment to ascertain how to tackle the challenge of heterogeneity. The present study therefore addressed one aspect of heterogeneity specifically gender by establishing the preferred intervention promotion strategies on the basis of gender and determining if there are gender differences in preferences of students

and teachers on the intervention promotion strategies for HIV & AIDS prevention in secondary schools.

Based on documentation from a survey by Lancet Commission in Adolescent Health and Wellbeing; The National AIDS Control Council, Kenya; and the Ministry of Health, Kilonzo (2016) reported that AIDS was the number one cause of death and disability among Kenyans aged between 10 and 24 years. A total of 2,531 youths aged between 15 and 19 years - most in secondary school – died in 2013, followed by 2,398 between 10 and 14 years and 1,719 between 20 and 24 years. It was estimated that 435, 225 adolescents aged between 10 and 24 years were HIV positive, while another 119,899 have the virus but were yet to be identified. There were at least 195, 299 adolescents on anti-retroviral therapy and another 315, 000 who needed it. In addition, the annual new infections among children aged 0 to 14 years was 12, 511 while for those above 14 but below 25 years was 13, 148. These new infections were majorly attributed to early sex where 20% of youths aged 15 and 24 years had sex for the first time before their 15<sup>th</sup> birthday. Kilonzo (2017) quotes the lead author of the Lancet Commission Professor George Patterson who says that "The generation of young people could transform the future generation for the better. This means it will be crucial to invest in their health, education, livelihoods and participation. Adolescence brings a more different and more intense engagement with the world beyond the immediate family."

Though progress in HIV prevention in Kenya has been made especially among children, the scourge is still a major challenge across the 47 counties with some having a considerably higher burden than others. Nairobi, Siaya, Homabay, Kisumu, Migori, Kisii, Nakuru, Kakamega,

Mombasa and Kiambu are collectively home to 800,000people living with HIV and account for 65% of all new HIV infections (GOK, 2014). The data implies that the identified counties would get more attention on HIV initiatives, however, the rest of the counties including Vihiga County in which Emuhaya Sub County is part would not. This is despite the fact that it borders three of the counties that have a high HIV burden namely Siaya, Kisumu and Kakamega with two of these counties – Siaya and Kisumu categorized as HIV hyper endemic counties. Owing to this, Vihiga County is vulnerable to the HIV pandemic.

Amongst the Sub Counties in Vihiga County, Emuhaya Sub County which despite its being divided into Luanda and Emuhaya. has been operating as one county due to infrastructural and human resource challenges, had an HIV prevalence of 7.2% while Vihiga County as a whole had an HIV prevalence of 4.7 %. Thus, it is evident that the HIV burden in the Sub County is fairly high; a fact whose reality has been watered down by the overall County prevalence. The youth aged 15 to 24 years in Emuhaya Sub County are not spared by the scourge because they accounted for 14.3% of the HIV infection in the County. The female accounted for 20.6% while the male 7.9%; an indicator of gender differentials in infection patterns of the HIV & AIDS pandemic. (Vihiga County, Ministry of Health Information Systems, 2016). Owing to the vulnerability of Vihiga County to the HIV & AIDS pandemic and prevalence rates in Emuhaya which are higher than the national and county prevalence rates and also display the gender differentials in infection, the present study was carried out in Emuhaya Sub County in Vihiga County.

Documentation on extent of effectiveness of HIV & AIDS education from studies undertaken by various researchers including Nyinya (2006); Ongunya (2007); Ochieng, (2005); Malanda;

(2008; 2017); Njue, Nzioka, Ahlberg, Pertet and Voeten (2009) Malanda & Moracha, (2010) and Malanda et al. (2014a & b; 2017a & b) indicate that the programs in schools were not effectively promoting HIV prevention initiatives. Interventions like counselling, VCT, condom use promotion, peer involvement and parental involvement are underutilized in promoting HIV and AIDS prevention. Additionally, the students had a negative attitude towards the program and the methods used in dissemination were not interactive. Some of the factors that led to ineffective promotion included insufficient time due to an overloaded curriculum, lack of active involvement of teachers and students in programme design and implementation deliberations, lack of adequate training to teachers, counsellors and peer educators and religious and sociocultural factors. Additionally, Njue et al. (2009) in their publication "If you don't abstain you will die of AIDS": AIDS Education in Kenyan Public Schools" reported that there was disapproval of openness about sex and condoms by the Ministry of Education and parents.

Tijuana (2001) developed a tool "Developmentally Based Interventions and Strategies; Promoting Reproductive Health and Reducing Risk taking among Adolescents" aimed at providing guidelines for the appropriate approaches. The tool prescribed the need for interventions and strategies to be developmental stage and culture appropriate and to use relevant content and dissemination devices including dissemination methods, forums, aids and resource persons. FOCUS (2001) studied programs aimed at enhancing youth reproductive health that incorporated strategies from initiatives of school based HIV & AIDS education, social marketing and mass media, community outreach, youth centres, peer programmes, school/health facility links and private sector. The programs had their successes and limitations leading to

recommendations on the need to involve youth in meaningful ways in programs that target them and identify program mixes best suited for the target population by adapting and not adopting.

The need for information and knowledge on HIV and AIDS relevant to the youths' age and developmental stage cannot be overemphasized. An extensive body of literature indicates that schools are largely responsible for the imparting of moral and sexuality knowledge to children. Additionally, the institution of religion is considered a strong influence to the youths' behaviour (Osafo et al, 2013; Alhassan, 2013; Sowah, 2012 and Mumuni, 2010). However, researchers have identified various leading barriers hindering access of sexual health education to students. According to Attwood, Henault and Dubin (2014); Goldman and Coleman (2013); Preston (2013); Wilkefeld and Ballan (2011); Klein and Breck (2010) and Nyinya (2007), lack of teacher education programmes specifically in regard to Sexual Health Education is one of the major barriers to access. The lack of teacher knowledge and confidence thus increasing concern, anxiety and fear in handling sexuality issues among the learners was also cited as an impediment (Malanda, 2017; Barnard-Brak et al, 2014; Eisenberg, Madsen and Oliphant et al, 2013; 2010; Wilkefeld and Ballan, 2011; and Rohleder (2010)).

The effect of parental concern, anxiety and fear was also cited as a barrier to access to sexual health education to learners (Kok and Akyuz, 2015; Barnard-Brak et al, 2014; Eisenberg et al, 2013; Rohleder, 2010; Suter, McCracken and Calem, 2009; Malanda, 2008). According to Kok and Akyuz (2015), Goldman and Coleman (2013); and Travers and Tincani (2010) there was need to enhance school, teacher and parent partnership to effectively teach sexual health education. The lack of implementation of valid and reliable sexual health education with

standards guiding development, implementation and evaluation was a concern raised by respondents in various studies (Preston, 2013; Future of Sex Education (FoSE), 2012; Eisenberg et al, 2010; and Grievo, Mc Laren and Lindsay, 2007). Additionally, there is lack of funding to support educational programs based on comprehensive sexual health education (SEICUS, 2016; 2015; Advocates of Youth, 2014; Einsenberg et al, 2013; and Kirby, Coyle, Forrest et al, 2011).

Studies have been done to establish various features within intervention programs that are key in necessitating positive outcomes towards reproductive health including HIV prevention (UNAIDS, 1998; Kelly, 2001; Tijuana, 2001; Kirby, 2001; 2006). The characteristics of successful programs included giving comprehensive, accurate and clear information without prejudice; being considerate and sensitive to gender and culture of the recipients; addressing barriers to prevention initiatives; involving the beneficiaries to the program in areas like designing, planning and implementation; employing a variety of interactive teaching methods appropriate to the age, gender, culture and sexual experience of the recipients; using implementers who were trained and committed to ensuring the program succeeds and provided ample and realistic duration for implementation of the program.

The board room deliberations on the direction HIV and AIDS prevention initiatives have been there for almost two decades now but still the ravaging effects of the scourge are yet to be alleviated. Additionally, dissatisfaction in the level of involvement in planning and implementation has been raised especially by teachers (Malanda, 2010). The youth have also raised concerns on the insensitivity of adults to their needs while designing reproductive health programs for them (Kilonzo, 2017). This calls for the need to interrogate the trickle down

method of making declarations in boardrooms and directing that they be implemented at the grassroots without factoring in the recommendations of the major beneficiaries and implementers. This study therefore sought to establish the preferred intervention promotion strategies from the teachers and students who are the implementers and beneficiaries in a school setting respectively. Additionally to avoid any dissatisfaction due to differences in perspectives between the students and teachers, the study will determine the differences in preferences between the students and teachers

Youth including those who are school-going still remain a vulnerable group to HIV infection despite the brilliant prescriptions for mitigation. This therefore brings to fore the need to adopt a bottoms up approach in which proposals are got from the stakeholders to the boardroom and not vice versa. The situation in Kenya has been that technocrats sit in the boardroom and determine what works for a certain population without involving the implementers and consumers. This has been highlighted even for HIV &AIDS initiatives in schools. The present study therefore sought to establish the preferences of students and teachers on intervention promotion strategies for HIV & AIDS prevention in secondary schools. The study majorly built on a study by Malanda (2008) which sought to establish "The effectiveness of HIV & AIDS Education in promoting interventions among the youth in secondary schools". The study established that only abstinence was well promoted while the other interventions which the present study focused on, namely condom use, counselling, VCT, parental involvement and peer involvement fared on dismally.

The current study mainly sought to establish which strategies could best promote these interventions through information provision, service provision and awareness creation. On

information provision particularly for counselling and VCT, the study sought to establish in order of preference, which topics would enhance their uptake. As for peer and parental involvement, the study sought to establish which topics the respondents preferred to be handled by peers and parent figures. The respondents also established their preferred service providers for the five interventions and strategies that could be used to create awareness. The present study solicited the views from the major stakeholders in schools – the students and teachers, to establish intervention strategies that are of relevance and appeal in light of their appropriateness to the students' developmental stage, cultural underpinnings and content and dissemination devices.

The present study focused on strategies from initiatives of mass media, community outreach, youth centres, peer programmes, school/health facility links and private sector that can promote interventions for HIV & AIDS prevention. For each intervention the preferred strategies were limited to the responses of the students and teachers on selected relevant topics, the service providers and awareness creation mediums. The study also established the factors that contributed to the choice of the strategies for the interventions in question. Owing to the fact that gender and teacher versus student differentials could have a bearing to the choice of intervention strategies, the also study sought to establish these differences. In order to ascertain if the Kenyan HIV & AIDS curriculum is living up to the respondents' expectation of being an enabler to behaviour change and or modification, the study sought to identify the preferred intervention promotion strategies addressed by the curriculum.

## 1.2 Statement of the Problem

The infection rates among the youth still remain high despite HIV & AIDS Education being taught in schools for almost two decades now. Unless there is change of mindset to appreciate

the fact that youth are not a homogeneous group since some are sexually active while others are not; they come from various sociocultural and economic backgrounds and are not of one gender; then there will be no headway in abating the scourge and the situation will remain as it is or worsen. For the sake of ensuring that the youth are safeguarded, there is need to appreciate that HIV & AIDS is more than a moral issue; it is also a health issue. The need to invest in not just financial resources but also support systems like parents and peers and services like counselling, VCT and condom use promotion so that we take care of the whole spectrum of heterogeneity among the youth in schools cannot be overemphasized. This would be realized by involving the youth themselves to inform on which strategies would work for them because out of their experience and interactions they are the best informants to the program. Additionally the program has implementers whose input in informing on the best strategies to use is invaluable. Evidence shows that strategies derived from the mass media, community outreach, youth centres, peer programmes, school/health facility links and private sector have the potential to enhance HIV & AIDS. There is need to establish which information would help enhance the use of the strategies; who would be the best suited service providers and how awareness can be enhanced on access and use of the services. Thus, the reason why this study zeroed in on establishing the preferences of students and teachers on intervention promotion strategies for HIV & AIDS prevention in secondary schools. The promotion of abstinence as an intervention is not in doubt and needs to be sustained but there is need to step up on counselling, VCT, peer involvement, parental involvement and condom use promotion. Thus this study focused on these interventions. Emuhaya Sub County carries the largest burden of HIV in Vihiga County which neighbours three counties namely Siaya, Kisumu and Kakamega that are among the counties that carry a high HIV burden in Kenya. The vulnerability of Vihiga County especially Emuhaya Sub County

can thus not be overemphasized. This study, therefore, sought to establish the preferences of students and teachers on intervention promotion strategies for HIV & AIDS prevention in secondary schools in Emuhaya Sub County, Kenya.

## 1.3 Purpose of the Study

The purpose of this study was to establish the students' and teachers' preferences on HIV & AIDS prevention intervention promotion strategies for youth in secondary schools in Emuhaya Sub County, Kenya.

## 1.4 Research Objectives

The specific objectives of this study were to:

- i. Establish the preferences of students and teachers on HIV & AIDS prevention intervention promotion strategies in secondary schools in Emuhaya Sub County, Kenya.
- Determine difference between preferences of students and teachers on HIV & AIDS prevention intervention promotion strategies in secondary schools in Emuhaya Sub County, Kenya.
- iii. Determine difference between preferences of female and male students on HIV & AIDS prevention intervention promotion strategies in secondary schools in Emuhaya Sub County, Kenya.
- iv. Establish factors that contributed to the preferences of students and teachers on HIV & AIDS prevention intervention promotion strategies in secondary schools in Emuhaya Sub County, Kenya.
- v. Identify the preferences of students and teachers in Emuhaya Sub County, Kenya on HIV & AIDS prevention intervention promotion strategies addressed in the HIV & AIDS Education curriculum for secondary schools in Kenya

## 1.5 Research Questions

The study sought to answer the following questions:

- i. What were the preferences of students and teachers on HIV & AIDS prevention intervention promotion strategies in secondary schools in Emuhaya Sub County, Kenya?
- ii. What was the difference between preferences of students and teachers on HIV & AIDS prevention intervention promotion strategies in secondary schools in Emuhaya Sub County, Kenya?
- iii. What was the difference between preferences of female and male students on HIV & AIDS prevention intervention promotion strategies in secondary schools in Emuhaya Sub County, Kenya?
- iv. What factors contributed to preferences of the students and teachers on HIV & AIDS prevention intervention promotion strategies in secondary schools in Emuhaya Sub County, Kenya?
- v. Which preferences of students and teachers in Emuhaya Sub County, Kenya on HIV & AIDS prevention intervention promotion strategies were addressed in the HIV & AIDS Education curriculum for secondary schools in Kenya?

## 1.6 Significance of the Study

The study was considered useful in the following ways:

i. The findings of the study would enable government and school policy makers to evaluate the curriculum and other relevant policies with the aim of ensuring they are practical to the youth's needs for HIV & AIDS prevention in secondary schools in Kenya.

- ii. The findings would help stakeholders in the education system like teachers, counselors and peer educators to improve their approach in relaying HIV & AIDS education to the youth in secondary schools in Kenya.
- iii. The findings of the study would enable the Ministry of Education refine their intervention promotion strategies towards promotion of preventive sexual behavior in secondary schools in Kenya.
- iv. The findings would guide policy makers especially from the Ministry of Education and the other ministries that deal with youth, health and gender to develop realistic logical frameworks for HIV & AIDS prevention programmes in secondary schools in Kenya.

## 1.7 Scope of the Study

- The study confined itself to getting information through questionnaire, document analysis
  guides and focused group discussion guides to establish intervention promotion strategies
  for HIV & AIDS prevention among youth in secondary schools.
- ii. The study specifically concentrated on secondary schools in Emuhaya Sub County which at the time of study included two Sub Counties namely Emuhaya and Luanda whose operations have now been separated.
- iii. The study confined itself to preferred strategies for five interventions namely condom use, counselling, VCT, parental involvement and peer involvement.
- iv. The study focused on strategies from initiatives of mass media, community outreach, youth centres, peer programmes, school/health facility links and private sector that could promote the five interventions in (iii) above to enable HIV & AIDS prevention.

- v. The study confined itself to establishing strategies to promote the interventions in the areas of information provision, service provision and awareness creation.
- vi. The study confined itself to getting information from teachers and students only.

## 1.8 Limitation of the Study

- i. Emuhaya Sub County formerly Emuhaya district upto the year 2012 when devolution came into being, still housed data for both Emuhaya Sub County and Luanda Sub and ran the two counties under the name Emuhaya Sub County up to July 2016 thus the research could not put a distinction between the two. This implies that the fact that the data from this study is also relevant to Luanda Sub County is not very distinct.
- ii. Cultural differences among various ethnic communities in Kenya may influence use of findings that were culturally inclined and or sensitive. However this could be overcome by judicious adaptation of the particular issues.
- iii. Parents' opinions were not sought in this study therefore their views on the expectations students and teachers wanted vested in them were uncertain.
- iv. The data analysed to determine differences in preferences between students and teachers and between female and male students was of ordinal scale thus could only be analysed using Whitney Mann U test which is a nonparametric test that is less robust and of lower power as compared to the parametric test alternative which is the t test.

## 1.9 Assumptions of the Study

i. All students in secondary school were within the age bracket of 15-19 years hence could be referred to as youth.

- HIV & AIDS education curriculum has been implemented in all Kenyan Secondary Schools.
- iii. HIV & AIDS education programme recommends the promotion of the interventions under study namely condom use, counselling, VCT, parental involvement and peer involvement.
- iv. The interventions under study namely condom use, counselling, VCT, parental involvement and peer involvement are ineffectively promoted in secondary schools in Kenya thus the need for strategies that can promote them.
- v. HIV & AIDS education programme in secondary schools derive its guidelines for intervention promotion strategies mainly from the AIDS Education syllabus and two resource books "Bloom and Doom: Your Choice" and "AIDS Education Facilitators' Handbook, an AIDS Education project for Youth in and out of school".

#### 1.10 Theoretical Framework

The theory that was used in guiding this study was the Ecological Systems Theory which was developed by Urie Bronfenbrenner from the late 1970s up to 2004 (Bronfenbrenner 1979; 1990; 1998; 2004). The theory acknowledges that humans don't develop in isolation, but in relation to their family and home, school, community and society. Each of these ever-changing and multilevel environments, as well as interactions among these environments, is key to development. The theory led to new directions in basic research and to applications in the design of programs and policies affecting the well-being of children and families. Bronfenbrenner's concept of the ecology of human development, however, viewed these environments - from the

family to current society and the times - as nested settings called subsystems in which a person develops over time throughout the life course. (Bronfenbrenner, 1979)

Bronfenbrenner proposes that especially in the early phases, and to a great extent throughout the life course, human development takes place through processes of progressively more complex reciprocal interaction between an active evolving biopsychological human organism and the persons, objects, and symbols in its immediate environment. To be effective, the interaction must occur on a fairly regular basis over extended periods of time. Such enduring forms of interaction in the immediate environment referred to as proximal processes, are the "the primary engines of human development." (1998).

The ecological environment is conceived as a set of nested structures each inside the other and starting from the innermost, include the microsystem; the mesosystem; the exosystem and the macrosystem, with the chronosystem, a function of time and transitions that take place across these subsystems. The subsystems and their interactions as conceptualized from this theoretical framework are illustrated in Figure 1.

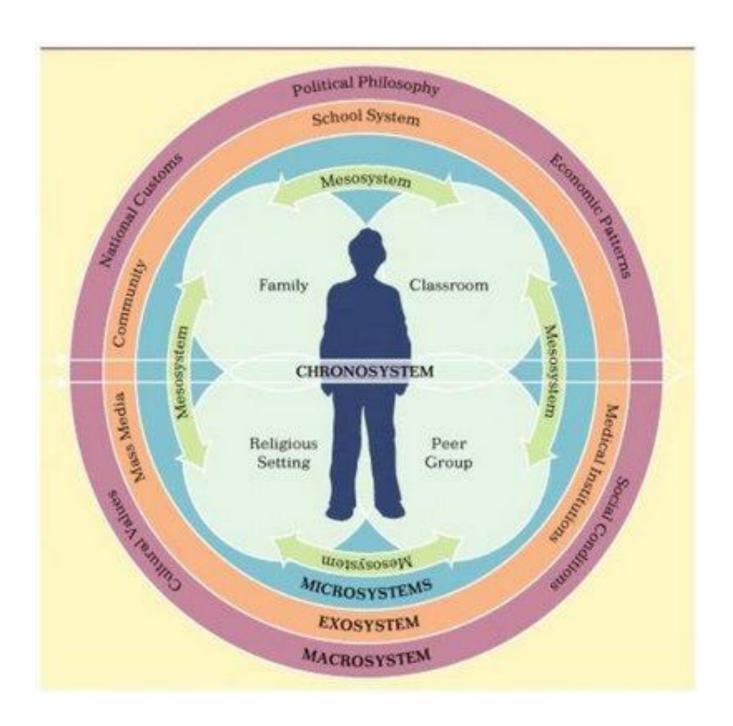


Figure 1: An Illustration of The Ecological Systems Theory developed by Urie Bronfenbrenner (1979; 1990; 1998; 2004) Showing the Interaction between the Subsystems. Derived from Ruby Bridges (2012) Project Cornerstone: Through my Eyes and Ruby Bridges, ABC Year 3, Lesson 5.

According to Bronfenbrenner and as illustrated in Figure 1, the theory is person centred thus it begins with a focus on the person's experiences because these are the "engines of development". The current study puts this into perspective by giving the students the opportunity to establish their preferences on intervention promotion strategies for HIV & AIDS prevention. This would be an important basis on which to design and plan HIV & AIDS education programs that would be effective in developing and or modifying behaviour. The present study acknowledges that there must be other players to enable success of the program and being that the program is conducted in schools, teachers are key thus getting their input on what would work for the youth is also necessary. This would ensure consistency in coming up with intervention promotion strategies that resonate with the students and still have approval from the teachers.

The interventions that the current study focuses on namely counselling, VCT, parental involvement, peer involvement and condom use promotion are known to necessitate HIV & AIDS preventive behaviour irrespective of the youths' varied backgrounds. The varied backgrounds amongst the youth include their socio economic status, gender, the stage of sexuality – whether sexually active or not among other but irrespective of this, the interventions give the youth opportunity to develop their potential to embrace HIV & AIDS preventive behaviour particularly abstinence and condom use. In appreciating the diversity among the youth and even teachers and the fact that it could be a basis of divergent views among these respondents, the study sought to determine the difference in preferences on the intervention promotion strategies between student and teachers; and also on the basis of the gender of the students.

The microsystem is the setting in which the individual lives. It includes a pattern of activities, social roles and interpersonal relations experienced by the developing person in a given face to face setting with the particular physical, social and symbolic features that invite, permit, or inhibit engagement in sustained, progressively more complex interaction with, and activity in, the immediate environment. In the current study, the school is the major immediate environment, however, the family and peer groups cannot be ignored since they are part of the immediate environment that the youth in school interact with. In order to establish the intervention promotion strategies that the youth preferred, the study focused on the areas of information provision, service provision and awareness creation. The service providers and awareness creation entities from which the students and teachers established their preferences were mostly drawn from the students' immediate environment. According to Bronfenbrenner the frequency and quality of the interactions are important influences to a person's development. In light of the fact that the youth would interact more frequently with the teachers, peers and parents, these form important resource from which to identify intervention promotion strategies that could be utilized to ensure the youth get correct and consistent information and skills for HIV & AIDS prevention.

The mesosystem is about the relations between microsystems or connections between contexts. The mesosystem comprises the linkages and processes taking place between two or more settings containing the developing person and describes how they work together for the sake of the being. In the context of the current study, the student-parent, the student-teacher and the student-student interactions are necessary to enable the youth in school embrace HIV AIDS preventive behaviour especially abstinence and condom use. When these systems offer conflicting lessons,

it hinders behaviour change and or modification. In order to ensure that the linkages are utilized optimally to enable HIV & AIDS preventive behaviour by use of relevant intervention strategies, there is need for concerted efforts from the various settings namely the schools, home and health facilities so that there is consistency in provision of knowledge and skills.

The exosystem comprises the linkages and processes taking place between two or more settings, at least one of which does not contain where the developing person lives, but in which events occur that indirectly influence processes within the immediate setting in which the developing person lives. The exosystem level includes the other people and places that the person may not interact with often themself but that still have a large effect on them. In the context of the current study, the media, health facilities and the neighborhood are among such entities. In view of the fact that HIV & AIDS prevention initiatives cannot ignore the interactions the youth in school have with the media, health facilities and the community, intervention promotion strategies from among these entities were also part of the choices from which the youth drew their preferences.

The macrosystem consists of the overarching pattern of micro-, meso-, and exosystems' characteristic of a given culture or subculture, with particular reference to the belief systems, bodies of knowledge, material resources, customs, lifestyles, opportunity structures, hazards, and life course options that are embedded in each of these broader systems. The macrosystem includes things such as the relative freedoms permitted by the national government, cultural values, the economy and conflicts therein. The macrosystem may be thought of as a societal blueprint for a particular culture or subculture. This formulation points to the necessity of going beyond simple labels of class and culture to identify more specific social and psychological

features at the macrosystem level that ultimately affect the particular conditions and processes occurring in the microsystem. In the context of the present study, policies and legislation cannot be ignored. Of particular interest to the current study was the HIV & AIDS curriculum which is the major reference point when conducting HIV & AIDS education programmes in schools. Therefore one of the objectives of the present study was to identify which intervention promotion strategies preferred by students and teachers were addressed in the HIV &AIDS curriculum. This would ascertain whether the curriculum is relevant to the needs of the students.

The chronosystem is the patterning of environmental events and transitions over the life course, as well as sociohistorical circumstances. Traditionally in the study of human development, the passage of time was treated as synonymous with chronological age. However, in this theory, time does not appear merely as an attribute of the growing human being, but also as a property of the surrounding environment not only over the life course but across historical time for instance changes over the life course in family structure, socioeconomic status, employment, place of residence or the degree of hectiness and ability of everyday life. The present generation of youth has undergone various changes overtime including the breakdown of traditional networks of grandparents, aunts and uncles that were a great resource in behaviour development especially on sexuality issues. Additionally advancement in technology has brought in novel ways of reaching the youth through social media and mobile telephony thus can be exploited in enhancing behaviour development and or modification among the youth. These are important considerations when identifying intervention promotion strategies and also may have an influence on the factors that influence the choice of the strategies.

According to Bridges (2012) the policy makers should ensure that the youth have all the experiences they need in the micro system setting and help strengthen the linkages. A system is about relationships as much as about discrete programs and factors therefore developing connections between these kind of influences to create a true system where all persons have all they need by focusing on what people need and not the characteristics of those who seem to have the problem is imperative. This begins with establishing the child's experience across settings rather than looking only within individual settings

### 1.11 Definition of Terms

*Emuhaya Sub County* refers to both Luanda and Emuhaya Sub counties which though by the time of this study had been separated in terms of boundaries, administratively operations were still being carried out together till after June 2016.

*Form four* refers to the fourth year of study in secondary schools in Kenya.

HIV & AIDS education refers to the subject that is taught in Kenyan schools with the aim of promoting HIV & AIDS prevention. Though referred to as AIDS education in Kenyan schools, the term has been used to clearly avoid any other connotations that could be occasioned by the use of the word "AIDS" that has more than one meaning. The name of the subject differs in scope in different countries and other names used to describe similar subject include sex education, Reproductive health Education, Family Life Education, School based sexual health education among others.

HIV & AIDS education programme refers to activities undertaken in schools whether in or out of class to necessitate provision of knowledge and skills on HIV & AIDS education to the school going youth.

*Intervention* is used mainly to refer to the organized activities that have been known to enhance HIV & AIDS prevention among the youth (FOCUS, 2001). The specific interventions that this study focused on are condom use promotion, counselling, VCT, parental involvement and youth involvement.

Intervention promotion strategies refer to initiatives from curriculum based HIV & AIDS education, social marketing and mass media, community outreach, youth centres, peer programmes, school/health facility based health services and private sector that can promote interventions for HIV & AIDS prevention.

*Kenya Institute of Education* (KIE) refers to the Kenyan entity which has the mandate of developing curriculum for use in learning institutions whose name has since been changed to Kenya Institute for Curriculum Development (KICD)

**Preferences** refers to the students' and teachers' rankings on the given strategies' ability to enhance HIV & AIDS prevention

Service providers refers to the various individuals who have been identified to have the potential to disseminate specific information and services relevant to the interventions that have the potential for HIV & AIDS prevention

#### **CHAPTER TWO**

### LITERATURE REVIEW

# 2.1 Intervention Promotion Strategies for HIV and AIDS Prevention among Youth

Kirby et al. (1991), did a study on an educational program, "Reducing the Risk", in forty-six high school classrooms rural and urban Northern California in the United States of America (USA). The primary focus of the intervention was development of attitude and skills that would help the students prevent pregnancy and transmission of STDs including HIV. The program employed sixteen 45-minute lessons emphasized avoidance of unprotected sex either by abstinence or use of condoms. The classes employed use of role-play to build skills and self-efficacy. The comparison group received existing sex education program of equal length. The study sample comprised 758 high school students – 53% female and 47% male from ninth grade to twelfth grade aged 13 to 18 years old. Data collected at 18 months post-intervention, found delayed sexual initiation and increased use of condoms especially among those sexually inexperienced at baseline. Hubbard et al., (1998) replicated the same study in urban and rural Arkansas with similar results.

Jemmott, (1992); J. B. Jemmott, L. S. Jemmott, Fong and McCaffree, (1999) and J. B. Jemmott, L. S. Jemmott, Fong and Morales (2010) conducted three studies on a program "Be Proud! Be Responsible!" that was geared towards behaviour modification and building knowledge, understanding and a sense of responsibility regarding STD/HIV risk in vulnerable youth. The intervention was designed to influence knowledge, beliefs and intentions related to condom use and sexual behaviours such as initiation and frequency of sexual intercourse. The curriculum had six modules each to be delivered in one hour sessions. The program was delivered through and

was highly participatory and interactive. The initiative was delivered by a trained adult facilitator with the ability to work with youth, relate to them and their life circumstances and believe in the youth and their resilience. The three studies were conducted subsequently in three sites each with an independent study sample.

Jemmott et al (2010) conducted a third study on the intervention "Be Proud! Be Responsible" in eighty-six community based organizations in New Jersey and Philadelphia both in the U. S. A. The study sample was 1.707 English speaking youths of ages 13 to 18 years with 90 % of their population being African American. The sample consisted of 56% female and 44% male. The study design was a randomized control trial in which half the study participants were randomly selected to implement the "Be Proud! Be Responsible!" intervention and half were randomly selected for a control group that received a general health promotion intervention on heart disease, stroke, hypertension and cancer. Surveys were administered at baseline, immediately after the six hour intervention, and three, six and twelve months after the intervention. The study findings when averaged across the three, six and twelve months follow up reported that adolescents participating in the intervention who were sexually experienced at baseline reported more consistent and frequent condom use in the previous three months before each follow up. The study did not find any statistically significant program impacts on frequency of sexual intercourse in the past three months or condom use at last intercourse.

Philliber, Williams Kaye, Herrling and West (2002) conducted a study on "The Carrera Adolescent Pregnancy Prevention Program" in NewYork City. The initiative used a long term, holistic approach to empower youth, to help them develop personal goals and the desire for a

productive future, in addition to developing their sexual literacy and educating them about the consequences of sexual activity using individual counselling, case management and crisis intervention. The program recruited boys and girls ages 11-12 years old and followed them through high school and beyond. The program was guided by a philosophy that sees youth as "at promise" instead of "at risk" and worked to develop a participant's capacity and desire to avoid pregnancy. Parent Family Life and Sexuality Education was also included to facilitate effective communication between parents and or guardians and their children. The sample comprised 484 adolescents - 55% female and 45% male of whom 56% were African American, 42% Hispanic, 2% some other race or ethnicity. The study design employed was randomized controlled trial. One half of the study participants were randomly selected to participate in the CAS-Carrera program. The other half were randomly selected to participate in each agency's regular youth programs. Surveys were administered before the program began (baseline) and then annually for three years. Three years after the program started: Female adolescents participating in the intervention were significantly less likely to report having been pregnant or being sexually active. The study found no statistically significant program impacts on pregnancy or sexual activity for male participants.

Flay, Graumlich, Segawa, Burns and Holiday (2004) conducted a research on effects of two prevention programs on high-risk behaviors among African American youth. "Aban Aya Youth Project" focused on abstinence and STI prevention in twelve low income high-risk metropolitan schools in Chicago, USA. The curriculum provided accurate information about risky behaviours like unsafe sex, violence, alcohol and drug use; changes student perception of acceptable behaviour and alter dangerous norms like carrying weapons, drug trafficking, sexual activity and

fighting. Pedagogy components included lectures, group discussions, role plays, videos, games, quizzes, public service announcements and anonymous boxes. Homework was at times given to the students some of which could involve parental participation. The project involved an average of 19 lessons annually taught in class by a health educator for 40-45 minutes. During evaluation, Flay et al (2004) used a study sample consisting of 1, 153 fifth through eighth grade students with a mean age of 10.8 years consisting 50.5 % female and 49.5% male was used. African Americans accounted for 91% of the sample. Using cluster randomized trial, four schools were randomly chosen to implement the Aban Aya curriculum, four were randomly chosen to implement the Aban Aya curriculum plus additional school and community support programs, and four were randomly chosen for a control group that implemented a general health curriculum focused on nutrition, physical activity, and general health care. Data were collected from surveys administered to study participants in the fall and spring of fifth grade and then annually in the spring of sixth, seventh, and eighth grades. When the program ended in the spring of eighth grade: Boys participating in the intervention were significantly less likely to report recent sexual intercourse. The study found no statistically significant program impacts on sexual intercourse for girls.

Coyle, Kirby, Marin, Gomez and Gregorich (2004) studied the intervention "Draw the Line/Respect the Line." The motto to the program was "Abstinence is the safest choice; condoms are safer than unprotected sex". The research evaluated curriculum promoted abstinence by providing students in grades 6, 7 and 8 with the knowledge and skills to prevent HIV, other STD and pregnancy. The students were shown how to set personal limits and meet challenges to those limits. The 19-lesson curriculum was designed to be used either by a classroom teacher or

trained family life educator. Lessons in Grade 6 featured limit setting and refusal skills in a nonsexual context. Grade 7 examined consequences of unplanned sex, information about sexually transmitted disease, and applying refusal skills in a party context. Grade 8 featured practice of refusal skills in dating contexts, and a condom demonstration. Ideally classes were taught for 45 minutes 2-3 times a week with a class size of 10 to 35 youth. The classes were scheduled such that most youth participated in 19 classes. All classes were taught in sequence, 5 in the 6th grade, 7 in the 7th grade and 7 in the 8th grade.

Coyle et al. (2004) followed a cohort of 2,829 sixth graders who had an average age 11.5 years and comprised 50.1 % female and 49.9% male at baseline, for 36 months. The cohort consisted 59.3% Hispanic, 16.5% white, 15.9% Asian, 5.2% African American, and 3.1% from other races. The study design was cluster randomized trial in which ten schools were randomly selected to implement Draw the Line/Respect the Line and nine were randomly selected for a control group that continued their regular school programming. Surveys were administered before the program in spring of sixth grade (baseline) and then annually in spring of seventh, eighth, and ninth grades. During the second year of the program in the spring of seventh grade: Boys participating in the intervention were significantly less likely to report ever having had sexual intercourse and having had sexual intercourse during the previous 12 months. They reported a lower frequency of sexual intercourse and having had fewer partners in the previous 12 months. The study found no statistically significant program impacts for girls on any of these outcomes. At the end of the program in the spring of eighth grade: Boys participating in the intervention were significantly less likely to report ever having had sexual intercourse and having had sexual intercourse during the previous 12 months. They reported a lower frequency of sexual intercourse and having had fewer sexual partners in the previous 12 months. The study found no statistically significant program impacts for girls on any of these outcomes.

Downs et al (2004) conducted a study on an intervention dubbed "17 Days" that was formerly known as "What Could You Do?" The intervention was a theory based interactive video (DVD) designed to educate young women about contraception and STDs. The DVD presented different scenarios involving decisions that young women face in relationships, identified choice points, suggested risk-reduction strategies, and allowed viewers to practice what they would do in a similar situations through frequent use of cognitive rehearsals. The video consisted of four vignettes, a condom demonstration and three mini documentaries. The vignettes focused on reproductive health and were divided into four related story lines, each with a unique set of issues and possible outcomes. The mini documentaries lasted 5-7 minutes each and focused on anatomy, STDs and contraception. Each mini documentary presented real life stories and footage relevant to the topic; expert commentary from health care providers, clinicians, scientists, teachers among others; and graphic animations of anatomy and other medical subjects. Privacy during viewing was ensured and each subject went through the program at their pace. The ideal program dosage included viewing one complete vignette and the condom demonstration at baseline, 3rd, 6th, and 18th month booster of viewing one additional vignette and one mini documentary.

The study by Downs et al (2004) was conducted in four clinic-based health care sites in Pittsburgh, USA. The study sample was 300 urban adolescent females of ages ranging from 14 to 18 years who were sexually experienced in six months before study enrollment. Of these 75%

were African Americans, 15% white and 10% other populations. Randomized controlled trial was used with the participants distributed into three groups: a treatment group that watched the video; a control group that received the same information from the video but as a book and a control group that received commercially-available brochures on STD risk. Surveys were administered immediately before the intervention and at follow-up conducted 3 and 6 months after the intervention. Biological testing for chlamydia was conducted at the six month follow-up. Three months after the intervention, participants who watched the video were more likely to report having been abstinent. The study found no statistically significant impacts on self-reported condom use in the past 3 months. Six months after the intervention, participants who watched the video were less likely to report having been diagnosed with STD. The study found no statistically significant program impacts on rates of abstinence and self-reported condom use in the past 3 months, or biological tests of chlamydia.

Coyle et al. (2006) developed a program "All4You" whose goal was to reduce the number of students who had unprotected sexual intercourse which is associated with among others increased risk to HIV. The target audience was 998 students in 24 alternative high schools aged 14-18 years, 63% male and 37% female, located in four large urban counties in Northern California in the United States of America. The program consisted of two primary instructional components that were integrated and delivered as a 14-session program of about 26 hours implemented 2-3 times a week for a period of 5 to 7 weeks. One of the components was a 9-session skill based HIV, other STD and pregnancy prevention program delivered in classroom for a total of 13.5 hours with each session lasting between 70-90 minutes. Additionally there were five service learning visits in the community for a group size of between 10 to 20 students

lasting a total of 12.5 hours with each session requiring at least 140 minutes. The sessions used varied interactive pedagogical techniques including role play, games, small group work, brain storming, mini lectures, videos, guest speakers, music, pamphlets, small gifts like pens with visual cues to reinforce information and involved use of adult chaperones to monitor and motivate student engagement at service sites.

In the study by Coyle et al. (2006), thirteen schools were randomly selected to implement the intervention and eleven were selected for the control group. Surveys were administered to the study sample of 998 students at baseline and 6,12 and 18 months after baseline. At six months after baseline, students participating in the intervention reported significantly lower frequency of sexual intercourse and intercourse without a condom in the previous 3 months. However, there were no statistically significant impacts on the number of sexual partners and on number of partners without a condom. Twelve months and eighteen months after baseline, no statistically significant program impacts were found.

Villarruel, J. B. Jemmott and L. S. Jemmott (2006) evaluated a program dubbed "¡Cuídate! (Take Care of Yourself)".which was a culturally tailored program designed specifically for Latino youth. The program was an adaptation of the Be Proud! Be Responsible! program. "¡Cuídate!" emphasized Latino cultural beliefs to frame abstinence and condom use as culturally accepted and an effective way to prevent unwanted pregnancy and sexually transmitted diseases, including HIV/AIDS. The focus of "¡Cuídate!" was to increase each participant's skill level and self-efficacy in communicating and negotiating with sexual partners about abstinence and condom use. The program also helped teenagers to develop the technical skills they needed for

correct condom use. The intervention provided important information about the causes, diagnosis, transmission, and prevention of HIV and STDs, as well as the risk of HIV infection for Latino youth. The program was designed for adolescents 13 to 18 years of age and included the following: Six 1-hour modules delivered over two or more days; Small mixed gender groups of 6 to 10 adolescents; Use of culturally relevant role-plays, music, video games, and hands-on practice to allow participants to practice skills they had learned. The program served neighborhoods in northeast Philadelphia, and sessions were conducted on Saturday in either English or Spanish.

Villarruel et al (2006) recruited a sample of 684 Latino adolescents aged between 13 to 18 years old from three neighborhood high schools and community-based organizations. Of these, 55% were female and 45% male; and 85% Puerto Ricans. Randomized controlled trial was used. The study was conducted with multiple groups of youth over a 5-month period. For each group, about half the participants were randomly selected to receive the eight-hour intervention over two consecutive Saturdays, and half were randomly selected for a control group that received a general health-promotion curriculum on diet, exercise, and substance use. Surveys were administered immediately before the program (baseline), immediately after the program (posttest), and at 3, 6, and 12 months after the program. Averaged across the 3, 6, and 12-month follow-up surveys, adolescents participating in the intervention were significantly less likely to report having had sexual intercourse and having had multiple sexual partners in the previous three months. They reported significantly fewer days of unprotected sex and were more likely to report using condoms consistently. The study found no statistically significant program impacts

on condom use at last sex or a measure of the proportion of days of sexual intercourse that were condom protected.

Hawkins, Kosterman, Catalano, Hill and Abbott (2008) evaluated an intervention named "Raising Healthy Children." The program was a social development approach to positive youth development. The approach incorporated school, family and individual programs to promote key elements that research has shown are critical for creating strong connections and bonds that children need to succeed in school and life; opportunities, skills, and recognition. The program created strong connections in students' lives by committing to comprehensive school wide action to strengthen instructional practices and family involvement; affect the entire social environment of the student, classroom, family, and peers; develop a broad base of support and teamwork; and bring results that are long lasting.

Hawkins et al (2008) set the study in eighteen public elementary schools in Seattle, Washington, USA. Out of the 376 students who enrolled in the evaluation as elementary school students, 46% were white, 26% African American, 26% Asian American, 6% Native American; and female with 47% male. Quasi-experimental design was used. The study compared 156 students from elementary schools that implemented the programs in grades 1 through 6 with 220 students from elementary schools that did not have the program. Surveys were administered before the program started and at long-term follow ups conducted when the sample members were 18, 21, 24, and 27 years old. When the study participants were 18 years old: Participants in the intervention were significantly less likely to report ever having had sexual intercourse and reported significantly fewer lifetime sexual partners. The study found no statistically significant program impacts on

lifetime pregnancy or births. When the study participants were 21 years old: Participants in the intervention reported a significantly higher age at first intercourse and significantly fewer lifetime sexual partners. Female participants were significantly less likely to report a lifetime pregnancy or birth. Among the male subjects the study found no statistically significant program impacts on frequency of condom use, condom use at first intercourse, STD diagnoses, or causing a pregnancy. When the study participants were 24 years old: Participants in the intervention were significantly less likely to report having ever been diagnosed with an STD. The study found no statistically significant program impacts on lifetime number of sexual partners, number of sexual partners in the past year, condom use, pregnancy, or births. When the study participants were 27 years old: Participants in the intervention were significantly less likely to report having ever been diagnosed with an STD. The study found no statistically significant program impacts on lifetime number of sexual partners, number of sexual partners in the past year, condom use, pregnancy, or births.

Kirby, Baumler and Coyle (2011) conducted a study on an intervention dubbed "Safer Choices" which was a multi-component STD, HIV and teen pregnancy prevention program for high school students. The program aimed to reduce the frequency of unprotected sex among high-school-age students by reducing the number of sexually active students and by increasing condom use among students who are sexually active. It sought to motivate behavioral change by increasing students' knowledge about HIV and STDs as well as by promoting more positive norms and attitudes toward abstinence and condom use at the student, school, and community levels.

The program evaluated by Kirby et al. (2011) began with schools establishing a Health Promotion Council, composed of teachers, students, parents, administrators, and community members. The Council had the lead responsibility for organizing and planning the components of the program. The two-year curriculum consisted of 11 lessons in level 1, taught during 9th grade, and 10 lessons in level 2, taught during 10th grade. Each school convened a student organization to reinforce the curricular messages in the broader school environment through school-wide activities, events, and services. Suggested activities included publishing articles in the school newspaper, presenting dramatic skits, or organizing speakers and assemblies. Schools engaged parents in the program's goals through newsletters, child-parent discussions on sexuality topics, and parent education workshops or speakers. The program had a component that sought to connect students with community resources such as local information hotlines, clinics, and testing services.

The study by Kirby et al (2011) involved 20 high schools in South Eastern Texas and Northern California. The sample comprised 3,869- 9<sup>th</sup> grade students comprising 30.5% white, 17.9% Asian, 17.0% black, 27.4% Hispanic, 7.2% other races or ethnicity with 52% being female and 48% male. Using cluster randomized trial study design, ten schools were randomly chosen to implement the "Safer Choices" program and 10 were randomly chosen to implement a standard five-session knowledge-based curriculum about the consequences of unprotected sex, contraception, STDs, and HIV. Surveys were administered to incoming 9<sup>th</sup> grade students (baseline) and at the end of their 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> grade years. When the curriculum ended in 9<sup>th</sup> and 10<sup>th</sup> grades: Students participating in the intervention who were sexually experienced at baseline were more likely to have used a condom and or an effective contraceptive method the

last time they had sex. A year after the curriculum ended in the spring of 11th grade: Program impacts on condom use and contraceptive use were no longer statistically significant.

Tortolero et al (2010) studied an intervention "It's Your Game: Keep it Real" involving 7th and 8<sup>th</sup> grade female and male students aged between 12 and 14 years in South East Texas, U. S. A. The program was a classroom and computer based HIV, STI and pregnancy prevention program which consisted of twelve-50 minute lessons each delivered at 7<sup>th</sup> and 8<sup>th</sup> grade. The curriculum was delivered to a classroom size of 30 to 35 students. In each grade, the program integrated group-based classroom activities with personalized journaling, parent-child homework activities and individual based activities that were computer based. The curriculum was guided by the Social Cognitive Theory. The study setting involved ten middle schools with a study sample of 3,007 seventh grade students consisting of 44% Hispanic, 42.3% African American, while 13.7% comprised of all others. The male constituted 41% and female 59% of the sample. The study design was the cluster randomized trial. Five schools were randomly selected to implement the intervention while five other schools were the control group that continued with their regular health classes. Surveys were administered before the program (baseline), after 8<sup>th</sup> grade and after 9<sup>th</sup> grade. At the end of the program after 9<sup>th</sup> grade, students participating in the intervention who were sexually inexperienced at baseline were significantly less likely to report having initiated sexual activity. Program impacts examined on measures of attitude towards sex and self-efficacy were positive.

Gold et al. (2016) conducted a study in Pittsburgh, Pennsylvania U. S. A. that sought to examine a computer-assisted, counselor-guided motivational intervention (CAMI) aimed at reducing the

risk of unprotected sexual intercourse. Inclusion criteria included being a female adolescent between the ages of 13 and 21 years, having access to a telephone, and being able to sign informed consent. A sample of 572 was randomized to either the CAMI (n = 286) or Didactic Educational Counselling DEC (n = 286) condition stratified by age, race, and sexual history. A trained female research assistant screened female adolescents in the clinic or by telephone. After enrollment, participants in both groups completed the following assessments: a 90-day Timeline Follow-back calendar (a well-validated and reliable self-report assessment tool) recording their sexual, contraceptive, and substance use behaviors (TLFB), and a computerized assessment to collect demographic information, sexual, contraceptive, pregnancy and STD history, psychological assessments of mood, substance use, abuse history, and measurement of the four Trans-theoretical Model constructs of stage, decisional balance, self-efficacy, and processes of change for condom use and other contraceptive use. After completing the baseline assessment, participants were randomized (stratified by age, race, and by sexual history of ever or never sexually active) to one of two conditions (DEC or CAMI) and immediately received the assigned intervention.

Gold et al (2016) used randomized controlled trial to assess the efficacy of a computer-assisted, counselor-guided motivational intervention using MI and constructs from the Trans-theoretical Model, compared to a didactic pregnancy and STD preventive counselling, on female adolescents' sexual behaviors. The assessment was rated as easy to understand and most participants felt comfortable disclosing information. The findings indicated that for those participants who completed the study, the CAMI intervention, compared to the didactic counselling, significantly increased the likelihood of fully condom-protected sex in this

population. Future studies are recommended to modify the CAMI, including shortening the length of the assessment and intervention as recommended by study participants, to reduce attrition, and learn if the as-treated findings can be replicated with a heterogeneous sample of sexually active high-risk young women. Given the staggering rates of STD acquisition and unintended pregnancies among female adolescents, preventive interventions that are acceptable and effective in targeting sexual risk behaviors and reducing incidence of HIV/STDs and unintended pregnancy in this vulnerable population are needed

Murray et al., (2000) conducted an evaluation of an integrated youth development program for urban youth in 7th-12th grade in Santiago, Chile. The content of the education included healthy relationships, sexuality, STIs, gender, risky behaviours such as drug abuse and smoking. A local adolescent's research and service group provided additional information and referrals to clinics. In the three follow-ups done the study found out that the program increased knowledge of human reproduction and STIs and also enhanced contraceptive use among youth in the program as compared to the control group not in the program. Parents, teachers and students supported the curriculum. Their support could have enhanced the success of the program.

Wilson, Davis, Albertina, Mparadzi and Lavelle (1991) conducted an experimental AIDS prevention intervention to student teachers in Zimbabwe. The intervention group received one skill- based education session lasting 90 minutes on condom demonstration, role playing, large and small group psychodramas and video. The control group received an information based session for 1 hour. Each group had a sample size of 42 subjects. At the four month follow-up, the experimental group was more knowledgeable about condoms, and their correct use, had higher

efficacy scores and perceived fewer barriers to protective action. Youth in the intervention group also reported fewer partners and reported fewer episodes of unprotected sex in the last month than the control group.

Fawole, Asuzu, Oduntan and Brieger (1999) evaluated the effectiveness of a school-based AIDS education program for secondary school students in the local government area of Ibadan, Nigeria. The study compared the knowledge, attitude, and sexual risk behaviors of 233 senior students who received comprehensive health education intervention with 217 controls. A baseline survey was conducted prior to the implementation of the HIV/AIDS education sessions. Evaluation of the intervention was carried out after 6 months. Baseline and end line data of the intervention and the control groups were then analyzed. Baseline data showed that there was no significant difference between the two groups as to their knowledge and attitudes on HIV/AIDS and their sexual behavior. End-line comparisons, however, reveal that the knowledge about HIV transmission and prevention was significantly higher (P 0.05) in the intervention group. Furthermore, 92.8% of the intervention students as compared to only 56.7% of the controls felt AIDS constituted a problem in Nigeria, indicating better attitudes among the intervention group. The end-line data also showed that there was a decrease in the number of sexual partners among the intervention students from 1.51 to 1.06 while it increased from 1.3 to 1.39 among the controls. Among the intervention students there was also an increase in consistent use of the condom and the use of the condom at last sexual intercourse. In conclusion, the education program was successful in improving the student's sexual practices as well as their knowledge and attitudes regarding HIV/AIDS.

Fitzgerald et al. (1999) adapted a United States of America based "Focus on Kids" program to an African setting, based it on the social cognitive theory and dubbed it "My Future is My Choice". The program involved 15-18 year old in-school youths in Namibia. The program trained facilitators for 40 hours who in turn conducted 14 after school sessions with groups of 15-20 students 2 hours a week for 7 weeks. The content emphasized abstinence and safer sex practices. Youth with in the 10 schools selected were randomly assigned to an intervention or a control group. Baseline and three post-intervention surveys were conducted within a span of one year. Chi-square tests were used in analysis. The program helped girls who had not engaged in sexual intercourse delay first sex for the span of the intervention and increased condom use among those who were sexually active but only for the 12 months of intervention as revealed by a subsequent longitudinal study. Although the program was costly, it underscored the need to make cultural adaptations to Western based programs to make them relevant to developing country settings and also address gender differences in program responses.

Kim et al. (2001) conducted a study on promoting sexual responsibility among youth in Zimbabwe. The target population comprised 10-24 year old males and female with more than half being 15-19 year olds. The study used the quasi-experimental design. Chi-square tests were used for analysis. The sample size was 1426 at baseline and 1400 at follow up. The program aimed at promoting youth responsibility by increasing risk-reducing behaviours; increasing awareness, knowledge and positive attitude towards reproductive health; increasing the use of service facilities among youth; and increasing support among leaders, policy makers and parents for reproductive health communication and services directed to young people

An intensive six month multi-media campaign using drama, radio, print media, peer educators and hot lines educated the youth on reproductive health issues and encouraged them to seek contraceptive and health care services. The project also improved the quality of youth counselling at health facilities by training service providers from youth organizations in interpersonal communication and youth counselling skills. At follow-up, one year later, the radio program had broad reach especially in rural areas and appeared to have generated discussions among the youth as well as between the youth and parents. Improved levels of knowledge on contraception and reproductive health issues were observed especially in the intervention sites. Additionally use of contraceptives and clinic services increased significantly in campaign sites. The study affirmed the importance of involving youth in every aspect of program design and implementation, use of counselling in overcoming reproductive health challenges and community involvement.

Mason-Jones (2011) conducted a quasi-experimental study whose purpose was to evaluate the effectiveness of a government-led peer education program on the self-reported sexual health behavior and related psychosocial outcomes of adolescent students in public high schools in the Western Cape of South Africa. Grade 10 students (n = 3934), at 30 public high schools (15 intervention, 15 comparison) were recruited to the study. In the intervention schools, peer educators were recruited and trained to provide information and support to their fellow students. Sexual health behaviors and related psychosocial outcomes of students were measured at baseline and at follow up 18 months later. Comparisons were made between those in the intervention and comparison group schools. We were unable to detect a significant difference in the age of sexual debut, use of condoms at last sex, goal orientation, decision-making or future

orientation for students in the intervention group as compared to students in the comparison group. The findings suggest that the peer education program was not effective in reducing the age of sexual debut or condom use. Issues around the implementation of the program suggested that this was sub-optimal. Governments who advocate widespread use of peer education as an approach needed to recognize barriers to implementation and ensure ongoing monitoring and evaluation of effectiveness and cost effectiveness.

Shuey et al. (1999) studied an education program that involved 400, 13-14 year old primary school youths in Soroti District Uganda. The education program aimed at increasing access to information and resources for healthy sexual decision making, improving communication between the youth about sexuality and improving quality of the school system to implement the education program. The sensitivity training conducted for local leaders and headmasters; carried out survey on sexuality issues to inform program design; increased supervision of school health programmes; facilitated meetings of parents, teachers and community leaders to discuss health education issues; and provided training to teachers. There was increased communication with sexual partners, increased communication between peers and teachers, reduced unprotected sexual activity and increased the agreement that abstinence was good. The program proved that interaction with major stake holders like community leaders, teachers, parents and peers enhanced the success of HIV & AIDS prevention programs The program also underscored the need to have policies that support it.

The literature reviewed was on studies for 21 intervention programs developed to ensure enhanced reproductive health among the youth, a similarity they share with the present study though the current study specifically dwelt on HIV & AIDS prevention and not the broad reproductive health. The majority of the interventions except seven were based in the USA. Of the seven, one was in Chile (Murray et al., 2000); and six in Africa specifically Zimbabwe (Wilson et al., 1991; Kim et al., 2001); Namibia (Fitzgerald et al., 1999); South Africa (Mason-Jones, 2011); Nigeria (Fawole et al., 1999); and Uganda (Shuey et al., 1999). Despite the fact that six of the studies were in African countries, none of them was conducted in Kenya like the current study. A considerable number of the initiatives just like the current study targeted learning institutions majorly high schools as their study sites, however, others involved health facilities (Jemmott, 1992; Downs et al., 2004; Gold et al., 2016) Community based Organizations (Villaruel et al., 2006; Jemmot et al, 2010); and agencies targeting youth (Wilson et al, 1991; Jemmott, 1992; Philliber, 2002).

Most of the interventions majorly employed various strategies to promote abstinence and condom use. However, programs documented by Kim et al. (2001); Kirby et al. (2011) and Gold et al (2016) also emphasized on counselling. Peer involvement was a component in studies by Kim et al. (2001); Mason Jones (2011); Hawkins et al. (2008); and Kirby et al. (2011). Shuey et al. (1999); Kim et al. (2001); Hawkins et al. (2008) and Kirby et al. (2011) studied programs that had parental involvement component included. The present study established strategies that could enable promotion of condom use, peer involvement, parental involvement, counselling and VCT thus it encompassed all the strategies that were addressed to different levels by the reviewed initiatives apart from abstinence which was not included in the current study. The present study established the components from various strategies namely social marketing and mass media, community outreach, youth centres, peer programmes, school/health facility links

and private sector initiatives preferred by students and teachers for inclusion in school HIV & AIDS programmes.

The study by Fitzgerald et al. (1999) put into consideration the need for culture appropriateness, training of disseminators, was theory based and lasted a sufficient length of time (at least 14 hours) as per the recommendations of Kirby (2001). However, the cited study did not specify the strategies they involved apart from the curriculum based education strategy. The study was adapted for an African setting, Namibia, a characteristic it shares with the present study which is based in Kenya. However, the fact that both are African countries does not imply that the cultural convictions that exist in the various cultural settings with in these countries are the same.

The study by Wilson et al., (1991) used interactive methods of pedagogy which are known to enhance learning due to the active involvement they accord the students. However, the intervention time of one session lasting 90 minutes was insufficient thus it cannot be concluded with certainty that the HIV & AIDS preventive behaviours that the experimental group had embraced were as a result of the intervention. Gall, Borg and Gall (2003) recommends that about 15 observations per group are sufficient for an experimental research design therefore a sample size of 42 observations per group can be considered large enough to enable statistical significance. However, Mertens (2005) argues that statistical significance does not necessarily imply that the study is practically significant. Additionally quasi-experimental research designs do not allow for probability sampling thus the findings are never representative enough to allow generalization. The present study used the mixed method design, probalistic sampling specifically simple random sampling to select a sample of 768 form four students and saturated

sampling to select the teachers. Therefore, the sample size and selection procedures will be amenable to statistical significance and practicability as well as generalization to the target population – youth in secondary schools in Emuhaya Sub County, Kenya.

The programs studied by Kim et al (2001) and Kirby et al (2011) are favourable examples of how interventions can be promoted to enable HIV & AIDS preventive behaviour among the youth using a multicomponent approach in which varied intervention strategies are incorporated into the programme. The interventions used social marketing and mass media, peer programmes, community outreach, linkages with health facilities, and a curriculum base to promote contraceptive use, counselling, peer involvement and parental involvement to provide the youth with relevant content using appropriate dissemination devices. The programme approach was interactive thus it actively involved the participants and was therefore suitable to their developmental stage. The involvement of many sub-sets of the community enhanced the programme because it ensured that the programme had cultural acceptance.

Like the cited studies by Kim et al., (2001) and Kirby et al. (2011), the present study sought to find out how the same strategies can be used to promote the interventions the cited study promoted though in a different location. Additionally, the present study sought to establish if strategies in the private sector and youth centres can be viable for incorporation into the programme. Another intervention - VCT was included in this study. The cited study used parametric tests of analysis; however, the present study used a non-parametric test to determine differences in preferences on intervention strategies between male and female students and also teachers and students. Unlike the cited studies, this study used mixed method research design

instead of quasi-experimental design and Randomized Controlled trial respectively. Despite the fact that the present study had a sample size of 768 youth which is lower than that of the cited studies by Kim et al., (2001) and Kirby et al. (2011), it was more representative for purposes of generalization because it randomly sampled the youth unlike the study by Kim et al., (2001) in which the quasi-experimental research design that does not allow for randomization was used. The present study apart from using quantitative methods of data analysis like the cited studies also used qualitative methods of data analysis by providing thick comprehensive description of various phenomena thus giving the findings of the present study an edge because of their capacity for transferability to other populations.

The study by Shuey et al. (1999) involved curriculum based education, peer programs and community outreach to ensure promotion of peer involvement, parental involvement, condom use and abstinence. The study also included training to community leaders, needs assessment to establish what is favourable to the youth. The present study focused on how the interventions in the study by Shuey et al. can be promoted apart from abstinence but will also include counselling and VCT that the reviewed study did not address. Apart from establishing the preference of the users on which initiatives from community outreach and curriculum based education which is likely this study did since it conducted a needs assessment, the present study also incorporated the students and teachers preferences to initiatives of mass media, youth centres, peer programmes, school/health facility links and private sector initiatives. The present study was carried out in secondary schools in Emuhaya Sub County, Kenya unlike the study by Shuey et al. which was conducted in primary schools in Soroti district, Uganda.

The literature reviewed on the intervention strategies employed to enhance the reproductive health of the youth including those in learning institutions does not clearly spell out if the major beneficiaries the students and the implementers – the teachers were involved in informing on the intervention promotion strategies that would be best suited in enabling students embrace HIV & AIDS preventive behaviour. Additionally, none of these studies were done in Kenya and particularly in Emuhaya Sub County. The present study sought to establish the preferences of students and teachers on intervention promotion strategies for HIV & AIDS prevention in secondary schools in Emuhaya Sub County.

## 2.2 Differences between Students and Teachers on Intervention Promotion Strategies

In looking at adolescent sexual activity according to its social construction, a comparative analysis of contextual factors affecting risk to HIV & AIDS among youth in seven developing countries points to realities and concerns as expressed by young people themselves in rapidly changing circumstances. Research recognizes the disparity between levels of knowledge and related changes in risk-taking practices and that adolescent reproductive health messages that are communicated do not, but must, address the core values, myths and social enforcement mechanisms that support the program (Mohamoud, Ali & Yinger, 1998; UNAIDS, 1999).

A study by Karim, Magnani, Morgan and Bond (2000) concluded that adolescent behaviors are influenced by a large number of factors operating at several levels (individual, family, community and society). Ssetswe (2010) in a metaanalysis of interventions that work for the youth to enable HIV & AIDS prevention concluded that because of the number and diverse nature of factors related to adolescent behaviors, it is unlikely that a single "magic bullet"

intervention will be found to markedly change adolescent sexual risk-taking therefore justification for programs that target multiple antecedents via multi-component, community-based interventions. Karim et al. (2000) observed that, young men were more likely than adults to have met their partners at school which means that community-based or school-based reproductive health interventions are probably the best ways to reach most young adults.

Young men and women around the world state that most of what they learn about sex is neither from their schools nor families but from their friends, peers, books, magazines and the mass media. In many cases, the information from these sources may be misleading, incomplete or wrong. Around the world the young people state that they learn too little too late about sex and sexuality (Michielsen et al., 2012; Lema, 1990; Okumu & Chege, 1994 and Kilonzo, 2016).

Pupil related problems are the main challenge that school counselors face in their endeavour to develop guidance and counselling programs. Students are unwilling to admit that they have a problem and are afraid to be seen with the guidance and counselling teacher. This is because the students have a negative attitude to counselors who due to their classroom teaching responsibilities are forced to couple it with being disciplinarians. The students also have a wrong notion on what counselling is all about. Students felt that teachers were not best placed in dissemination of HIV & AIDS education and for counselling this was because they could not uphold confidentiality. They preferred health personnel since they felt they were more versed with knowledge and their not being in frequent interaction with the students could ensure anonymity (Gitonga, 1999 & Malanda, 2008; 2010 & 2014b)

Students felt that they should be involved in the choice of school peer educators who in most cases were selected by the teachers yet they served the students thus their approval was key. They felt that the double standards displayed by some teachers where they were expected to arm them with knowledge and skills on HIV & AIDS prevention yet some had sexual relationships with students reduced their credibility of providing believable information on HIV & AIDS, providing counselling and deliberating on the best suited peer educators (Malanda, 2008).

Even young people who know how to protect themselves from HIV & AIDS often lack the social skills to do so. This is so in part because societies themselves show anxiety and embarrassment about sex. Similarly this anxiety and apprehension is exhibited by the young people – it prevents them from using condoms which initially entails negotiation, partner awareness and cooperation; fear of asking about partners sexual history for fear of endangering relationship thus concede that partner is safe rather the option of discomfort inquiring will afford them. Young people don't believe they can control their sexual or contraceptive behavior. They deny that they need protection or exaggerate the difficulty of obtaining them. Adolescents who deny their personal risk of getting HIV & AIDS can ignore HIV & AIDS prevention messages, dismiss their relevance, or think they do not bear responsibility for protection. (Walter, Vaughan, Gladis, Ragin, Kasen & Cohall, 1992).

In a study by Michielsen et al. (2012) that sought to establish the effectiveness of peer-led HIV prevention intervention in secondary schools in Rwanda, students were asked to indicate the two main channels through which they would prefer to receive information on HIV: friends ranked sixth as a preferred source of information, after radio, parents, television, teachers and medical

experts (doctors/nurses). This finding is supported by studies from other countries. Young people in Uganda prefer receiving HIV information from formal sources. They rank friends last and mass media and teachers first as preferred prevention sources (Guttmacher Institute, 2007). In Cameroon a study among urban youth shows that only 3% of respondents named their friends as people whose opinion they value, while 93% mentioned family members (Van Rossem & Meekers, 2011). A study among Canadian youth demonstrated that, although they indicate friends as their main source, young people prefer receiving sexual health information from professionals (McKay & Holowaty, 1997). A study from the United Kingdom stressed the important role of parents in sex education, and showed that young people prefer to be taught about sexual health by health professionals (HeadsUp, 2010).

According to Price and Knibbs (2009) when it comes to HIV prevention among young people, not disregarding the capacities they have, it was a very tall order to expect a young person – possibly discovering his/her sexuality him/herself - to act as an expert and guide, counsel, teach and advise peers on a personal, sensitive and complex issue as sexuality. Furthermore, when it comes to young people, the notion of 'peer' oftentimes refers to someone of the same age. This is a very simplistic notion: even though they might be of approximately the same age, this does not mean they have a similar background, similar experiences, similar values and norms. A study of a peer education drug prevention intervention found that young people value experience-based and message-based credibility more than the peer educators' personal characteristic (Shiners & Newburn, 1996 in Price & Knibbs, 2009)

Some adults including educators still think that sex education encourages sexual experimentation 15 years after international recognition of the need for education and communication in HIV & AIDS prevention. Consequently programs and campaigns are limited in what they can discuss. For instance educators at the University of Cairo in Egypt had to alter the program so as not to be accused of moral propaganda (Gawhary, 2001). A study by Malanda (2008; 2014b) reported that some teachers felt that condom promotion should not target students because condoms were a family planning method but not a means for necessitating HIV prevention. This is despite the fact that teachers were aware that students were at high to moderate risk of HIV. In interviews with 277 secondary school principals in South Africa, 60% acknowledged their students were at high to moderate risk of HIV & AIDS but only 18% of the schools offered a full sex education curriculum (UNICEF, 2000).

According to Hendrikz (1986) and Attah (2010) even though it may be unconsciously done, many teachers have been seen to focus their teaching on the boys and either to ignore the girls or at times laugh at their efforts. Therefore girls tend to underachieve academically and feel less able to compete with the boys favourably. Others tend to despair when they see their efforts being rejected. The notion is also ingrained in society. This tends to strengthen the belief that girls are inferior to themselves and to boys which reduces their self-efficacy.

While one cannot assume that all women teachers are gender-sensitive in their teaching methods, there is a specific need in some areas to recruit more women teachers who can serve as role models for girls and may make girls' parents feel more comfortable. Countries that achieve higher enrolment in primary education tend to employ a high proportion of female teachers. In

Kenya, the Strengthening Primary School Management project, funded by the United Kingdom Department for International Development, requires one of every two head teachers or principals receiving training to be a woman (Mehrotra & Richard, 1997 & UNICEF, 2003).

Studies by Amayo (1995); GOK (2004) and Kenya Institute of Education [KIE] (2003) and Malanda (2017b) report that teachers shuned counselling as part of a responsibility to their already overloaded school schedules thus do not have or create the time to address the counselling needs of the students. The teachers felt there that was selective selection of counselors on the basis of religious inclination and age and not competence. Additionally, teachers reported that most parents did not actively participate in guidance and counselling and this was an impediment to its success. The end result is that guidance and counselling programs don't function properly.

There is concern that teachers need training in order for them to be able to effectively and efficiently execute HIV & AIDS prevention programs. However, teachers feel that these trainings do not target them but education officers who supervise but do not implement the programs. Additionally, poor remuneration and an overloaded workload are issues that need to be addressed if the programs are to be successful (Nyinya, 2007).

Results of studies also suggest that, to have a substantial impact of HIV/AIDS-education programs, teachers or educators should be adequately trained before involving them in any HIV/AIDS-prevention program in a school setting (Munodawafa, 1991; Orji & Esimai, 2003 and Njue et al, 2009). A qualitative study in South Africa and Tanzania concluded that teaching

about sexuality was perceived to be challenging in terms of language and communication norms, and teaching about HIV/AIDS was perceived as challenging because teachers often need to convince students about the reality of AIDS (Helleve et al., 2009).

In 2010, a report concluded that there is a general consensus that more work for teacher-trainees is required and that without preparing teachers to work in this area, there is a limit to what can be achieved (Higher Education HIV/AIDS Programs of South Africa, 2010). Moreover, training on HIV/AIDS education has facilitated educators to breaking the silence and reducing stigma while, at the same time, equipping them to provide care and support for infected and affected learners and colleagues (Holderness, 2012). Findings of a rapid assessment in Bangladesh showed that trained teachers were more likely to participate in classroom teaching of HIV/AIDS. Despite this positive impact, almost half of trained teachers in the intervention area faced some difficulties in teaching the HIV/AIDS course, particularly during discussion on the transmission and prevention of HIV/AIDS and sex-related issues. Moreover, in the intervention area, over 50% of teachers did not use any interactive teaching method (Sarma & Oliveras, 2012).

Implementing HIV/AIDS education through the national curriculum is a challenging task, especially in developing cultural-sensitive curriculum and readiness of teachers in disseminating HIV/AIDS information to their pupils. In Bangladesh and in Kenya HIV/AIDS is a sensitive issue in the sociocultural-religious context due to its transmission primarily through sexual contact. It may, thus, be considered too controversial to be taught in a school setting (Sarma & Oliveras, 2012; Gallant & Maticka Tyndale, 2004 and Njue et al. 2009). Besides, incorporating HIV/AIDS in the national curriculum is itself a policy issue. Since education is the national

concern, strong governmental commitment to the mainstream education sector is, thus, needed in terms of both planning and advocacy as a channel of disseminating HIV/AIDS-related information (Njue et al., 2009).

According to Munodawafa (1991) eighty-three secondary school teachers and headmasters from Masvingo Province in Zimbabwe responded to a questionnaire eliciting their opinions toward implementation of AIDS prevention education programmes in the school setting. Results show that although 79 (95.2 %) teachers supported implementing AIDS prevention programmes in the school setting, teachers were divided as to what should be taught (content) and when it should be taught (timing). Specific content areas such as the use of condoms was found to be controversial and supported only by 53 (63.9%) teachers. Further, the 53 teachers could not agree as to what educational level this should be taught. These findings suggest that teachers alone cannot determine the "what" or "when" of an AIDS prevention programme in the school setting. Formation of a health council comprising of community members, school and health officials within each school district is proposed in order to receive community input. Additionally, in one study based in Kenya, providing lessons on condom use was met with strong resistance from teachers who feared that teaching students about condoms would encourage sexual activity. As a result, condom use was not included in the regular lesson plans although teachers were trained on how to respond to students' questions about condoms in a factual manner (Maticka-Tyndale, Wildish & Gichuru, 2010).

The perspective opined from studies by Mohamoud et al. (1998); and UNAIDS (1999) were based on youths' views on analysis of contextual factors affecting risk to HIV & AIDS among

youth in developing countries. Though the present study focused on the youth in a developing country, it specifically dealt with youth in schools. The study Karim et al. (2000) after establishing the several levels that influence adolescent behavior proposed the need for a multi-component approach using community and school based interventions. The present study concurs with the study by Karim et al on the need for a multicomponent approach but established strategies that were likely to enable the promotion of specific interventions namely condom use, counselling, VCT, peer involvement and parental involvement.

Lema (1990) and Okumu & Chege (1994) identified the strategies that the youth use to obtain information on sexual issues. This does not however imply that these are the strategies they prefer. The current study established the strategies that the, youth specifically those in secondary schools, prefered to use to enable promotion of HIV and AIDS prevention. However, the present study was not able to establish the ideal age to start sensitizing the youth on HIV & AIDS prevention since the study specifically targetted youth in secondary schools. Studies by Gitonga (1999) and Malanda (2008) highlighted the reasons for youths' negative attitude towards counselling. Additionally the study by Malanda (2008) reported on what the youth view as the pitfalls to the success of school peer educators and teachers in HIV & AIDS prevention promotion. The present study dtd not focus on the reasons nor pitfalls; however, it sought to establish the remedies to these pitfalls by establishing the youth's preferences on the intervention promotion strategies.

Literature reviewed from studies by Amayo (1995); Gawhary (2001); GOK (2004); Henrikz (1986); KIE (2003); Malanda (2008); Mehrotra and Richard (1997); Nyinya (2007); UNICEF

(2000) and UNICEF (2003) put in perspective the impediments that make teachers not to execute their duties efficiently and effectively especially as knowledge disseminators, role models, and HIV & AIDS education program promoters. The present study sought to establish how best teachers can execute their duty specifically as promoters of HIV & AIDS education programs by establishing their preferred intervention promotion strategies. The present study further sought to establish the differences in preferences between the teachers and students on the intervention promotion strategies for HIV & AIDS prevention. This gave insight on areas of divergence and convergence among the teachers and students who are the major users of HIV & AIDS prevention initiatives in schools either as disseminators and or consumers. In turn, the findings could be used to build consensus among these two groups and thus enhance HIV & AIDS prevention among the youth in secondary schools in Emuhaya Sub County, Kenya especially on the five interventions this study focused on.

The literature reviewed on differences of students and teachers on intervention promotion strategies pointed out the challenges faced by each of the two categories individually in their pursuit to enhance reproductive health. The cited studies did not elaborate on strategies that could address these challenges and if there were any differences between the views of students and teachers. The present study focused on a specific reproductive health challenge HIV & AIDS. Further, after establishing the intervention promotion strategies that the students and teachers preferred for HIV & AIDS prevention, the study sough to establish the differences in preference between students and teachers.

#### 2.3 Gender Differences on Intervention Promotion Strategies

Issues affecting women and girls are nearly invisible in the theories, policies and practices of development. Traditional perspectives often fail to take into account the gender issues that affect children's access to school, those related to the differences between the needs of girls and boys, and the inequities in their roles, responsibilities and identities. Without recognition of such differences, educational policies and practices lack gender sensitivity. In such cases, the behaviour and attitudes of policy makers and practitioners at best fail to meet the particular needs of boys and girls and at worst sabotage their right to an education (UNICEF, 2003).

Studies done in Latin America among youths who had not had formal sex education showed that adolescent boys were more likely than adolescent girls to know how to use a condom correctly. However despite this it is thought that men are ill informed and construe ignorance as a sign of weakness preventing them from admitting their lack of knowledge in order to seek correct information regarding HIV & AIDS prevention. Another study on 17 countries in Africa and 4 in Latin America showed that better-educated girls tended to delay having sex and were more likely to require their partners to use condoms (UNICEF, 2003).

Program planners are beginning to translate the need for gender equity into programs that more fundamentally strengthen women's ability to think and act in ways to protect themselves and enhance their well-being, face the more difficult issues of violence and immobility and address the power dynamic. Research studies related to women and AIDS confirmed the reality that women have less control than men over initiation of sex and the nature and conditions of sexual encounters. This fundamental power deficit in sexual decision-making makes women, and

especially young women, profoundly vulnerable. Yet, based on gender stereotyping, men commonly state that the responsibility for protection should be the woman's, but also insist that women be passive. Given the need to depend on the male condom to prevent HIV, she is charged with the responsibility but not allowed the power to implement it. Gender inequality manifesting itself in double sexual standards for males and females; the general vulnerability of women which partly accounts for a wide range of female reproductive health problems and variations in socio- economic and political status in gender, have emerged as some factors increasing the spread of HIV infection on parts of Africa (Carael, Buve & Awasabo, 1997; Grunseit, 1997; Orubuloye, Oguntimenin & Sadiq, 1997; Standing, 1992 & Standing & Kiseka, 1989).

The International Center for Research on Women (ICRW), found that a small group discussion format could successfully challenge "the culture of silence" surrounding the discussion of sexuality and gender in many societies. More efforts are needed to translate some of these concerns to the larger community, challenging the prevailing social norms. Assisting young women to negotiate safe sexual practices also means challenging culturally constructed notions of femininity and masculinity. Thus, more focus needs to be placed on the other half of the gender power dynamic, males, addressing their notions of gender and sexual identity through which they understand their experiences. Given the greater openness of young people, it would be practical to begin working more with boys and young men to raise alternative views about male roles in society. An encouraging piece of evidence shows that even in traditionally maledominant societies, there are identified role models for gender-equitable masculinities. Combined with the institutional opportunities available for working with them, this program emphasis appears important and promising (Barker, 1999; Grunseit, 1997 &Weiss et al., 1998).

Deniaud (1997) reviewed 10 of the 15 studies on the current state of the female condom use carried out in sub Saharan countries between 1990 and 1996. The review established that African women are subordinate to men in many aspects of their lives, politically, educationally, socially and sexually. This sexual inequality makes them highly vulnerable to STDs, including HIV, and unwanted pregnancies. Despite these limitations, most studies concluded that the women who participated in the trials generally found the female condom acceptable. The moderate level of acceptability to male partners may be overestimated because women whose partners disliked the device would be more likely to discontinue its use. However, initial negative perceptions of the device were often replaced with a more positive reaction after several uses. The experience gained with use reduced the technical problems. The study emphasized need to overcome the stereotypes, simplifications and strong opinions that threaten to damage the acceptance of this new method and efforts to encourage women to adopt it.

A review article by Lohan (2010) reveals a long-standing gender bias in academic and policy research on adolescent pregnancy, which has led to the neglect of adolescent men's perspectives. It emphasizes that a greater understanding of adolescent men's perspectives could lead to a reframing of adolescent pregnancy away from being seen solely as a woman's issue. Furthermore, it is argued that the inclusion of adolescent men would lead to more effective adolescent pregnancy prevention and counselling programmes. Hiltabiddle (1996) submitted that among males, the perception of positive attitudes from their girlfriends toward condoms and an increased confidence in their ability to use condoms correctly was positively associated with condom use.

Few (1997) examined the relationship between the cultural construction of female sexuality and the lack of potential for many young heterosexual women to be truly sexually healthy. This paper submitted that messages for women within HIV prevention programmes can be confused, confining and at times dangerous to women's health and well-being. It suggested that these messages also reinforced a traditional, biologically determined medical understanding of female sexuality that does not take note of social or culturally based research or commentary on female experience or female desire. The messages confined many women to sexual restrictions, doing little to empower women to prevent sexual risk-taking. The paper suggested that health care professionals need to develop an awareness of the diversities within female sexuality and gain insight into their own values and assumptions about female sexuality if these are not to inhibit effective approaches and interventions in the areas of HIV and sexual health. The effect of stereotypical sexual images and contradictory messages arising from the traditional understanding of female sexuality is shown to legitimize the idea that women are passive, sexually submissive objects (and, thus, unable to dictate behaviors that would protect their sexual health). It is concluded that clinical research is locked into old assumptions about sexuality and is isolated from relevant socially or culturally-based research. Few (1997) recommended that for HIV prevention strategies to be effective, the inequality of women in heterosexual relationships must be acknowledged, women's self-esteem must be bolstered to help women assume sexual decision-making responsibility, and efforts to bolster the sexual health of young women must include men.

A considerable number of researchers have reviewed the "Abstinence Only" initiative in Uganda and its implication to gender issues. Schoepf et al (2003) posited that women in Uganda have a

diminished ability to hold dominion over their bodies. Young women are often coerced into relationships with older men, teachers, or "sugar daddies" who provide them with items that would not be accessible otherwise. Biologically, if women or men break their abstinence vow, a woman is twice as likely to contract HIV due to her anatomy. In Uganda, men are twice as likely to infect their wives in marriage after entering into the relationship as seronegative. In addition, men are less likely to communicate the fact that they are infected with HIV to their partners. For example, of men that are hospitalized for HIV/AIDS, only 12% of the wives knew of their husbands' infection. According to Cohen & Tate (2005) many young girls and some boys are sex workers, selling their bodies to survive. In these high-risk environments, the participants do not have the ability to abstain or enter into a faithful monogamous relationship. Hindin & Fatusi (2009) reported that outside of sex work, there exist young women and men that also cannot abstain due to social or financial pressure from older parties that act as "sugar mommies" and "sugar daddies". Young men and women engage in sexual relationships in order to obtain items, treats or opportunities that they would not be able to otherwise receive

Another concern about social context, especially if data are derived from the US antecedent analysis, is the role of parents and family. Whereas parental guidance and "connectedness" may correlate with lower risk-taking (and be thus viewed positively) in the US setting, conditions are quite different for many girls in developing countries. In these settings, the home is often the base of parental control, in which girls are virtually entrapped in the domestic sphere where they undergo their apprenticeship for adulthood— an intense training for a lifelong role as wife and mother. The authors of a study on girls' passage to adulthood argue, in fact, that the resultant social and economic disadvantages, stemming from gender dynamics deeply rooted in familial

systems and societal institutions, are the driving forces behind early marriage and childbearing. Outcomes among matched pairs of female adolescents enumerated other potential factors to female vulnerability: family structure, partner relationships, knowledge of sexuality and pregnancy risks, self-esteem, and locus of control (Lipovsek et al., 2000 & Mensch et al., 1998).

According to studies by UNICEF (2000) on youth aged 15 -19 years old, young women are far less knowledgeable than young men on issues regarding HIV. Moreover young women often hesitate to challenge misinformation from their partners lest they appear too knowledgeable about sex. A scenario that is shunned at in the African patriarchal societies (Weiss et al., 1996)

Findings on studies of whether certain aspects of the school environment affect the likelihood of early and unprotected sex among adolescent girls and boys in three districts of Kenya suggest that neither the school nor the home influences whether boys engage in premarital sex. However, for girls, a school characterized by girl-friendly teachers and a gender-neutral atmosphere; and a home containing female role models and the extra support that two parents can provide, reduce the risk of premarital sex. On the other hand, girls are more likely to engage in premarital sex if they attend schools where considerable pressure to have sex is reported. The school environment also appears to have an impact on whether or not sexually active boys choose to use contraceptives. A gender-neutral environment leads to greater contraceptive use among boys, as do schools where students have greater knowledge of reproduction. Additionally, even if certain school characteristics significantly affect the risk of premarital sex for girls, the data indicate that pregnancy is not the primary reason that girls leave school early (Lloyd, Kaufmann & Hewwett, 1999; Mehrotra & Richard, 1997 & UNICEF, 2003)

UNICEF (2003) reported on gender perspectives towards access to schooling. The present study was based in schools; however it focused on gender perspectives on intervention promotion strategies and specifically in secondary schools. UNICEF (2003) also reported on gender perspective on condom use knowledge among the youth without formal sex education in Latin America. Though the present study also focused on youth, it sought to establish which strategies could be used to promote interventions that have the potential to necessitate HIV & AIDS prevention, condom use included specifically in Emuhaya Sub County, Kenya. The report by UNICEF (2003) highlighted the role of education and condom use efficacy among girls in Latin America and Africa. The present study included girls in its focus but not on their need to have education but on how the HIV & AIDS education they got could enhance interventions including condom use.

Studies by Carael et al. (1997); Grunseit, (1997) Orubuloye, Oguntimenin & Sadiq (1997); Standing (1992); and Standing and Kiseka (1989) put in perspective how gender dynamics influenced reproductive health and HIV & AIDS prevention among the youth. Similarly, the present study focused on the youth but specifically on youth in secondary schools and how their preferred interventions promotion strategies could be implemented in manner to ensure HIV & AIDS prevention despite the gender dynamics that may exist. Studies by Barker (1999); Grunseit (1997); and Weiss et al. (1998) explored gender based strategies that could curtail the inequalities occasioned by gender power dynamics to enhance sexual and reproductive health among the youth. The present study sought to establish the differences in preference of female and male students on intervention promotion strategies that can enhance HIV & AIDS prevention.

Studies by Brown (1994); Lipovsek et al. (2000); Lloyd, Kaufmann and Hewwett (1999); Malanda (2008); Mehrotra and Richards (1997); Mena (1998); Mensch et al. (1998); Oloo (2003); Pittman and Adams (1988); UNICEF (1992; 2000; 2003); and Weiss et al. (1996) adopt a gender perspective while exploring factors that have a bearing on sexual and reproductive health among the youth.

The present study focused on the gender perspective among the youth like the cited studies; however, it digressed from the cited studies by establishing the preferred intervention promotion strategies for HIV & AIDS prevention and specifically to youth in schools. In addition, unlike all the cited studies that have reported on gender perspectives, the present study using Mann-Whitney U test established the difference in preference between female and male students.

## 2.4 Factors that Contributed to Choice of Intervention Promotion Strategies

Studies by Malanda (2008); Odiwuor (2002); Tijuana (2001) established that serving young people with reproductive health information, education, counselling and services has been challenging because the issues and actions involve matters of great traditional cultural sensitivity. Furthermore, other cultures like western culture and peer culture are becoming a force to reckon with when considering how, when and where to provide information and services for youth on issues of reproductive health and specifically HIV & AIDS.

Community approval influences the choice of intervention promotion strategies adopted by a programme especially one that deals with sexuality issues like HIV & AIDS. Studies reiterate the

importance of involving the main stake holders and gatekeepers in designing and implementing the programmes in order to enhance their approval (Shuey et al., 1999 & UNAIDS 1998).

Gender dynamics profoundly influence women and men's sexual lives and thus their vulnerability to HIV & AIDS and choice of strategies to prevent it. The subordinate role played by the female youth in the African setting even on issues that affect their sexuality undoubtedly affects their choice of preventive technology. Based on gender stereotyping, men commonly state that the responsibility for protection should be the woman's, but also insist that women be passive. Economic dependence and lack of adequate education particularly for women impinge on the young women's ability to negotiate sex. The dominance and aggression that is expected of the young male instills in them reluctance to seek for relevant information and advice that would enhance their ability to maintain sexual health (Grunseit, 1997; Odiwuor, 2000; UNAIDS, 1999; & Weiss and Rao Gupta, 1998).

Studies by Malanda (2008); Mumah, (2003) and Nyinya (2007) reveal that attitude to HIV & AIDS control initiatives plays a key role in determining self-efficacy of any programme in Kenya. Particularly the attitude of parents, peers, teachers and religious leaders influenced the students, resolve to abstain, use condoms and seek for counselling. This was despite evidence that a considerable number of the youth were sexually active either by consensus and or coercion.

Programme appeal enhances acceptability of youth reproductive health programs. Social marketing programs have demonstrated that a combination of media, peer education and youth-

relevant sales outlets can succeed in increased condom acceptability and use —if coverage of these components is great enough. Young people prefer retail purchase of condoms and private physicians for reproductive health services. This is because these strategies afford the youth anonymity, non-threatening and non-judgmental environments (Hughes & McCauley, 1995; Kerrigan & Weiss, 2000; & Senderowitz, 1997, 1998).

Active involvement of the target group, in this case, the youth, increases ownership and initiative among the youth to the program. It also facilitates discussion of issues that are important to the youth's sexual health and are acceptable in their peer culture but seem to receive negative publicity and resistance as they are deemed as controversial in the larger community cultures. Youth can be among the best advocates for their own interests (IPPF, 1999 & Rosen, 2000).

Sustainability is a factor that is likely to influence implementation and the lifespan of any programme. All project designs must consider the level of human and financial resources available for project implementation and evaluation. Research is beginning to stress this point, which will allow programmers to factor in costs when choosing among several alternatives. Effective recruitment and selection, turnover, supervision and training, and compensation are challenges to most programs and of great concern to the peer educators (Hughes & McCauley, 1995; Kerrigan & Weiss, 2000; MacLaren, 1999 & Senderowitz, 1997, 1998).

Despite the HIV pandemic disproportionately affecting young people, to date, however, most program responses have been scattered, poorly documented and not rigorously evaluated. This relates, in part, to a lack of clearly defined adolescent reproductive health policy, whether part of

youth policy, youth health policy or reproductive health policy. Presently, the major challenge is the commitment by government, institutions and service providers to implement these policies (Kenya Youth Initiative, 1995 & Rosen, 2000).

The literature reviewed on factors that contributed to choice of intervention promotion strategies was mainly based on factors that influence the choice of reproductive health programs. Though HIV & AIDS prevention is meant to uphold reproductive health, there is need to establish specific factors that relate to it. The present study did not look at the general overview of HIV prevention but specifically focused on the students' and teachers' views on factors that contributed to their preferences on intervention promotion strategies for HIV & AIDS prevention.

## 2.5 Proposed Intervention Promotion Strategies for the Youth

Youth in structured school environments are a captive audience for educational messages and programmes that attempt to develop skills and promote positive behavior. These programs when they engage students, teachers, parents and community more broadly, can effectively address many individual, institutional and community level risk and protective factors that have an important influence on youth behavior. Findings from 11 out of 13 school programs focusing on HIV & AIDS and STIs demonstrated a short term impact on improved attitudes about the knowledge of HIV, STIs and reproductive health topics. Much of the findings to date are that there is need to provide funding, plan for teacher training, community support and involve parents and the young people in order to realize success in sexuality education programs. The programs appear to have short term impact on reproductive health behavior, however the long

term impact is uncertain. This is an indicator that a curriculum based HIV & AIDS initiative alone is not sufficient in enabling long term behaviour change thus the need for incorporating other initiatives in intervention promotion. The programs provide an opportunity for institutionalizing sexuality education and scaling it up therefore there is need to establish a more comprehensive and sustainable package that will necessitate enhance HIV & AIDS prevention among the youth (Birdthistle & Vince-Whitman, 1997; FOCUS, 2001 & Kirby, 1999; 2007).

Considerable evidence shows that mass media initiatives influence adolescent knowledge and attitudes, but less evidence shows that they consistently and directly influence sexual and contraceptive behaviours. Linking mass media strategies with other activities like clinics linkage and outreach or school programs that are more personalized and sustained and that provide enabling support and services may be required to change behavior. Mass media has also been successfully used as a social marketing tool and has proven more successful in influencing access to and use of condoms than in influencing other types of behavior. New information technologies involving computers offer potential for confidential information and diffusion of new ideas. Multiple approaches and channels have been identified as generally fostering better outcomes (FOCUS, 2001; Israel & Nagano, 1997; Kim et al., 1998; Strand, Rosenbaum, Hanlon & Jimerson, 2000).

Peer promotion approaches appear effective in reducing risky sexual behaviours. Studies of peer programs have consistently demonstrated that the peer promoters themselves were the most affected by the programs therefore for the programs to have a larger reach and thus be more cost effective monitoring is needed to ensure other youth are reached and influenced. Studies also

indicate that most peer promoters trend to reach youth who are like themselves. Therefore to reach the heterogenous group of youth, there is need to recruit peer promoters who can identify with the varied sub groups and this can be successfully done with the help of the targeted youth (Magnani et al., 2000; Malanda, 2008; Philliber, 1999; & Wolf et al., 2000)

Though studies indicate that youth centres do not appear to be a cost effective way to increase the use of reproductive health services by adolescents and they view them more as recreation centres, they still provide a non threatening environment where youth also have access to counselling, contraceptives, clinical prevention and even treatment. The centres tend to address non sexual risk factors like alcohol and drug abuse. The centres also bring youth in contact with influential peers and are a place where mentoring can occur. (Erulkar & Mensch, 1997 & Senderowitz 1997, 2000).

Evidence on school-health facility links show initiatives though limited suggest a positive impact. The need for education programs to include referral for contraceptive services is crucial. However these linkages should be broadened to include private practioners and commercial sources, peer distribution of contraceptives and linkages to clinics and other types of distribution points in schools. (Murray et al., 2000 & Senderowitz, 1999)

Survey data indicates that a high proportion of youth in the world use the private sector. The private sector offers youth the opportunity to seek information and services in a relatively anonymous way and the youth state that they value and want privacy and confidentiality in reproductive health services. There is need to enhance youth friendliness of private sector initiatives especially through training, expand the number of service sites available to the youth

and provide subsidy to enable that many youth access their services. Key to successful partnering with the private sector is ensuring that the interests of and benefits to the commercial entity are identified, served and maintained (Murray, Winfrey, Colvin and Stevens, 2001; & Senderowitz &Stevens, 2001).

UNAIDS, (1998) postulates that the best preventive programs for the youth are those that work simultaneously at many levels by involving many stakeholders like parents, teachers and peers who can necessitate behaviour change, increased knowledge of HIV & AIDS and how to avoid it. Prevention also includes the creation of an environment where safer sexual practices and drug taking behaviours can be discussed and acted upon. Preventive measures include providing services such as HIV & AIDS testing; and counselling to avoid drug abuse, STDs and unwanted pregnancies, which if ignored greatly magnify the risks of HIV & AIDS transmission. Furthermore prevention includes access to cheap condoms and helping people acquire skills they need to protect themselves and their partners.

A report on HIV & AIDS on University campuses outlined the fundamental principles needed to understand and manage the HIV & AIDS crisis among the graduates. They are; get the facts about HIVAIDS out into the open and break every form of silence, secrecy and shame that enshrouds the disease; recognize the extent to which HIV & AIDS has been feminized and benefits from the sub-ordinate status and subjugation of women. In response, act urgently to promote greater gender equality, to overcome the social and other constraints to enhance female participation, and to lead by word and example in transferring power and responsibility to women, ensure that the entire university culture is enlightened by human rights principles. Use

deliberate and conscientious adherence to these principles to reduce vulnerability to HIV & AIDS and to help those infected or affected by the disease to live in dignity. Allow no form of stigma or discrimination to find a haven within the institution; recognize the persons living with HIV & AIDS are among the most important actors in any program to contain and control the disease, without in any way using or manipulating them, the university should draw upon their expertise and insights and fully involve them in every aspect of HIV & AIDS campaign; and coordinate university plans and programs with those at the national level so as to ensure greater synergy, unity of direction, complementarity of activities, access to resources, and more efficient use of resources (Kelly, 2001)

In a review of 49 evaluation studies of sexuality and STD/HIV prevention programs in schools in the United States, Kirby (2001; 2007) found that those that significantly improved safe sexual behaviour shared the following characteristics: Focused on reducing one or more sexual behaviours that lead to unintended pregnancy, or HIV & AIDS/STD infection; were based on theoretical approaches that have been demonstrated to influence other health related behaviour and identified specific important sexual antecedents to be targeted; delivered and consistently reinforced a clear message about abstaining from sexual activity and or using condoms; provided basic, accurate information about the risks of teen sexual activity and about ways to avoid intercourse or use methods of protection against pregnancy and STDs; included activities that address social pressures that influence sexual behaviour; provide examples of and practice with communication, negotiation and refusal skills; employ a variety of teaching methods designed to involve participants and have them personalize the information; incorporated behavioural goals, teaching methods and materials that are appropriate to the age, sexual experience and culture of

students; lasted a sufficient length of time specifically at least 14 hours long; selected teachers or peer leaders who believe in the program and provide them with adequate training.

Tijuana (2001) developed a tool "Developmentally Based Interventions and Strategies; Promoting Reproductive Health and Reducing Risk taking among Adolescents" aimed at providing guidelines for the appropriate interventions and strategies for varied age specific developmental stages within the adolescent stage. The 15-19 year olds, where most secondary school student fall, was referred to as middle adolescence. Some of the interventions suggested to ensure their holistic development included designing programmes that address multiple needs and desires either directly or in formal partnership with other youth serving or youth development organizations; providing HIV & AIDS and STI education especially at places where youth gather; ensuring easy and confidential access, information and counselling on condom use and other youth friendly services; conducting large-scale campaigns using the media, social marketing strategies and other available technology. Additionally, ensuring youth are welcome to receive reproductive health and related medical care through existing health systems; including modern and traditional practitioners, community and clinic based health workers, pharmacists, private as well as government doctors and female as well as male practitioners were proposed.

Tijuana (2001) also suggested the need to: have peer educators available in schools and communities to provide outreach, education and services, provide information, education, counselling and effective referrals on issues related to risk taking behavior. Provision of opportunities for youth to discuss issues related to sexuality and relationships; training of service

providers - medical, non-medical and nontraditional providers youth-friendly service techniques were also recommended.

The above literature reviewed on proposed intervention promotion strategies gives a general overview on strategies from the school curriculum based education programs, mass media, peer programmes, community outreach, youth centres, school/health facility links and private sector that have been successful at enhancing the reproductive health of the youth. The present study focused on all the above strategies and their practicability to the youth. However, the present study relied on the students and teachers to establish the most preferred strategies not for general reproductive health promotion, but for promotion of five interventions that have been known to promote HIV & AIDS prevention. The interventions under focus were condom use, counselling, VCT, peer involvement and parental involvement. The present study also identified the intervention promotion strategies proposed by the students and teachers addressed in the HIV & AIDS curriculum for secondary schools. This will enable the study to establish areas of divergence and convergence between the proposals in order to draw practical conclusions and recommendations.

The proposed intervention promotion strategies are based on a review of various studies that target reproductive health of the youth. UNAIDS (1998) majorly recommended various interventions for the youth, however, the present study focused on strategies that have the potential to promote various interventions. Kelly (2001) highlighted strategies that could enhance HIV & AIDS prevention among university students. The present study sought to establish strategies but for promotion of interventions that have been known to enhance HIV & AIDS

prevention among youth in secondary schools. Kirby (2001) enumerated characteristics of successful school based programs for HIV/STI prevention in the US. The present study sought to establish how initiatives from various strategies could be integrated into the existing school programs in order to make them more youth friendly in respect to the youths' and teachers' preferences and intervention promotion. Tijuana (2001) included the intervention promotion strategies that this study will focus on. However, the proposals made were for adolescents as a group, therefore, do not focus on what is favourable for youth in secondary schools.

The literatures reviewed were based on a compilation of evaluation studies from various locations. There are many considerations that come into play when choosing interventions including the setting where the programme will be situated and the locality. The recommendations do not specify who the proposers of the recommendations are thus there was need to consult the teachers and students in secondary schools in Emuhaya Sub County, Kenya in order to ascertain what intervention promotion strategies were practical to their situation.

The studies cited prescribed the best practices programs could adopt to enhance reproductive health including HIV & AIDS prevention. However, the studies did not specify if the students and teachers were involved in establishing the prescriptions. In Kenya the major prescription for HIV & AIDS prevention is secondary schools is the HIV & AIDS Education curriculum. The present study thus sought to identify if the preferences of student and teachers were addressed in the major guides for HIV & AIDS Education curriculum namely the syllabus and resource books.

# CHAPTER THREE RESEARCH METHODOLOGY

## 3.1 Research Design

The study adopted mixed method research design. Fitters and Molina-Azorin (2017) define mixed method research design as the linking of quantitative and qualitative approaches and dimensions together to create a new whole or a holistic outcome than could be achieved by either alone. The design seeks to integrate the methodological, methods and philosophical aspects of research. According to Schoonenboom and Johnson (2017) mixed method research can be used at the level of data collection, analysis and inference for the broad purpose of enhancing the breadth and depth of understanding. The design is used to provide triangulation, seek convergence, corroboration, identify divergence and for correspondence of results from different methods.

The mixed methods research design was employed to explore opinions and knowledge from the subjects in order to establish preferences on intervention promotion strategies for HIV & AIDS prevention among the students in secondary schools in Emuhaya Sub County. The design was chosen because it enabled the researcher to be able to triangulate and corroborate information from the two approaches inorder to come up with information that would comprehensively address the topic. The type of mixed method used was convergent parallel design. As propositioned by Creswell and Plano Clark (2011), the convergent parallel design enabled the researcher simultaneously but independently collect the quantitative and qualitative strands of data, analyze them then integrate the results in the overall interpretation. The two strands of data were collected simultaneously within one month. There was a minimal time lapse between collection of the two data sets because the researcher had a limited time frame to conduct the

research. For most of the objectives, the quantitative strand in form of questionnaires was conducted then the qualitative strand - the FGDs and document analysis conducted to complement and expand the findings. According to Schoonenboom and Johnson (2017) the complementarity in the data sets enabled elaboration, enhancement, illustration and clarification from one method with the results of the other.

As evidenced by the choice of research design, the researcher holds that in order to be able to comprehensively explore issues on HIV & AIDS especially in this case where opinions and knowledge are the basis of obtaining data to inform on preferences on intervention promotion strategies, the pragmatic paradigm was the most appropriate philosophy to adopt. One important feature of pragmatism is it rejects the distinction between realism and idealism which has been the core debate about positivism and interpretivism in social science. For pragmatists there is indeed such a thing as reality but it is ever changing based on one's actions which have consequences. Pragmatism provides a framework to bind together the data sets that would be employed to determine what works for whom; the relevance and importance of the context.

The reality of youth in schools on the preferred strategies for HIV & AIDS prevention depend on the context in which they have been socialized, the systems that they interact with and their developmental stage which is impacted by the sociocultural, biological, demographic and economic aspects within their environment. This implies that their realities differ and thus the need for the qualitative approach. However, irrespective of the fact that the realities among and within the youth differ, there is need to find the most ideal way to manage these differences within the prescribed systems in this case the secondary schools. The present study used the

quantitative approach to establish the preferences of students and teachers on intervention promotion strategies for HIV & AIDS prevention with the knowledge that the preferences would differ. The researcher appreciates the fact that the major actors in the school system are students and teachers as consumers and implementers of education programmes respectively thus their opinions and knowledge were key in this study. However, the context within which students and teachers approach intervention promotion strategies would differ due to various factors including age, experience and socialization. In the same breath, even among the students who would be the beneficiaries to the intervention promotion strategies, differences abound particularly due to their gender. Thus in the quest for the most ideal way to employ these strategies to enable HIV & AIDS prevention the need to find out the differences and also the factors that influenced the choice of their preferences needed to be established. In this study, the pragmatic paradigm therefore enabled the researcher illustrate convergence, diversity and divergence. Additionally as espoused by Teddlie and Tsakhori (2010) in the event of divergence there would be room for further research to resolve the differences and it would be established if differences were because of the properties of the methods involved or indeed they were due to social world reality.

## 3.2 Area of Study

The study was carried out in Emuhaya Sub County previously Emuhaya district in Western province, Kenya. It was curved from Vihiga district now Vihiga County in the year 2007. The Sub County and County titles are as a result of devolution that brought into being 47 counties in Kenya. The Luhyia of Bunyore sub-tribe are the main inhabitants of Emuhaya Sub County. It is divided into two administrative divisions namely Emuhaya and Luanda. Emuhaya Sub County is comprised of two constituencies namely Emuhaya and Luanda. Emuhaya Sub County borders

Butere County to the North, Vihiga Sub County to the East, Kisumu County to the South and Siaya County to the West. Its Sub County headquarters has been in Emuhaya. It covers a total area of 173.2 km<sup>2</sup>. The Sub County experiences bi-modal annual rainfall that averages 1750 millimetres. Temperatures in the Sub County range from 18°C to22°C. (Emuhaya Sub County Development Office, 2016).

The 2015 Emuhaya Sub County population estimate is 219 655 persons comprising 98845 males and 120810 females. The overall poverty level in the Sub County stands at 42 %. The major occupation in the area is subsistence farming. The population density is approximately 1 268 persons per square kilometre. This high population density has contributed to poor land use. The total fertility rate in Emuhaya Sub County is 5.I. This translates to an average of seven members per family. Hence, the land size of cannot sustain the food consumption needs of the family. This has led to most male adults in the family to migrate to major cities and towns to look for jobs to subsidize the inadequate farm produce. Adult females in the households apart from fending for the family through farming also run small businesses to subsidize their farm produce and the income from their male counterparts. The Sub County's large population mainly comprises of youth who are unemployed thus due to this fact most of them engage in drugs. (Emuhaya Sub County Development Office, 2016).

The Sub County estimates the HIV prevalence at 7.4% which is higher than the national prevalence of 6%. The contributing factors to the present high rates of HIV include cultural practices especially wife inheritance and economic constraints due to high population density but

low food security leading to exchange of sex for money (Emuhaya Sub County MOH Report, 2015).

By February 2015, there was total of 38 public secondary schools of which 4 were boys' schools, 5 girls' schools and 29 co-educational schools. The Institutions have an enrollment of 13 515 students of which 7370 were females and 6050 males yet the 15-19 year olds who are legible to be in secondary school were estimated to be 26507 with 12777 being male and 13729 female. Of the 13 315 students, form one were 3 903; form two 3 514; form three 3 348 whereas form four had 2 960. The average years for school attendance are 18 years for boys and 15 years for girls. The Sub County has a total of 359 teachers of whom 230 are male and 129 female. The Sub County has a staffing requirement of 739 teachers therefore there is a shortage of 350 teachers which translates to a 51% deficit. (Emuhaya Sub County Education Office, 2015).

#### 3.3 Study Population

The study targeted a population of 359 teachers and 2 960 form four students in the 38 secondary schools in Emuhaya Sub County. The 359 teachers comprised of 230 male and 129 female. The 2 960 form four students targeted consisted of 1 336 male and 1 334 female (Emuhaya Sub County Education Office, 2016). The form four students were selected because compared to the other classes they are likely to have been exposed to more content and intervention strategies from HIV & AIDS programme present in their secondary education. If the curriculum is considered as a basis of dissemination of the programme, they could provide more reliable and detailed information on the intervention promotion strategies

#### 3.4 Sample and Sampling Procedure

Emuhaya Sub County comprised 38 secondary schools. Of these, four schools which translate to 10% of the school population were randomly selected for the pilot study. Stratified random sampling was used put the students in the schools in two strata on the basis of gender - female and male. Since studies indicated that among the youth, female were three times more vulnerable than their male counterparts, stratification on the basis of gender would enable a representative sample to determine if there were any differences in preference of intervention promotion strategies for HIV & AIDS prevention due to the context in which the youth find themselves because of gender. Saturated sampling was used for the teachers. In each selected school, <sup>1</sup>/<sub>3</sub> of students in form four totaling to 387 learners (248 male and 139 female) and the entire teachers' population of 51 (30 male and 21 female) were included. According to Kothari (2009) a sample size of <sup>1</sup>/<sub>3</sub> ensures that the sample is representative enough of the population and the likelihood of selection bias is reduced.

For the actual study, systematic random sampling was used to select 13 schools which constituted approximately  $^{1}/_{3}$  of the 38 schools in the Sub County. Systematic sampling was practical in this case since a list of schools could easily be obtained and the population was not too large to render the exercise tedious. To obtain a truly random sample and enhance reliability using this method, the list of all schools in the sampling frame were randomized. This was done by ensuring that the schools were not arranged in alphabetical order hence had an equal probability for selection. This would eliminate the systematic error in sampling. To further introduce randomness, the school to start from on the list was ascertained from a list of random

numbers. A sampling interval of each third school on the list was then used to select the schools to be involved in the study (Mugenda and Mugenda, 2003; Kothari, 2003).

Stratified random sampling was used to select <sup>1</sup>/<sub>3</sub> of the 2 960 form four students from the selected schools on the basis of gender to get a sample of 987 students (510 male and 477 female). Stratified random sampling entails categorizing the population into specific homogeneous categories (strata) in this case, male and female, before obtaining a random sample. This ensured that inclusion of these categories was not taken to chance. This was because they have varied vulnerability to HIV & AIDS with the female being more vulnerable; therefore, ensuring representativeness would enhance reliability of data obtained. To obtain a true random sample and enhance reliability using this method, a table of random numbers was used so that all subjects in the sampling frame had an equal probability for selection. The method would eliminate the systematic error in sampling (Mugenda and Mugenda, 2009; Kothari, 2009).

Saturated sampling was used to include all teachers in the 13 selected schools totaling to 180 teachers (115 male and 65 female). Saturated sampling entails using all the subjects present in the selected site for the study. The sampling procedure was used to ensure that the findings from the study were with a viable number to enable inferential statistical analysis and generalization to the population.

#### 3.5 Instruments of Data Collection

Data was collected using questionnaires, focus group discussion guides and document analysis guides.

#### 3.5.1 Questionnaires

There were two Questionnaires prepared; one for the students and the other for the teachers. The two documents sought to: establish the preferences of students and teachers on HIV & AIDS prevention intervention promotion strategies; determine differences in preference between students and teachers on the intervention promotion strategies; and determine the differences in preference between female and male students on the intervention promotion strategies.

The questionnaires were divided into two parts – A and B. Part A in both the students' and teachers' questionnaires sought for demographic information of the respondents such as age, sex, religious affiliations, type of school. Additionally Part A of the teachers' questionnaire sought for academic and professional qualification of the teachers. Part B of the questionnaire sought for information that would facilitate production of responses for the questions and objectives of this study. The questionnaire comprised open and close-ended questions which gave the subjects freedom of response and facilitated consistency of data across respondents respectively (Gall, Borg and Gall, 2003). Appendices 1 and 2 present the questionnaire for the students and teachers respectively.

#### 3.5.2 Focus Group Discussion Guides

Focus group discussions with students and teachers were conducted in all the thirteen schools included in this study. The focused group discussions mainly sought to explore factors that influence the choice of intervention promotion strategies by both teachers and students. However, the FGDs also provided complemented, illustrated and expanded the data that sought to: establish the preference of students and teachers on HIV & AIDS prevention intervention

promotion strategies; determine difference in preference between students and teachers on the intervention promotion strategies and determine differences in preference between female and male students on the intervention promotion strategies. The focused group discussions were used in data collection because they have the potential to evoke in depth discussion of issues of interest unlike questionnaires, which normally give brief and precise information (Mugenda and Mugenda, 2009).

The students' focused group discussions consisted of eight form four students of the same gender therefore in 9 of the 13 schools involved in the study, 2 FGDs were conducted in each school because they were coeducational schools. Therefore, 22 FGDs were conducted for the students' sample. Grouping on the basis of gender was meant to enhance free discussion of issues since homogeneity in gender could reduce intimidation among the students. According to Guest, Namey and McKenna (2016) the modal size of FGDs is eight respondents, however, it could range from six to twelve persons. In the studies Guest et al (2016) reviewed the desirable sample size of FGDs to adequately address a research objective ranged from 2 to 40 FGDs depending on the homogeneity of the sample size and complexity of the questions being addressed but 80% of desired responses were attained after an average of 12 FGDs. This implies that the number of participants and FGDs conducted in this study were within these ranges thus were likely to comprehensively address the objectives in this study. Appendix 3 presents the Students' Focus Group Discussion Guide.

The teachers' FGDs were conducted in all the thirteen selected schools. Each FGD comprised representative teachers from all the eight departments that are usually present in secondary

schools. The departments are languages, science, applied sciences, mathematics, humanities, games, careers and guidance and counselling, These FGDs were to enable the researcher establish similar and divergent views among the teachers that could be due to their subject specialization and the responsibility they held. Appendix 4 presents the Teachers' Focus Group Discussion Guide.

#### 3.5.3 Document Analysis Guide

Document analysis was used to facilitate in identifying the preferences of students and teachers on HIV & AIDS prevention intervention promotion strategies addressed in the HIV & AIDS Education curriculum for secondary schools in Kenya. The researcher used three documents as guides to the HIV & AIDS Education curriculum for secondary schools in Kenya:

- AIDS education syllabus for Secondary Schools was used to establish the proposed strategies which promote the interventions.
- ii. Bloom and Doom: Your Choice which is the main HIV & AIDS Education resource material was examined to determine the extent its content promotes the interventions focused on by this study.
- iii. AIDS education Facilitators' Handbook was examined to determine the extent its content promotes the interventions focused on by this study (Appendix 5).

### 3.6 Pilot Study

Piloting the instruments formed the first phase of the study. A thorough scrutiny of the questionnaire and the focus group discussion guides was be done by the researcher's supervisors. The aim of this was to:

- i. establish whether the themes surrounding the intervention promotion strategies for HIV
   & AIDS prevention in secondary schools covered in the research objectives were captured in the questionnaire and focus group discussions
- ii. identify if there were any other types of instruments that would be required and if any additional items needed to be constructed

The questionnaire was piloted to the students and teachers (258 students and 51 teachers) in the four schools – one boy's, one girl's and two coeducational that were selected for the pilot study. However, 197 students and 42 teachers were legible since they availed themselves for the study and duly filled the questionnaires. The numbers accounted for a response rate of approximately 76% and 82% for the students and teachers respectively.

The Focus Group Discussions were conducted in the four schools involved in the pilot study. One focus group discussion each for the students and teachers were conducted in the single gender schools. For the coeducational schools, two focus group discussions with the students and one focus group discussion with the teachers were carried out in each of the two schools. A total of 4 FGDs were conducted with the teachers and 6 FGDs with the students. Each FGD comprised eight participants. The students' FGDs were conducted separately for the boys and girls while the teachers' FGDs had representation from the eight departments in secondary schools. The FGDs were recorded using a taping machine. This enabled the researcher to listen to the information; identify and revise areas which might have appeared ambiguous and also establish any omissions that merit inclusion.

The schools used in the pilot study were excluded from the actual study. Mugenda and Mugenda (2009) recommend their exclusion from the actual study to ensure more realistic findings from subjects who have not been exposed to the same instruments.

#### 3.7 Reliability and Dependability of Instruments

The researcher ensured validity of the instruments for collecting quantitative data – the questionnaires and dependability, a parallel for validity, for instruments of collecting qualitative data namely the FGD guides. To ensure validity of the questionnaires, the responses from the pilot study were analyzed to establish whether the themes surrounding the objectives of this study had been captured by the instruments. Cronbach's coefficient alpha was used to check for internal consistency of the questionnaires. According to Mertens (2005), this method of internal consistency can be used with only one administration of an instrument and a reliability coefficient of 0.7 is considered reliable. The students' and teachers' questionnaire had a reliability coefficient of 0.93 and 0.91 respectively. Therefore the two questionnaires' reliability coefficients which exceeded 0.7 were considered to be reliable.

In order to ensure dependability of the instruments that would collect data qualitatively, the FGD and document analysis guides were assessed by experts from the Faculty of Education who were knowledgeable about the context in which assessment occurred; that grounded the interpretations obtained by piloting the instruments. The experts assessed the textual and contextual evidence available and also engaged in a rational debate to ensure that the instruments provided a holistic and integrative interpretation of collected information. Thereafter, the instruments were revised by the researcher.

Three instruments for data collection were used: Questionnaire, Focus Group Discussion Guides and Document Analysis Guides. This helped to compare responses and to eliminate information that was not relevant to the study. Mertens (2005) posits that triangulation can improve the accuracy of the researcher's judgments by collecting different types of data bearing on the same phenomenon. Triangulation can also capture a more complete, holistic and contextual portrayal of units under study.

#### 3.8 Validity and Credibility of Instruments

The researcher ensured validity and credibility of the respective quantitative and qualitative data collection instrument. Guba and Lincoln (1989) identify credibility as the criterion in qualitative research that parallels internal validity in post positivist research.

The instruments for quantitative data collection namely the questionnaire were presented to three research methodology experts in the Faculty of Education to advice on face and content validity. The validity of the questionnaires was ensured by establishing that all themes in the research objectives had been covered by the instruments and that there were no other instruments, apart from the ones already developed, that could best help in data collection. With the guidance of the experts, the researcher built a specification matrix that listed the items and content area domains covered by each item. Corrections and amendments were made on the questionnaire following the experts' advice. Thereafter, the Content Validity Index which is the number of items rated by all judges divided by the total number of all items was computed. For the students' questionnaire an index of 0.66 while for the teachers it was 0.7.

As proposed by Mertens (2005), in order to ascertain credibility of the qualitative data collection instruments particularly the FGD guides, the researcher during the piloting phase employed two techniques namely: prolonged and substantial engagement; and member checks. The researcher during the FGDs conducted prolonged and substantial engagement with the participants to a point where the themes under inquiry were repeating instead of expanding. Additionally, the researcher conducted member checks during the FGDs. Member checks is the process in which the researcher verifies with the respondent groups the constructions that are developing as a result of data collected and analyzed (Mertens, 2005). To conduct member checks, the researcher, at the end of each of the FGDs conducted during the piloting phase summarized what had been said and ascertained from the respondents that the notes accurately reflected the group's position.

#### 3.9 Data Collection Procedures

The relevant research authorization was sought. The research sought approval to conduct research from National Commission for Science Technology and Innovation (NACOSTI), through Maseno University School of Graduate Studies, Emuhaya Sub County Commissioner, Emuhaya Sub County Education Office and Principals of the various schools where the research was conducted. Letters notifying the selected schools of the intended research were dispatched two weeks prior to the researcher's visits to the schools. The researcher then visited the secondary schools for reconnaissance, to select the respondents for the study and to introduce the respondents to the topic of study. The researcher thereafter made appointments with the respondents on when they would be ready to volunteer information for the study. To select the

students who would be included in the study, the researcher assigned numbers to class lists then selected the desired sample of 987 respondents using the table of random numbers.

The researcher with the aid of two assistants administered the self-completion questionnaires, conducted focused group discussion and analyzed the documents. The researcher tape recorded proceedings during the focused group discussions. Permission to tape record was sought by the researcher from the participants. The subjects were assured of confidentiality of the information they gave. This also improved reliability of the instrument since the respondents did not feel threatened by giving certain responses.

The chosen students in each institution were put in one school room at the opportune time for them to be able to respond to the questionnaire at the same time. This reduced the likelihood that the responses the students gave could be influenced by interaction and discussions with other respondents had they responded to the questionnaire at differing intervals. This also enhanced reliability of the responses. Before responding to the questionnaire, the researcher created a rapport with the students by introduction of the research team and explaining the purpose of the information being collected.

## 3.10 Methods of Data Analysis

Data collected was sorted, edited, coded, classified and tabulated. Data analysis was done both quantitatively and qualitatively. Data for quantitative analysis was mainly derived from the questionnaire. A total of 987 questionnaires from students (477 female and 510 male) and 180 teachers (65 female and 115 male) were earmarked for analysis. However, 768 students (391

female and 377 male) and 135 teachers (58 female and 77 male) duly filled their questionnaires. This translated into a 77.8% and 75 % response rate among the students and teachers respectively. According to Survey Monkey (2009) for a population of more than 1000 but less than 10 000 and using a Margin of Error of 5%, obtaining a response rate of 370 is acceptable, based on this therefore, the researcher proceeded with the data analysis.

Data from questionnaire was analyzed quantitatively using descriptive statistics mainly percentages, median, rank means and standard deviations. To obtain the rank means, the respondents were asked to rank their preferences with the most preferred ranked 1 and where there were ten options, the least preferred was ranked 10. In analysis, where there were ten options the best ranked was assigned 10 while the least got 1 then the mean ranks were generated. Descriptive data was presented as cross tabulations on the basis of gender. Inferential statistics particularly Mann-Whitney U test was used to test differences in group means between female and male students and also students and teachers in order to establish if there were differences in their preferences on intervention promotion strategies. The Mann-Whitney U test which is a non-parametric test was used because the responses provided entailed ranking which is in the ordinal scale. According to Fields (2005) measurements in the ordinal scale are not amenable for analysis using parametric tests. Data obtained from inferential analysis was presented in form of tables.

In order to get a quantitative reflection of the magnitude of differences in preferences among the students and teachers and on the basis of the gender of the students, an effect size for Mann-Whitney U test namely the Rank-biserial correlation (r) was calculated using the Kerby simple

known as common language effect size, u is the proportion of pairs favourable to the hypothesis also known as common language effect size, u is the proportion of pairs not favourable to the hypothesis also known as the complement and r is the simple difference between the two proportions). The Kerby formula has values ranging from minus one to plus one - with zero indicating no relationship (Kerby, 2014). Effect size is a useful descriptive statistic which provides a standard metric for comparing across studies and thus is critical for meta-analysis. The American Psychological Association (APA) Task Force on Statistical Inference emphasizes that when reporting statistical significance for an inferential test, effect size should also be reported (Wilkinson and APA Task Force, 1999). The importance of reporting effect size is that inferential tests may be statistically significant (unlikely to have occurred by chance) but that does not necessarily indicate how large the effect is and unlike statistical significance, effect size is not influenced by the sample size. Additionally effect size would detect non-significant, notable effects in low powered tests.

The data obtained from the effect sizes was interpreted as recommended by Fields (2005) and Ongula (2005), an effect size less than .2 was considered negligible; between .2 and .4 weak; between .4 and .7 moderate; between .7 and .9 substantial; and more than .9 very dependable. According to Cohen (1988) because the terms used in interpretation of effect sizes are not only relative to each other but to the area of behavioural sciences and even more particularly to the specific content and research method being employed, there is a risk in offering conventional operational definitions. This risk nevertheless is accepted in the belief that more is to be gained than lost by supplying a common conventional frame of reference.

Data for qualitative analysis was mainly derived from the focus group discussions and document analysis reports. The information from the focused group discussions was transcribed, categorized into emergent themes then reported in narrative form. Similarly, the information from the document analysis reports was categorized into emergent themes then reported in narrative form. Since the qualitative data from the document analysis was to establish the extent to which the HIV & AIDS Education curriculum addressed the intervention promotion strategies preferred by students and teachers, the phrases "not addressed, not comprehensively addressed, fairly comprehensively addressed and comprehensively addressed" were used to describe the various levels at which the preferences of the respondents had been addressed by the curriculum.

## Specifically:

- Rank means were used to establish the preferred intervention promotion strategies from the perspective of the students and teachers;
- ii. Mann-Whitney U test was used to determine differences in perspective of students and teachers on the intervention promotion strategies;
- iii. Mann-Whitney U test was used to determine differences in perspective of female and male respondents on the intervention promotion strategies;
- iv. Rank-biserial correlation (r) was calculated using the Kerby simple difference formula to ascertain the effect size thus giving a quantitative reflection of the magnitude of differences in perspective among the students and teachers; and on the basis of the gender of the respondents
- v. Qualitative data from the FGDs was used to establish factors that contributed to teachers' and students' choice of intervention promotion strategies;

vi. Qualitative data from document analysis was used to establish the extent to which the HIV & AIDS Education curriculum for secondary schools in Kenya addresses the intervention promotion strategies preferred by students and teachers in Emuhaya Sub County.

The study used mixed methods of data collection and analysis to enable the two approaches – quantitative and qualitative. The two approaches were used because according to Mertens (2005), quantitative and qualitative methods can complement each other in seeking both objective and comprehensive information from the respondents.

#### 3.11 Ethical Considerations

The students and teachers who were involved in the study were assured of confidentiality and anonymity on the information they provided and that the information would be used for the sole purpose of attainment of the requirements of the researcher's study as a doctorate student. The researcher collected data from participants who consented to participate in the study thus none was coerced into participation. To ensure that the findings were disseminated to the participants, the researcher assured them that each school would get a copy of the findings upon completion of the course.

#### CHAPTER FOUR

#### DATA PRESENTATION, ANALYSIS AND DISCUSSION

### 4.1 Background Information

The introductory part of the questionnaire in Appendix A and B sought to establish some demographic information of the respondents who were involved in the present study. A total of 768 form four students comprising of 477 female and 510 male were involved. The majority of the form four students included in this study – 80.2% had ages that ranged between 17 to 19 years. The modal age was 18 years which accounted for 32.9% of the students' ages. The students came from three types of schools: coeducational schools which accounted for 444 students who were 57.8% of the respondents; girls' schools - 176 students translating into 22.9% of the respondents; and boys' schools, 148 respondents accounting for 19.3% of the respondents. Day scholars accounted for 397 of the students and boarders 371 learners which translated to 51.7% and 48.3% respectively. The students belonged to three religious affiliations: protestants - 532 students, catholics – 220 students and muslims – 16 students accounting for 69.3%, 28.6% and 2.1% respectively.

A total of 135 teachers comprising of 58 female and 77 male participated in this study. The ages of the teachers were: between 20 to 24 years - 37 teachers; 25 to 34 years - 53 teachers; 35-44 years - 33 teachers; and 45 years and above 12 teachers. The percentages for the age ranges were 27.4%; 39.3%; 24.4% and 8.9% respectively. The teachers who taught in coeducational schools accounted for 52.6% of the total number of teachers while those who taught in girls' schools and boys' schools were 26.7% and 20.7% respectively. The majority of the teachers - 71.1% were university graduates and only 19.6% were not professional teachers since their qualifications were not in a course in Education. Most of the teachers - 60.7% had a teaching experience of

less than 10 years; 10.4% had taught for between 10-14 years while 28.9% had taught for more than 15 years. A total of 79.3% of the teachers were protestants; 19.3% were catholics; 0.7% were muslim and 0.7% translating into one teacher did not indicate their religious affiliation.

# 4.2 The Intervention Promotion Strategies Preferred by Students and Teachers in Secondary Schools

The study focused on students' and teachers' preferences on strategies that in the respondents view had the potential to promote the five interventions that this study focused on. Thus the study focused on strategies that would promote counselling, VCT, peer involvement, parental involvement and condom use promotion. In establishing the preferred strategies the study focused on three areas for each of the five interventions: information provision, service delivery and awareness creation.

For the area of information provision, the study sought to establish the information that the respondents preferred in order to enable them enhance the uptake of the interventions particularly counselling and VCT. For peer involvement and parental involvement, the study sought to establish the topics that respondents preferred their peers and parents to address. The topics in question were derived from the HIV & AIDS curriculum. The findings were reported as percentages and frequencies.

The study also sought to establish strategies that could be used to enhance service provision for each intervention. In establishing the service provision strategies, the study focused on responses from the respondents on the persons they preferred to provide them with services for each of the

five interventions covered by this study. The respondents established their preferred service providers by ranking them. The findings were reported as median, rank means and their standard deviation.

The study also focused on the mediums that could be used to create awareness on how the youth in schools received information and services on the interventions focused on by this study. As was done for the service providers, the mediums for awareness creation were ranked from the most to least preferred and reported as median, rank means and their standard deviation.

For the median scores and rank means, the higher the score meant the better the rank thus the more preferred the strategy. The tables that reported on preferred service providers had the maximum median score being 10 except for two tables in the area of VCT and condom information service providers which had a maximum score of 11. The findings for the rank means were presented as cross tabulations on the basis of gender.

## **4.2.1 Counselling Promotion Strategies**

To establish the preferred counselling promotion strategies, the study focused on the view of the respondents in three areas: the preferred information on counselling that could enhance students' utilization of counselling services in schools; the preferred counselling service providers and the preferred mediums for creating awareness on how students can get information and services on counselling.

The respondents were given five topics and asked to indicate those they preferred to be provided information on in order to enhance students' use of counselling (See Question 5(a) in both Appendix A and B). The responses for the students and teachers in form of percentages and frequencies were presented as Table 1.

Table 1

The preferences of students and teachers on selected topics for enhancing students' use of counselling services

Topic	Percentages and Frequencies (% (f))						
	Gender		Total				
	Female	<u>Male</u>					
Students' responses:	% (f)	% (f)	% (f)				
Where to get counselling	49.6 (381)	47.7 (366)	97.3 (747)				
Counselling process	31.6 (243)	28.8 (221)	60.4 (464)				
Ethical issues in counselling	25.5 (196)	19.8 (152)	45.3 (348)				
Role of the client	9.9 (76)	12.8 ( 98)	22.7 (174)				
Role of the counsellor	13.2 (101)	14.8 (114)	28.0 (215)				
Teachers' responses:							
Where to get counselling	37.0(50)	54.1 (73)	91.1 (123)				
Counselling process	17.8 (24)	29.6 (40)	47.4 (64)				
Role of the client	21.5 (29)	15.6 (21)	37.1 (50)				
Ethical issues in counselling	14.8 (20)	19.3 (26)	34.1 (46)				
Role of the counsellor	14.1 (19)	5.9 (8)	20.0 (27)				

The findings in Table 1 indicate that both the students and teachers felt that informing youth in schools on where they could get counselling was the most preferred information. The total response was 97.3% and 91.1% respectively. The topic on the counselling process was second in preference for both the students and teachers. However the two groups differed on their third choice in which the students preferred information on ethical issues in counselling while the

teachers indicated information on the role of the client in the counselling process as their third choice. For both the students and teachers, the role of the counselor in the counselling process was the least preferred topic. The findings suggest that the respondents appreciated that in order to enhance use of counselling services there was need for the students to be informed on where to access it and how it is done.

The divergence in preference of third and fourth choices could be associated with the views of the respondents during the FGDs. The students reported that they rarely used counselling services because there was lack of confidentiality on the part of the service providers especially the guidance and counselling teachers in schools. They felt that being sensitized on the ethical issues would empower them in making informed choices on where to access counselling and to gauge the quality of counselling services they were getting. On the other hand, the teachers' third choice - the role of the client in counselling, was likely to be because they felt it would enable the students be aware of the fact that it is the client who seeks for counselling and not the counsellor who organizes forums on pertinent issues as seems to be the case in most schools.

During the teachers' FGDs the guidance and counselling teachers highlighted the concern that they made use of guidance more than counselling because the students rarely sought for counselling. The topics with the least response rates for both the students and teachers garnered at least 20%. This is a considerable number of respondents therefore all the topics had the potential to contribute to enhanced understanding for the students.

The female student respondents recorded higher response rates than their male counterparts in all topics apart from the topic on "The role of the client in the counselling process". These higher response rates among the female students could be attributed to the fact that they were interested in being armed with sufficient information since traditionally; they were faced with more challenges related to HIV & AIDS prevention as compared to their male counterparts. The female teachers registered higher response rate in only two out of the five topics. These were the "The role of the counsellor in the counselling process" and "The role of the client in the counselling process".

The scenario of there being higher response rates on need for uptake of information meant to enhance HIV and AIDS prevention among female compared to male was also reported in a studies by Malanda (2010) and Malanda & Moracha (2012) on the effectiveness of HIV & AIDS education in promoting interventions in secondary schools in Kenya and on evaluation of HIV & AIDS education in Kenya. Though the two studies sought to establish topics that the youth felt were relevant to HIV & AIDS prevention including counselling and did not find out the specific areas in counselling that the students preferred, the studies shed light on the general trend on the students' need for information. The present study also established the same trend in which male students had the least response rates on the need for information dissemination. This could be an indicator that the male youth had a low risk perception on HIV & AIDS an issue that needs to be put into perspective if prevention initiatives are to be enhanced. This is especially in a country like Kenya where despite efforts to create affirmative action in favour of the female gender, still remains a patriarchal society in which the male play a major role in decision making.

The findings on the topics that the respondents would prefer to get information on are an indicator that the utilization of counselling services by students may not necessarily be because they do not need it but as a result of ignorance on where counselling is offered, what counselling entails and perception of lack of confidentiality thus leading to a negative attitude towards counselling services. These findings partly concur with the findings by Malanda (2010) that secondary schools do more of guidance and students underutilize counselling services in schools because they felt that there is lack of confidentiality among the counsellors in schools. The present study however has an edge over the study by Malanda (2010) because it further probes to establish information that the students need to be provided for them to acknowledge the scope of their role and rights as counselees and that of the counselors in the process.

Apart from potential information on counselling issues, provision of actual counselling services to the youth is necessary. Therefore, the present study sought to establish the perspective of students and teachers on counselling services providers they preferred from a choice of ten. The findings for each of the ten service providers for the two respondent groups – the students and teachers were reported as median; and rank means cross tabulated on the basis of gender, from the overall most preferred to the least preferred. The standard deviations (Std. Dev.) of the total rank means for each provider were also reported. The median score had a maximum of 10 which denoted first rank up to 1 which implied the preference was accorded the tenth rank. The findings were presented as Table 2.

Table 2

The preferences of students and teachers on counselling service providers

8	edian	Rank M	Ieans			
Service		~ •			G. T.	
Provider		Gende		Total	SD	
		<u>Female</u>	Male			
Students' responses:						
Mother	8	7.26	5.90	6.59	3.29	
G & C teacher	7	6.61	6.30	6.46	2.91	
Health facility counselor	6	6.07	5.62	5.85	3.00	
Doctor	6	6.03	5.62	5.83	3.14	
Father	5	4.99	5.42	5.20	3.29	
Youth centre	5	4.93	5.09	5.01	2.74	
School peer educator	5	4.87	4.75	4.81	2.70	
Nurse	5	5.06	4.27	4.68	2.76	
Out of school peer educator	r 4	3.86	3.85	3.86	2.66	
Chaplain/religious leader	3	3.60	3.40	3.50	2.72	
Teachers' responses:						
G & C teacher	8	6.83	8.04	7.52	2.89	
School peer educator	7	6.67	5.94	6.25	3.56	
Mother	5	5.74	4.60	5.09	3.55	
Health facility counselor	5	4.53	5.29	4.96	3.24	
Out of school peer educator	r 5	4.81	4.55	4.66	3.13	
Father	3	4.66	3.52	4.01	3.10	
Youth centre	4	4.26	3.56	3.86	3.01	
Doctor	3	3.91	3.64	3.76	3.04	
Chaplain/religious leader	3	3.21	3.47	3.36	2.83	
Nurse	3	3.21	3.27	3.24	2.71	

In Table 2, the median scores indicate that among the students, the mother and guidance and counselling teacher; and among the teachers, the guidance and counselling teacher and school peer educator had got to the 50% of the total respondents' response at a median of 8 and 7 out of a maximum of 10 respectively. The total rank means indicate that the four most preferred service providers by the students included mother, guidance and counselling teacher, health facility counselor and doctor. The teachers preferred the guidance and counselling teacher, school peer

educator, mother and health facility counselor. The order of mention for each group of respondents descended from the most preferred.

The findings in Table 2 indicate that the students and teachers had the same preferences on three of their first four choices. Their point of divergence was on the choice of doctors by the students which for the teachers was the eighth choice and the choice of school peer educators by the teachers who the students indicated as their seventh choice on the basis of total rank means. The students' choices were more inclined on the health institutions having the greatest potential in providing counselling services while the teachers' choices indicate their confidence in the potential schools' fraternity had in providing the services. On both fronts, the importance of the parent figure namely mother in providing the service was reiterated.

The female student respondents' order of first four preferences was similar to that of the overall student fraternity in which preference was accorded the mother then the guidance and counselling teacher, the health facility counselor and the doctor as the fourth preference.

Though the first four preferences among the male students were similar to those presented for the student respondents, the order of preference differed. The male students preferred the guidance and counselling teacher most, followed by mother, then the health facility counsellor and doctor tying as third preference with a mean of 5.62. The findings suggest that though the father was the fifth most preferred service provider to the female and male student respondents and also in the total responses for the youth, he still remained an important figure in counselling especially to the boys. However, in all categories, the mother was more preferred to the father. This implies

that though the father is a culturally approved figure especially in the mentoring of the male children, the mother was still considered the best and most acceptable choice irrespective of the youths' gender. The implication here could be that mothers play an active role in the upbringing of their children and are more accessible.

The findings of the present study that the mother was among the most prefered counsellors concurs with findings by Malanda (2014b) which sought to establish other persons apart from the guidance and counselling teacher the students would approach for counselling. Mothers then doctors were the most preferred with response rates of 71.2% and 56.5% respectively while fathers had a response rate of 38.2% which is just slightly above half the number who preferred the mothers. Though the study by Malanda (2014b) sought alternatives to the guidance and counselling teacher unlike the present study which established the preference of the students with none of the service providers being looked at as an option to the other, the study bolsters the findings of the present study that among the students, mothers have positioned themselves as parent figures who the students approve as counselors to them.

The present study established that for the preference of mother, female students had higher rank means than their male counterparts while for the father, the male learners had higher rank means compared to their female contemporaries, This trend was also observed in the study by Malanda (2014b). This finding implies that irrespective of the level of preference, vestiges of the traditional practice in advice giving where female youth would be assigned to older females and the male to their fellow male still abounds thus gender roles cannot be ignored. It is apparent that

this finding reiterates the fact that parents should not only be involved in academic activities in the school but also in issues related to HIV & AIDS prevention initiatives.

The female teachers' order of preference for the first four service providers included the guidance and counselling teacher, school peer educator, mother and out of school peer educator. The male teachers preferred the guidance and counselling teacher, school peer educator, health facility counselor and mother. The findings in Table 2 suggest that the father was not a preferred service provider for counseling the female and male teachers ranked him sixth and eighth respectively while the overall ranking for the teachers was sixth. However, studies Wong et al (2009), Guttmacher Institute (2007) and Van Rossem & Meekers (2011) done among youth in Uganda, Cameroon and Canada respectively contend that school-family collaborations can enhance an environment of resilience to the program thus improving their sustainability.

The findings from the FGDs conducted with the students threw some light on why they did not prefer some of their own, the school based peer educators as counselling service providers. Lack of confidentiality and inadequate content mastery among the peer educators were the main reasons for this. However, the teachers felt that the best capacity in providing the service lay in the school itself because accessibility and monitoring of the program would be made convenient in such an arrangement. The study found out that the traditional role of care giving the mothers played necessitated the creation of a rapport which lasted even up to the youthful stage hence, they were always a reference point when the students especially those of the female gender needed to consult on issues they classified as confidential. Both the students' and teachers' FGDs

revealed their choice of doctor and health facility was based on the feeling that these had the technical expertise to provide counselling services.

The findings on the respondents' preferences for counselling service providers are varied as evidenced by the variability in standard deviations. This is an indicator that respondents had varied preferences thus no one strategy can enable counselling promotion and in turn HIV & AIDS prevention. This implies that there was need to use varied initiatives. This finding concurs with the finding by Ssetwe (2010) when establishing the strategies to use for HIV & AIDS prevention in South Africa came to the conclusion that no one strategy could enable mitigation of the scourge. The present study was specific on its target population to whom the strategies are to be applied and was based on primary data whereas Ssetswe (2010) focused on the general population and reviewed secondary data. This implies that the present study would inform on how to tailor interventions to a specific group using appropriate strategies unlike the cited study.

These preferences suggest that for both the two groups of respondents, the strategies that could work need to involve the home, school and health facilities. However, the extent and nature of involvement is an important consideration for the strategies to practically achieve their intended purpose as strategies of promoting counselling. Mothers are caregivers to their children and even when they have the prerequisite skills in counselling, there is already an emotional attachment between them and their children. In the view of the researcher, mothers then can be good at guiding and not necessarily counselling.

The health facility counsellor is trained with a bias on health issues which is one of the needs of the youth in school, however, the bulk of the students' challenges leans more on social issues which precipitate into the health issues. The area of operation of the health facility counselor is in the health facility thus they spend most of their time at their work place. To be able to access the health facility counsellor, the client needs to visit them at their work place or an arrangement could be made with the schools for occasional visits to the schools. Such arrangements have a cost implication yet one of the factors that influenced choice of some strategies was financial in nature arising from the fact that school did not have a cost centre to support such initiatives. Additionally, the health sector is faced with a challenge on personnel a situation which is more acute than that of teachers. The ratio of health facilities to schools is very low therefore the health based preferences may not have sufficient time to attend to their work and at the same time go to schools to provide the service.

The training and job description of a doctor does not majorly involve counselling and it is unlikely that doctor could want to delve into counselling issues or deal with them putting in mind the fact that the doctors are already strained in terms of their main stream job. It is common knowledge that in Kenya there are some health facilities that lack doctors.

The school peer educators were a preference by the teachers, however, the students had some reservations about them thus did not rank them highly as a preference. The misgivings that the students had on the school peer educators were majorly lack of training and confidentiality. Despite this, the school peer educators are easily accessible to the students in both formal and informal settings. The peer educators can also be instrumental in giving the youth in school who

are their agemates, information without reservation because there are no cultural barriers among them. Additionally, the execution of their duty would not be limited to a schedule since they interact with their fellow students in many fora.

The guidance and counselling teacher was a preference for both the students and the teachers. The training background of the guidance and counselling teacher is biased to a school setting giving them the expertise and experience to deal with students. Teachers generally spend a considerable part of their time in schools because it is their place of work and the guidance and counselling teacher is not an exception. Therefore, they are easily accessed by the students and can deal with challenges affecting the students in real time which is a necessary ingredient in helping the learners navigate their challenges. However, to enable the guidance and counselling teachers to be more effective, there is need to take them for more training and also reduce their workload so that they can dedicate more time to counselling.

Assessing the situation therefore, it is the in the view of the researcher that though the mother and health facility counselor were preferred by both the respondents, their role would be to complement and or supplement the work of the guidance and counselling teacher and the school peer educator while the doctor may not have a major role to play in the promotion of counselling. Though mothers seem to be more involved in education activities for their children in schools as observed by Malanda (2014b) fathers need to be encouraged to do the same so that the family front works in unison towards complementing and supplementing the initiatives present in schools by providing advisory and reinforcement service to their children. This is to guard against the challenges that come about when the youth have identity issues. The study by

(Paxman, 1993) recommended that parents need to be aware of the programs that their children are being taken through in schools but they don't necessarily have to be actively involved. The health facility counselor could supplement the work of the guidance and counselling teacher through referrals on specific issues that are biased towards health. This implies that there is need for collaboration between the school and health facilities.

In order to increase the uptake of the counselling services by the youth, there is need for them to be made aware of the presence and points where provision of information and services can be accessed. In this light, the study sought to establish the strategies respondents felt would best create this awareness. The findings were presented in Table 3 as median; and rank means cross tabulated on the basis of gender. The standard deviation for the rank means was also reported.

Table 3

The preferences of students and teachers on counselling services awareness promotion strategies

Counselling Median Awareness		Cross Tabulated Rank Means					
Strategies		Gende	er	Total	SD		
Students' responses.		<u>Female</u>	<u>Male</u>				
Students' responses:	5	<b>5</b> 10	4 71	4.05	2.60		
School notice boards	5	5.18	4.71	4.95	2.69		
School counselor referrals	5	4.99	4.63	4.81	2.39		
Radios	5	4.74	4.73	4.74	2.42		
Newspapers/magazines	3	4.50	4.51	4.51	2.17		
School peer educators	5	4.72	4.24	4.49	2.31		
Television	4	4.58	4.24	4.41	2.54		
Out of school peer educator	5	3.75	3.14	3.45	2.18		
Mobile van announcements	1	2.30	2.31	2.31	2.09		
Teachers' responses:							
School counselor referrals	7	4.97	5.32	5.17	3.15		
School peer educators	6	4.97	4.78	4.86	3.21		
Out of school peer educator	4	3.90	3.25	4.53	2.59		
School notice boards	5	3.90	4.81	4.41	3.31		
Radios	4	3.26	3.71	3.52	2.71		
Television	3	2.95	3.30	3.15	2.74		
Newspapers/magazines	2	3.09	2.73	2.88	2.53		
Mobile van announcements	1	2.03	1.83	1.92	2.28		

Though not necessarily with the same rankings on preference, the findings in Table 3 suggest that the students and teachers were in consensus that school notice board and school counselor referrals were among the four best strategies that could be used in awareness creation on access of counselling services and information. The students felt that radio and magazines/newspapers were the other two while teachers felt school based peer educators and out of school peer educators sufficed.

Female and male students were in agreement that the school notice boards, school counselor referrals and radio were among the three most preferred mediums for awareness creation. However, the fourth preferred medium was school based peer educator for the female and magazines for the male students.

These findings from the students' fraternity indicate that the mass media particularly the radio was an important strategy in reaching the youth and its accessibility in both rural and urban areas endeared it to the youth. This finding concurs with findings by (FOCUS, 2001; Guttmacher Institute, 2007; Peddecord et al. 2008; & Moshki et al, 2016) that the mass media was an important tool in information dissemination to the youth. However, there is need to establish a mechanism that would ensure that the students have access to the information on media gadgets out of the class lessons and other school activities. This study did not seek to establish the specific radio and television stations of preference however "fm" radio stations seemed popular. School confined strategies namely school counselor referrals and school notice boards were promising strategies for awareness creation. This could largely be due to the fact that students spent a lot of time in school hence they could easily access them.

Gender notwithstanding, the teacher respondents chose school counselor referrals, school peer educators and school notice board among their first three choices. The fourth choice was out of school peer educators and radios for the female and male teachers respectively. These findings indicate the consistent confidence teachers had in the school fraternity as the best mediums for promoting counselling in learning institutions. This finding resonates with findings by Sarma et al (2013) and Sani et al (2016) that school based approaches are well-proven intervention

strategies in providing information for HIV & AIDS. Though these two studies are not specific to counselling they reiterate the potential within schools for HIV & AIDS prevention.

### 4.2.2 Voluntary Counselling and Testing Strategies

The study also attempted to establish the perspective of students and teachers on strategies that could enhance VCT to the youth in schools. The findings were reported on the basis of their preference on the information they felt was essential for the youth to increase their uptake of VCT services, their preferred service providers and the mediums that could be used to create awareness to the youth in school on how they could access information and services on VCT. In order to ascertain the respondents' preference on information that they felt would enhance their utilization of VCT, the respondents were asked their preference on selected topics in VCT. These responses from the students and teachers were reported as percentages and frequencies in Table 4.

Table 4

The preferences of students and teachers on selected topics for enhancing students' use of Voluntary Counselling and Testing services

Topic	Female	Male	Total
Students' responses:	% (f)	% (f)	% (f)
Where to get VCT services	48.6 (373)	44.2 (339)	92.8 (712)
The VCT process	23.4 (180)	18.9 (145)	42.3 (325)
Ethical issues in VCT	23.0 (177)	19.0 (146)	42.0 (323)
Role of the VCT counsellor	18.0 (138)	16.7 (128)	34.7 (266)
Role of the VCT client	13.3 (102)	14.8 (114)	28.1 (216)
Teachers' responses:			
Where to get VCT services	39.3 (53)	38.5 (51)	77.8 (105)
Ethical issues in VCT	19.4 (26)	24.6 (33)	44.0 (59)
Role of the VCT client	20.1 (27)	22.4 (30)	42.5 (57)
The VCT process	13.4 (18)	23.1 (31)	36.5 (49)
Role of the VCT counsellor	12.8 (17)	13.5 (18)	26.3 (35)

The findings in Table 4 indicate that information on "where to get VCT services" was the most prefered by students and teachers alike. The female students had higher response rates than the male students on all apart from the topic on "the role of the counselor in VCT." The students' FGDs revealed that the male students had a negative attitude towards getting tested because they felt if they were found positive, they would not be able to live with that reality therefore, they were more comfortable not knowing their status. Further probing revealed that very few knew their status.

During the FGDs with male students it emerged that they had mixed feelings on VCT. Some felt that VCT was an important intervention and needed to be practiced by the youth while others felt that they were better off not knowing their status. The students who were not for testing used phrases like "What you do not know does not kill you. I cannot live with the fact that I am

positive." This is an indicator that a considerable number of male youth in schools were sexually active. It emerged from the FGDs with male students that there was need to introduce moonlight testing which increased the likelihood of anonymity thus enhanced uptake of VCT. Further probing revealed that the students were not confident enough to utilize VCT services for fear of being labeled as "positive." This is an indicator that issues touching HIV & AIDS are still shrouded with stigma. This finding concurs with findings by Majelantle, Keetile, Bainame & Nkawana (2014) and Sisay et al (2014) whose studies on uptake of VCT among youth in Botswana and Ethiopia respectively revealed that fear of stigmatization, low risk perception and fear of being positive for the test hampered the use of VCT services. The male teachers recorded higher response rates than their female counterparts in all the topics apart from the topic on "where to get VCT."

The response rates on information provision for VCT ranged between 26% and 93%. These response rates are an indicator that information provision was not well done in some of the topics thus the need to step up strategies to enable this. These response rates do not concur with reports by (Malanda, 2010; KDHS 2003; 2008) that awareness on VCT was high among the youth in schools, and the reason for poor uptake of the services is majorly due to negative attitude and the stigma associated with being seen in a VCT site. The study by Malanda (2010) was conducted on youth in secondary schools in Vihiga District from which Emuhaya Sub County the study site of the present study was carved. This finding calls for the need to ensure that the youth in schools are given relevant information consistently. It is possible that the negative attitude towards VCT testing could be as a result of insufficient information to the youth in schools. Additionally, the topic on "Where to get VCT services" had the highest response rates from

students and teachers alike. This could imply that though a nationwide survey like the KDHS could report high level of awareness on VCT services, there is a likelihood that the information given is not comprehensive enough or does not reach the target population.

The topics that have the potential to enhance the use of VCT need to go hand in hand with the provision of actual VCT services to the youth for the intervention to succeed. Therefore, the present study sought to establish from the students and teachers their preferred VCT service providers from a choice of eleven. The findings were reported in form of median, rank means and the standard deviation to the rank means. The findings for each of the eleven service providers from the two respondent groups are presented as Table 5 in form of cross tabulations to capture gender of the respondents and the overall total response.

Table 5

The preferences of students and teachers on Voluntary Counselling and Testing services providers

VCT Services Me Provider	edian	Cross Tabulated Rank Means				
		Gend	er	Total	SD	
		Female	e Male			
Students' responses:						
Doctor	9	7.90	7.02	7.46	3.42	
G & C teacher	8	7.51	7.08	7.30	2.98	
Health facility counselor	8	7.57	6.80	7.19	3.39	
Mother	6	6.81	6.01	6.41	3.28	
Nurse	7	6.68	5.65	6.18	3.30	
School peer educator	6	5.68	5.71	5.70	2.95	
Youth centre	6	6.02	5.79	5.90	2.82	
Father	5	5.00	5.21	5.14	3.29	
Out of school peer educator	4	4.78	4.51	4.65	2.86	
Chaplain/religious leader	3	3.53	3.81	3.67	2.74	
Community health worker	3	3.63	3.80	3.71	3.15	
Teachers' responses:						
School peer educator	9	6.86	6.96	6.92	4.23	
G & C teacher	9	6.97	6.34	6.61	4.60	
Health facility counselor	6	5.24	6.06	5.71	3.99	
Out of school peer educator	5	5.24	4.56	4.85	4.02	
Mother	4	4.53	4.84	4.71	3.57	
Doctor	5	4.72	4.64	4.67	3.62	
Youth centre	5	4.83	4.31	4.53	3.24	
Nurse	5	4.10	4.79	4.50	3.23	
Father	3	3.26	3.83	3.59	3.14	
Chaplain/religious leader	2	2.79	3.61	3.26	3.03	
Community health worker	2	3.00	2.95	2.97	3.14	

The students' total responses in Table 5 indicate that they preferred services on VCT being handled by health facility based personnel. Out of their first four choices, two namely doctor and health facility counselors are health facility based personnel. On the other hand, teachers' responses indicate that they felt counselors both in school and at the health facility and school

based as well as out of school based peer educators were better suited for this task. Both the two categories of respondents named the guidance and counselling teacher as the second most preferred in providing VCT services. The mother emerged as the fourth preferred VCT services provider to the students. Despite the respondents preferences on provision of the entire VCT component, the practicability of the choices would have to be in conformity with the guidelines for provision of the service (CDC, 2001). This would thus limit the legible preferences to health personnel and counselors who have been trained to provide the service. The preferences of the respondents that are not limited to the health personnel and counselors are an indication of the need to explore the possibility of involving peer educators, mothers and the guidance and counselling teacher in provision of the counselling component of VCT. Though they have no background training in VCT, the service providers featured as preferred choice which implies that they could have a profound influence in ensuring VCT was promoted among students and thus reduce or alleviate the mixed feelings that some students were likely to be having.

Gender notwithstanding, doctor, guidance and counselling teacher and health facility counselor were the three most preferred VCT service providers among the students. Doctors were the most preferred among the respondents in all the categories. However, though the male students preferred guidance and counselling teacher second, and health facility counselor third, it was vice versa for the female students. The preference for health facility personnel is in line with findings by McKay & Holowaty (1997) and HeadsUp (2010) which indicated that young people in Canada and United Kingdom respectively prefer health professionals as their sources of information on sexual health. Though the cited studies were done in the developed countries

unlike the present study which is in developing country, the findings both studies focused on the youth.

The findings on the preferred VCT service providers bring to the fore the variability in the preferences of the respondents just as it did with the counselling services. This is evidenced by the standard deviations in relation to the rank means posted for each service provider. The findings thus affirm findings by Ssetswe (2010) on the need to employ varied intervention strategies to curb the HIV & AIDS scourge. However, there is a divergent point for these two studies – the present study has specifically addressed the needs of the age group between 15-19 years in Kenyan secondary schools in Emuhaya Sub County while Ssetswe's findings were based on a meta-analysis of various studies on the general population between 15 and 45 years in South Africa. The present study therefore provides more specific information on what can work for a specific population – the students. This is in line with recommendations by Tijuana (2001) and UNICEF (2012) that interventions and strategies that work need to be based on the developmental age and the need to have disegregated data that could enable coming up with recommendations specific to age, gender and other relevant variables.

The intervention has a counselling component and a testing component. Though the guidance and counselling teacher can be trained to effectively provide the counselling component, the testing will always require the input of health facilities to acquire the HIV testing kits and use them procedurally. This implies that the guidance and counselling teacher would be better placed to refer the students for the VCT exercise and not to carry it out. This would ensure that the students have information on what VCT entails but would guard against the likelihood of poor

uptake of the service. In view of the factors that influenced choice of VCT service providers, the students felt that health facility personnel would provide them the service and at the same time uphold confidentiality and anonymity. Two health personnel the doctor and health facility counsellor were among the four most preferred service providers by either or both the two groups of respondents – students and teachers. The job description and work load in the health facilities is likely not to enable the doctor to be able to provide VCT services, however, it places the health facility counselor in a better position to provide the service.

The choice of mother as a service provider is likely to be because of the guidance and counselling role mothers play on the family front. However, practically speaking, it may not be feasible for the mother to provide this service to the students because of the emotional attachment between the mother and their child who would be the likely target of the service if they were to offer it. Additionally, the qualifications required to enable one provide the service may be a challenge to the majority of the mothers thus they could be better placed to encourage their children to use the service but not to provide it.

The school peer educators and out of school peer educators were also among the preferred service providers. Inspite of the fact that they could be having basic training in counselling, the peer educators are not fully equipped with the prerequisite knowledge and skills to provide the service. In the researcher's view, the school peer educators who are always in constant interaction with their fellow students could be armed with information on VCT especially on the topics in Table 4 so that they create awareness. Additionally they would be suitable referral agents. Since students are mostly in school, the out of school peer educators may not be able to

provide the students with sufficient contact hours to provide adequate service to the youth in schools. Additionally schools are not likely to grant the out of school peer educators with adequate contact hours with the students due to the nature of the school schedule and in light of the fact that there has always been a challenge of the overloaded curriculum.

This implies that to promote VCT, the collaboration between schools and health facilities would be necessary so that the schools especially through the guidance and counselling teacher and the peer educators provide information and referrals while the health facility counselors provide the service. Presently there is a Policy under legislation that seeks to enable the youth to get comprehensive reproductive health services from the age of 15 without consent. In the event that it is enacted, VCT promotion can be enhanced by having the health facilities schedule provide outreach services in the schools.

In order to increase the uptake of the Voluntary Counselling and Testing services by the youth in schools, there is need for them to be made aware of the presence and points of provision of the services. In light of this, the study sought to establish the strategies respondents felt would best create this awareness. The findings were presented as Table 6 in form of median, rank means and their standard deviation with the rank mean being cross tabulated on basis of gender.

Table 6

The preferences of students and teachers on Voluntary Counselling and Testing (VCT) services awareness promotion strategies

VCT Awareness Me Strategies	dian	Cross Tabulated Rank Means				
		Gend	er	Total	SD	
		Female	Male			
Students' responses:						
School notice boards	6	5.46	4.75	5.11	2.79	
School counselor referrals	5	4.97	4.47	4.73	2.52	
Radios	4	4.55	4.51	4.53	2.47	
Newspapers/magazines	3	4.46	4.03	4.25	2.28	
Television	4	4.44	3.96	4.21	2.57	
School peer educators	4	4.44	3.90	4.18	2.43	
Out of school peer educator	5	3.47	3.12	3.30	2.22	
Mobile van announcements	1	2.32	2.27	2.30	2.10	
Teachers' responses:						
School notice boards	5	4.40	4.68	4.56	3.36	
School peer educators	5	5.48	3.26	4.21	3.24	
School counselor referrals	4	4.79	2.99	3.76	3.11	
Out of school peer educator	3	3.74	2.30	2.92	2.57	
Radios	3	3.74	2.23	2.88	2.44	
Television	2	3.33	2.01	2.58	2.44	
Newspapers/magazines	3	3.47	1.78	2.50	2.33	
Mobile van announcements	1	2.02	0.94	1.40	1.75	

Though not in the same order, for the students, the three most preferred overall rank means in Table 6 were also rated as such among the female and male learners. The teachers' first three choices were also among their three choices on the basis of gender.

The findings suggest that both the students' and teachers' overall choices on mediums of awareness showed preference for the school notice board and school counselors' referrals since these two were among the three most preferred choices. These two preferred choices of VCT

were similar to those of counselling services in which the respondents identified notice boards and school counselor referrals as among the most preferred awareness creation medium. This is an indicator that notice boards could serve as site for awareness creation to more than one intervention thus was a cost effective strategy.

#### **4.2.3 Peer Involvement Strategies**

The study also established the preference of students and teachers on strategies that could enhance peer involvement in schools. The findings were reported on the respondents' preference on the information they felt peer educators could disseminate to the students; their preferred service providers and the mediums that could be used to create awareness to the learners on how they could access information and services on peer involvement.

In order to ascertain the respondents' preference on information that would enhance their utilization of peer involvement, the respondents were asked to rank selected topics on HIV & AIDS prevention that peer educators could handle. These responses from the students and teachers were cross tabulated on the basis of gender and reported as percentages and frequencies in Table 7.

Table 7

The preferences of the students and teachers on topics peer educators should address

Topic	Cross Tabulated Percentages					
	Female	Male	Total			
Students' responses:						
-	% (f)	% (f)	% (f)			
HIV & AIDS prevention	32.6 (250)	30.4 (233)	63.0 (483)			
Leisure time management	25.4 (195)	23.3 (179)	48.7 (374)			
Boy-girl relationships	25.7 (197)	21.7 (167)	47.4 (364)			
Sexual abuse/coercion	18.9 (145)	22.7 (174)	41.6 (319)			
STIs prevention	19.9 (153)	20.2 (155)	40.1 (308)			
Drug & alcohol abuse	19.4 (149)	18.1 (139)	37.5 (288)			
VCT	16.7 (128)	16.7 (128)	33.4 (256)			
How to use condoms	11.1 (85)	14.6 (112)	25.7 (197)			
How to avoid pregnancy	12.2 ( 94)	11.3 (87)	23.6 (181)			
Puberty	11.8 ( 91)	10.2 ( 78)	22.0 (169)			
Negotiating sex	9.9 (76)	9.5 (73)	19.4 (149)			
Where to get condoms	5.7 ( 44)	7.9 ( 61)	13.6 (105)			
Teachers' responses:						
HIV & AIDS prevention	23.0 (31)	40.0 (54)	63.0 (85)			
Leisure time management	22.2 (30)	31.1 (42)	53.3 (72)			
STIs prevention	14.8 (20)	32.6 (44)	47.4 (64)			
Drug & alcohol abuse	21.5 (29)	22.2 (30)	43.7 (59)			
Sexual abuse/coercion	14.8 (20)	25.9 (35)	40.7 (55)			
VCT	11.9 (16)	24.4 (33)	36.3 (49)			
How to use condoms	14.1 (19)	20.7 (28)	34.8 (47)			
Puberty	13.4 (18)	20.1 (27)	33.5 (45)			
Where to get condoms	10.4 (14)	11.1 (15)	21.5 (29)			
How to avoid pregnancy	7.4 (10)	11.1 (15)	18.5 (25)			
Negotiating sex	6.7 (09)	8.1 (11)	14.8 (20)			
Love relationships	0.0 (00)	1.5 (02)	1.5 (02)			

The findings in Table 7 indicate that both students and teachers selected HIV & AIDS prevention and leisure time management as the two most preferred topics that peer educators could handle. All the topics had an overall response rate of over 10% among teachers and students alike apart from the topic on love relationships whose response rate among the teachers was a paltry 1.5%.

This implied that the teachers did not feel that youth had the expertise to talk about issues of love to their contemporaries.

The female students recorded higher percentages than their male counterparts on all the topics except Sexual abuse/coercion, STIs prevention, how to use condoms and where to get condoms. Both genders recorded a response rate of 16.7% on VCT. On the other hand, the male teachers recorded higher percentages than their female counterparts on all the topics. These findings suggest that female students and male teachers unlike their counterparts supported the need for peer educators to disseminate these topics thus had more confidence in the role peer educators could play as agents of HIV & AIDS prevention initiatives. The female students unlike female teachers had lower response rates on the topic on sexual coercion/ abuse than their male counterparts. This could imply that the female students had less confidence than their male learners in the capability of peer educators to address the issue. On the contrary female teachers more than their male colleagues felt that the peer educators were in a position to handle the topic.

The students and teachers alike posted higher percentages for peer involvement in addressing topics related to HIV & AIDS prevention as compared to parental involvement. This can be ascertained when the response rates in Table 9 and Table 11 are compared. The two tables sought the preferences of the respondents on the same topics. The teachers particularly posted response rates lower than 6% on ten topics for parental involvement as compared to only one topic for peer involvement. The findings thus imply that the respondents felt that peers had a higher potential than parents in being agents of HIV & AIDS prevention among their fellow youth. This could be because the peer educators being age mates to the students, could easily

understand and empathize with their fellow youth; and can identify with most of the experiences they go through. Thus, peer involvement initiatives in schools were a strategy that could enhance HIV & AIDS prevention. Various studies (Menna, 2015; Murray et al, 2000; Shuey et al, 1998; Cash, 1993; Chege, Avarand & Njay, 1995; Lane, 1997; Randolph, 1996) are in agreement with the notion that peer involvement is an effective way of reaching the youth in a culturally appropriate manner. However, Mason-Jones et al (2011; 2013) and Michielsen et al (2012) cast doubt on the efficacy of peer involvement initiatives in enabling behaviour that would enhance HIV & AIDS prevention. The divergent findings call for the need to further interrogate the effectiveness of peer based interventions.

For the peer involvement intervention to succeed, the topics relevant to HIV & AIDS prevention initiatives that peer educators have the potential to handle need to go hand in hand with the provision of actual peer education services to the students. Therefore, the present study sought to establish the preference of students and teachers on peer education service providers from a choice of eleven. The findings for each of the eleven service providers for the two respondent groups – the students and teachers were reported as median and rank means with corresponding standard deviations. The ranks means were cross tabulated on the basis of gender and the overall total response indicated. The findings are presented as Table 8.

Table 8

The Peer Educators preferred by students and teachers

Peer Educator Med	Cross Tabulated Rank Means					
		Gend	er	Total	SD	
		Female	e Male			
Students' responses:						
University/college based	8	7.68	6.81	7.25	2.96	
School based	8	7.02	6.55	6.79	3.26	
Youth centre based	8	6.88	6.58	6.73	2.73	
Radio based	6	5.62	5.58	5.60	2.57	
Church based	6	5.55	5.11	5.34	2.92	
Television based	5	5.28	4.93	5.11	2.64	
Community based	4.5	4.83	4.54	4.69	2.61	
Magazine/newspaper based	5	4.83	4.38	4.61	2.61	
Telephone hotlines based	3	3.55	3.16	3.36	2.46	
Internet sites based	2	3.16	2.77	2.97	2.85	
Teachers' responses:						
School based	10	8.55	7.69	8.06	3.56	
Youth centre based	8	6.64	6.60	6.61	2.97	
University/college based	8	7.07	5.79	6.34	3.21	
Church based	6	5.53	5.26	5.38	2.91	
Community based	6	5.59	4.39	4.90	2.87	
Radio based	5	4.33	4.91	4.66	2.45	
Television based	4	3.64	4.48	4.12	2.48	
Magazine/newspaper based	3	3.28	3.58	3.45	2.36	
Telephone hotlines based	2	3.26	2.48	2.81	2.10	
Internet sites based	1	1.64	1.94	1.81	1.98	

Based on findings in Table 8, though at different ranks, the overall and gender related ranking for both the teachers' and students' on the three most preferred strategies indicate that they were in consensus that University/college based, youth centre based and school based peer educators were among the three most preferred peers for HIV &AIDS prevention initiatives. The findings for the school based peer educators indicate that at least 50% of the responses from the teachers were attained at a median value of 10, which is the maximum, while for the students it was at a

median of 8. The university/college and youth centre based peer educators' 50% mark was attained at a median of 8 for both the teachers and students. The findings that both students and teachers chose university/ college based peer educators as among their three most preferred peer educators do not concur with earlier findings by Malanda (2010) which reported that teachers were reluctant to involve youth in tertiary institutions especially universities in HIV &AIDS initiatives at their schools. According to the findings, the teachers felt that the moral standing of the students in tertiary institutions was wanting thus would negatively impact on students in school. The study by Malanda (2010) was done in Vihiga District from which Emuhaya Sub County was carved thus geographical diversity is unlikely to be the reason for the divergent views in the two studies. The preference for the University based peer educators by the teachers could be due to the fact that the teachers objectively considered the role the youth in tertiary institutions would play in positively impacting on the youth in schools instead of stereotyping.

Though the Youth Centre based peer educators featured prominently as preferred service providers, through the FGDs and the researchers probing and observation, it was realized that there was no youth centre in the area of study which is predominantly in a rural setting. This affirmed findings by Zuurmond, Geary and Ross (2012) and Senderowitz (1998) that though the youth centres were a youth friendly initiative, their positive contribution towards reproductive health initiatives was curtailed by their few numbers and location since most were in urban areas. Though these finding was based on a broader spectrum of reproductive health of which HIV & AIDS is part it provides important insight into the role of youth centres as a strategy to necessitate peer led education and services.

With reference to the rank means, the students' fourth choice was radio based peer educators while the teachers' was church based peer educators. This implies that students felt that the most accessible mass media, the radio, could have an impact on HIV & AID initiatives to the youth while the teachers felt the religious front was the better choice. Despite of mobile telephony and Internet Technology being popular in the present times, telephone hotline based and internet site based peer educators were the least preferred in all categories of responses. However, studies by Rogers, Lemmen, Kramer, Mann and Vineet (2017) on internet delivered health interventions that work submit that the strategy is accessible, cost effective and an attractive alternative to health promotion. Pop-Eleches et al. (2011) and Lester et al. (2010) who conducted studies in Kenya and Free et al. (2013) who did a meta-analysis on mobile phone technology use to promote antiretroviral adherence agree with this notion. The low preferences for the two initiatives could likely be due to the fact that during the period of research, mobile phones were banned in schools. Additionally, the provision of internet services in schools was limited, if present, or not accessible to most students. These barriers to use of mobile phones and internet were established during FGDs by students and teachers alike. To express this, student used "sheng" phrases like "Hawa mode wanetukazia kutumia simu na net ni ya classwork pekee." to mean that the teachers had denied them use of mobile phones and internet was exclusively for classroom learning. Additionally they said that "Ukinaswa na phone hiyo ni confiscation na suspe direct" to mean if found with a mobile phone it would be confiscated and one would earn a suspension from school without being given an opportunity to explain themselves.

The standard deviations in relation to the rank means on the total responses for all the service providers listed indicated that there was variability in preferences of the respondents. This trend in variability has also been observed for counselling and VCT.

All the peer educators listed in Table 8 apart from the school based peer educators can be categorized as out of school peer educators. It is likely therefore, that the school programs may not afford a lot of time to have them visit and promote initiatives for HIV & AIDS prevention. Additionally, factors like the cost of facilitating their visits, ensuring consistency in the information that they give the students are among the challenges that would need address. On the school front, there is no cost centre that could sustain the frequent involvement of externally sourced peer educators thus their involvement is likely to be occasional. At the same time, these externally sourced peer educators are likely to be engaged in other activities to sustain their livelihood and or are still studying. However, it would be worth involving them where possible so that they supplement and reinforce the HIV & AIDS prevention initiatives within the schools.

The University based peer educators are likely to be the most appropriate group because these tertiary institutions have peer education programs that offer them training on varied HIV and AIDS issues. Though the major mandate of these peer educators is to operate within their institution, they are also encouraged to provide outreach services. Schools can thus benefit from this service by collaborating with the institutions where possible despite the fact that the ratio of universities to schools may be low and the cost implications may impede frequent involvement especially in far flung schools.

Youth Centre based peer educators were another preference which could be utilized, however, the few youth centres in the country are mainly based in the urban areas. These establishments majorly relied on the youth within the locality most of whom had other personal engagements. This implies that most of the peer educators in the youth centres were available at varied times thus the critical mass to enable outreach to schools could be achieved occasionally especially within the school term. In most cases, the youth centres encouraged the youth to visit their premises to get the required services which for the students could mostly be possible during school holidays and probably weekends and can easily be done at individual and not institutional level.

Radio based peer educators can be accessed when the programs are aired on radio. These programs run when there is funding to enable and sustain them and presently funding on HIV & AIDS initiatives has drastically reduced. Additionally, the youth in schools can only benefit from these programs when on recess and or if there is arrangement in the school to enable them listen to such programs. This is likely to be an occasional arrangement since schools have routines to follow in pursuit of excellence especially at the academic level.

The Church based peer educators are derived from the youth within the church and in most cases are available during church activities within the church. This implies that they could easily be utilized during the church service and when the church had organized an activity or was invited to a certain activity. Though most schools are affiliated to religious entities, the notion within the religious circles that advocate for abstinence would limit the content these peer educators' were mandated to disseminate to the students.

The school based peer educators are based in the school, go through the same experiences with their school mates when they are in session, understand the school culture and challenges and are also always available for informal interactions within the institution. In the view of the researcher, the school based peer educators would thus be the most appropriate in promoting HIV & AIDS initiatives in schools. However, the school based peer educators would need training to equip them with knowledge and skills to enable them give correct and consistent information and services to their fellow students. In selecting these peer educators, there is need to involve other students in order to build confidence and acceptance that the peer educators are qualified to give services to the students. The school peer educators also need to be mentored especially by the teachers to enable them be reputable role models through their character and academic excellence.

In order to increase the uptake of the peer education services by the youth, there was need for them to be made aware of the presence and providers of the services. In light of this, the study sought to establish the strategies respondents felt would best create this awareness. The findings were presented as median and rank means with corresponding standard deviations. The ranks means were cross tabulated on the basis of gender and the overall total response and reported in Table 9.

Table 9

The preferences of students and teachers on Peer Involvement awareness promotion strategies

Peer Involvement					
Awareness					
Strategies	Median	Gend	er	Total	SD
~ .		<u>Femal</u>	e Male		
Students' responses:					
School notice boards	6	5.16	4.77	4.97	2.88
School counselor referrals	5	4.83	4.22	4.53	2.62
Radios	4	4.34	4.54	4.44	2.57
School peer educators	5	4.68	4.24	4.41	2.27
Television	4	4.04	3.93	3.98	2.52
Newspapers/magazines	4	3.93	3.90	3.91	2.33
Out of school peer educate	or 4	3.63	3.33	3.48	2.27
Mobile van announcement	s 1	2.28	2.25	2.26	2.13
Teachers' responses:					
School peer educators	5	4.55	3.44	3.92	3.26
School notice boards	3	4.02	3.82	3.90	3.46
School counselor referrals	3	3.83	3.08	3.40	3.06
Out of school peer educate	or 4	3.86	2.70	3.20	2.65
Radios	2	2.48	2.84	2.69	2.44
Television	2	2.78	2.19	2.44	2.50
Newspapers/magazines	2	2.50	1.84	2.13	2.06
Mobile van announcement	s 1	1.57	1.34	1.44	2.06

The total rank means in Table 9 indicate that the notice board and school counsellor referrals still featured among the three most preferred awareness creation mediums like they were on strategies in counselling and VCT. Though the mean rank place school peer educators as the fourth preference for the students, it had a median of 5 which was the same as that of school counsellor referrals, the second preference for learners on the basis of rank mean. This implies that this strategy that was preferred by at least 50% of the student respondents at median of 5 held some promise in advancing the peer education initiatives among the youth in schools. A

similar observation was made on the teachers' responses on the out of school peer educator who on the basis of the median of 4 could be the second preferred but was relegated to the fourth position due to its rank mean. Though according to Gall, Borg and Gall (2003) the mean is considered as a more powerful measure of central tendency than the median, this is a noteworthy observation as far as preferences are concern. However, the variability in choice as evidenced by the little margins between the rank means and their standard deviations implies that varied strategies need to be used to enable awareness creation.

### **4.2.4 Parental Involvement Strategies**

The study sought to establish the perspective of students and teachers on strategies that could enhance parental involvement to the youth in schools. The findings were reported on the basis of their preference on the topics they felt were essential for the youth to increase their uptake of initiatives championed by their parents or parent figures in schools; their preferred service providers and the mediums that could be used to create awareness to the youth on parental involvement promotion.

In order to ascertain the respondents' preference on information that they felt would enhance their utilization of HIV & AIDS prevention initiative by parents and or parent figures, the respondents were asked of their preference on selected topics on HIV & AIDS prevention that parent and or parent figures educators could handle. These responses from the students and teachers were cross tabulated and reported in Table 10 as percentages and frequencies on the basis of gender and the overall total responses.

Table 10

The preferences of the students and teachers on topics parents/parent figures should address

Topic	Cross tabulated Percentages					
	Gender		Total			
	Female	Male				
Students' responses:						
HIV & AIDS prevention	31.6(243)	28.5(219)	60.1(462)			
Leisure time management	30.6(235)	25.4(195)	56.0(430)			
Boy-girl relationships	26.2(201)	19.3(148)	45.4(349)			
STIs prevention	22.8(175)	19.3(148)	42.1(323)			
Drug & alcohol abuse	22.0(169)	20.1(154)	42.1(323)			
Sexual abuse/coercion	19.9(153)	21.1(162)	41.0(315)			
VCT	17.6(135)	12.5(96)	30.1(231)			
How to avoid pregnancy	15.6(120)	11.2(86)	26.8(206)			
Puberty	15.2(117)	10.8(83)	26.0(120)			
Negotiating sex	9.5(73)	9.0(69)	18.5(142)			
How to use condoms	6.0(46)	6.9(53)	12.9(99)			
Where to get condoms	3.3(25)	4.6(35)	7.8(60)			
Teachers' responses:						
Drug & alcohol abuse	18.5(25)	27.4(37)	45.9(62)			
VCT	6.7(09)	20.7(28)	27.4(37)			
How to avoid pregnancy	0.7(01)	5.2(07)	5.9(08)			
Puberty	0.0(00)	2.2(03)	2.2(03)			
HIV & AIDS prevention	0.7(01)	1.5(02)	2.2(03)			
STIs prevention	0.0(00)	2.2(03)	2.2(03)			
Sexual abuse/coercion	0.0(00)	1.5(02)	1.5(02)			
Leisure time management	0.0(00)	1.5(02)	1.5(02)			
Where to get condoms	0.7(01)	0.7(01)	1.4(01)			
How to use condoms	0.7(01)	0.0(01)	0.7(01)			
Boy-girl relationships	0.0(00)	0.7(01)	0.7(01)			
Negotiating sex	0.0(00)	0.7(01)	0.7(01)			

The findings in Table 10 suggest that both students and teachers felt that "HIV & AIDS prevention" and "leisure time management" were the two most crucial topics that parents should address. All the topics except that on "Where to get Condoms" had an overall response rate of

over 10% among students. Among the teachers all the topics apart from two – "HIV & AIDS prevention" and "leisure time management" had a response rate of less than 10%. This could likely be because the teachers do not feel that parents are an appropriate choice to be involved in talking to students on issues related to HIV& AIDS prevention. This finding concurs with findings by Paxman (1993) which examined the role that parents could play in enhancing the reproductive health of their children. The study concluded that though it is necessary to make the parents aware of the programs the students are taking it does not mean that the parents should be actively involved in implementation of the programs.

The responses from the students imply that the learners feel there is need for their parents to be actively involved in matters touching on HIV & AIDS prevention. During the students FGDs, the it emerged that parents tended to avoid addressing issues to do with the learners' sexuality thus were not empathetic enough of their challenges. Additionally this leaves the students to experiment and look up to their peers to get information which more often is not reliable and consistent. This finding concurs with findings by Malanda (2010) & Malanda et al (2014b) which established low involvement of parents on HIV & AIDS initiatives for their children. The study reported that despite the fact that parents were aware that the traditional support systems of the extended family that was instrumental in tackling sexuality had broken down, they were still reluctant in taking up this responsibility. Additionally, parents assumed that teachers had taken up the role while teachers felt that they had an overloaded curriculum thus the parents had a responsibility to be involved in sexuality issues of their children. The resultant outcome was that the students had insufficient knowledge and skills to enable promotion of HIV & AIDS preventive behaviour. A study by Cui, Tian, Li and Shah (2012) whose objective was to explore

parental perspectives and attitudes towards the provision of sexual and reproductive health information and services to unmarried youth aged between 15 and 24 years in Chengdu, China adds credence to these findings. According to Cui et al., parents' knowledge on sexual and reproductive health was low and they had dissonant attitudes of tolerance and ambivalence towards provision of the information and services to the unmarried youth.

The female students recorded higher percentages than their male counterparts on all the topics except "Sexual abuse/coercion", "Negotiating sex", "how to use condoms" and "where to get condoms". The male teachers recorded higher percentages than their female counterparts on all the topics except the topic on "how to use condoms" - none of the male teachers felt that parents could tackle the topic.

These findings suggest that female students and male teachers are more appreciative of the need for parents to disseminate the topics thus have higher confidence in role parents could play as agents of HIV & AIDS prevention initiatives. The findings from female teachers where most of the topics had 0% on responses glaringly indicate lack of confidence in the parents' ability to handle the topics with their children.

The topics relevant to HIV & AIDS prevention initiatives that parents and or parent figures have the potential to handle need to go hand in hand with the provision of actual parental involvement services to the youth for the intervention to succeed. Therefore, the present study sought to establish the preferences of students and teachers on parental involvement service providers from a choice of ten. The findings for each of the ten service providers for the students and teachers

were reported as median, rank means and standard deviations and presented as Table 11. The rank means were cross tabulated on the basis of gender. The findings overall total responses included their standard deviations.

Table 11

The parent figures/representatives preferred by students and teachers

Parent Figure Me	dian	Cross	tabulated	Rank Mean	S	
		Gende	r	Total	SD	
		<b>Female</b>	Male			
Students' responses:						
Mother	10	8.72	7.39	8.07	3.23	
Father	9	6.91	6.47	6.69	3.30	
PTA parent representatives	6	5.70	5.63	5.66	2.95	
Radio based	6	5.39	5.50	5.45	2.68	
God mothers	5	5.48	4.64	5.06	2.96	
Television based	4	4.91	4.68	4.80	2.54	
God fathers	5	4.35	4.44	4.40	2.83	
Magazine/newspaper based	4	4.19	4.24	4.21	2.75	
Telephone hotline based	3	3.43	3.25	3.35	2.39	
Internet site based	2	3.17	2.66	2.92	2.74	
Teachers' responses:						
Mother	10	7.22	6.45	6.79	4.43	
Father	7	4.98	5.57	5.32	4.10	
PTA parent representatives	6	5.26	4.64	4.90	3.48	
Radio based	5	4.26	4.25	4.25	2.98	
God mothers	4	4.86	3.77	4.24	3.51	
Television based	4	4.19	3.47	3.78	2.81	
God fathers	3	3.64	3.04	3.29	2.88	
Magazine/newspaper based	3	3.31	2.99	3.13	2.69	
Telephone hotline based	2	3.02	2.13	2.51	2.40	
Internet site based	1	1.41	1.25	1.32	1.68	

The findings in Table 11 indicate that at a median of 10 which is the maximum in this case, at least 50% of both the students and teachers indicated that they preferred the mother to be

involved in HIV & AIDS preventive initiatives. As for the father who was the second most preferred parental figure, the respondents affirmed their ranking with 50% mark being achieved at median 9 and 7 for the students and teachers respectively. The findings in this present study confirm that the youth have a desire to discuss issues on HIV & AIDS with their parents. A similar finding was reported by Wamoyi et al. (2010) who conducted a study in Tanzania on the implication of parent-child communication on interventions. However, the study revealed that parents in African settings are reluctant to discuss sexuality issues with their children due to cultural underpinnings and relegate the responsibility to grandparents who in the present times are not easily accessible due to urbanization and modernization. This is despite the fact that studies by Lezin, Rolleri, Bean and Taylor (2004) and DiClementine et al. (2001) reporting that there was growing evidence parents and caregivers acting in parental role do matter for youth to transition successfully into adulthood.

The PTA parent representative and radio based parent figure were the third and fourth choices respectively for both the teachers and students. Despite of mobile telephony and Internet Technology being popular in the present times, telephone hotline based and internet site based parent figures were the least preferred. This finding does not concur with studies by Pedecord (2008) that indicate that Information, Communication and Technology was popular with the youth and need to be exploited in order to make initiatives to the youth more appealing and successful. Though this finding by Pedecord (2008) holds a lot of truth with the youth, the context in which the students are faced in terms of availability and feasibility of these technologies in the case of the present study need to be put into perspective. The FGDs with the students and teachers revealed that students were not allowed possession of mobile phones while

in school and the use of computers in school was majorly for class lessons in specific subjects especially Computer Studies thus there was limited access to the internet. This could likely be the reason as to why the two groups of parent figures were the least preferred.

The four most preferred strategies for promotion of the intervention parental involvement were similar even in ranking for both the students and teachers. As reported in Table 11, the mother, father, PTA parent representative and radio based parent figure were the four most preferred strategies for both the students and teachers.

In the researcher's view, the radio based parent figure would easily be accessed by the students during holidays since it would not be feasible for schools to arrange for these youth in school to listen to radio whenever the programs are aired. Though during the holidays students had more flexibility on how they organized their assignments thus could create time to listen to such programs, it does not guarantee that all students would have or want to have access to the radio. There would also be no control over the information that the students get through radio to ensure it is credible and consistent. On the positive side the radio based parent figure would allow the students to discuss issues that they could be yearning to discuss with their parents but had not due to fear of how their parents would perceive them and traditional barriers that relegated the duty of discussing sexuality issues to grandparents, aunties and uncles. This is a view that some families still held onto irrespective of the breakdown of traditional social systems due to urbanization and migration. Students can thus be encouraged to listen to the relevant programs and share what they learnt in some organized fora in school so that inconsistencies can be addressed and those who were not able to access the programs can also get the information.

However, this is an activity that is likely to be done few times, if at all, due to the nature of the school curriculum. Thus, radio based parent figures may not be considered as a major strategy in promoting parental involvement for HIV & AIDS prevention among the youth in schools.

The PTA parent figures are representatives of parents in school management fora. Usually each class or stream would have a representative who seeks to find out the challenges their group faces and articulates them in meetings. In most cases the challenges that are discussed are on academic excellence and financial issues. The PTA forums usually comprise of teachers and parents thus could create a good forum to discuss issues that could promote HIV & AIDS prevention among the students and identify roles which parents could play to ensure the success of the program and in turn disseminate the information to their fellow parents. The challenge in this arrangement is that in no one forum could the attendance be 100% therefore the deliberations in such meetings will never enable all students to gain from the resolutions. However, the PTA parent figures could be a good medium of information on the expectation of teachers and parents alike on the roles they ought to play to ensure that the wellbeing of the youth in school is catered for favourably. This is because in most cases teachers expect parents to get involved in their childrens' sexuality issues while parents feel that that is the role of the teachers thus leaving the students with inadequate support systems to enable them deal with challenges they face.

Parents were the two most preferred parent figures that the respondents felt need to be involved in promotion of HIV & AIDS prevention. The mother particularly was singled out as a preferred service provider. The father on the other hand was identified as an integral part in the success of

the program whose involvement needed to be encouraged because it was below expectation. The findings in this study indicate that the youth in school especially the boys yearned for more active participation of their fathers in their sexuality issues. In the FGDs with teachers, it was established that mothers were more active in participating in school activities as compared to fathers. Despite this, the concerted efforts of both parents would be important. According to the teachers, the role that the parents could play in ensuring HIV & AIDS prevention was creating an enabling environment where discussions could be held and giving holistic support to their youth as they navigate through this vulnerable stage of life.

In order to enhance promotion of parental involvement, there is need for the student to be made aware of these initiatives. In light of this, the study sought to establish the strategies respondents felt would best create this awareness. Therefore, the present study sought to establish the preferences of students and teachers on awareness creation strategies for promotion of parental involvement from a choice of eight. The findings were reported as median, rank means and standard deviations and presented as Table 12. The rank means were cross tabulated on the basis of gender. The findings overall total responses included their standard deviations.

Table 12

The preferences of students and teachers on parental involvement services awareness promotion strategies

Parental Involvement Med Awareness Strategies	Cross ta	abulate	ed Rank Means	
		Gende	r	Total SD
		<b>Female</b>	Male	
Students' responses:		_		
School notice boards	6	5.09	4.54	4.82 2.97
School counselor referrals	5	4.87	4.12	4.51 2.83
School peer educators	5	4.45	4.01	4.23 2.62
Radios	4	4.10	4.04	4.07 2.63
Television	3	3.99	3.41	3.71 2.57
Newspapers/magazines	3	3.80	3.31	3.56 2.41
Out of school peer educator	4	3.52	3.34	3.43 2.33
Mobile van announcements	1	2.15	2.13	2.14 2.14
Teachers' responses:				
School peer educators	4	4.50	3.03	3.66 3.29
School notice boards	2	3.79	3.53	3.64 3.51
School counselor referrals	3	3.76	3.05	3.36 3.08
Out of school peer educator	4	3.79	2.45	3.03 2.68
Radios	4	3.07	2.47	2.73 2.48
Television	2	1.88	2.17	2.04 2.19
Newspapers/magazines	2	1.90	1.97	1.94 2.25
Mobile van announcements	1	0.91	1.34	1.16 1.79

The total rank means indicate that the notice board and school counselor referrals were still among the three most preferred awareness creation mediums like they were on counselling, VCT and peer involvement strategies. Though the rank mean placed school peer educators as the third preference for the students, its median of 5 was the same as that of school counsellor referrals which was the second preference for learners on the basis of rank mean. This implies that this strategy that was preferred by at least 50% of the student respondents at median of 5 holds some promise in advancing the parental involvement initiatives in schools. A similar observation was

made on the teachers' responses on the out of school peer educator who on the basis of the median of 4 could be the second preferred but was relegated to the fourth position due to its rank mean. Though according to Gall, Borg and Gall (2003) the mean is considered as a more powerful measure of central tendency than the median, this is a noteworthy observation as far as preferences are concern. However, as evidenced by the little margins between the rank means and their standard deviations the variability in choices was high which implies that varied strategies need to be used to enable awareness creation.

### **4.2.5 Condom Use Promotion Strategies**

The study also attempted to establish the preference of students and teachers on strategies that could promote condom use to the youth in schools. The findings were reported on the basis of their preference on condom information service providers, condom distribution service providers and the mediums that could be used to create awareness to the youth on how they could access information and services on condoms. In order to ascertain the respondents' preference on condom information service providers, the respondents were asked to rank their preference from a choice of eleven service providers. These responses from the students and teachers were cross tabulated and reported as median, rank means and standard deviations for the rank means and reported as Table 13.

Table 13

The preferences of students and teachers on condom information service providers

Condom Information Mo Service Providers	edian	Cross 1	abulation	n of Rank M	eans	
		Gende	er	Total	SD	
		Female	Male			
Students' responses:		remare	water			
Doctor	9	8.06	7.38	7.73	3.53	
Health facility counselor	8	7.71	6.14	6.94	3.51	
Nurse	8	7.26	6.06	6.67	3.42	
G & C teacher	7	6.82	6.02	6.43	3.38	
Youth centre	7	6.48	6.23	6.36	3.17	
School peer educator	6	6.36	5.67	6.02	2.97	
Out of school peer educator	6	5.63	4.98	5.31	2.94	
Mother	4	5.21	3.93	4.58	3.26	
Community health worker	3	3.74	3.95	3.85	3.24	
Father	3	3.79	3.43	3.62	2.88	
Chaplain/religious leader	2	2.72	2.76	2.74	2.39	
Teachers' responses:						
School peer educator	7	6.24	5.38	5.75	4.48	
Health facility counselor	7	5.76	5.45	5.47	4.34	
G & C teacher	5	5.12	4.69	4.87	4.26	
Out of school peer educator	6	5.48	4.36	4.84	4.08	
Doctor	5	4.90	4.08	4.43	3.78	
Youth centre	5	4.71	4.19	4.41	3.72	
Nurse	5	4.98	3.82	4.32	3.68	
Community health worker	1	3.95	2.60	3.18	3.85	
Mother	2	2.84	2.34	2.56	2.74	
Father	2	2.03	1.79	1.90	2.89	
Chaplain/religious leader	1	1.59	1.55	1.56	2.09	

The students' responses in Table 13 indicate that the doctor was the most preferred information provider on issues to do with condoms with a median of 9 while the health facility counselor and nurse were preferred at a median of 8. The guidance and counselling teacher had a median of 7. These findings indicate that the students had more confidence in the health facilities dealing with information provision on condoms.

Probing during the students' FGDs revealed that the students felt that condoms were found in health facilities thus that was the best place to get the information regarding them because the health personnel dispense what they were knowledgeable about. They also felt that the probability of being labeled promiscuous when seeking the information would be lower at health facilities as compared to school. The feelings of the students were affirmed by a debate in which Principals of secondary schools were against the provision of condoms and contraceptives to students. This debate was sparked by the introduction of the Reproductive Health Bill 2014 which sought parliament endorsement to enable provision of comprehensive reproductive health education and services to the youth (Kenya Television Network, Prime News and The Standard Newspaper, June 23 2014).

The rank means indicate that the female students had a higher total response rate than the male learners. This is noteworthy considering that the popular and more affordable condoms on the market are male condoms. However the FGDs with students revealed that the female students appreciated the fact that they needed this information so that they could be able to make informed choices especially with the knowledge that they bore more consequences than their male counterpart in case of any eventualities especially pregnancy. They were also aware of the option of the female condom though they complained it was not easily available and its cost was exorbitant. This finding does not concur with finding by Malanda (2010) where the female students had less content and interest in information on condoms. The students felt that issues on condom were the preserve of men. The same finding had established that a considerable number of female students did not know of the female condom. A study by Sante (1997) confirms that

many people in the developing world do not have access to the female condom since most of the marketing has been done in the developing world and the cost is exorbitant.

The teachers preferred school peer educator and health facility counselor both with a median of 7; the guidance and counselling teacher with a median of 5 and the out of school peer educator with a median of 6. The responses by the teachers are an indicator that they felt the peer educators had the potential to better provide information on condoms.

The FGDs with teachers revealed that the educators felt that due to the minimal age gap if any among peers they were best placed to discuss issues on condoms in their informal forums. The teachers did not want to involve themselves in provision of information on condoms due to the emotive nature of the topic that was likely to put them into disrepute with the parents to the students and the school religious sponsors – the church. When asked the reason for preferring the guidance and counselling teacher, they said that the counsellors deal in confidentiality thus they were likely not to be victimized. The finding on the views of teachers on condom information providers concurs with findings by Malanda (2008) which established that the Guidance and Counselling teachers were the most preferred persons in schools when it came to dealing with matters that required confidentiality. Kilonzo (2017) adds credence to this finding by reporting about a survey done in Kenya of 2,484 teenagers aged 15 to 19 years old in which 3 out of 10 interviewees indicated they were sexually active and needed information on condoms. Despite this the current sexuality education curriculum is highly moralistic and fear based as it only preaches abstinence. Additionally, the church and parliament have been opposed to the inclusion of topics related to contraception including condoms in sex education

The female teachers recorded higher rankings in their responses than the male teachers. The students had higher medians and rank means as compared to the teachers in all categories of responses. This is an indicator that the teachers were less inclined in supporting the provision of information on condoms as compared to the students. This could be affirmed by the views of head teachers on the Reproductive Health Bill 2014 (The Standard, 23<sup>rd</sup> June 2015) that students should not be given condoms and or contraceptives.

The community health workers, mother, father and chaplain/religious leader were the least preferred service providers. The FGDs for the respondents revealed that they did not have confidence in their ability to effectively provide the information. The community health workers were viewed to lack anonymity thus would lack confidentiality. The parents were viewed to be persons curtailed to freely and comprehensively talk about condoms since the topic heavily relates to sexuality issue, a taboo topic between parents and their children in the African cultural context. The religious leaders were viewed as anti-condoms due to the immoral label they place on them and their view that the youth should embrace chastity till marriage. The standard deviations like those of other interventions strategies tackled earlier indicate variability in preference especially so among the teachers.

The findings are an indicator that the school and health facilities could play a major role in provision of information on condoms. The responses indicate that students would prefer that the role be done by the health facility personnel while the teachers' responses suggest that the they preferred peer educators. The choice of guidance and counselling teacher could be informed by the fact that during counselling which allows for confidentiality, the teacher could give this

information. However, among the choices, the doctor may not be the best option to rely on in providing this information due to their job description and their workload which would not allow them to be heavily depended on to give the information. As for the nurse, there are those charged with taking care of the family planning unit and they would give information on condoms. The health facility counsellor is also very well placed to give the information at the health facility level. However, one reason why the youth did not frequent the health facilities for the information was lack of anonymity because of the high chances that the health facilities at their disposal were likely to be in close proximity to the school or the home. This notion could be dispelled during awareness creation and when referrals are being made especially by the peer educators. The peer educators in and out of schools were among the most preferred choices by the teachers. This could be probably due to the fact that peer educators could easily reach their contemporaries and have interactions even at an informal level without fear that it would spark controversy. The teachers in the FGDs mentioned that the stand of the church on condoms for the youth curtailed free discussions on the topic and for the sake of not provoking negative reactions, the peer educators were the best option on giving information even if it meant doing it informally. To enable the provision of factual information, the peer educators especially the school peer educators who frequently interact with their fellow students needed training. As for the Guidance and Counselling teacher, the fact that their operations were under confidentiality, they had the lee way of addressing issues on condoms on need basis without eliciting controversy.

Provision of information on condoms needs to enhance their use particularly by the youth who are sexually active. For condom use to be effectively promoted there is need ascertain the

condom distribution service providers. Therefore, the present study sought to establish the preference of students and teachers on condom distribution service providers from a choice of ten. These responses from the students and teachers were cross tabulated and reported as median, rank means and standard deviation for the rank means. The rank means were cross tabulated on the basis of gender and total responses then reported in Table 14.

Table 14

The preferences of students and teachers on condom distribution service providers

Condom Distribution Me Service Providers	Cross	tabulated	Rank Mea	ns		
		Gende	er	Total	SD	
		Female	e Male			
Students' responses:						
Government health facility	7	6.64	4.45	5.57	4.09	
Private health facility	6	6.08	4.10	5.11	3.90	
Youth centre	5	5.15	3.64	4.41	3.58	
Private chemist	4	5.30	3.44	4.39	3.57	
School health facility	3	4.68	3.18	3.94	3.64	
Out of school peer educator	4	4.43	2.89	3.73	3.13	
School peer educator	3	4.06	2.89	3.49	3.17	
Community health worker	3	3.73	2.63	3.19	2.96	
Entertainment spots	2	2.95	2.22	2.59	2.70	
Street vendors	1	2.31	2.06	2.18	2.43	
Teachers' responses:						
Government health facility	7	4.91	7.12	6.17	3.94	
Youth centre	7	5.19	4.88	5.01	3.80	
Private health facility	3	4.74	4.71	4.73	3.74	
School peer educator	4	4.91	4.18	4.50	3.97	
Out of school peer educator	4	4.43	4.25	4.33	3.44	
School health facility	3	4.40	3.14	3.68	3.69	
Private chemist	6	3.79	3.52	3.64	3.36	
Community health worker	3	4.14	2.70	3.32	3.01	
Entertainment spots	2	2.40	2.68	2.56	2.82	
Street vendors	1	1.47	2.61	2.12	2.61	

Findings in Table 14 indicate that for both the teachers and students, Government health facilities, private health facilities and youth centres were among their three most preferred choices. However, as the fourth choice, the students preferred the private chemist while the teachers preferred the school peer educator. The first three preferences indicate that the respondents were of the view that condom distribution would best be done by providers who were not affiliated to the schools. Michielsen et al., (2012) reported that doctors and nurses who

are found in health facilities were among the preferred reproductive health services providers. Though the study did not specifically limit itself to condom provision services, it emphasizes the confidence students had in health personnel on provision of services which in the view of the youth require anonymity and confidentiality. While the students upheld this notion in their fourth preference, the teachers felt that the peer educators could be an option in schools for that task. However, Price & Knibbs (2009) postulates that not disregarding the capacities they have, it was a very tall order to expect a young person – possibly discovering his/her sexuality him/herself to act as an expert and guide, counsel, teach and advise peers on a personal, sensitive and complex issue as sexuality. The argument by Price Knibbs (2009), coupled with studies by Michielsen et al. (2012); Guttmacher Institute (2007); Van Rossem & Meekers (2011) and (HeadsUp) 2010, cast a shadow on the potential of peer educators as service providers for sensitive issues on sexuality.

The FGDs revealed that students preferred dealing with service providers not linked to the schools whatsoever, to deal with condom distribution. This, the students felt would reduce the probability of the learners who needed condoms being labeled as promiscuous. This is because it would afford them comparatively higher levels of confidentiality and anonymity as compared to school based providers. The teachers' choices were mainly motivated by their need to steer clear from the emotive issue of condoms. With respect to the rank means, on the basis of gender, the four preferences were upheld as among the most preferred though in some instances not necessarily in the same order of preference as the overall total responses.

The preferences are an indicator that this service is best performed away from the school. The preferences of the students do not include any designate from within the school while those of the teachers suggest that the teachers were distancing themselves from any service that would spark controversy with parents and or the church. Thus teachers delegated this responsibility to school peer educators. Given that peer educators are guided by the teachers and they are children to the parents who the majority have a religious affiliation, it is unlikely that the school peer educators would carry out this duty effectively especially within the school. In the opinion of the researcher, the school peer educators are better placed to possibly create awareness and give information to their fellow students but not be distributors. This service is thus better left to the health facilities so that the students have an option to either access the condoms at government health facilities at no cost or private entities at a cost depending on their preferences. Even as this option is being floated to the students, they need to be told that the best means of HIV & AIDS prevention still remains abstinence.

In order to enhance condom use promotion to the youth, there is need for them to be made aware of the how and where the services can be accessed. In light of this, the study sought to establish the strategies respondents felt would best create this awareness. The findings from the students and teachers were presented as median, rank means and standard deviation for the total rank means. The rank means were cross tabulated on the basis of gender. The findings were reported in Table 15.

Table 15

The preferences of students and teachers on condom information and distribution services awareness promotion strategies

Condom Services Me Awareness	Cross	Cross tabulated Rank Means					
Strategies		Gend	er	Total	SD		
		<u>Female</u>	e Male				
School counselor referrals	3	3.70	4.17	4.93	3.33		
Radios	5	4.07	4.42	4.25	3.35		
Newspapers/magazines	4.5	4.07	4.07	4.07	3.11		
School notice boards	4	3.71	4.21	3.96	3.57		
Television	4	3.83	3.71	3.77	3.26		
School peer educators	3	3.54	3.79	3.66	3.06		
Out of school peer educator	3	3.16	3.39	3.27	2.92		
Sales representatives from							
companies selling condoms	3	3.07	3.25	3.16	2.86		
Mobile van announcements	1	2.27	2.43	2.35	2.53		
Teachers' responses:							
School peer educators	6	5.28	4.32	4.73	3.52		
Out of school peer educator	5	4.19	4.42	4.32	3.20		
School notice boards	4	4.91	3.75	4.25	3.81		
School counselor referrals	4	3.95	4.38	4.19	3.62		
Newspapers/magazines	3	3.98	3.51	3.71	3.00		
Radios	5	4.29	4.62	3.70	3.22		
Television	3	3.47	3.87	2.56	3.01		
Sales representatives from							
companies selling condoms	2	3.19	2.05	2.54	2.60		
Mobile van announcements	1	2.10	1.51	1.76	2.43		

On the basis of rank means as reported in Table 15, the school counsellor referral and the notice board still remained the most preferred awareness provision strategies even for the intervention on condom promotion like in earlier tackled interventions. The other two preferences for the students were radios and newspapers while for the teachers were school and out of school peer educators. However, on the basis of median, the television was among the four preferences of

both the students and teachers. The standard deviation in relation to the total responses, like for the other interventions, indicate a high range of variability in the preferences of the respondents.

The rankings in Tables 3; 6; 9; 12 and 15 on intervention promotion awareness creation strategies indicate that the rankings for the school notice board and the school counselor promotions were among the four most preferred strategies for all the interventions. The two categories of peer educators - school peer educators and out of school peer educators were among the four most preferred awareness creation strategies for all interventions among the teachers while the same could be said for the radio among the students. This implies that notice boards and school counselors could be used in schools as the major awareness creation strategies. The peer educators, especially the out of school peer educators, could be an important source for awareness creation including on condom use promotion, an intervention that even the teachers do not want to address due to the controversy and emotiveness it attracts. However, there is need for students to be involved in finding the most appropriate way to identify the peer educators so that the strategy is accepted by the learners. Additionally training the peer educators needs to be given priority so that their capacity to carry out their mandate is enhanced. Though out of school peer educators were among the four most preferred awareness creation strategies, their operations within the school may not be consistent because they can only access the schools on invitation or appointment which is likely not to happen frequently yet awareness creation is an activity that needs to be carried out frequently and consistently for it to enhance use of the initiatives. The radio, one of the four preferences among the students for all the interventions can only be accessed when students are on holiday or when they are having a recess from the school program. Additionally, there is always a cost implication to it. For these reasons, the frequency

of use of the radio as an awareness creation strategy may be limited thus impacting on its effectiveness negatively.

Based on the aforementioned, therefore, it is the researcher's view that notice boards, school counselors and school peer educators would be the most suitable awareness creation strategies for all the interventions. The three strategies are based in the school thus have the capacity to carry out awareness creation frequently and consistently with a low cost implication in terms of time and money because all the three are not sourced for outside the institutions.

According to Collins and Allagiri (2002), one reason why HIV & AIDS prevention programs fizzle out after a while is because the strategies involved are not sustainable. The strategies involved can work effectively when the program is being run through funding but once the program is handed back to the recipients, it fails to stand the test of time. This implies that though there in need to come up with strategies that are acceptable by the consumers and implementer their feasibility also needs to be assessed to avoid redundancy.

# 4.3 Differences in Preferences of Students and Teachers on the Interventions Promotion Strategies in Secondary Schools in Emuhaya Sub County, Kenya

The study sought to find out if the differences in preferences of students and teachers were significant. With the consideration that ordinal scale in form of ranking was used in this analysis, a non-parametric test Mann-Whitney U test (U) was used and the alpha level ( $\alpha$ ) set at .05. Additionally, the effect size(r) was calculated to ascertain the extent of practicality of this statistical significance. As recommended by Fields (2005) and Ongula (2005), an effect size less

than .2 was considered negligible; between .2 and .4 weak; between .4 and .7 moderate; between .7 and .9 substantial; and more than .9 very dependable. The findings were reported on all the five interventions the study focused on in form of tables for the preferred service providers and the preferred awareness creation strategies.

# **4.3.1 Counselling Promotion Strategies**

In order to establish if there were significant differences in preferences of students and teachers on the counselling promotion service providers, Table 16 presents the findings.

Table 16

Difference in preference of students and teachers on the Counselling promotion service providers

<b>Counselling Services Providers</b>	Median	$\mathbf{U}$	p value	z-score	r
Mother	7	38573	.000	-4.801	160
Guidance and counselling					
teacher	7	39152.5	.000	-4.580	152
Health facility counselor	6	43889	.005	-2.859	095
Doctor	6	32831.5	.000	-6.834	227
Father	5	40646	.000	-4.033	134
Youth centre	5	40832.5	.000	-3.960	132
School peer educator	5	36198.5	.000	-5.626	187
Nurse	5	36635.5	.000	-5.469	182
Out of school peer educator	4	44092	.005	-2.790	093
Chaplain/religious leader	3	49303	.358	-0.917	031

The findings in Table 16 indicate that the Mann-Whitney U (U) test statistics for the counselling promotion service providers had an associated two tailed significance level (p) of equal or less

than .005 (p $\le$  .005) except for the chaplain/religious leader (p = .358). Apart from the chaplain/religious leader, the p values of the other service providers were less the set alpha level of .05. It was therefore concluded that there was significant difference between the preferences of students and teachers for all the counselling promotion service providers except the chaplain/religious leader.

However, the effect size, r, for all the service providers except the doctor (r= -.227), were less than .20. The effect size for the doctor was therefore, considered weak while the rest were considered negligible. The lowest effect size was -.031 and the highest -.227. This implies that the students' and teachers' differences on the counselling promotion service providers accounted for between 3.1% and 22.7% of the divergence in preference. This therefore implies that the students' and teachers' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

In order to establish the difference in preference of students and teachers on the counselling awareness promotion strategies, Table 17 presents the findings.

Table 17

Difference in preference of students and teachers on Counselling services awareness promotion strategies

<b>Counselling Services</b>					
Awareness Strategies	Median	U	p value	z-score	r
School notice board	5	47568.5	.118	-1.553	052
School counselor referrals	5	43836	.005	-2.890	096
Radios	5	38886	.000	-4.672	155
Magazines/newspapers	4	32324	.000	-7.041	234
School peer educators	5	43788.5	.004	-2.906	097
Television	4	38183.5	.000	-4.923	164
Out of school peer educators	3	50469.5	.617	-0.495	016
Mobile van announcements	1	42898.5	.001	-3.328	111

The findings in Table 17 indicate that the Mann-Whitney U (U) test statistics for the counselling services awareness promotion strategies had an associated two tailed significance level (p) of equal or less than .005 (p $\leq$  .005) except for the notice board (p= .118) and out of school peer educators (p=.617). Apart from the notice board and out of school peer educators, the p values of the other counselling services awareness promotion providers were less the set alpha level ( $\alpha$ ) of .05. It was therefore concluded that there was significant difference between the preferences of students and teachers for all the counselling services awareness promotion strategies except the notice board and out of school peer educators.

However, the effect size, r, for all the service providers except the magazines/newspapers (r= -.234), was less than .20. The effect size for the magazines/newspapers was therefore, considered weak while the rest were considered negligible. The lowest effect size was -.016 and the highest -.234. This implies that the students' and teachers' differences on the counselling

services awareness promotion strategies accounted for between 1.6% and 23.4% of the variance in preference. This therefore implies that the students' and teachers' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

## 4.3.2 Voluntary Counselling and Testing Promotion Strategies

In order to establish the differences in perspective between students and teachers on the preferred VCT service providers, Table 18 presents the findings.

Table 18

Difference in preference of students and teachers on the Voluntary Counselling and Testing promotion service providers

VCT Services Providers	Median	U	p value	z-score	r
Doctor	8	29414.5	.000	-8.086	269
Guidance and counselling					
teacher	8	50748	.692	-0.394	013
Health facility counselor	8	40935.5	.000	-3.930	131
Mother	6	37952	.000	-4.994	166
Nurse	6	36712.5	.000	-5.443	181
School peer educator	6	38220	.000	-4.894	163
Youth centre	6	40159.5	.000	-4.202	140
Father	4	37716	.000	-5.078	169
Out of school peer educator	4	50735.5	.683	-0.397	013
Chaplain/religious leader	3	45638	.028	-2.238	074
Community health worker	2	43157	.002	-3.138	104

The findings in Table 18 indicate that the Mann-Whitney U (U) test statistics for the VCT promotion service providers had an associated two tailed significance level (p) of equal or less

than .03 (p $\leq$  .03) except for the Guidance and Counselling teacher (p= .692) and out of school peer educators (p=.683). Apart from the Guidance and Counselling teacher and out of school peer educators, the p values of the other VCT promotion service providers were less than the set alpha level ( $\alpha$ ) of .05. It was therefore concluded that there was significant difference between the preferences of students and teachers for all the VCT promotion services providers except the Guidance and Counselling teacher and out of school peer educators.

However, the effect size, r, for all the service providers except the doctor (r= -.269), was less than .20. The effect size for the doctor was therefore, considered weak while the rest were considered negligible. The lowest effect size was -.013 and the highest -.269. This implies that the students' and teachers' differences on the VCT promotion service providers accounted for between 1.3% and 26.9% of the variance in preference. This therefore implies that the students' and teachers' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

Service promotion can be enhanced by awareness creation. In order to establish the differences in preference between students and teachers on the VCT awareness promotion strategies, Table 19 presents the findings.

Table 19

Difference in preference between students and teachers on the Voluntary Counselling and
Testing awareness promotion strategies

Strategies	Median	$\mathbf{U}$	p value	z-score	r
School notice board	6	48063	.162	-1.384	046
School counselor referrals	5	42793.5	.001	-3.271	109
Radios	4	33787	.000	-6.510	217
Magazines/newspapers	4	30708	.000	-7.628	254
Television	4	33687	.000	-6.542	218
School peer educators	4	49646.5	.430	-0.791	026
Out of school peer educators	3	46624	.055	-1.883	063
Mobile van announcements	1	37786	.000	-5.194	173

The findings in Table 19 indicate that the Mann-Whitney U (U) test statistics for the VCT awareness promotion strategies had an associated two tailed significance level (p) of equal or less than .001 (p $\leq$  .001) except for the notice board, school peer educators and out of school peer educators (p= .162, p= .430 & p=.055 respectively). Apart from the notice board, school peer educators and out of school peer educators, the p values of the other VCT awareness promotion providers were less the set alpha level ( $\alpha$ ) of .05. It was therefore concluded that there was significant difference between the preferences of students and teachers for all the VCT promotion services providers except the notice board, school peer educators and out of school peer educators.

However, the effect size, r, for all the service providers except the radios, magazine/newspaper and television (r= -.217, r= .254 & r=.218 respectively, were less than .20. The effect size for the radios, magazine/newspaper and television were therefore, considered weak while the rest were considered negligible. The lowest effect size was -.026 and the highest -.254. This implies

that the students' and teachers' differences on the VCT services awareness promotion providers accounted for between 2.6% and 25.4% of the variance in preference. This therefore implies that the students' and teachers' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

## **4.3.3** Peer Involvement Promotion Strategies

In order to establish the differences in preference between students and teachers on the peer educators, Table 20 presents the findings.

Table 20
Difference in preference between students and teachers on the Peer educators

Peer Educators	Median	$\mathbf{U}$	p value	z-score	r
University/college based	8	41102.5	.000	-3.897	130
School based peer educator	8	34020	.000	-6.520	217
Youth centre based	8	51535	.914	-0.110	004
Radio based	5	40989	.000	-3.916	130
Church based	6	51045.5	.773	-0.286	010
Television based	5	41095	.000	-3.870	129
Community based	5	48632.5	.247	-1.155	038
Magazine/newspaper based	4	38615	.000	-4.765	159
Telephone hotlines based	3	45723.5	.024	-2.230	074
Internet sites based	1	40729	.000	-4.147	138

The findings in Table 20 indicate that the Mann-Whitney U (U) test statistics for the peer educators had an associated two tailed significance level (p) of less than .03 (p< .03) except for the youth centre based, church based and community based peer educators (p= .914, p= .773 & p= .247 respectively). Apart from the youth centre based, church based and community based

peer educators, the p values of the other peer educators were less the set alpha level ( $\alpha$ ) of .05. It was therefore concluded that there was significant difference between the preferences of students and teachers for all the peer educators except the youth centre based, church based and community based peer educators.

However, the effect size, r, for all the service providers except the school based peer educator (r= -.217) was less than .20. The effect size for the school based peer educator was therefore, considered weak while the rest were considered negligible. The lowest effect size was -.004 and the highest -.217. This implies that the students' and teachers' differences on the peer educators accounted for between 0.4% and 21.7% of the variance in preference. This therefore implies that the students' and teachers' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

Service provision can be enhanced by awareness creation. In order to establish the differences in preference between students and teachers on the peer involvement awareness promotion strategies, Table 21 presents the findings.

Table 21

Difference in preferences of students and teachers on Peer Involvement awareness promotion strategies

Strategies	Median	U	p value	z-score	r
School notice board	5	42625	.001	-3.361	112
School counselor referrals	5	40376.5	.000	-4.139	138
Radios	4	32768	.000	-6.879	229
School peer educators	5	48581	.240	-1.178	039
Television	3	34011.5	.000	-6.429	214
Magazines/newspapers	4	29727.5	.000	-7.981	266
Out of school peer educators	4	49254.5	.349	-0.934	031
Mobile van announcements	1	35962.5	.000	-5.898	196

The findings in Table 21 indicate that the Mann-Whitney U (U) test statistics for the peer involvement awareness promotion strategies had an associated two tailed significance level (p) of equal or less than .001 (p $\leq$  .001) except for the school peer educators ((p= .240) and out of school peer educators (p= .349). Apart from the school peer educators and out of school peer educators, the p values of the other peer involvement awareness promotion providers were less the set alpha level ( $\alpha$ ) of .05. It was therefore concluded that there was significant difference between the preferences of students and teachers for all the VCT promotion services providers except the notice board, school peer educators and out of school peer educators.

However, the effect size, r, for all the service providers except the radios, television and magazine/newspaper (r= -.229, r= .214 & r=.266 respectively), were less than .20. The effect size for the radios, television and magazine/newspaper were therefore, considered weak while the rest were considered negligible. The lowest effect size was -.031 and the highest -.266. This

implies that the students' and teachers' differences on the peer involvement services awareness promotion providers accounted for between 3.1% and 26.6% of the variance in preference. This therefore implies that the students' and teachers' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

## **4.3.4 Parental Involvement Strategies**

In order to establish the differences in perspective between students and teachers on the preferred parent figures or representatives, Table 22 presents the findings.

Table 22

Difference in preference of students and teachers on the parent figures/representatives

Parent figures	Median	$\mathbf{U}$	p value	z-score	r
Mother	10	45561.5	.011	-2.521	084
Father	8	42666.5	.001	-3.412	114
School parent representatives	6	45718.5	.028	-2.221	073
Radio parent figure presenters	6	40530	.000	-4.084	136
Godmother	5	44612	.010	-2.602	087
Television parent figure					
presenters	5	41961	.001	-3.564	119
Godfather	4	40304	.000	-4.156	138
Magazine/newspaper parent					
figures	4	39825.5	.000	-4.331	144
Telephone hotlines parent figures	3	40123.5	.000	-4.268	142
Internet sites parent figures	2	31548.5	.000	-7.445	248

The findings in Table 22 indicate that the Mann-Whitney U (U) test statistics for the preferred parent figures/representatives had an associated two tailed significance level (p) of less than .03 (p< .03) which was less the set alpha level ( $\alpha$ ) of .05. It was therefore concluded that there was

significant difference between the preferences of students and teachers for all the parent figures/representatives.

However, the effect size, r, for all the service providers except the magazine/newspaper (r= -.248), was less than .20. The effect size for the magazine/newspaper was therefore, considered weak while the rest were considered negligible. The lowest effect size was -.073 and the highest -.248. This implies that the students' and teachers' differences on parent figures/representatives accounted for between 0.4% and 21.7% of the variance in preference. This therefore implies that the students' and teachers' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

Service provision can be enhanced by awareness creation. In order to establish the differences in perspective between students and teachers on the preferred parental involvement awareness creation strategies, Table 23 presents the findings.

Table 23

Difference in preference between students and teachers on the parental involvement services awareness promotion strategies

Awareness Strategies	Median	U	p value	z-score	r
School notice board	5	42341	.001	-3.461	115
School counselor referrals	5	39383	.000	-4.509	150
School peer educators	5	47645	.125	-1.518	051
Radios	4	37567.5	.000	-5.160	172
Television	3	32837.5	.000	-6.865	228
Magazines/newspapers	3	31547.5	.000	-7.336	244
Out of school peer educators	4	47426.5	.108	-1.59	053
Mobile van announcements	1	34203.5	.000	-6.543	218

The findings in Table 23 indicate that the Mann-Whitney U (U) test statistics for the parental involvement awareness promotion strategies had an associated two tailed significance level (p) of equal or less than .001 (p $\leq$  .001) except for the school peer educators ((p= .125) and out of school peer educators (p= .108). Apart from the school peer educators and out of school peer educators, the p values of the other parental involvement awareness promotion providers were less the set alpha level ( $\alpha$ ) of .05. It was therefore concluded that there was significant difference between the preferences of students and teachers for all the parental involvement awareness promotion strategies except the notice board, school peer educators and out of school peer educators.

However, the effect size, r, for all the awareness promotion strategies except the television, magazine/newspaper and mobile van announcements (r= -.228, r= .244 & r=.218 respectively), were less than .20. The effect size for the television, magazine/newspaper and mobile van announcements were therefore, considered weak while the rest were considered negligible. The lowest effect size was -.051 and the highest -.244. This implies that the students' and teachers' differences on the parental involvement awareness promotion strategies accounted for between 5.1% and 24.4% of the variance in preference. This therefore implies that the students' and teachers' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

#### **4.3.5 Condom Use Promotion Strategies**

In order to establish the differences in preference of students and teachers on the condom information service providers, Table 24 presents the findings.

Table 24

Difference in preference of students and teachers on the condom information service providers

<b>Condom Information</b>					
Service Providers	Median	U	p value	z-score	r
Doctor	9	26107	.000	-9.311	310
Health facility counselor	8	42126.5	.001	-3.503	117
Nurse	7	32501	.000	-6.979	232
Guidance and counselling					
teacher	6	41023.5	.000	-3.894	130
Youth centre	7	36898	.000	-5.381	179
School peer educator	6	49983.5	.505	-0.669	022
Out of school peer educator	6	49669.5	.434	-0.781	026
Mother	4	32689	.000	-6.898	230
Community health worker	3	41786	.000	-3.628	121
Father	3	31719	.000	-7.288	243
Chaplain/religious leader	2	33445	.000	-6.681	222

The findings in Table 24 indicate that the Mann-Whitney U (U) test statistics for the preferred the condom information service providers had an associated two tailed significance level (p) of less than .001 (p< .001) except for the school peer educator and out of school peer educator (p= .505 & p=.434 respectively). Apart from the school peer educator and out of school peer educator, the p values of the condom information service providers were less the set alpha level (α) of .05. It was therefore concluded that there was significant difference between the preferences of students and teachers for all the condom information service providers except the school peer educator and out of school peer educator.

However, the effect size, r, for all the service providers except the doctor, nurse, mother, father and chaplain (r = -.310, r = .232, r = -.230, r = .243 & r = .222 respectively), were less than .20.

The effect size for the doctor, nurse, mother, father and chaplain were therefore, considered weak while the rest were considered negligible. The lowest effect size was -.022 and the highest -.310. This implies that the students' and teachers' differences on parent figures/representatives accounted for between 2.2% and 31% of the variance in preference. This therefore implies that the students' and teachers' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

Apart from getting information to promote condom use, the study also focused on condom distribution strategies. In order to establish the differences in perspective between students and teachers on the preferred condom distribution service providers, Table 25 presents the findings.

Table 25

Difference in preference of students and teachers on the condom distribution service providers

<b>Condom Distribution</b>					
Service Providers	Median	U	p value	z-score	r
Students' responses					
School health facility	3	48802.5	.269	-1.105	037
School peer educator	3	44424	.008	-2.698	090
Out of school peer educator	4	46601	.055	-1.906	063
Government health facility	7	46952	.076	-1.785	059
Private health facility	6	47727.5	.136	-1.500	050
Youth centre	5	47035	.079	-1.747	058
Private chemist	4	45628.5	.023	-2.258	075
Street vendors	1	50116.5	.519	-0.631	021
Entertaiment spots	2	50939.5	.750	-0.329	011
Community health worker	3	51084	.779	-0.275	009

The findings in Table 25 indicate that the Mann-Whitney U (U) test statistics for preferred the condom distribution service providers had an associated two tailed significance level (p) of less than .03 (p< .03) for the school peer educators (p= .008) and private chemists (p=.023). Apart from the school peer educator and private chemists, the p values of the condom distribution service providers were more than the set alpha level ( $\alpha$ ) of .05. It was therefore concluded that there were significant differences between the preferences of students and teachers for only two condom distribution service providers namely the school peer educators and private chemists

However, the effect size, r, for all the service providers were less than .10 thus they were considered negligible. The lowest effect size was -.009 and the highest -.09. This implies that the students' and teachers' differences on condom distribution service providers accounted for between 0.9% and 9% of the variance in preference. This therefore implies that the students' and teachers' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

Service provision can be enhanced by awareness creation. In order to establish the differences in perspective between students and teachers on the preferred condom services awareness promotion strategies, Table 26 presents the findings.

Table 26

Difference in preference of students and teachers on the condom information and distribution services awareness promotion strategies

<b>Condom Services</b>					
Awareness Strategies	Median	$\mathbf{U}$	p value	z-score	r
School notice board	4	49281	.353	-0.934	031
School counselor referrals	3	50888	.725	-0.346	012
School peer educators	4	42412	.001	-3.422	114
Out of school peer educators	3	42914.5	.001	-3.246	108
Radios	5	50190	.541	-0.599	020
Television	4	51385	.874	-0.165	006
Magazines/newspapers	4	48195	.185	-1.325	044
Company sales representative	2	45939.5	.030	-2.146	071
Mobile van announcements	1	44650.5	.007	-2.641	088

The findings in Table 26 indicate that the Mann-Whitney U (U) test statistics for the condom services awareness promotion strategies had an associated two tailed significance level (p) of equal or less than .03 (p $\leq$  .03) for the school peer educators ((p= .001) and out of school peer educators (p= .001), company sales representative (p= .030) and mobile van announcements (p= .007). Therefore, it was concluded that there was significant difference between the preferences of students and teachers for the school peer educators, out of school peer educators, company sales representative and mobile phone announcements since they had p values of less than set alpha level ( $\alpha$ ) of .05. The other condom services awareness promotion were thus not significant.

However, the effect size, r, for all the condom services awareness promotion strategies were less than .20 thus they were considered negligible. The lowest effect size was -.006 and the highest -.114. This implies that the students' and teachers' differences on the condom services awareness

promotion providers accounted for between 0.6% and 11.4% of the variance in preference. This therefore implies that the students' and teachers' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

## 4.4 Differences in preference of female and male students on the intervention promotion strategies in secondary schools in Emuhaya Sub County, Kenya

The study sought to find out if the differences in preference between the female and male students were significant. With the consideration that ordinal scale in form of ranking was used in this analysis, a non-parametric test – Mann-Whitney U was used and the significance level set at .05. Additionally, the effect size, r, was calculated to ascertain the extent of practicality of this differences in warranting the tailoring of the intervention strategies to incorporate the gender perspectives. As recommended by Fields (2005) and Ongula (2005), an effect size less than .2 was considered negligible; between .2 and .4 weak; between .4 and .7 moderate; between .7 and .9 substantial; and more than .9 very dependable. The findings were reported for all the five interventions the study focused on in form of tables on the preferred service providers and the preferred awareness creation strategies.

#### **4.4.1 Counselling Promotion Strategies**

The present study sought to determine if there were any differences in perspective between female and male students regarding their preferred counselling service providers. The findings were reported in Table 27.

Table 27

Difference in preference of female and male students on counselling promotion service providers

<b>Counselling Services Providers</b>	Median	U	p value	z-score	r
Mother	8	55037	.000	-6.157	222
Guidance and counselling	O	33037	.000	-0.137	222
teacher	7	69831.5	.208	-1.270	046
Health facility counselor	6	68945.5	.124	-1.556	058
Doctor	6	68875.5	.115	-1.579	057
Father	5	67668.5	.044	-1.978	071
Youth centre	5	72957.5	.814	-0.244	009
School peer educator	5	72825	.779	-0.288	010
Nurse	5	61331.5	.000	-4.047	146
Out of school peer educator	4	73584	.969	-0.039	001
Chaplain/religious leader	3	68634	.099	-1.667	060

The findings in Table 27 indicate that the Mann-Whitney U (U) test statistics for the counselling promotion service providers had an associated two tailed significance level (p) of less the set alpha level of .05. for the mother ( $p \le .000$ ), father ( $p \le .044$ ) and nurse ( $p \le .000$ ). The p values of the other service providers were more than the set alpha level of .05 thus were not significant. It was therefore concluded that there was significant difference between the preferences of female and male students for three counselling promotion service providers namely the mother, father and nurse.

However, the effect size, r, for all the service providers except the mother (r=-.222), was less than .20. The effect size for the mother was therefore, considered weak while the rest were considered negligible. The lowest effect size was -.001 and the highest -.222. This implies that the female and male students' differences on counselling promotion service providers accounted

for between 0.1% and 22.2% of the variance in preference. This therefore implies that the female and male students' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

Apart from determining the differences in preference between the female and male students on counselling service providers, the present study sought to determine their preference on the counselling services awareness promotion strategies. The findings were reported as Table 28.

Table 28

Difference in preference of female and male students on Counselling services awareness promotion strategies

Responses	Median	U	p value	z-score	r
	F	66704.5	024	2 207	002
School notice board	5	66784.5	.024	-2.287	083
School counselor referrals	5	68604	.095	-1.674	060
School peer educators	5	65809.5	.009	-2.592	094
Out of school peer educators	3	62085	.000	-3.815	138
Radios	5	71916	.569	-0.586	021
Television	4	68351.5	.081	-1.755	063
Magazines/newspapers	5	71814	.538	-0.621	022
Mobile van announcements	1	71921.5	.547	-0.605	022

The findings in Table 28 indicate that the Mann-Whitney U (U) test statistics for the counselling services awareness promotion had an associated two tailed significance level (p) of less the set alpha level of .05. for the notice boards (p= .024), school peer educators (p= .009) and out of school peer educators (p= .000) The p values of the other service providers were more than the set alpha level of .05 thus were not significant. It was therefore concluded that there was

significant difference between the preferences of female and male students for three counselling services awareness promotion strategies namely notice board, school peer educators and out of school peer educators.

However, the effect size, r, for all the service providers were less than .20, therefore, they were considered to be negligible. The lowest effect size was -.021 and the highest -.138. This implies that the female and male students' differences on the counselling services awareness promotion strategies accounted for between 2.1% and 13.8% of the variance in preference. This therefore implies that the students' and teachers' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

## **4.4.2** Voluntary Counselling and Testing Strategies

The present study sought to determine if there were any differences in preference between female and male students regarding the VCT service providers. The findings were reported in Table 29.

Table 29

Difference in preference of female and male students on Voluntary Counselling and Testing promotion service providers

VCT Services Providers	Median	$\mathbf{U}$	p value	z-score	r
Doctor	9	65224.5	.004	-2.786	101
Guidance and counselling					
teacher	8	68930	.115	-1.564	056
Health facility counselor	8	65285	.005	-2.761	100
Mother	6	63466	.001	-3.349	121
Nurse	7	61695.5	.000	-3.932	142
School peer educator	6	72781.5	.763	-0.301	019
Youth centre	6	72107	.599	-0.522	019
Father	5	70825	.353	-0.941	034
Out of school peer educator	4	69819.5	.212	-1.270	046
Chaplain/religious leader	3	70834.5	.345	-0.942	034
Community health worker	3	72856.5	.776	-0.278	010

The findings in Table 29 indicate that the Mann-Whitney U (U) test statistics for the VCT promotion service providers had an associated two tailed significance level (p) of less the set alpha level of .05 for the doctor ( $p \le .004$ ), health facility counsellor ( $p \le .005$ ), mother ( $p \le .001$ ) and nurse ( $p \le .000$ ). The p values of the other service providers were more than the set alpha level of .05 thus were not significant. It was therefore concluded that there was significant difference between the preferences of female and male students for four VCT service providers namely doctor, health facility counselor, mother and nurse.

However, the effect size, r, for all the service providers were less than .20, therefore, were considered negligible. The lowest effect size was -.010 and the highest -.142. This implies that the female and male students' differences on the VCT promotion service providers accounted

for between 1% and 14.2% of the variance in preference. This therefore implies that the female and male students' preferences did not vary considerably. Thus, the differences were not practically viable despite their statistical significance.

Apart from determining the difference in preferences of female and male respondents on VCT service providers, the present study sought to determine the difference in preferences of the female and male restudents on the VCT services awareness promotion strategies. The findings were reported as Table 30.

Table 30

Difference in preference of female and male students on Voluntary Counselling and Testing services awareness promotion strategies

VCT Awareness Strategies	Median	U	p value	z-score	r
School notice board	6	63556.5	.001	-3.378	122
School counselor referrals	5	65944.5	.012	-2.551	092
School peer educators	4	64739	.003	-2.941	106
Out of school peer educators	3	66535	.019	-2.354	085
Radios	4	72673.5	.736	-0.338	012
Television	4	65761.5	.009	-2.603	094
Magazines/newspapers	5	66219.5	.014	-2.459	089
Mobile van announcements	1	69829	.196	-1.304	047

The findings in Table 30 indicate that the Mann-Whitney U (U) test statistics for the VCT awareness promotion strategies had an associated two tailed significance level (p) of equal or less than the set alpha level ( $\alpha$ ) of .05 (p $\leq$  .05) except for radio (p $\leq$  .736) and mobile van announcements (p $\leq$  .196). It was therefore concluded that there was significant difference

between the preferences of female and male students for all the VCT awareness promotion strategies except the radio and mobile van announcements.

However, the effect size, r, for all the service providers were less than .20 therefore, were considered negligible. The lowest effect size was -.012 and the highest -.122. This implies that the female and male students' differences on the VCT awareness promotion strategies accounted for between 1.2% and 12.2% of the variance in preference. This therefore implies that the female and male students' preferences did not vary considerably. Thus, the differences were not practically viable despite their statistical significance.

## **4.4.3 Peer Involvement Strategies**

The present study sought to determine if there were any differences in perspective between female and male students regarding their preferred peer educators. The findings were reported in Table 31.

Table 31

Difference in preference of female and male students on Peer educators

Peer Educators	Median	U	p value	z-score	r
University/college based	8	60306.5	.000	-4.432	160
School based peer educator	8	68135	.061	-1.838	066
Youth centre based	8	72030.5	.589	-0.550	020
Radio based	6	73304.5	.898	-0.131	005
Church based	6	68390	.085	-1.738	063
Television based	5	67514.5	.044	-2.027	073
Community based	4.5	69033.5	.127	-1.529	055
Magazine/newspaper based	5	66961.5	.026	-2.208	080
Telephone hotlines based	3	67865.5	.052	-1.936	070
Internet sites based	2	67738	.041	-2.017	073

The findings in Table 31 indicate that the Mann-Whitney U (U) test statistics for the peer educators had an associated two tailed significance level (p) of more than the set alpha level (α) of .05 (p> .05) except for the university/college based, television based, magazine/newspaper based and internet sites based peer educators (p= .000, p= .044, p= .026 & p=.041 respectively). It was therefore concluded that there was significant difference between the preferences of female and male students for university/college based, television based, magazine/newspaper based and internet sites based peer educators while the rest were not significant.

However, the effect size, r, for all the service providers were less than .20 therefore, was considered negligible. The lowest effect size was -.005 and the highest -.160. This implies that the female and male students' differences on the peer educators accounted for between 0.4% and 21.7% of the variance in preference. This therefore implies that the female and male

students' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

Apart from determining the differences in preference between the female and male students on the preferred peer educators, the present study sought to determine the differences in preference of the female and male students on the peer involvement awareness promotion strategies. The findings were reported as Table 32.

Table 32

Difference in preference of female and male students on Peer Involvement awareness promotion strategies

Peer Involvement					
Awareness Strategies	Median	U	p value	z-score	r
		60220	0.60	1.014	0.65
School notice board	6	68230	.068	-1.814	065
School counselor referrals	5	62860	.000	-3.561	128
Radios	4	69540	.167	-1.366	049
School peer educators	5	66004	.011	-2.530	091
Television	4	71724.5	.516	-0.649	023
Magazines/newspapers	4	73650	.986	-0.018	001
Out of school peer educators	4	67933	.059	-1.895	068
Mobile van announcements	1	71589	.483	-0.713	026

The findings in Table 32 indicate that the Mann-Whitney U (U) test statistics for the peer involvement awareness promotion strategies had an associated two tailed significance level (p) of more than the set alpha level ( $\alpha$ ) of .05 (p> .05) except for the school counselor referrals (p= .000) and school peer educators (p= .011). It was therefore concluded that there was significant

difference between the preferences of female and male students for school counsellor referrals and school peer educators while the rest were not significant.

However, the effect size, r, for all the service providers were less than .20 therefore, was considered negligible. The lowest effect size was -.001 and the highest -.128. This implies that the female and male students' differences on the peer involvement awareness promotion strategies accounted for between 0.1% and 12.8% of the variance in preference. This therefore implies that the students' and teachers' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

## **4.4.4 Parental Involvement Promotion Strategies**

The present study sought to determine if there were any differences in preference between female and male respondents regarding the parent figures/representatives. The findings were reported in Table 33.

Table 33

Difference in preference of female and male students on parent figures/representatives

Parent Figures	Median	U	p value	z-score	r
			<b>1</b>		
Mother	10	53256.5	.000	-7.504	271
Father	9	71889.5	.532	-0.613	022
School parent representative	6	72861.5	.781	-0.277	010
Radio parent figure presenters	6	69230	.140	-1.468	053
Television parent figure					
presenters	5	70519.5	.298	-1.044	038
Magazine/newspaper parent					
figures	4	73693	.997	-0.003	000
Godmother	5	61733	.000	-3.919	141
Godfather	4	72530	.699	-0.384	014
Telephone hotlines parent figures	3	68659.5	.089	-1.669	060
Internet sites parent figures	2	63597	.001	-3.357	121

The findings in Table 33 indicate that the Mann-Whitney U (U) test statistics for the parent figures/representatives had an associated two tailed significance level (p) of more than the set alpha level (α) of .05 (p> .05) except for the mother (p= .000), godmother (p= .000) and internet sites parent figures (p= .001). It was therefore concluded that there was significant difference between the preferences of female and male students for mother, godmother and internet site parent figure while the rest were not significant.

However, the effect size, r, for all the service providers except the mother (r= -.271), were less than .20. The effect size mother was therefore, considered weak while the rest were considered negligible. The lowest effect size was -.000 and the highest -.271. This implies that the female and male students' differences on the parent figures/representatives accounted for between 0% and 27.1% of the variance in preference. This therefore implies that the female and male

students' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

Apart from determining the differences in preference between the female and male students on parent figures/representatives they preferred, the present study sought to determine the preferences of the female and male students on the parental involvement awareness promotion strategies. The findings were reported as Table 34.

Table 34

Difference in preference of female and male students on parental involvement services awareness promotion strategies

<b>Parental Involvement</b>					
Awareness Strategies	Median	U	p value	z-score	r
School notice board	6	65726	.009	-2.640	095
	Ü	00,20			
School counselor referrals	5	62327.5	.000	-3.746	135
School peer educators	5	67731	.048	-1.963	071
Radios	4	73305	.893	-0.131	005
Television	3	63635	.001	-3.302	119
Magazines/newspapers	3	65174.5	.005	-2.799	101
Out of school peer educators	4	70701	.326	-0.988	036
Mobile van announcements	1	69416	.145	-1.442	052

The findings in Table 34 indicate that the Mann-Whitney U (U) test statistics for the parental involvement awareness promotion strategies had an associated two tailed significance level (p) of equal or less than set alpha level ( $\alpha$ ) of .05 ( $p \le .05$ ) except for radios ((p = .893), out of school peer educators (p = .326) and mobile van announcements (p = .145). It was therefore

concluded that there was significant difference between the preferences of female and male students for all the parental involvement awareness promotion strategies except the radios, out of school peer educators and the mobile van announcements.

However, the effect size, r, for all the parental involvement awareness promotion strategies were less than .20 therefore, were considered negligible. The lowest effect size was -.005 and the highest -.135. This implies that the female and male students' differences on the parental involvement services awareness promotion strategies accounted for between 0.5% and 13.5% of the variance in preference. This therefore implies that the students' and teachers' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

## **4.4.5 Condom Use Promotion Strategies**

The present study sought to determine if there were any differences in preference between female and male students regarding condom information service providers. The findings were reported in Table 35.

Table 35

Difference in preferences of female and male students on condom information service providers

<b>Condom Information</b>					
Service Providers	Median	U	p value	z-score	r
Doctor	9	70834	.341	-0.947	034
Health facility counselor	8	55141.5	.000	-6.086	220
Nurse	8	63087.5	.000	-3.489	126
Guidance and counselling					
teacher	7	64331	.002	-3.068	111
Youth centre	7	73082	.841	-0.204	007
School peer educator	6	65697	.008	-2.624	095
Out of school peer educator	6	64172	.002	-3.120	113
Mother	4	53536	.000	-6.601	238
Community health worker	3	72675.5	.740	-0.337	012
Father	3	65008.5	.004	-2.863	103
Chaplain/religious leader	2	69586	.174	-1.359	049

The findings in Table 35 indicate that the Mann-Whitney U (U) test statistics for the preferred condom information service providers had an associated two tailed significance level (p) of less than the set alpha level ( $\alpha$ ) of .05 (p< .05) except doctor (p≤ .341), youth centre (p≤ .841), community health worker (p≤ .740) and religious leader (p≤ .174). It was therefore concluded that there was significant difference between the preferences of female and male students for all the condom information service providers except the doctor, youth centre, community health worker and religious leader.

However, the effect size, r, for all the service providers except two were less than .20 thus they were considered negligible. The two strategies namely health facility counselor and mother had an effect size of r = -.220 and r = -.238 respectively thus were considered weak. The lowest

effect size was -.007 and the highest -.238. This implies that the female and male students' differences on their preferences on condom information service providers accounted for between 0.7% and 23.8% of the variance in preference. This therefore implies that the female and male students' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

Additionally, this study sought to determine the differences in preferences of female and male students on condom distribution service providers. The findings were reported in Table 36.

Table 36

Difference in preference of female and male students on condom distribution service providers

Condom Distribution					
Service Providers	Median	U	p value	z-score	r
Government health facility	7	51683.5	.000	-7.307	264
Private health facility	6	52824	.000	-6.920	250
Youth centre	5	56761.5	.000	-5.595	202
Private chemist	4	51929	.000	-7.195	260
School health facility	3	54331	.000	-6.399	230
Out of school peer educator	4	53503	.000	-6.686	241
Community health worker	3	56068.5	.000	-5.835	211
School peer educator	3	56295	.000	-5.763	208
Entertainment spots	2	56706	.000	-5.642	204
Street vendors	1	61887.5	.000	-3.935	142

The findings in Table 36 indicate that the Mann-Whitney U (U) test statistics for preferred the condom distribution service providers had an associated two tailed significance level (p) of less

than the set alpha level ( $\alpha$ ) of .05 (p< .05) – for all p was .000. It was therefore concluded that there was significant difference between the preferences of female and male students for all the condom distribution service providers.

However, the effect size, r, for all the service providers except one were more than .20 but less than .40 thus they were considered weak. The service provider namely street vendor had an effect size of r = -.142 thus was considered negligible. The lowest effect size was -.142 and the highest -.264. This implies that the female and male students' differences on condom distribution service providers accounted for between 14.2% and 26.4% of the variance in preference. This therefore implies that the female and male students' preferences did not considerably. Thus the differences were not practically viable despite their statistical significance.

Apart from determining the differences in perspective between the female and male respondents on condom information and distribution service providers, the present study sought to determine the difference in preference of the female and male respondents on the condom information and distribution awareness creation strategies. The findings were reported as Table 37.

Table 37

Difference in preference of female and male students on condom information and distribution services awareness promotion strategies

Condom Services					
Awareness Strategies	Median	U	p value	z-score	r
School notice board	4	67931	.057	-1.913	069
School counselor referrals	3	67420.5	.042	-2.076	075
School peer educators	3	70434	.281	-1.079	039
Out of school peer educators	3	70851.5	.352	-0.943	034
Radios	5	69071	.133	-1.529	055
Television	4	72838.5	.779	-0.286	010
Magazines/newspapers	4.5	73368	.909	-0.111	004
Company sales representative	3	70786.5	.338	-0.964	035
Mobile van announcements	1	71119	.401	-0.861	031

The findings in Table 37 indicate that the Mann-Whitney U (U) test statistics for preferred the condom services awareness strategies had an associated two tailed significance level (p) of less than the set alpha level ( $\alpha$ ) of .05 (p< .05) for only one strategy namely school counsellor referrals - p = .042. It was therefore concluded that there was significant difference between the preferences of female and male students for school counsellor referrals while the others were not significant.

However, the effect size, r, for all the service providers were less than .20 thus they were considered negligible. The lowest effect size was -.004 and the highest -.075. This implies that the female and male students' differences on condom services awareness strategies accounted for between 0.4% and 7.5% of the variance in preference. This therefore implies that the female and male students' preferences did not vary considerably. Thus the differences were not practically viable despite their statistical significance.

# 4.5 Factors that contributed to the choice of intervention promotion strategies by both students and teachers in secondary schools in Emuhaya Sub County, Kenya

In order to get insight on the reasons that informed the preferences of the respondents, the researcher sought to establish from them the factors that influenced the choice of intervention promotion strategies. The researcher used findings that emerged from FGDs conducted.

#### 4.5.1 Counselling Promotion Strategies

Availability of the service provider was one factor that contributed to the choice of respondents on the preferred counselling strategies. One of the factors that informed the choice of mother and guidance and counselling teacher among the three most preferred choices of the respondents was that in the home front, mothers were easily reached when the students had challenges. The same could be said about the guidance and counselling teacher during school sessions. Additionally, majority of the population of parents during school functions and visiting days for students in boarding schools were mothers therefore they were accessible. A considerable number of guidance and counselling teachers had designated offices and had schedules on when could could be available in the offices thus they could easily be reached.

The school peer educator was also identified as a service provider who could also be available and was ranked highly especially by the teachers. Despite ranking the school peer educators as their seventh choice overall, the student respondents were in consensus with their teachers on the fact that the school peer educators were readily available. The youth centres though favoured by teachers and students alike as a strategy that could highly impact on HIV and AIDS prevention was ranked seventh by both sets of respondents because of its unavailability. It was noted that

there was no youth centre in the entire Emuhaya Sub County. This finding concurs with findings from a study by Senderowitz (2001) who reported that though youth centres had programmes and infrastructure that appealed to the youth it could only be found in some parts of urban areas therefore could not avail its services to a large population of youth including those in urban areas. The respondents indicated that it was important that the students get prompt attention to the challenges they face that are likely to negatively impact on their efforts towards HIV & AIDS prevention. The findings indicate that however much impact a strategy was likely to have in enabling HIV & AIDS prevention, one of the considerations that is key to its preference was availability.

Being non-judgmental was another factor that influenced choice of preferred strategies for counselling. Strategies that involved health personnel especially the health facility counsellor, were ranked highly on their ability to be non-judgmental while the chaplain and or religious leaders were considered the least non-judgmental. The respondents particularly the students felt that they could not easily seek for counselling from individuals they perceived to be very religious including their fellow students. This is because these service providers would base their counsel on the religious teachings and not put into perspective the "reality on the ground" that increased the vulnerability of the youth to HIV & AIDS.

The student respondents said that one reason why learners sought the guidance and counselling teacher when they had challenges was because they did not participate in disciplinary panels. The Guidance and Counselling teachers therefore, dealt with the students' challenges impartially since they did not have prior knowledge on their disciplinary case. The school counsellor

therefore, got into a counselling relationship with them with a mindset that the client was capable of overcoming their challenges and being a well adjusted individual. This finding concurs with Bandura (1986) that enhancing self-efficacy in an individual enables the person have a higher resolve to work towards positive behavior development and or modification which is an important ingredient towards HIV & AIDS prevention.

Most students also identified fathers as judgmental thus preferred mothers as their choice of a person who could offer counselling in a manner that was less judgmental. Most students described their fathers as "dictatorial and poor listeners who placed a high premium on academic achievement". The finding that being non-judgmental was an important attribute in the choice of counsellors concurs with findings by Tijuana (2001) which indicates that inorder for strategies to enable behaviour change they had to address the challenges that the youth were confronted with in a nonjudgmental manner.

Confidentiality was another factor that influenced the respondents' choice of intervention strategy. The view of both student and teacher respondents indicated that confidentiality was a major consideration as to why the Guidance and Counselling teacher, mother and health personnel especially the health facility counsellor were among the most preferred strategies. The peer educators though ranked highly by the teachers were perceived as lacking in the attribute of confidentiality. The respondents indicated that if the attribute of confidentiality could be instilled and upheld by peer educators then they could be one of the most appropriate strategies in providing counselling services.

The findings indicate that the religious leaders and nurses were among the least preferred service providers on counselling. The religious leaders it was presumed especially by the student respondents could not maintain confidentiality since they had a duty to uphold religious teachings that shunned issues of sexuality which HIV & AIDS revolves around. With this backdrop, the respondents felt that they were not a favourable choice. The respondents indicated their lack of sufficient back ground information on the operation of youth centres thus could not comment much on the strategy's confidentiality levels.

The respondents especially the students observed that most nurses in health facilities lived in the neighbourhood of the facilities and interacted with the inhabitants of the area including the students' parents and teachers. The students revealed that the most accessible health facilities to them were those in close proximity to their schools and or homes therefore they doubted the ability of the nurses to ensure confidentiality. The respondents reiterated that confidentiality was a very crucial consideration in their choice of service provider. This submission concurs with findings by Senderowitz, (2001), Tijuana (2001) and Ajowi (2006) that confidentiality is a key consideration in the uptake of counselling services.

Anonymity was another factor that influenced choice of counselling strategies especially by the student respondents. The students felt that it would be easier for them to seek for counselling from individuals who did not know them because that ensured anonymity and enabled the students to talk freely to the service provider. This perception the students said was likely to prompt some students to go to health facilities that were not in close proximity with their schools and homes. The FGDs with the students revealed that during open guidance forums on topics

related to HIV & AIDS prevention organized within the schools, they found it convenient to raise their challenges in the form of written anonymous notes to the presenter. According to the students anonymity shielded them from victimization, labeling and stigma from teachers and fellow students. The learners felt that in the absence of anonymity, discussing sexuality issues would be perceived to be immoral. According to Senderowitz (2000) anonymity when addressing issues of a sensitive nature could shield the client from any eventualities arising from their disclosure.

Experience and training on how to carry out counselling was a factor that made the Guidance and Counselling teachers and health personnel to be preferred service providers for counselling. The peer educators and chaplains/religious leaders were least rated on this factor thus it did not contribute positively to the ranking on students' preference for them. According to Nyinya (2007) training and experience in counselling were very important ingredients for a reputable counsellor because they provide an individual with the knowledge and skills to enable them conduct their counselling sessions procedurally.

Feasibility was a factor that was majorly considered by the teachers. It was an undisputable feeling among the teachers that whichever strategies were put in place for the purposes of provision of counselling services to the youth, their success was assured if only they fitted into the prescribed school program and schedules. The teachers pointed out that HIV & AIDS initiatives could not be emphasized at the expense of the curriculum thus had to be treated like any other extra curriculum activities. This was the reason why teachers chose the Guidance and Counselling teacher and the school peer educators as their most preferred counselling services

provider. This was because these two were part of the school fraternity therefore offered more flexibility on when they could be accessed for the service. This scenario was unlike that of external service providers whose schedules were likely to make them available during the classroom instruction hours or on appointments. The timings have to be convenient to both the school and service provider. This finding concurs with findings by Collins and Alagiri (2001) who reported that for programs to be successful they must be feasible and fit into the schedules of the beneficiaries of the initiatives.

#### 4.5.2 Voluntary Counselling and Testing Strategies

Experience and training was one factor that the respondents' in the FGDS identified as a factor that contributed to choice of VCT strategies. The students' FGDs revealed that the learners felt that any form of testing that had medical implications needed to be done by health personnel especially the doctor who due to the nature of training they receive were undoubtedly experienced to counsel and test. On the other hand, the teachers who ranked the doctor as their sixth most preferred choice though they were in agreement with the students on the doctor being experienced in medical issues felt that the these health personnel were overqualified for such assignments. Both groups of FGDs were in consensus that the background training that the health facility counselor possesses in health issues as well as in counselling made them well-grounded to undertake VCT hence the ranking as the third most preferred for students and teachers alike. Despite agreement among respondents that the nurse had sufficient training on VCT, the students and teachers ranking was fifth and eighth respectively which implied that other factors had informed their preference.

#### **4.5.3 Peer Involvement Strategies**

In the area of service provision strategies, the university/college based peer educators were the most preferred by students and the third most preferred by teachers. The FGDs established that the tertiary institutions' based peer educators received this favourable rating mainly because of appeal. The respondents felt that their age and the experiences they had gone through were similar to those of the high school students. Therefore, they could easily understand and identify with the challenges these youth face thus they were likely to be nonjudgmental. These peer educators were also from other institutions therefore they would afford anonymity. On the other hand, during the FGDs with the teachers, the respondents agreed on the potential the peer educators from tertiary institutions had in promoting HIV & AIDS initiatives among the youth in schools, however, they questioned their moral standing which to them was an impediment to the initiative. All the FGDs were in consensus that their availability and feasibility would be a challenge. The university/ college based peer educators were students therefore they could be available only at times when they were not undertaking their programs and this limited the contact time they could afford the students. Additionally, the ratio of tertiary institutions to high schools was very low and in some cases the distance was far therefore logistical issues that had financial implications could hamper sustainability of the programme.

School based peer educators were ranked second by the students and first by the teachers as the preferred peer educators. During the FGDs, the student respondents felt that school based peer educators were always available in the school hence, they could easily be reached to provide services. Additionally, school based peer educators were their age mates thus could easily identify with the challenges their fellow students faced hence they had appeal. However, the

learners felt that attributes of confidentiality, training and experience and anonymity needed to be addressed for the school based peer educators to effectively carry out their duties. During some FGDs with the students, the moral ratings of some of the peer educators were questioned while some students felt that these peer educators could not uphold the attribute of being nonjudgmental. The student respondents claimed that though some of the peer educators seemed to empathize with them in the course of their interaction, they would portray the issue in bad taste thereafter.

On the other hand the teachers' FGDs felt that school based peer educators were the most feasible choice for HIV & AIDS prevention initiatives. The teachers felt that the school based peer educators could provide a cost effective way of promoting the initiative since they were available in school and the challenge of scheduling could not arise. However, the teacher respondents acknowledged that training and experience, confidentiality and anonymity were the shortcoming for most school based peer educators. This finding is in line with the findings from a study by Malanda (2010) on the effectiveness of HIV & AIDS Education programs in secondary schools in Kenya which explored factors that influence the effectiveness of peer involvement in schools.

The youth centre based peer educators were ranked third and second by students and teachers respectively. During the FGDs, the respondents acknowledged that most of them had never been exposed to the youth centres but had preferred them as a choice by virtue of the name. This finding concurs with findings by Senderowitz (2001) that revealed that most youth were not exposed to youth centres thus were not aware of the services they provide. This therefore,

implies that if the visibility of the youth centres could be increased, then they would be popular with the youth. This affirms the recommendation that the potential of youth being major agents of intervention promotion among their peers was an appealing initiative. However, after the researcher explaining the operations and logistics of coming up with a youth centre, the respondents particularly the teachers concluded that though appealing, feasibility of increasing the availability of youth centres to closer proximity to schools was not tenable and could end up serving a few youth especially those in urban areas. This finding resonates with earlier findings from a study on youth friendly services by Senderowitz (2001) and findings from a systematic review on the effectiveness of youth centres in increasing use of sexual and reproductive health services by Zuurmond, Geary & Ross (2012) that youth centres though a high potential for behavior change promotion have been able to serve a small population of youth mostly from urban areas thus was not a cost effective strategy

The mass media based peer educators on radio, television and in print were ranked fourth, sixth and eighth respectively by students and sixth, seventh and eighth respectively by the teachers. The students and teachers in the FGDs were in consensus that these peer educators particularly the television based would appeal to the youth due to the audio and visual component they had. Listening to and reading articles from fellow youth would also be motivating. Moshkhi (2016) in his study that dwelt on parental supervision in students' television watching adds credence to this study especially on the attribute of television being appealing.

However, the respondents were in agreement that access to the mediums would be a challenge to most youth even within the school setting because availing the media to students regularly would

not be feasible in schools. Due to the fact that school going youth spend most of their time in schools this would be the right place to avail them but it was not tenable in term of financing such an undertaking to levels that would ensure adequate provision and coverage. During the FGDs with students, some respondents said that most schools had no television sets and institutions that had limited the time for watching and had it shared at a ratio of up to one television set for five hundred students.

The church based peer educators were ranked fifth and fourth by the students and teachers respectively. This implies that the respondents, to a fair extent appreciated the role religious entities could play in propagating HIV & AIDS prevention initiatives among the youth. However, the respondents especially the students had mixed feelings on involving the church on issues that address sexuality especially to youth who are at the premarital stage in their lives. Thus, the students felt that the judgmental stand the church held especially on youth and premarital sex may inhibit the potential of church based peer educators in necessitating the success of HIV & AIDS prevention initiatives that targeted the realities of youth sexual relations that did not only promote abstinence. Though teachers felt strongly that the church had a major role to play in HIV & AIDS prevention especially by promoting abstinence, they were in agreement that by virtue of church based peer educators being affiliated to the religious settings they were likely to be biased in addressing the heterogeneous population of the youth. The diverse sexual experiences of the youth included those who are sexually active thus the church based peer educators would not serve the broad spectrum that the youth represented in respect to their sexuality. This was with the backdrop of the fact that some youth in church were sexually active. This finding lends credence to findings by Wambua (2003) that despite the church talking

mostly of abstinence and demonizing youth who were sexually active, even church going youth in Kenya were sexually active. Thus the insistence of religious entities on abstinence did not not candidly handle the prevention needs of some of their youth congregants in terms of providing relevant skills, knowledge and information.

Telephone hot line based peer educators and internet based peer educators were ranked ninth and tenth by the teachers and students alike. Though the respondents agreed that these strategies had the potential of being appealing to the youth by virtue of them being propelled by modern technology and also enabling anonymity, the telephones including mobile phones were not easily accessible to the students. This is because schools had telephone lines exclusively for school administration functions and mobile phone that could have been an option for this strategy are abolished in schools. Internet in most schools in the area where the study was done was mostly accessed from modems by teachers for research and communication while other modes of getting internet through school purchasing broad bands was not tenable by most schools due to the financial obligations associated with it, therefore, these strategies were not feasible. This implies that though the youth are the major consumers of social network the gains that these networks can make among the youth can not easily be achieved during a school term.

#### **4.5.4 Parental Involvement Strategies**

The mother emerged to be the most preferred parent figure as a service provider for HIV& AIDS initiatives. The student and teacher respondents alike ranked the mother as the most preferred parent figure followed by the father. During the FGDs, the respondents revealed that the factors that informed their preference of mother as their first choice included availability, being

nonjudgmental and confidentiality. The FGDs revealed that during school functions that required parents, the majority who turned up were mothers therefore they were likely to be available for the HIV & AIDS prevention initiatives. Additionally mothers could keep secrets, were good listeners and were understanding thus did not judge the students harshly even when they erred. These findings concur with findings by Malanda (2010) which established that mothers were among the most preferred alternative to guidance and counselling teachers. However, despite mothers being the most preferred choice, the extent of preference in matters on HIV & AIDS which touch on sexuality, was influenced by traditional cultural underpinnings. During the teachers' FGDs it was pointed out that culturally, mothers were not permitted to freely discussed issues touching on sexuality with their children especially sons. This was a preserve of aunts, uncles and grandparents. However, in the present times where there is a breakdown of cultural networks due to urbanization and modernization, interaction between the youth and their parents particularly on sexuality issues was being encouraged. The challenge is that some parents still hold on the notion that it is not their responsibility and tend to delegate it to teachers who in turn feel that parents need to embrace this duty instead of relegating it to the teachers.

The second most preferred parent figure as a service provider for HIV& AIDS initiatives was the father. During the FGDs the teachers and students alike were in consensus that compared to mothers, fathers were less involved in participation on schools issues. Therefore, the major reason why they were ranked highly as a preference was because the respondents felt the need for their involvement to endorse the initiatives for their success since traditionally fathers were the major decision makers and their approval of the program was likely to ensure sustainability. Additionally, the students particularly the male students felt that there were some issues that

required the intervention of their male parents thus their involvement was likely to afford the students the opportunity to have the issues dealt with. The student felt that their involvement would be a platform that would allow continuity of interaction even at home since this was presently lacking in most homes. However, there were mixed feelings on fathers with some students describing them as judgmental and dictatorial.

The PTA parent representative was ranked as the third preference by the students and teachers alike. During the FGDs with the teachers, they felt that involvement of the PTA representative was likely to ensure sustainability of HIV &AIDS prevention program in schools. This is because being that representatives are drawn from each class or stream and were the link between the school administration and the parents they could easily influence ownership and funding of the programs. The students who participated in the FGDs said that PTA representatives were the most available parent figure in schools thus involving them would guarantee parental representation.

God parents were ranked fifth and seventh for the God mother and God father respectively, by the students and teachers alike. During the teachers' FGDs it emerged that the traditional role that God parents held as alternative parents was no longer as effective as it used to be. This could probably be because the church doctrines no longer emphasize on the roles of God parents. Some students during the FGDs did not know who a God mother or God father was. This therefore implied that there was little if any interaction between the God parents and the students. The FGDs attributed this to the fact that most children are nowadays baptized at a very young age therefore no proper bonding with their God parents existed. This background information

indicated that God parents were ranked on the strength that the title began with the name "God" and on the roles they ought to be playing of giving advice to the students from a religious perspective and not on the basis of their impact in the students' lives. When the researcher asked the students if God parents were among the preferred people that could be contacted in case of an emergency or be an alternative authorized person to visit them, none of the students involved in the FGDs affirmed this. Additionally, the schools do not have any records on who the God parents to the students are and a considerable number of students do not know them. This implies that the choice of God parents is negatively influenced by the feasibility of their involvement and their availability.

The media based parent figures were ranked fourth and sixth for radio and television respectively, by the students and teachers alike. During the respondents' FGDs there was consensus that the radio was preferred due to its wide coverage thus accessibility by many students. The television on the other hand had a lot of appeal which could be advantageous in influencing students' behavior, due to the fact that apart from listening, the images could reinforce the information. However, the respondents felt that the mediums could not be manipulated to allow for the varied and limited time that students within the coverage area could be available to listen and or watch the relevant programs. Additionally, the media were business entities which could only produce and air the programs at a fee or on the program getting sponsorship from a funding body. The presence of many radio stations and television stations coupled with the varied preferences of the students heightened the complexity of the feasibility of the media based strategies. An earlier study by Malanda (2010) revealed that there was limited

times in school to listen and or watch these media devices and that the ratio of students to the gadgets was in some instances up to one to five hundred students.

The telephone based parent figure was ranked ninth out of the ten choices. This happened despite the fact that mobile telephony has become a popular means of communication with a considerable number of youth having access to mobile phones. During the FGDs the respondents pointed out that the gadgets were not allowed in schools and even at home most of the students had limited access to the mobile phones thus the strategy would not be feasible despite it assuring anonymity.

The internet based parent figures was the least preferred strategy despite global technological advances that have made internet services accessible to a wider range of rural areas even through the mobile phone. The reason for this was that students had limited access to the internet for purposes of utilizing it as an interactive medium for addressing their challenges. This is because when at school, the services were limited to classroom mediums for learning for selected students especially those who had enrolled for computer studies as a subject. During school holidays, students had limited access to mobile phones since most of them relied on their parents' phones whose use was monitored. This would thus not allow a lot of access to the internet due to fear of parental monitoring on the content on internet and also due to the cost pegged on internet usage. Even for the students who could access cyber services – during school holidays for all students and weekends for day scholars, the cost implication was an impediment. The dismal ranking to this choice does not concur with the finding that youth were major users of the internet and mobile telephones (Rogers et al. 2017; Pop-Eleches et al. 2011 and Lester et

al. 2010). However, this statement could imply that though youth have accessibility to internet, they visit other sites that are a priority to them and not for strategies that could enhance HIV & AIDS prevention.

## 4.5.5 Condom Use Promotion Strategies

In the present study, the condom use promotion strategies included condom information service providers and condom distribution service providers. This section explores the factors that contributed to choice in the two mentioned service provision areas separately.

#### 4.5.5.1 Condom Information Service Providers

The service providers from the health sector namely the doctor, health facility counselor and the nurse were the first three preferences for the students while the teachers ranked them fifth, seventh and second respectively. The students felt that the health personnel were better equipped to give information on condoms because health facilities were the major source of condoms thus had up to date and detailed information on condoms and their use. This implied that they had the prerequisite training and experience to enable condom use promotion. The students felt that the health personnel do not stigmatize the condom by associating its use with promiscuity and immorality which was usually the case with school based, religious based and community based entities as well as parents. Thus the students felt that the health personnel were nonjudgmental. However, the students did not fully trust the confidentiality of the health personnel particularly the nurses and the health facility counsellors due to the fact that most of them hailed from the locality where they worked. Despite of this, the students' had little choice apart from frequenting

the health facilities in their locality. Irrespective of these shortcomings, the students still felt that they were their best bet when it came to maintaining confidentiality.

The teacher respondents during the FGDs, were of the opinion that of the three health facility based personnel, the health facility based counsellor who they ranked second in preference was well placed to provide condom use promotion information services. According to the teachers, the doctor and nurse who they ranked fifth and seventh respectively had the knowledge but their job commitments of providing curative services hindered their ability to carry out condom use promotion. This was especially at such a time as this when there is a shortage of staff in health facilities. As far as the teachers are concern, using doctors and nurses was likely not to be feasible.

The Guidance and Counselling teacher was ranked fourth and third by the students and teachers respectively. The FGDs indicated that the respondents felt that if guidance and counselling teachers could uphold confidentiality as should be the case, then they were among the most feasible service providers. This is because their responsibility as guidance and counselling teachers gave them a favourable entry point for discussing sexuality issues including condom use promotion information unlike the rest of the teaching staff. The issue of confidentiality was articulated during the some students' FGDs with the feeling that some guidance and counselling teachers breached confidentiality by discussing some issues in the staff room or during staff fora. When asked how the teachers could solicit for support from staff mates on dealing with some of the challenges that faced the youth, the students suggested that the teachers should give general information and not specific information relating to students' sexuality as they sometimes do. On

the other hand, some students' FGDs appreciated the role the guidance and counselling teachers had played in necessitating behavior change among the students.

During the teachers' FGDs, they felt that the guidance and counselling teachers upheld confidentiality in their undertakings. However, they required more training to increase their knowledge and skills in handling issues affecting the youth. The teachers FGDs reiterated that this especially in the present times where "the support system of extended families in the African cultural setting had greatly diminished and parents were not doing enough to assist their youthful children navigate this challenging period." Respondents from the FGDs irrespective of designation - teacher or student felt that despite the challenges, the guidance and counselling teachers with increased capacity in terms of ratio to students, knowledge and skills, variation in gender and age and with change in attitude especially on cultural and religious prejudices on condoms would be among the best condom information service providers. This is because the students would not need to go far from their major area of operation – the school to get information on condom use. The students' FGDs suggested that for the information to be better disseminated there was need to organize talks with large groups that would allow students to get the information and allow for anonymous questions.

The youth centres were ranked fifth by the students and sixth by teachers as a strategy that would enable condom information provision. The researcher noted during the FGDs and the time for responding to the questionnaires that the concept of the youth centres for youth friendly services was not well known by the teachers and students alike. This finding confirmed the fact that youth centres were not popular with the respondents because they could only be accessed in selected

urban centres in areas where HIV & AIDS was viewed to be endemic. The nearest youth centre on reproductive health issues from the research area was "Tuungane Youth Centre" in Kisumu city. Even with government commitment on the need to have at least one youth centre in every constituency, the concept in the government context did not include the reproductive health component. The government concept heavily leaned on knowledge and skills for technological skill building and economic empowerment of the youth. This implied that youth centres were not a feasible means for condom information promotion because they were inaccessible and expensive to develop and sustain.

The school peer educator was the best ranked and the sixth ranked among the teachers and students respectively. The teachers during their FGDs, observed that the similar age bracket and collegiality between students and the school peer educators would enable a conducive environment to discuss condom use information. This is because amongst themselves, they were likely to identify with the challenges, trends and behaviours they have and or are exposed to. Since the scheduling of lessons and activities allowed for times that the students could even meet informally, the peer educators were thus more accessible. Though the students agreed with the teachers on the aforementioned factors, they felt that the peer educators lacked training and experience that would enable them give accurate information that could enable condom use promotion. Additionally, the students FGDs revealed that not all schools had peer educators and for those that had, they were selected by teachers thus were likely not to uphold confidentiality when discussing information on sexuality issues including condom use promotion among the students. The students felt that the peer educators were likely to be judgmental by assuming that

students who have approached them to get information on condom use were using condoms and if this information got to other students and teachers, it would bring about stigmatization.

The out of school peer educators were ranked seventh by the students and fourth by the teachers. The students' FGDs gave the same reasons for their preference as those they had mentioned on school peer educators. The student FGDs specifically questioned their experience and training and their ability to uphold confidentiality. The students and teachers alike felt that due to the busy school schedules, there was likely to be insufficient time to schedule the out of school peer educators to provide information on condom use promotion. Despite the time constraints in schools due to their busy schedules, the teachers felt that the out of school peer educators were well placed to discuss such sensitive issues like condoms while infusing experiences from the "real world" environment that they had now been exposed to. The teachers also pointed out that the out of school peer educators were likely to give comprehensive and information perceived to be sensitive as compared to the school peer educators because they had no fear that by being candid the school fraternity would perceive them as being immoral.

Parents were among the least preferred service providers by both categories of respondents. The mother was ranked eighth and ninth by students and teachers respectively while the father was ranked tenth by both categories of respondents. The major factor that informed this ranking was cultural underpinning. Traditionally, discussion of "sensitive topics" on sexuality was not a preserve of parents but of the extended family of grandparents, aunts and uncles. However, despite the evident erosion of traditional networks due to modernization and urbanization parents are still considered and to a large extent still consider themselves unsuitable facilitators to such

topics of which condom use information is part. The teachers and student were in consensus on this fact during the FGDs conducted.

The community health worker was ranked ninth and eighth by the students and teachers respectively. This poor ranking in preference was attributed to the fact that during the FGDs both the students and teachers felt that the age range of most community health workers was within that of parents and thus the cultural underpinnings that made parents an unfavourable preference sufficed. Additionally, most community health workers discharged their duties in areas of close proximity to their homes implying that they belonged to the community. This to the students meant that they were not assured of confidentiality and anonymity if they discussed or sought information on condom use from these service providers.

The religious leaders or chaplains were the least preferred service providers for condom use information. During all the FGDs, the respondents were in consensus that the negative attitude that religions held on condoms made these service providers completely unsuitable to discuss issues on condom use.

#### 4.5.5.2 Condom Distribution Service Providers

The government health facility was the most preferred condom distribution service provider by both the teachers and the students alike. During the FGDs both the student and teachers involved were in consensus that the major factor that informed their choice was that the government health facilities offered free service particularly when it came to condoms, they gave them out free of charge. Additionally with the advent of counties, the number of government health

facilities was on the rise thus enhancing accessibility of services including condom distribution because all health facilities are usually stocked with free condoms.

The private health facilities were the second and third choice for the students and teachers respectively. As articulated during the students' FGDs, though there was a cost implication to their offering of services, they provided their services with courtesy. Additionally, the privately owned facilities had variety in condoms since they stocked the free condoms like the government facilities and they also offered other brand names of condoms at a cost. This gave the clients to the private facilities the option of choice. To the students, this was desirable especially with the negative attitude that the students had towards the free condoms like their being small in size and that they easily burst. The teachers during the FGDs agreed with the students on the issue of the provision of variety of condoms but were skeptical about the kind of information the private facilities would give the youth in the process of distribution. The teachers felt that being a business entity, private clinics could easily vouch for the sold condoms by negatively marketing the free condoms thus easily creating a negative attitude amongst the youth. Such information was likely to be circulated to many other youths thus making the promotion of condoms especially to those who are unable to afford sold condoms watered down. Yet this would not necessary imply that those who can't afford condoms would abstain. This would thus negatively impact on HIV & AIDS prevention efforts.

The youth centre was the third students' preference and the second teachers' preference. Though youth centres are not easily accessible, their preference is an indicator that there was need to explore the possibility of having premises that provided HIV & AIDS prevention services

exclusively to the youth. This was affirmed during the teachers' and students' FGDs in which the participants felt that youth centres if made accessible would easily be one of the popular service providers to the youth on issues of HIV & AIDS prevention. This is because the staff was youthful and if not, had training to enable them serve the youth in a friendly, confidential and nonjudgmental manner; offered comprehensive services and entertainment that resonated well with the youth.

Private chemists were the fourth preference to the students and the seventh to the teachers. The students during the FGDs pointed out that personnel in private chemists offered services especially on condom distribution with confidentiality and anonymity assured. Owing to the fact that their services including condoms had a cost to it, they exercised confidentiality and anonymity so their clients could become repeat customers and also recommend their business to other clients in order for them to increase their sales. The teachers on the other hand felt that private chemists were not the best choice of place for youth to access condoms because it was unlikely that they could promote or give accurate information on the free condoms. According to the teachers, even if the private chemist were given the responsibility to distribute the free condoms, it was likely they would not do it with a lot of commitment because it would have a negative implication on their sale of condoms.

The school health facility was the fifth and sixth preference for the students and teachers respectively while school peer educators were ranked seventh by the students and fourth by the teachers. The teachers' FGDs pointed out that condoms was an emotive issue among religious entities who were the main sponsors to school and a considerable number of parents. Thus

having school based entities like school based facilities and school peer educators distributing condoms would definitely become a controversy. This was an issue that the schools were not prepared to be dragged into hence were better off not "having anything to do with condom distribution within the school premises." These sentiments were echoed during the students' FGDs who also added that they doubted that confidentiality and anonymity would be upheld by the service providers. For the students who were using the boarding facilities in their schools, it would be alleged that they were being sexually active in school and this would likely earn the students' punishment.

Community health workers were ranked eighth by the students and teachers alike for their capacity of being condom distributors. The student FGDs indicated that the students were not aware that such service providers existed and if they did, their visibility in operating within the community was poor. Thus the learners felt that they could not effectively carry out the task. When the researcher explained the job description of the community health workers, the students felt that anonymity and confidentiality were not likely to be upheld by these officers. Since one requirement in their operations would be their familiarity with their area of work and most students would need to access condoms when at home, there was a likelihood that their parents or relatives would end up knowing that the students used condoms, from the community grapevine started by the officers. This the learners felt would not augur well with their parents. The teachers during their FGDs indicated that most community health workers were age mates of the students' parents and traditionally speaking, a person the age of ones parent was considered as a parent too. This age difference would hinder the uptake of condoms distributed by these officers.

Entertainment spots were ranked ninth by students and teachers alike as a condom distribution strategy. According to the students and teachers alike, due to parental restrictions, it was unlikely that a considerable number of students would frequent entertainment spots which became active mostly at night. Additionally the age restriction placed on most entertainment spots of access to those eighteen years and above would hinder a considerable number of students from accessing the service.

Street vendors were ranked the tenth option for condom distribution services to the youth. Condoms are viewed as a commodity that needs to be accessed with privacy thus all the FGDs were in consensus that street vendors would not be a suitable choice to distribute condoms to the youth. Additionally a considerable number of students hailed from rural areas where street vending did not exist thus these youth would be cut out from the service.

# **4.5.6** Awareness Promotion Strategies

The study sought to find out students' and teachers' preference on awareness creation strategies. The strategies enumerated were the same for all the interventions with an additional strategy of use of sales representatives from companies selling condoms for the condom information and distribution awareness interventions. The ranks on respondents' preferences was derived from the rank means as reported in the first objective that sought to establish the preferred intervention promotion strategies from the perspective of teachers and students in Emuhaya Sub County, Kenya. The factors that contributed to the choice of preference of respondents will be explored in this section.

School notice boards were one strategy for awareness creation that was to be ranked for all the interventions. It was ranked best by at least one group of respondents (teachers and students) in four of the five intervention categories for awareness creation. It was ranked first by students as a strategy for awareness creation on counselling, VCT, peer involvement and parental involvement initiatives and fourth for condom information and distribution. The teacher had notice boards as their best preference for VCT awareness promotion; second best for peer and parental involvement; third preferred for condom initiatives and fourth for counselling. This implies that its worst ranking was as the fourth preference making it one of the most preferred awareness creation strategies.

According to the students' and teachers' FGDs, students spent most of their time of activity in school than at their areas of residence. Therefore, an awareness creation medium within the school could easily reach many students. School notice boards had the potential of reaching many students in an unobtrusive manner because the students chose which of their free time they could use to check the information on it. Given that varied information was placed on the notice boards, the students felt that when they went to check the notice boards, their fellow students and some teachers would not label them as being immoral for looking at information associated with sexuality as is always the case with a lot of HIV & AIDS prevention information.

The teachers in the FGDs felt that notice boards though an effective medium of awareness creation ran the risk of giving generalized information yet interventions needs to be tailored to the targeted individual or group. The teachers felt that the notice boards needed to be a referral point to another awareness creation point that had the potential of offering relevant and specific

information to fully meet the needs of the client. Despite their preference for notice boards, the students' FGDs pointed out that many at times information on notice boards was not frequently updated. Thus, there was need to have mechanisms to manage information on the notice boards to ensure the students are furnished with a variety of the most recent information to better meet the needs of the youth in schools who are a heterogeneous group. Additionally, in the view of the students, noticeboards gave brief information thus creating chance for speculation and misinterpretation so they needed to be augmented by another source for more comprehensive information.

The school counselor referrals were favourably ranked by students and teachers alike. The teachers gave it first preference for awareness creation for counselling services while students ranked it as their best preference for condom information and distribution. The students gave it second preference for counselling, VCT, peer involvement and parental involvement services' awareness creation initiative. Teachers placed it third as an awareness creation strategy for VCT, peer involvement and parental involvement and fourth for condom use promotion initiatives.

According to the teachers during the FGDs, student counselor referrals were an excellent way to create awareness on the interventions in place in a more precise manner. Counselor referrals were done after in depth confidential interaction between client and counselor thus tailored to the needs of a specific person or group. The referrals allowed for follow up thus uptake of the necessary intervention could be tracked hence an assurance that appropriate action was being taken. The students' FGDs indicated that though it did not assure anonymity, this initiative of awareness creation would yield positive outcomes if it was done by an individual who was

knowledgeable. This would ensure that the likelihood of misinterpretation or inadequacy in information content did not arise.

The awareness creation strategy of radio was the second preference by students for the condom use promotion interventions; third preference for students on counselling, VCT and peer involvement interventions; fourth by students on parental involvement. Among the teachers, radio was ranked fifth preference on counselling, VCT, peer involvement and parental involvement interventions and sixth on condom use promotion interventions. According to the students' FGDs, the factors that contributed to their choice included the fact that radio particularly the "fm radio stations" had a wide coverage thus could reach many youth in provision of awareness creation for the various interventions. The teachers' FGDs on their part were in consensus with the students on the wide coverage. However, the teachers felt that awareness creation on radio was likely not to benefit the youth in schools much because of the nature of their schedules which involved spending a considerable part of their time in class. The times when classes were in session were thus likely to coincide with the time when these programs were aired. Additionally, the teachers felt that running such awareness programs or messages had a monetary cost which was not factored into the school budget. This implied that the teachers would have to go out of their way to solicit for funding an exercise they felt was tedious since it entailed writing proposals and negotiating with donors. The exercise of getting funds for radio usage would require time, consensus building with donors and other schools, involving the ministry and other logistics that were not within their scope. The teachers also felt that even the funding had a life span thus the usage of radio was likely not to be continuous implying that in the long term it was not sustainable.

The print media particularly newspapers and or magazines was one of the awareness creation strategies whose preference ranking was sought. The students gave it third preference for condom use promotion interventions; fourth for counselling and VCT and sixth for peer involvement and parental involvement. The teachers gave the print media fifth preference for condom use promotion interventions and seventh preference for counselling, VCT, peer involvement and parental involvement interventions. During the FGDs, the researcher established that the students felt that the print media was not easily accessible to them due to the cost implication that goes with purchasing thus the students would not easily access the information. Even when available in school, the copies that could be set aside would not reach most students or the students were likely to miss the information because the media had many other issues they were reporting about that appealed to the students. The teachers agreed with the students on the factors they had raised on viability of print media as a strategy to the students.

School peer educators were among the strategies whose preference was sought for as a medium for awareness creation on interventions for HIV & AIDS prevention. The teachers identified peer educators as their best preference for peer involvement, parental involvement and condom use promotion interventions while they ranked it second best for counselling and VCT. Students ranked school peer educators third as a strategy to enhance parental involvement; fourth for peer involvement; fifth for counselling and sixth for VCT and condom use promotion interventions. During the FGDs, the teachers felt that with the eroded traditional social networks for dealing with sexuality issues of which HIV & AIDS is largely part, peers could play a major role in creating awareness on interventions for the prevention initiatives. According to the teachers, school peer educators were present in the school whenever education programmes were on

during the formal teaching hours and even outside the official program thus if well trained and inducted could carry out the exercise effectively. This would be particularly so for sensitive matters on condoms. On their part, the students during the FGDs pointed out that school peer educators had the challenge of lacking consistent information, they did not assure them of anonymity and confidentiality. In most cases the students were not involved in the nomination of the peer educators hence the perception by the learners that they were "spies for the teachers" a view that watered down the learners trust in most of them.

The television was the fifth awareness creation preference for the students on VCT, peer involvement, parental involvement and condom use promotion interventions and sixth for counselling intervention. The teachers gave television sixth rank as a strategy for awareness creation on counselling, VCT, peer involvement and parental involvement and seventh for condom use promotion interventions. The students' FGDs pointed out that though the audio as well as visual aspects of the television were likely to appeal to the students' interest in exploring various interventions, their accessibility was fairly low. The implication was that a considerable number of students especially those in rural areas were likely not to access them because their parents could not afford the sets or there was lack of electricity and or solar energy installations in some homes. Even with increased coverage of the area under electricity in rural areas, the demand from the Kenyan education curriculum which was overloaded left the students limited time to watch televisions. The students in boarding schools said that watching of the television was highly rationed thus they were unlikely to get sufficient awareness creation as a result of this gadget. On their part, the teachers' FGDs agreed with the students and added that televisions provided mixed messages to the youth – some of the messages were likely to enhance the prevention initiatives were others would act as a catalyst to make the youth embrace behaviours that were retrogressive to HIV & AIDS prevention efforts.

Out of school peer educators as an awareness creation strategy was given second preference by the teachers for condom use promotion interventions; third for counselling and fourth for VCT, peer involvement and parental involvement interventions. The students ranked out of school peer educators seventh for all the interventions. The students' FGDs revealed that the learners felt that there would be very little time in the school program to accommodate the out of school peer educators. The students questioned the authenticity of the information the out of school educators would give them since they doubted if there would be a mechanism to provide adequate training to enable adequate and consistent information to be passed on to the learners. The teachers' FGDs indicated that out of school peer educators were a good medium to provide information to the youth and also share relevant and recent experiences with the students that would promote interventions especially those of sensitive nature like on condoms. The teachers believed that the efforts of the out of school youth would positively augment the school peer educators initiatives. However, the FGDs pointed out the need to come up with sound logistical measures that would enable training to be done to enhance the capabilities of the out of school youth. On the issue of limited time that was at the disposal of students, the teachers agreed that this was an area that needed to be addressed if this strategy was to achieve the intended purpose.

Mobile van announcements was an awareness strategy that was given eighth preference for all the interventions by both the two groups of respondents except for the interventions on condom use promotion in which it was the ninth preference for the students and teachers alike. This implies that the students and teachers alike did not vouch for it as a strategy that would effectively promote any of the interventions. The FGDs revealed that the major factor that informed this preference was that the strategy had cost implications in terms of having a van, an announcer, maintenance and fuel; was disruptive and was likely not to fit in with the scheduling in schools since it could not cover many schools within the same time. The respondents felt that the mobile van was a strategy that would be best suited for commercial sites and not within the school program.

Sales representatives from companies was an awareness strategy specifically for condom use promotion initiatives and for the students and teachers alike, it was the eighth preference. This implied that the respondents felt that it would not best meet their needs for intervention promotion. One reason for this ranking as revealed during the FGDs was that the condoms sales persons would limit their promotion to the brand of condom they were selling thus were unlikely to give comprehensive and unbiased information without favouring their brand. This was with a backdrop that most students could not access company branded and sold condoms due to price.

# 4.6 The preferred intervention promotion strategies addressed by the HIV & AIDS Education Curriculum

The present study sought to identify the intervention promotion strategies preferred by students and teachers in secondary schools in Emuhaya Sub County addressed by the curriculum. For this purpose, the researcher used the curriculum namely the "AIDS Education Curriculum" (GOK, 1999b) and two main reference books as indicated in the "AIDS Education Curriculum" – "Bloom and Gloom: Your Choice" (GOK, 1999a) a resource book for youth in and out of

secondary school and the "AIDS Education Facilitators' Handbook, an AIDS Education project for Youth in and out of school" (GOK, 1997). The three are publications from Kenya Institute of Education which is now referred to as Kenya Institute of Curriculum Development (KICD). The books have never been reviewed to date and no communication has ever been made to exclude them from the syllabus thus in the view of the researcher they remain the main resource books on HIV & AIDS Education and any other book used is a supplementary. This implied that whether HIV & AIDS Education programs were to be stand-alone programs or fused into other subjects within the secondary school curriculum, the guide on how the programs were to be conducted was derived from the two aforementioned references.

The researcher reviewed the HIV & AIDS Education syllabus which is called "AIDS Education Syllabus for Schools and Colleges". The publication consolidates the topics, objectives, content, learning and teaching activities and resources, suggested assessment methods and suggested time for what is to be covered at primary, secondary and college schooling levels.

In the foreword, the then Director of Education Sammy P. M. Kyungu, mentions that the syllabus puts emphasis on need for behaviour development and change in order to combat HIV & AIDS. The Director hopes that the users of the syllabus would play a leading role in behaviour modification and helping others live an AIDS and STD free life. Special mention is made on Kenya Institute of Education, UNICEF – Kenya Country Office, National AIDS Control Programme (NASCOP), Supreme Council of Kenya Muslims (SUPKEM), Kenya Catholic Secretariat, The Christian Churches Education Association, and the Hindu Council among others for their contribution in the development of this syllabus.

As stipulated in the syllabus, HIV & AIDS education's general objectives are to:

- i. Acquire necessary knowledge, skills about HIV & AIDS, STDs
- ii. Appreciate facts and issues related to HIV/AIDS, STDs
- iii. Develop life skills that will lead to AIDS and STDs free life
- iv. Identify appropriate sources of information on HIV/AIDS related issues
- v. Make decisions about personal and social behaviour that reduce risk of HIV and STDs infection
- vi. Show compassion towards and concern for those infected and affected by HIV/AIDS
- vii. To be actively involved in school and out of school activities aimed at prevention and control of HIV and STDs infections
- viii. Communicate effectively with peers and others, issues and concerns related to HIV/AIDS and STDs (GOK 1999a: vii).

In the secondary school section of the syllabus, the introduction stipulates that the purpose of the secondary school AIDS curriculum is to equip students with the necessary knowledge, skills and attitudes that will enable them adopt behavior to avoid being infected with and spreading HIV & AIDS. The Students are in turn supposed to effectively communicate facts and issues on HIV & AIDS to their peers and other members of society. The introduction further stipulates that the aim of the syllabus is to enrich the existing curriculum by focusing more on HIV & AIDS issues which can be carried through most of the subjects in the curriculum or taught as a stand-alone subject. The course is intended to take 19 lessons in form one; 20 lessons in form two; 17 lessons in form three; 22 lessons in form four totaling to 78 lessons. Each lesson lasts 40 minutes thus the entire program duration is 52 hours. According to Kirby (2001), one characteristic of successful programs is that they should last a sufficient length of time preferably not less than 14 hours. The Kenyan HIV & AIDS curriculum therefore satisfied this requirement.

The syllabus also has a college section which targets trainees in early childhood development training, primary teachers' colleges, technical teachers' training institutions and non-formal education providers. The graduate teacher trainees at university level are not included in the scope. This is despite the fact that a considerable number of teachers in secondary schools are

university graduates. The sample size of teachers in the current study consisted of 71.1% university graduates. The syllabus aims to enrich the existing curriculum by focusing more on HIV & AIDS issues which could be fused into other subjects or taught separately. The syllabus was developed after a baseline survey in 1993 that revealed that teachers would require being equipped with knowledge, skills and attitudes to enable them handle HIV & AIDS Education competently. The syllabus would expose the trainees with subject content and equip them with appropriate methodologies of handling and assessing the content and familiarize themselves with what they were being prepared to teach. The course takes 42 hours.

The reference book "Bloom and Gloom: Your Choice" (GOK, 1999a) a resource book for youth in and out of secondary school is divided into nine chapters addressing the following broad topics: youth and sexuality; responsible behavior; management of leisure time; facts about STDs and HIV & AIDS; prevention and control of STDs and HIV & AIDS; internal body defence; religious and cultural beliefs; communication skills and effects of HIV infection and AIDS. In its foreward it is mentioned that the book provides information to enable the youth to be responsible citizen who can make rational decisions for themselves and help them develop healthy relationships with those they interact with. It also stipulates that the book aims at equipping the youth with knowledge, attitudes and skills needed to help them avoid being infected with HIV and other Sexually Transmitted Diseases. The foreword includes a conviction that the book would go a long way in enabling young people to adapt to changing circumstances and meeting the challenges of life with courage.

The AIDS Education Facilitators' Handbook (GOK, 1999c), an AIDS Education project for Youth in and out of school, covers twelve units namely: Facts about STDs, HIV & AIDS; modes of HIV transmission; practices that promote the spread of HIV; methods of prevention and control of HIV& AIDS; support for those infected and affected; social and economic consequences of HIV & AIDS; management of AIDS Education activities of schools; methods of teaching in AIDS Education; community involvement; infusion and integration of education; nutrition guidelines and gender issues, youth and AIDS. The foreword of the book indicates that empowerment of youth through education and communication is one of the most viable methods of curbing the spread of HIV infection. It further acknowledges that the youth need to acquire knowledge, attitudes and skills to avoid being infected by HIV and other STDs and also to enable them be change agents in the community. The foreword reiterates the government's commitment towards improving the quality of life of the youth.

In the general introduction of the AIDS Education facilitators' handbook mentions that the book was as a result of a baseline survey by KIE which established the need for the teachers to get guidance on how to handle HIV &AIDS Education especially content and methodology in schools. Teachers are asked to note that the majority of youth under their care are not infected with HIV &AIDS and that the young people are expected to be agents of change in their communities thus the teachers have a role to equip them with knowledge, attitudes and skills. These will enable the youth to remain free from HIV infection and also communicate effectively with their peers on issues of HIV & AIDS. The introduction also defines AIDS prevention education as a body of knowledge meant to assist learners develop, adapt and adopt behaviour to enable them prevent themselves and others from being infected with HIV. The general

objectives, targeted audience and format of the books are also indicated. The fact that teachers need to go beyond the school and into the community to educate on HIV & AIDS and other related issues is also mentioned.

The introduction in the AIDS Education facilitators' handbook points out that issues handled in HIV & AIDS Education are value laden thus the content needs to be handled through value clarification methods to counter resistance and resentment to change that is likely to result since some of the values are sensitive and deeply rooted in culture. Some of the methods include debates, discussions, role-plays, case studies and games.

In order to establish the extent to which the curriculum proposed intervention promotion strategies differed with those suggested by the students and teachers, the researcher scrutinized the content of the three books to identify areas where the interventions under study were mentioned and the strategies prescribed to promote them.

# 4.6.1 Counselling Strategies

In the syllabus, at form four level the fifth of a total of six topics, communication skills, has two specific objectives that touch on counselling namely: that by the end of the topic the learner should be able to describe what counselling entails and also be able to demonstrate skills in counselling. The content includes meaning, types and stages of counselling and counselling for HIV & AIDS infected and affected person; skills in counselling specifically attending, responding, rephrasing, personalizing, initiating and terminating skills. The recommended learning activities are role play, demonstration, discussion and watching videos. The learning

and teaching resources recommended are resource persons, video tapes, charts or pictures or posters, the books Bloom and Gloom and the AIDS education facilitators hand book and any other recommended books. The assessment methods include observation, oral or written tests and assignment. The topic is to take 4 lessons of 40 minutes each totaling to 2 hours and 40 minutes (GOK, 1999a pp 46-47). The fact that the does not specify the resource persons leaves the implementers the lee way to make decisions on who to use which may not necessarily be what the students prefer. Additionally none of the topics that the respondents suggested would enhance their uptake of counselling. Thus it is unlikely that the use of the curriculum would effectively address the preferences of the students and in turn enhance the likelihood of HIV & AIDS prevention even if targets are set.

The book Bloom or Gloom: Your Choice in chapter eight on communication skills has the topic counselling covered in approximately five pages. In these five pages, the content on introducing the topic; peer counselling and stages in counselling is covered in two and a half pages while the remaining pages cover suggested activities namely role plays, discussions and exercises (GOK, 1999b, pp 116-121). The book attempted to cover the topic, "stages in counselling" which hold similarity with a topic respondents felt needs to be covered namely "The counselling process". However, none of the preferred service providers nor awareness creation strategies are mentioned.

The AIDS Education Facilitators' Handbook in unit five a topic on Support for those infected and affected dedicates the whole ten paged unit on talking about guidance and counselling. The areas covered include definition and purpose of guidance and counselling; categories of people

who need the service; issues and concerns that should be addressed during the session including a related case study; effective counselling; peer counselling; group counselling; conditions for counselling accompanied with a related case study; areas of counselling for People Living with HIV & AIDS (PLWAs) including a related case study and where to get help (referals for counselling services) (GOK, 1999c pp 29-39). The book covers various topics that have the potential to enhance counselling namely "where to get counselling, and the counselling process, role of the counselor and role of the client" through the topics "effective counselling, conditions for counselling and where to get help". However, the areas of preferred service providers and awareness creation strategies are not given prominence.

# 4.6.2 Voluntary Counselling and Testing Strategies

In the AIDS Education Syllabus for Schools and Colleges, the Secondary syllabus in its first topic in form one on Basic Facts about HIV & AIDS and STDs under content on ways of controlling and preventing STDs and HIV enumerates blood screening and going for HIV tests amongst the methods. At form three level in the topic HIV & AIDS Infection and Control Measures, screening is listed as one of the control measures. The college syllabus in the topic Prevention and Control of HIV & AIDS, blood screening and going for HIV tests are listed among the methods (GOK 1999a: pp 37; 42 & 57)

The book "Bloom or Gloom: Your Choice" in chapter five on Prevention and Control of STDs and HIV & AIDS, under the title Other Methods of Prevention and Control of STDs, HIV Test is one of the sub topics and on this, there is only one sentence. The sentence states that "People planning to get married should go for an HIV test". (GOK 1999b: pp 68)

The "AIDS Education Facilitators' Handbook" in unit four a topic on Methods of Prevention and Control of HIV & AIDS has a case study that entails a dialogue between two women who are members of a women group. They talk of knowing their HIV status and that of their husband by having an HIV test in the district hospital. The discussion is after a recent invite of a guest speaker who talked on prevention and control of HIV & AIDS and it clearly indicates that the talk was within women in a marriage context. Under the same topic on the sub topic issues and concerns that should be addressed during guidance and counselling, determining an individual's HIV status for whatever reason is listed and an example of such a reason is given as marriage. A case study under the sub topic is about a young woman who had to take a mandatory HIV test as a requirement before joining a university abroad (GOK 1999c: pp 26; 31). In relation to the intervention VCT, it is evident that all the aspects of information provision, service provision and awareness creation strategies are not given prominence.

## **4.6.3 Peer Involvement Strategies**

In the AIDS Education Syllabus for Schools and Colleges, the Secondary and college syllabus recommends teaching and learning activities that if used are likely to involve the youth themselves these include brain storming, role play, peer teaching, discussion and debate. There is no mention of a topic that could guide on how to effectively involve peers even under the topic Communication on HIV & AIDS Issues. (GOK 1999a)

The book Bloom or Gloom: Your Choice does not explicitly talk about how peer involvement can be incorporated. However, under the topic Communication Skills in Chapter eight a paragraph on peer counselling is included (GOK 1999b: pp 117). The AIDS Education

Facilitators' Handbook in unit nine a topic on Community Involvement includes peer education as one of the ways in which AIDS Education activities can be carried out in the community. It defines who a peer educator is, considerations in their choice, their qualities and the benefits of peer education (GOK 1999c: pp 71-72)

## **4.6.4 Parental Involvement Strategies**

The AIDS Education Syllabus for Schools and Colleges and the book Bloom or Gloom: Your Choice (GOK 1999a; GOK 1999b) do not have any explicit information to indicate promotion of parental involvement. However, the AIDS Education Facilitators' Handbook in unit seven on Management of AIDS Education Activities in Schools gives guidelines on how community members who include parents can communicate HIV& AIDS messages, how to plan, coordinate, monitor and evaluate such activities. The bulk of the reference is made on parents. In unit nine a topic on Community Involvement includes parent education and Parent Teachers Association meetings as some of the ways in which AIDS Education activities can be carried out in the community. The unit mentions the need of educating parents on STDs, HIV & AIDS, how they are transmitted and spread, how the parents can help their children protect themselves and caring for people with AIDS in the home and community. Towards the end of the topic, the book recommends planning occasions specifically school and community festivals which deliberately have AIDS related themes and schedule a specific time to talk on the issue. These festivals could include music and dance; drama; art and craft exhibitions, athletics and games meetings and trade fairs and exhibitions. At the end of the topic, in the summary there are questions challenging the learner to remember the ways of involving the community in HIV & AIDS intervention and to include any other ways (GOK 1999c: pp 48-51; 72).

## 4.6.5 Condom Use Promotion Strategies

In the AIDS Education Syllabus for Schools and Colleges under the topic on methods of prevention and control of HIV & AIDS, condoms, their use and promotion is not mentioned (GOK 1999a). The book Bloom or Gloom: Your Choice there is no mention of the word condom even under the topic prevention and control of HIV & AIDS (GOK 1999b)

The AIDS Education Facilitators' Handbook in unit four a topic on Methods of Prevention and Control of HIV &AIDS in the content of a case study that is in form of a dialogue that involves two married women they talk of use of condoms after the HIV test being positive to avoid reinfection. After the dialogue, a question is posed for learners to identify methods related to HIV infection control and prevention where using condoms is listed as one of the methods (GOK 1999c: pp. 26). No further mention of condoms is cited in the reference book.

The analysis done on the text that give guidelines and are references for the HIV & AIDS Education curriculum indicate that the preferences of the students and teachers on intervention promotion strategies for HIV & AIDS prevention in secondary schools were not adequately addressed. This calls for the need to review the curriculum so that it realistically meets the needs of the students. Presently HIV & AIDS infection rates that are not abating at envisioned rates Therefore, the moralistic approach towards "sensitive" topics like condom use needs address. As proposed by GOK (2014) HIV & AIDS issues need to be addressed comprehensively. The curriculum displays a disconnect between its objectives and the content to meet the objectives. It is not surprising, therefore that set targets including reducing the new infection rates by 50% by the year 2015 as proposed by the HIV & AIDS roadmap (GOK, 2014b) has not been met.

#### **CHAPTER FIVE**

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter highlights the summary and conclusions based on the findings of the study. It also incorporates recommendations and areas for further research.

# **5.2 Summary of Findings**

The summary in this study was based on the five objectives of this study. The summary was presented under the topics:

# **5.2.1** The preferences of students and teachers on intervention promotion strategies

The present study got views of students and teachers on importance of information on five selected topics in enhancing use of counselling services among learners. The five topics were: where to get counselling; counselling process; ethical issues in counselling; role of the client; and role of the counselor. The response rates for the topics ranged from 97.3% to 20.8% for students and 91.1% to 20% for teachers. The two most highly rated topics by both groups of respondents were where to get counselling and the counselling process. Among the learners, the female students had higher response rates than the male students. The female teachers had higher response rates than their male counterparts in two of the five topics.

The preferences of the students and teachers on counselling services indicated that both groups identified the mother, guidance and counselling teacher and the health facility counselor as three of the four most preferred choices. The divergence of their fourth choices, the students preferred the doctor while the teachers settled for the school peer educator. The first four preferences for the students were the same irrespective of gender. The teachers had the guidance and counselling

teacher, school peer educators and mother as three of their four choices, however, the divergence in preference was out of school peer educator and health facility for the female and male teachers respectively.

The topics on VCT namely: where to get VCT services, the VCT process, ethical issues in VCT, role of the VCT counselor; and role of the VCT client had a response rate of between 92.8 and 28.1 among the student respondents and ranged between 77.8% and 26.3% for the teachers. As far as the preferred VCT service providers are concern, the students' total responses indicate that their preference for health facility based personnel as the best placed to handle VCT services. Out of the four most preferred service providers, two – the doctor and the health facility counselor are based in health facilities while the other two were the guidance and counselling teacher and the mother. The teachers preferred the counselors – school and health facility based and the peer educators – school based and out of school based.

The preferences of students and teachers on topics related to HIV & AIDS prevention that peer educators should address indicated that among the students all the twelve topics listed had a response rate of between 63% and 13% while the same trend was true for the teacher respondents on eleven of the twelve topics. The university/college based; the school based and the youth centre based peer educators were among the four most preferred choices of peer educators for the teachers and students alike. The fourth choice was radio based and church based peer educators for the students and teachers respectively. The telephone hotline based and the internet based peer educator was among the least preferred choices despite the popularity of mobile phones and social media among the youth.

The preferences of students and teachers on topics parents/parent figures should address registered a response rate of between 61% and 12% among the students with only one topic of the twelve being rated at less than 10%. For the teachers, the response rates for two of the twelve topics were 45.9% and 27.4% while the other topics recorded percentages below 10%. Topics on negotiating sex, how to use condoms and where to get condoms were among the least rated across all categories of respondents. The four most preferred service providers for parental involvement were the mother, father, PTA representative and radio based parent figures for the students and teachers alike. Despite the popularity of Information, Communication and Technology use, the respondents' preference for telephone and internet based parent figures was low because of accessibility of these gadgets to the youth in schools.

The rank means on the preferred condom information service providers indicate that the students have a lot of confidence in the capacity the health facility personnel have in provision of the service. The teachers responses indicate that peer educators within and out of school and counselors in school and health facility would be best placed to provide the information. For condom distribution, the government then private health facilities and youth centres were preferred by teachers and students alike. The students felt that private chemists would also suffice while the teachers settled on school peer educators. The teachers consistently ranked the peer educators particularly the school based peer educators highly in all the interventions where they were listed as an option. The guidance and counselling teacher was also a popular choice among the respondents. The students' preferences show an inclination towards health facility based strategies.

Strategies on awareness creation in all the interventions indicate that the notice board and the school counselor referrals were the best placed modes. The radio was also a fairly popular strategy for awareness creation among the respondents. The teachers still preferred the use of peer educators as one of the strategies for awareness creation.

# 5.2.2 The differences in preference of students and teachers on the intervention promotion strategies

The findings on differences in perspective between students and teachers indicate that there was significant difference between the students and teachers for most of the strategies since the p value was less than the set alpha value of .05. However, the effect size for most of the strategies was below .3 implying that the effect of the designation of being a student or teacher was weak since it contributed to 30% or less to the differences in perspective for most of the interventions. All the effect sizes for the strategies were negative implying that differences in perspective had more variability among the teachers than among the students.

# 5.2.3 The differences in preference of female and male students on the intervention promotion strategies

The findings on differences in perspective between female and male students indicate that there was significant difference between the female and male for most of the strategies since the p value was less than the set alpha value of .05. However, the effect size for most of the strategies was below .3 implying that the effect of gender that is being a female or male was weak since it contributed to 30% or less for most of the interventions of the differences in perspective. All the

effect sizes for the strategies were negative implying that differences in perspective had more variability among the male than among the female respondents.

## 5.2.4 Factors that contributed to the choice of intervention promotion strategies

The factors that influenced counselling strategies included availability of the service provider; ability of the counselor being non judgemental; ability to uphold confidentiality; ability to assure anonymity; the experience and training the counselor had and feasibility of the strategy in relation to it being able to be accommodated within the school schedule of activities. As far as VCT strategies are concern, one factor namely experience and training stood out as the major consideration by the respondents. The age; training and experience of peer educators; ability to be non judgemental; availability of the peer educators; cost effectiveness and sustainability of the strategy and its appeal to the users were among the factors that informed the preference of the peer involvement strategies to the respondents. The factors that influenced the choice of parents/parent figures included ability to be confidential, nonjudgemental and a good listener; feasibility and availability of the strategy in relation to the school programs and ability of the service provider to enable sustainability of HIV & AIDS prevention initiatives within the school. For condom use promotion strategies, the ability to uphold confidentiality and anonymity; experience and training that the service provider had; and particularly for condom distribution the cost of accessing the service were among the important considerations in choice of the strategy.

Awareness creation on the intervention promotion strategies in place was a component that this study sought to establish for all the five interventions included in this study. Most of the

awareness promotion strategies whose preference ranking was sought from the respondents were the same for all interventions but for condom distribution awareness creation in which a strategy namely: sales representative from companies was included. Generally, the availability and accessibility of the strategy to the users, its cost effectiveness, its appeal to the users and the experience and training that the users felt the service provider had were among the factors the respondents put into consideration as they ranked their preferences.

# 5.2.5 The preferred intervention promotion strategies addressed by the HIV & AIDS

## **Education curriculum**

Document analysis was done for three documents namely the AIDS Education Curriculum (GOK, 1999b) and two main reference books as indicated in the AIDS Education Curriculum - Bloom and Gloom: Your Choice (GOK, 1999a) a resource book for youth in and out of secondary school and the AIDS Education Facilitators' Handbook, an AIDS Education project for Youth in and out of school (GOK, 1997). There was evidence of some effort to promote topics that could enhance uptake of counselling; however, there was need for more elaborate information particularly on the topics: where to get counselling, the counselling process and the role of the client and the counselor in the process. The methods recommended for dissemination did not reflect the preferred strategies of the respondents. The documents gave very little emphasis on VCT, peer involvement, parental involvement and condom use promotion. In the instances where these interventions had been addressed, it was done in context of a role play or another topic.

The researcher noted that the documents had never been revised for more than fifteen years yet there have been many developments, publications and proposals that could enhance HIV & AIDS prevention initiatives thus the references are not aligned to the current realities on HIV & AIDS issues among the youth in schools. The publications particularly the syllabus was designed and developed with the input of all religious affiliations in Kenya including christians, muslims and hindus.

#### **5.3 Conclusion**

The present study sought to answer five questions. This section provides a conclusion based on the five questions.

## **5.3.1** The preferences of students and teachers on intervention promotion strategies

The strategies to enhance counselling need to emphasize information provision, service provision and awareness creation. The importance of information on five selected topics in enhancing use of counselling services among learners was evident and indicated that a considerable number of students would benefit from the information got from the topics. The five topics were: where to get counselling; counselling process; ethical issues in counselling; role of the client; and role of the counselor.

The preference of counselling service providers among the students leaned more on health facility personnel while those of the teachers were more inclined to service providers within the school. However, the presence of a parent among the first four preferences most notably the mother is an indicator that parents need not be excluded completely from strategies to enhance

counselling. The father though not an active figure in many of the HIV AIDS prevention initiatives for their children should not be ignored due to the patriarchal nature of most Kenyan families where they are the main decision makers. The findings therefore implied that to enhance counselling for the purpose of HIV& AIDS prevention, the concerted efforts of the health facilities, home and school need to be encouraged. However, the guidance and counselling teacher assisted by the school peer educators would take the lead role while parents and health facility counselor would supplement and complement their role.

The percentages for topics on VCT the respondents felt were important in enhancing uptake of the service ranged from 93% and 26% an implication that to enhance this interventions, students need to be given information on all the topics. The lowest range of 26% cannot be underestimated and is an indicator that a considerable number of students consider even the lowest ranked topic important. The preferences of students on the best option for VCT favour the health facility personnel while those of the teacher are inclined towards the use of counselors and peer educators. The choice of school based peer educators as one of the preferred VCT service providers by the teachers indicates their confidence in the role peers could play in counselling and also testing. It is worth noting that the views on preference for VCT that the respondents held were the same preference as those on counselling initiatives. However, owing to the policy requirements attached to provision of VCT services, the collaboration between schools and health facilities would be necessary so that the schools especially through the guidance and counselling teacher and the peer educators provide information and referrals while the health facility counselors provide the service.

The percentages of between 63% and 13 % particularly among the student respondents on topics they felt that peer educators can handle could be viewed as an endorsement to the potential that peer educators hold in HIV & AIDS initiatives. This therefore calls for the need of providing the peer educators especially the school based peer educators who typically, are in constant interaction with their contemporaries, adequate training and expertise on handling of the topics. Though teachers were skeptical about university/college based peer educators having the moral authority to provide services to the students, their favourable ranking of this group of peer educators is an endorsement of the potential and positive influence that the peer educators from tertiary institutions have in promoting HIV & AIDS prevention. Though a favourite to the youth, students appreciate that mobile phones and internet based strategies for peer involvement may not be very feasible at secondary school level due to accessibility.

The perspective of respondents on the topics parents /parent figures should address indicate that the students feel that the parents should be more involved in addressing issues that could enhance HIV & AIDS prevention as compared to the teachers. This is evidenced by the ratings of the students which ranged between 61% and 12% with only one topic at below 10%. On the other hand, the teachers' ratings were below 10% for ten of the twelve topics. The students' responses coupled with findings from FGDs with the learners indicate a yearning by the students that their parents need to be more involved in issues that relate to their sexuality. This is especially so at such a time as this when traditional social networks including the extended family that dealt with sexuality issues have broken down. The teachers' responses imply that on their part, they felt that parental involvement in information provision on the topics should be minimal. However, parents need to be informed of the programs in place so that they act as a support system to their

children. The topics enumerated for parental involvement were the same as those included for peer involvement yet the ratings for peer involvement were higher in all the topics as compared to parental involvement. This implies that the respondents would prefer involving youth more in addressing issues to enhance HIV & AIDS prevention than parents. The dismal response rate on topics on condoms and negotiating sex were an indicator that these issues need to be destignatized and or alternative ways of addressing the topics need to be sought.

The preferred strategies for condom information and distribution indicate that respondents feel that the duty, due to its emotive nature, needs to be tackled more by health facilities which already have the mandate to address issues on condoms. Peer educator particularly those that are school based, by virtue of being in constant interaction with their fellow students even at informal level, could easily supplement the efforts of health facilities without fueling controversy. On the other hand school counselors could have a lee way of addressing issues on condoms especially at individual level since they have an obligation to maintain confidentiality. In view of the responses it can be concluded that schools most of which are sponsored by a religious entity would not want to be actively involved in interventions on condoms because they did not want to be embroiled in the emotive reactions that issues of condoms especially to the youth elicit from the religious front.

# 5.3.2 The differences in preference of students and teachers on the intervention promotion strategies

The findings indicate significant differences between the preferences of students and teachers on most strategies. Additionally, the effect size for most is less than .3. This implies that the difference in perspective is not profoundly as a result of either being a student or teacher. Thus it

can be interpreted that for most strategies it contributed to 30% or less of the difference in perspective. There is need, therefore, to establish other variables that could be the cause of significant differences. The effect size was negative for all the strategies implying that the variability in difference in perspective was higher among the teachers than the students thus the need to employ varied strategies to promote the interventions addressed by the present study and to build consensus among the teachers to enable enhanced HIV & AIDS prevention.

## 5.3.3 The differences in preference of female and male students on the intervention promotion strategies

The findings indicate significant differences between the preferences of female and male students on the strategies; however, the effect size for most is less than .3. This implies that the difference in perspective is not profoundly as a result of either being female or male thus it can be interpreted that for most strategies it contributed to 30% or less of the difference in perspective. There is need, therefore, to establish other variables that could be the cause of significant differences. The effect size was negative for all the strategies implying that the variability in difference in perspective was higher among the male than the female respondents thus the need to employ varied strategies to promote the interventions addressed by the present study to enable enhanced HIV & AIDS prevention. Additionally, the cultural underpinnings that occasion difference in perspective between female and male need to be addressed by creating forums that are exclusively for each gender so that such issues can be explored possibly with teachers of the same gender.

### 5.3.4 Factors that contributed to the choice of intervention promotion strategies

The factors that influenced the choice of the strategies for the various interventions are important considerations that can enable policy makers and implementers of the program to better execute their duty since they are a pointer to the expectations of the consumers on a specified strategy. The findings on differences in perspective on student and teacher basis and on gender basis suggested the possibility that there were other variables that could have caused the significant differences in preferences of the respondents. It is worth putting in mind that there is a high probability that some of the factors identified by the respondents as influencing their choice of strategies could possibly be among the variables in question.

## 5.3.5 The preferred intervention promotion strategies addressed by the HIV & AIDS Education curriculum

Document analysis done on the major reference books for HIV & AIDS prevention programmes in secondary schools reveal that interventions that have the potential to enhance HIV & AIDS prevention in schools have not been elaborately addressed in terms of content and strategies that can promote them. This implies that the initiatives in schools are likely not to address the needs of the students and teachers who are the major consumers and implementers respectively of the programs. This state of affairs is likely to slow down the gains that could be made on HIV & AIDS prevention in schools. Additionally the religious representation involved in the production of the publications particularly the curriculum are likely to have advanced their agenda on not addressing issues like condom use promotion despite the reality that youth including those who are religious are a heterogeneous group that consists of youth who are sexually active. The content and strategies recommended by the documents are thus not in tandem with the sexuality

needs of the youth including the youth in schools. The publications analyzed have never been revised for more than fifteen years thus their approach and content are likely not to incorporate emerging issues that have ensued since their publication. This thus implies that the realities of the present initiatives that are likely to enhance HIV & AIDS prevention especially among youth in schools have not been captured.

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#### **5.4 Recommendations**

In relation to the findings of the study, the following recommendations were made on preferences of students and teachers on intervention promotion strategies for HIV & AIDS prevention:

- A. The study found that the preferences of students and teachers though varied were mainly from the school, home and health facilities. Inorder to ensure that HIV & AIDS education in schools enabled prevention using acceptable intervention promotion strategies, the study recommended that:
  - The concerted efforts from the school, peer based initiatives home and health facilities need to be encouraged.
  - ii. Schools cannot provide all the interventions and do not have all the strategies but should be the major drivers of the program and foster collaborations with other necessary service providers.
  - iii. The guidance and counselling teacher assisted by the school peer educators need to take the lead role of counselling while the parents and health facility counselor supplement and complement their role.

- iv. The role of the school counselors in HIV & AIDS prevention could be enormous thus there is need to reduce or take up their teaching load and give them sufficient training and refresher courses to strengthen their capacity.
- v. Owing to the policy requirements attached to provision of VCT services, the collaboration between schools and health facilities would be necessary so that the schools especially through the guidance and counselling teacher and the peer educators provide information and referrals while the health facility counselors provide the service.
- vi. School based peer educators need to be trained and mentored to enable them carry out the role of HIV & AIDS prevention in schools more effectively.
- vii. Parents especially fathers need to play a more active role of being involved in creating an enabling environment for interactions on issues touching on HIV & AIDS prevention with their children.
- viii. The use of noticeboards, school peer educators and counselor referals for awareness creation on intervention promotion strategies including condom promotion needs to be encouraged.
- ix. There is need to explore ways of enhancing use of social media as a strategy for promoting interventions for HIV & AIDS prevention since it is popular among the youth.
- B. The study established that there were significant differences between students and teachers on most intervention promotion strategies, however the effect sizes implied that the significance was either negligible or weak thus was not practically significant. In this regard, the study made the following recommendation:

- i. There was need to build consensus with the students and teachers to come up with the most feasible intervention promotion strategies that would enable both the two parties have a sense of ownership of the program and thus effectively utilize the intervention promotion strategies for HIV & AIDS prevention.
- ii. There is need for inquiry to establish what other variable could be contributing to the significant differences
- C. The study established that there were significant differences between female and male students on most intervention promotion strategies, however the effect sizes implied that the significance was either negligible or weak thus was not practically significant. In this regard, the study made the following recommendation:
  - i. Though the finding implies that the differences in preference do not warrant the female and male students to have different programs to enable HIV & AIDS prevention, there is need to encourage schools to hold some forums that desegregate the students on the basis of gender so as to deal with issues that could be gender specific.
  - There is need for inquiry to establish what other variable could be contributing to the significant differences
- D. The study established various factors that contributed to the choice of intervention promotion strategies among students and teachers. In this regard, the study made the following recommendation:
  - i. There was need for policy makers and implementers of the program to address these factors inorder to enhance HIV & AIDS prevention in secondary schools.

- E. The study established that intervention promotion strategies for HIV & AIDS prevention in secondary schools had not been elaborately addressed. In this regard, the study made the following recommendation:
  - i. There is need to review the HIV & AIDS curriculum to enable it realistically meet the needs of the students and teachers in their capacities as consumers and implementers of the program respectively

### **5.5 Suggestions for further Research**

- i. The importance of replication of studies has been emphasized by various studies. This is especially so for studies that address on issues that affect populations of different cultural orientations. Therefore the researcher recommends that this study be replicated in other regions in this country in order to come up with more reliable and valid findings that would give direction on the guidelines that are suitable for the roll out of a country wide HIV & AIDS promotion programme that factors in the differences that could be occasioned by regional diversity.
- ii. The researcher also recommends that studies be carried out to inform on the scheduling and intergration of the recommended promotion strategies in the school programmes.
- iii. A study needs to carried out to establish the extent to which other factors apart from gender and designation – teacher versus students have an influence on intervention promotion strategies.

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#### **APPENDICES**

### APPENDIX A

iii. iv.

V.

## STUDENTS' QUESTIONNAIRE

I am a PhD student at Maseno University currentlydoing research on preferences of students and teachers on HIV & AIDS intervention promotion strategies in secondary schools of Emuhaya Sub County in Vihiga County. You have been identified as a potential respondent to this research. Information you will give is expected to guide in developing better intervention strategies for students in secondary schools aimed at enhancing HIV & AIDS prevention among the youth. Remember the information you give will be treated as confidential and anonymous. Therefore provide information as you know it. There is no right or wrong answer. If you feel you are not willing to participate, your decision will be respected . Your support will be highly appreciated. Thank you.

#### PART A: DEMOGRAPHIC INFORMATION 1. Sex of respondent: Male ( ) Female () 2. How old were you on your last birthday? Specify date of birth. Age \_\_\_\_\_ years Date of birth \_\_\_/\_\_/\_\_\_ 3. What type of school do you go to? (Indicate if a day scholar or boarder) i. Girls' school ( ) i. Day scholar ii. ii. Boys' school ( ) Boarder iii. Mixed school (has both boys and girls) ( ) 4. What is your religious denomination? (Give one response) i. Catholic ( ) ( ) iii. Muslim ii. Other (Specify) \_\_\_\_\_ Protestant ( ) iv. PART B: INFORMATION ON INTERVENTION PROMOTION STRATEGIES 5. a) Which of the following topics do you think would enable students enhance their use of counselling services in school in dealing with issues concerned with HIV/AIDS prevention? The counselling process i. ()The role of the counselor in the counselling process ii. ( )

b) Which of the following do you think would be the best for students to consult when they need counselling on any issues that could enable them prevent HIV/AIDS? Rank them in order of preference from 1 to 10 with the most preferred being 1 and least preferred 10.

( )

( )

The role of the client being counseled in the counselling process

Ethical issues in counselling

Where to get counselling

1.	Guidance and counselling	v.	Health facility cour	iselor ( )	
	teacher ( )	vi.	Nurse	( )	
ii.	School peer educator ( )	vii.	Youth centre	( )	
ii.	Doctor ( )	viii.	Mother	( )	
iv.	Out-of-school peer	ix.	Father	( )	
	educator ( )	х.	Chaplain/religious I	leader ( )	
	c) What mediums can be used to create	e awarenes	s of where else the st	udents can get	
	counselling services apart from scho		_	erence from 1 to 8	
	with the most preferred being 1 and	least prefe	erred 8.		
i.	School notice boards ( )	v.	Radios	( )	
ii.	School counselor referrals( )	vi.	Television	( )	
iii.	School peer educators ( )		Newspapers/magaz	` ′	
iv.	- · · · · · · · · · · · · · · · · · · ·		Mobile van announcements()		
	educators ( )	viii.		· · · · · · · · · · · · · · · · · · ·	
	6 a) Which of the following topics do you	think wou	ld enable students en	hance their use of	
	Voluntary Counselling and Testing (				
	with HIV/AIDS prevention?	· C1) 561 ·	rees in dealing with	issues concerned	
	i. The VCT process		( )		
	ii. The role of the VCT counselor		( )		
	iii. The role of the client undergoing	the VCT 1	process ( )		
	iv. Ethical issues in VCT	,	( )		
	v. Where to get VCT services		( )		
	<u> </u>		` '		
	b) Which of the following do you think v	yould be t	he heet for students to	o concult when	
	they need information on VCT service				
	11 with the most preferred being 1 and			rence from 1 to	
	-	a roust pro			
	i. Guidance and counselling		vi. Nurse	( )	
	teacher ( )		vii. Youth centr	re ( )	
	ii. School peer educator ( )		viii. Mother	( ,	
	iii. Out-of-school peer		ix. Father	( ) ( )	
	Educator ( ) iv. Health facility counselor( )		-	ligious leader (	
	v. Doctor ( )		xi. Community	Health Worker()	
C	) What mediums can be used to create aw	areness of	where the youth can	get VCT services	
·	from? Rank them in order of preference		-	_	
	least preferred 8.		•	C	
1.	School notice boards ( )	iv.	Out-of-school peer	( )	
ii.	School peer educators ( )	V.	educators Radios	( )	
111	School beer educators ( )	V.	ixauius	( )	

vi. vii.	Telev News	rision spapers/magazines (	( )	V111.	Mobile	e van announcements()	
		of the following topents to enhance HIV/	=	_	lucators	could effectively address with	
i.	Love	relationships	( )	vii.	How to	o prevent HIV/AIDS( )	
ii.	How	to avoid pregnancy	( )	viii.	Prevention of STIs ( )		
iii.	Sexua	al abuse /coercion	( )	ix.	How to use condoms ( )		
iv.	Puber	rty	( )	х.	Where to get condoms ( )		
v.	Nego	tiating sex	( )	xi.	Drugs and alcohol abuse( )		
vi.	How	manage leisure time	( )	xii.	VCT ( )		
	b) Wl	hich peer educators w	ould you prefer	the stud	ents to c	onsult when they need the	
	inf	Formation you specifi	ed in 13 (a) abov	ve? Rank	them ir	order of preference from 1 to	
	10	with the most prefer	red being 1 and 1	least pre	ferred 10	0.	
	i.	School peer educat	cor ( )		vii.	Church based peer -	
	ii.	Health facility base	ed peer			educators ( )	
		educator	( )		viii.	Community based peer	
	iii.	Youth centre based	l peer			educators ( )	
		educators	( )		ix.	Peer educators on telephone	
	iv.	Peer educator prese	enters in			hotlines ( )	
		the radio	( )		х.	Peer educators on internet	
	v.	Peer educator prese	enters in			sites ( )	
		the television	( )				
	vi.	Peer educator prese					
		magazines/newspa	-				
c)	servio					youth can get peer education h the most preferred being 1	
i.		ol notice boards (	)	v.	Radios	s ( )	
ii.	Schoo	ol teachers' referrals(	)	vi.	Television ( )		
iii.	Schoo	ol peer educators (	)	vii.	Newsp	papers/magazines ( )	
iv.	Out-c	Out-of-school peer -		viii.	Mobile van announcements()		
	educa	ators (	)				
8		hich of the following dents to enhance HIV		-	ents cou	lld effectively address with the	
i.	Love	relationships	( )	vi.	How manage leisure time ( )		
ii.	How	to avoid pregnancy	( )	vii.	How to prevent HIV/AIDS( )		
iii.	Sexua	al abuse /coercion	( )	viii.	Prevention of STIs ( )		
iv.	Puber	rty	( )	ix.	How to	o use condoms ( )	
v.	Nego	tiating sex	( )	х.	Where	to get condoms ( )	

xi.	Drugs	and alcohol abuse( )	xii.	VCT	( )
	nee	nich parents' representatives would yed the information you specified in 14 m 1 to 10 with the most preferred be	4(a) abov	e? Ran	k them in order of preference
	i.	Mother ( )		vi.	Parent figures in
	ii.	Father ( )			magazines/newspapers( )
	iii.	Parent representatives in		vii.	God mothers ( )
		schools ( )		viii.	Godfathers ( )
	iv.	Parent figures presenters in		ix.	Parent figures on telephone
		the radio ( )			hotlines ( )
	v.	Parent figures presenters on		х.	Parent figures on internet
		the television ( )			sites ( )
c		mediums can be used to create aware			•
		sentatives? Rank them in order of pre	ference i	from 1 t	to 8 with the most preferred
	being i.	1 and least preferred 8. School notice boards ( )		v.	Radios ( )
	ii.	School teachers' referrals ( )		v. vi.	Television ( )
	iii.	School peer educators ( )		vii.	Newspapers/magazines ( )
	iv.	Out-of-school peer -		viii.	Mobile van announcements()
	17.	educators ( )		V111.	vicone van announcements()
0	- \ 3371-	` ,		1.1 1.1	1
9		nich of the following topics do you th			
	cone	doms in dealing with issues concerne	ea with H	IIV/AIL	os prevention?
	i.	The efficacy of condoms		( )	
	ii.	The role of condoms in HIV/AIDS	preventi	on()	
	iii.	How to use condoms correctly		( )	
	iv.	Negotiating condom use		( )	
	v.	Where to get Condoms		( )	
	vi.	Other			
		nich of the following do you think wo			
		y need information on condoms? Ra			of preference from 1 to 11
	wit	th the most preferred being 1 and least	st preferr	ed 11.	
	i.	Guidance and counselling		vi.	Nurse ( )
	1.	teacher ( )		vii.	Youth centre ( )
	ii.	School peer educator ( )		viii.	Mother ()
	iii.	Out-of-school peer –		ix.	Father ()
	1111	educator ( )		х.	Chaplain/religious leader ( )
	iv.	Health facility counselor ( )		xi.	Community Health Worker()
	v.	Doctor ( )			()()
		( )			

	nich places would you predeference from 1 to 10 with			•			er of
i.	School health facility (	)		vi.	Youth centre	(	)
ii.	School peer educator (	)		vii.	Private Chemist	(	)
iii.	Out-of-school peer			viii.	Street vendors	( )	)
	educator (	)		ix.	Entertainment spo	ts ( )	)
iv.	Government Health			х.	Community Health	h	
	Facility (	)			Worker	( )	)
v.	Private Health facility(	)					
use	nat mediums can be used to e services from? Rank then eferred being 1 and least p	m ir	n orde	er of preference from		_	ndom
i.	School notice boards	(	)	vi.	Television		( )
ii.	School counselor referra	als(	)	vii.	Newspapers/maga	zines	( )
iii.	School peer educators	(	)	viii.	Sales representativ	es fro	om
iv.	Out-of-school peer -				companies selling	condo	oms()
	educators	(	)	ix.	Mobile van annou	ncem	ents()
v.	Radios	(	)				

## **APPENDIX B**

## **TEACHERS' QUESTIONNAIRE**

I am a PhD student at Maseno University currentlydoing research on preferences of students and teachers on HIV & AIDS intervention promotion strategies in secondary schools of Emuhaya Sub County in Vihiga County. You have been identified as a potential respondent to this research. Information you will give is expected to guide in developing better intervention strategies for students in secondary schools aimed at enhancing HIV & AIDS prevention among the youth. Remember the information you give will be treated as confidential and anonymous. Therefore provide information as you know it. There is no right or wrong answer. If you feel you are not willing to participate, your decision will be respected. Your support will be highly appreciated. Thank you.

## PART A: DEMOGRAPHIC INFORMATION

1	Sex o	f respondent: Male ( )	Female ( )	
2	Age			
	i.	20-24 years( )	iii.	35-44 years( )
	ii.	25-34 years( )	iv.	45 years and above( )
3	What	type of school do you teach? (Indicate if a day	y schoo	ol or boarding school or both)
		Girls' school ( )	Da	ay school ( )
		Boys' school ( )	В	oarding school ( )
		Mixed school (has both boys	В	oth day and boarding( )
		and girls) ( )		
4	What	is your religious denomination? (Give one res	ponse)	
	i.	Catholic ( )	iii.	Muslim ( )
	ii.	Protestant ( )	iv.	Other (Specify)
	PART	Γ B: INFORMATION ON INTERVENTIO	N PRO	OMOTION STRATEGIES
_				
5		ich of the following topics do you think woul		
		nselling services in school in dealing with vention?	n issue	es concerned with HIV/AIDS
	prev	ention?		
	i.	The counselling process		( )
	ii.	The role of the counselor in the counselling	proces	s ( )
	iii.	The role of the client being counseled in the	counse	elling process ( )
	iv.	Ethical issues in counselling		( )
	v.	Where to get counselling		( )

	them in order of pr preferred 10.	eference from 1 to	10 with th	ne most	preferred being 1 a	nd least
i.	Guidance and counsel	lling	v.	Healtl	n facility counselor	:( )
	teacher	( )	vi.	Nurse		( )
ii.	School peer educator	( )	vii.	Youth	centre	( )
iii.	Doctor	( )	viii.	Mothe	er	( )
iv.	Out-of-school peer		ix.	Father	ſ	( )
	educator	( )	х.	Chapl	ain/religious leade	r ( )
	<ul> <li>c) What mediums ca counselling services with the most prefer</li> </ul>	apart from school	? Rank the	em in or		U
i.	School notice boards	( )	v.	Radio	S	( )
ii.	School counselor refe	rrals( )	vi.	Telev	ision	( )
iii.	School peer educators	( )	vii.	News	papers/magazines	( )
iv.	Out-of-school peer		viii.	Mobil	e van announceme	ents()
	educators	( )				
		evention? eess e VCT counselor e client undergoing in VCT VCT services	the VCT	process	( ) ( ) ( ) ( )	
	they need informat 11 with the most pr	ion on VCT service	es? Rank t	hem in	order of preference	
	i. Guidance an	d counselling		vi.	Nurse	( )
	teacher	( )		vii.	Youth centre	( )
	ii. School peer ed			viii.	Mother	( )
	iii. Out-of-school	peer		ix.	Father	( )
	Educator			х.	Chaplain/religiou	, ,
	iv. Health facility	counselor( )		xi.	Community Heal	Ith Worker()
	v. Doctor	( )				

b) Which of the following do you think would be the best for students to consult when they need counselling on any issues that could enable them prevent HIV/AIDS? Rank

	from? Rank them in order of preference least preferred 8.	ce from 1 to 8	8 with the most prefe	erred being 1 and
i.	School notice boards ( )	v.	Radios	( )
ii.	School counselor referrals( )	vi.	Television	( )
iii.	School peer educators ( )	vii.	Newspapers/maga	zines ( )
iv.	Out-of-school peer	viii.	Mobile van annou	ncements()
	educators ( )			
7	a) Which of the following topics do with the students to enhance HIV/Al	• •		effectively address
i.	Love relationships ( )	vii.	How to prevent H	IV/AIDS( )
ii.	How to avoid pregnancy ( )	viii.	Prevention of STIs	s ( )
iii.	Sexual abuse /coercion ( )	ix.	How to use condo	ms ( )
iv.	Puberty ( )	х.	Where to get cond	oms ( )
v.	Negotiating sex ( )	xi.	Drugs and alcohol	abuse( )
vi.	How manage leisure time ( )	xii.	VCT	( )
	information you specified in 13 (a)  10 with the most preferred being 1 i. School peer educator ( ) ii. Health facility based peer educator ( ) iii. Youth centre based peer educators ( ) iv. Peer educator presenters in the radio ( ) v. Peer educator presenters in the television ( ) vi. Peer educator presenters in		ferred 10.  vii. Church baseducators  viii. Communit educators  ix. Peer educators  hotlines	sed peer - ( ) y based peer
c	magazines/newspapers ( ) ) What mediums can be used to create a services? Rank them in order of prefer		-	_
	and least preferred 8.			C
i.	School notice boards ( )	v.	Radios	( )
ii.	School teachers' referrals( )	vi.	Television	( )
iii.	School peer educators ( )	vii.	Newspapers/maga	* *
iv.	Out-of-school peer -	viii.	Mobile van annou	ncements()
	educators ( )			

c) What mediums can be used to create awareness of where the youth can get VCT services

8		nich of the following topics do you lents to enhance HIV/AIDS preven	=	ents cou	lld effectively address w	ith t	he
i.	Love	relationships ( )	vii.	How to	o prevent HIV/AIDS( )		
ii.		to avoid pregnancy ( )	viii.		ntion of STIs ( )		
iii.		al abuse /coercion ( )	ix.		o use condoms ( )		
iv.	Puber	` '	х.		to get condoms ( )		
v.		tiating sex ( )	xi.		and alcohol abuse( )		
vi.	_	manage leisure time ( )	xii.	VCT	( )		
	nee	nich parents' representatives would ed the information you specified in m 1 to 10 with the most preferred	n 14(a) abov	e? Ranl	k them in order of prefer	-	<b>;</b>
	i.	Mother ( )		vi.	Parent figures in		
	ii.	Father ( )			magazines/newspapers	( )	
	iii.	Parent representatives in		vii.	God mothers (	)	
		schools ( )		viii.	Godfathers (	)	
	iv.	Parent figures presenters in		ix.	Parent figures on telepl	ione	
		the radio ( )			hotlines (	)	
	v.	Parent figures presenters on		х.	Parent figures on interr	iet	
		the television ( )			sites (	)	
c)	repres being	mediums can be used to create aw sentatives? Rank them in order of 1 and least preferred 8.		From 1 to	o 8 with the most prefer		
	i. 	School notice boards ( )		v.	Radios	(	)
	ii. 	School teachers' referrals ( )		vi.	Television	(	)
	iii. ·	School peer educators ( )		vii.	Newspapers/magazines	, (	)
	iv.	Out-of-school peer -		viii.	Mobile van	,	,
		educators ( )			Announcements	(	)
9		nich of the following topics do you doms in dealing with issues conce				use	of
	i.	The efficacy of condoms		( )			
	ii.	The role of condoms in HIV/AII	DS preventi	on()			
	iii.	How to use condoms correctly		( )			
	iv.	Negotiating condom use		( )			
	v.	Where to get Condoms		( )			
	vi.	Other					
	b) Wh	nich of the following do you think	would be th	ne best f	or students to consult wl	nen	
	the	y need information on condoms?	Rank them i	in order	of preference from 1 to	11	

with the most preferred being 1 and least preferred 11.

1.	Guidance and counselling	ng		V1.	Nurse		(	)
	teacher	(	)	vii.	Youth centre		(	)
ii.	School peer educator	(	)	viii.	Mother		(	)
iii.	Out-of-school peer -			ix.	Father		(	)
	educator	(	)	х.	Chaplain/religiou	s leade	er (	)
iv.	Health facility counselo	r (	)	xi.	Community Heal	th Wor	ker	()
v.	Doctor	(	)					
*	h places would you prefer ce from 1 to 10 with the n			•		order o	f	
i.	School health facility (		1	vi.	Youth centre	(	)	
ii.	School peer educator (			vii.	Private Chemist	( )	)	
iii.	Out-of-school peer	,		viii.	Street vendors	( )	,	
	-	)		ix.	Entertainment spo	ots ( )		
iv.	Government Health			х.	Community Heal			
	Facility (	)			Worker	( )	)	
v.	Private Health facility(	)				,		
d) Wl	hat mediums can be used t	0 0	reate aw	areness of wher	e the students can	get co	ndo	om
	e services from? Rank then			of preference fro	om 1 to 9 with the n	nost		
pre	eferred being 1 and least p	ref	erred 9.					
i.	School notice boards	(	)	vii.	Newspapers/maga	azines	(	)
ii.	School counselor referra	als	( )	viii.	Sales representati		`	
iii.	School peer educators	(	)		from companies			
iv.	Out-of-school peer -	`	,		selling condoms		(	)
	educators		( )	ix.	Mobile van		`	•
v.	Radios	(	)		Announcements	(		)
vi.	Television	(	)			`		

#### APPENDIX C

## STUDENTS' FOCUS GROUP DISCUSSION GUIDE

- 1. Which intervention promotion strategies does the school use to enable HIV/AIDS prevention amongst the students?
- 2. Do the intervention promotion strategies used realistically address the needs and challenges of the youth in schools? Elaborate the strengths and or weaknesses and how they can be enhanced and or overcome.
- 3. Are there any intervention promotion strategies that you feel schools could incorporate in the HIV/AIDS prevention programmes to make these programmes more relevant to your needs and challenges as the youth? Justify the responses made.
- 4. Do you think the intervention promotion strategies mentioned in question 3 are acceptable to the entire school fraternity? Suggest how their acceptability could be enhanced or how the impasse can be addressed.
- 5. What factors do you think contribute the youths' choice of intervention promotion strategies? Explain why.
- 6. What factors do you think contribute to the teachers' choice of intervention promotion strategies? Explain why.

#### APPENDIX D

## TEACHERS' FOCUS GROUP DISCUSSION GUIDE

- 1. Which intervention promotion strategies does the school use to enable HIV/AIDS prevention amongst the students?
- 2. Do the intervention promotion strategies used by the school realistically address the needs and challenges of the youth in schools? Elaborate the strengths and or weaknesses and how they can be enhanced and or overcome.
- 3. Are there any intervention promotion strategies that you feel schools could incorporate in the HIV/AIDS prevention programmes to make these programmes more relevant to the needs and challenges of the youth? Justify the responses made.
- 4. Do you think the intervention promotion strategies mentioned in question 3 are acceptable to the entire school fraternity? Suggest how their acceptability could be enhanced or how the impasse can be addressed.
- 5. What factors do you think influence the youths' choice of intervention promotion strategies? Explain why.
- 6. What factors do you think influence the teachers' choice of intervention promotion strategies? Explain why.

# APPENDIX E

# **DOCUMENT ANALYSIS GUIDE**

Name of Document:		

Intervention	Topic and content	Service provider	Awareness
	recommended	recommended	promotion
			strategies
Counselling			
Voluntary			
Counselling and Testing			
and resting			
Condom use			
Peer			
involvement			
D 4-1			
Parental involvement			
mvorvement			

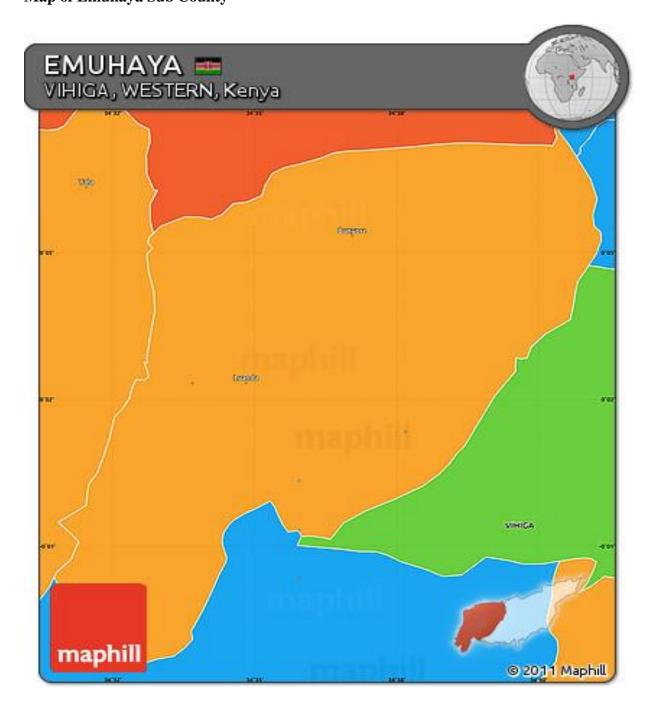
APPENDIX F

Map of Kenya Indicating Location of Emuhaya Sub County



APPENDIX G

Map of Emuhaya Sub County



## Appendix H Research Authorization

#### PAGE 2

### THIS IS TO CERTIFY THAT:

Prof./ Dr./ Mr./ Mrs./ Miss. NOEL
MANDELA MALANDA

of (Address) MASENO UNIVERSITY
P.O. PRIVATE BAG, MASENO

has been permitted to conduct research in .....

Location,

EMUHAYA District,

WESTERN Province,

on the topic...Intervention.promotion. strategies for HIV/AIDS prevention

among Youth in Secondary Schools in Emuhaya District. Kenya.

for a period ending. 31ST MARCH , 20. 11

### PAGE 3

Research Permit No. NCST/RRI/12/1/SS/804

Date of issue...06/09/2010

Fee received SHS 2,000



Applicant's Signature Secretary
National Council for
Science and Technology