SOURCES OF HIV/AIDS INFORMATION AMONG ADOLESCENTS IN PUBLIC SECONDARY SCHOOLS AND THEIR IMPLICATIONS IN NAIROBI, KENYA

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A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILMENT FOR THE DEGREE OF MASTER OF EDUCATION (EDUCATIONAL PSYCHOLOGY) IN THE SCHOOL OF EDUCATION OF KENYATTA UNIVERSITY

OCTOBER 2007
DECLARATION

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

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DEDICATION

Dedicated to my wife and all my loved ones.
ACKNOWLEDGEMENT

I sincerely wish to thank my supervisors Dr. Gatumu and Dr. Kinai both of Kenyatta University for their extremely valuable guidance and advice throughout this study. I also wish to thank all members of staff, Educational Psychology Department, Kenyatta University. I am greatly indebted to Dr. John Kihoro Mwaniki of Jomo Kenyatta University of Agriculture and Technology for the technical assistance offered during data analysis.

I would wish to thank all teachers who helped in conducting the survey especially Sam Mwangi Wanjuu of Kiamworia and Mrs Mercy Gitonga Githiri of Juja, Thika.

I would like to acknowledge with gratitude the support offered by my parents: Crispus and Julie Maina, brothers Githaiga, Kabene, Makena, Mwaniki, Tito Kibabante and Sister Naomi. In addition, friends like David Nduba Kabugo among others for their moral support. Above all, I extend special thanks to Jehovah, God for all that has happened. Thank you all.
ABSTRACT

A survey of sources of HIV/AIDS information among adolescents in public secondary schools in Nairobi and their implications was done. HIV/AIDS continues to be a major health threat in Kenya and was declared a national disaster in 1999. Review of various researches have shown that adolescents source of HIV/AIDS information in spite of being many and varied, are not addressing adequately the HIV/AIDS information needs of adolescents. To address this state, several researches done have suggested that HIV/AIDS information should specifically target adolescents as a group. The use of preferred sources of HIV/AIDS information has also been identified as a potential powerful tool in future HIV/AIDS prevention efforts. However, in the literature reviewed, the use of preferred sources of HIV/AIDS information among adolescents was found to be under-utilised especially in Kenya. An information gap was found to exist on where adolescents in Nairobi preferred to get their HIV/AIDS information from and this needed due emphasis. The purpose of this study therefore was to survey the sources of HIV/AIDS information among adolescents in Nairobi public secondary schools and to find if there are sex, age and form/class differences in their preferences. Two theories were used to guide this study: agenda setting theory and social exchange theory. A target population of secondary school students from public schools in Nairobi Province was used. The sample size was 384 students from 6 schools selected using stratified random sampling. A background information and HIV/AIDS preferred sources of information questionnaire was used. Kruskal-Wallis and Chi-square tests were used to analyse the data using the Statistical Package for Social Sciences version 12. A Pilot study was done in order to validate the research instruments. The most common sources of HIV/AIDS information among adolescents in Nairobi public schools were found to be TV and radio. Health care workers, school lessons and TV were cited as the most preferred sources of HIV/AIDS information. The results of the present study revealed significant differences in preferred sources of HIV/AIDS information chosen based on class/form of study and the age of the student. There were also significant sex and class/form differences in sources of HIV/AIDS information chosen by students. Results of this study enlightened on the best ways to communicate HIV/AIDS information to adolescents in Nairobi secondary schools. After this study was done, it was recommended that efforts be made to encourage the use of preferred sources of HIV/AIDS information to educate adolescents in Nairobi. Health workers for example, were found to be a preferred information source. Since Health workers as a HIV/AIDS information source are currently under utilised, efforts should be made to encourage them to take active roles in adolescents HIV/AIDS prevention campaigns. As a recommendation for further studies, a similar study could be replicated in rural schools where there is usually limited access to print and broadcast media.
ABBREVIATIONS/ACRONYMS

Center For Study Of Adolescence (CFSA)
Joint United Nations Aids Programme (UNAIDS)
Kenya Aids NGOS Consortium (KANCO)
Kenya Demographic Health Survey (KDHS)
National AIDS Control Council (NACC)
National HIV/AIDS and STD Control Programme (NASCOP)
Not Significant (ns)
Voluntary Counseling and Testing Centres (VCTS)
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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

The Human Immunodeficiency Virus (HIV) which causes Acquired Immunodeficiency Syndrome (AIDS) has become a pandemic disease that threatens the world’s population. HIV/AIDS is now a prominent issue at international gatherings. The issue is so important that the United Nations Security Council held its first ever debate on AIDS in January 2000, the first time it had ever examined a health or development issue [Joint United Nations AIDS Programme (UNAIDS, 2002).

In many African countries, the national HIV/AIDS prevalence rates are above one percent. In Kenya adult prevalence rate was 6.7% according to Kenya Demographic Health Survey (KDHS) preliminary report (2003). The National AIDS Control Council (NACC) latest AIDS Epidemic Update reports that the prevalence rate in Kenya is about 5.1% (Muchemi, 2007; NACC, 2007). However, HIV is still spreading throughout the population rather than being confined to people who were initially considered to have a higher risk of exposure such as commercial sex workers (plus their clients) and the injecting drug users.

Sub-Saharan Africa is the worst affected region in the world. Approximately 2.8 million new infections occurred in 2006 bringing to 24.7 million the total number
of people living with HIV/AIDS in this region by the end of 2006 (UNAIDS, 2006).

Globally more than half of new HIV cases occur among young people 15-24 years of age. African youth in this age group face one of the fastest growing rates of infection with HIV and other sexually transmitted diseases. Moreover, Sub-Saharan Africa has two thirds of all young people living with HIV/AIDS in the world. What is the extent of the problem in Kenya? HIV/AIDS is one of the most serious public health challenges facing Kenya today. By the end of 2006, 1.3 million adults and children were living with HIV/AIDS (UNAIDS, 2006). This disease is especially serious among the adolescents in and out of schools.

According to Kawewa (2004) since 1984 when the first AIDS case in Kenya was diagnosed, there have been Government efforts towards tackling the HIV/AIDS menace especially among the youth. By 1992, formation of the National HIV/AIDS Control Council programme had taken place. This programme was merged with the National Sexually Transmitted Diseases (STD) control programme to form the National HIV/AIDS and STD control programme (NASCOP). In 1997, the Kenyan parliament approved sessional paper no.4 of 1997 on AIDS in Kenya. Among its recommendations was formation of the National AIDS Control Council (NACC). In November 1999, the then President of Kenya, His Excellency Daniel arap Moi declared HIV/AIDS a national
disaster. This led to NACC being established under a state corporation act by the president’s order. Among many functions of the NACC strategic plan is the promotion of behaviour change among priority groups especially youths and adolescents in and out of school.

The Kenyan government recognises the important role education plays in shaping the life of learners. The development of the Kenyan education sector policy on HIV and AIDS document by Ministry of Education Science and Technology (Republic of Kenya, 2004) points to this fact. This policy calls for vastly expanded access to information and education, especially youth specific HIV/AIDS education. This policy developed in May 2004 encourages local communities, religious groups, parents, caregivers and guardians and peer educators to be mobilised to support and ensure success of HIV/AIDS prevention and control programme within learning institutions and at home. The policy encourages relevant and suitable teaching and learning materials to be developed for use in all learning institutions. Also, co-curricular activities such as clubs, drama groups and sports events are seen as important opportunities for HIV/AIDS education and therefore should be encouraged in schools.

As already stated in preceding pages, one section of the population that has been adversely affected by the HIV/AIDS epidemic in Kenya is the adolescents. Researchers have given various reasons to explain this. For example; peer
pressure on sexual behaviour, early debut in sexual activities, young people having many sexual partners, lack of enough knowledge about protection among others (Lema & Mulandi, 1992; Njau & Muganda, 1995; Platt, Obeng-Quiadood, Okigbo & James, 2000).

To arrest the spread of HIV/AIDS, various researchers (Buseh, Glass, McElmurry, Mkhabela and Sukati, 2002; Kenya AIDS NGOs Consortium {KANCO}, 1998) have suggested HIV/AIDS information should target adolescents as a group. This is because the youth are Kenyan future leaders. Given the fact that AIDS takes as long as ten years for a clinical manifestation to be shown, most young adults with AIDS are assumed to have contracted AIDS during adolescence.

Most of the adolescents in Kenya are in secondary schools, that is forms one to four of the current 8-4-4 public education system in Kenya. The KDHS (2003) study had the following crucial findings that could have implications for the present study especially on the choice of locality of the study. HIV prevalence was twice as high in urban areas as in rural areas. In addition, Nairobi and Nyanza provinces had HIV prevalence rates above the national average. In addition, gender differences in HIV/AIDS prevalence rates were most striking in young people. This trend is still continuing (Muchemi, 2007; NACC, 2007). In the 15-19
age group, KDHS report showed that 3.5% of women were infected and only 0.5% of men were infected in the same group.

Several studies (KDHS, 1998; Lema & Mulandi, 1992; Ochuodho, 2001) have shown that information about HIV/AIDS has been disseminated all over Kenya. However, even with such knowledge the disease continues to be one of the greatest health challenges in Kenya. This probably meant more research needed to be done on the sources of HIV/AIDS information especially HIV/AIDS information directed to adolescents.

Vital information about HIV/AIDS in Kenya is passed through the use of various sources of information like: radio, audio and visual tapes, magazines, books, lectures, workshops, seminars, conferences, pamphlets among others. This also includes informative discussions about the disease by teachers, religious leaders, parents and peers among others. For example, there are various HIV/AIDS information materials produced by the Ministry of Health in Kenya. In addition, there has been a proliferation of HIV/AIDS messages that target the youth through print and broadcast media. For example, radio youth programmes at Kenya Broadcasting Corporation (KBC) hosted by popular Deejay John Karani aimed at educating Kenyan youth about sexuality, HIV/AIDS and other sexually transmitted diseases. Furthermore, Kenyan Newspapers like “Daily Nation” have a youth series magazine produced fortnightly in the Friday newspaper called
“Straight talk” that deals mainly with youth and HIV/AIDS issues. There is also “a straight talk” programme on Saturday KBC radio English Service hosted between 11.00 am-11.30 am and at Metro FM radio on Sunday between 5pm and 5.30pm. The motto of these radio programmes is, “Keep listening because that’s where it starts.”

“Straight Talk” clubs and other peer chastity clubs like “True love waits” have been established in secondary schools all over the country. These clubs’ activities are also featured in the daily papers for example “Daily Nation” and the radio programmes like “Straight Talk”. Various plays, songs and poems focusing on the HIV/AIDS pandemic have been presented during Kenya schools and colleges national drama festivals held annually in Kenya. The Nation media group currently sponsors this festival. All the songs, plays and poems are taped and relayed later on Nation TV and other broadcasting stations like KBC channel 1 TV and Citizen TV. Since this festival is very popular, this is one good way of dissemination of the HIV/AIDS messages. Churches and other religious institutions have established youth HIV/AIDS control groups that are involved in voluntary work, performing plays on HIV/AIDS and visiting the sick in hospitals that are infected with HIV/AIDS among other HIV/AIDS awareness activities.

NACC as earlier stated is mandated to coordinate efforts in the prevention and control of HIV/AIDS in Kenya. This is part of a Kenyan National HIV/AIDS
communication strategy. It involves among other things reviewing and strengthening youth focused AIDS programmes and voluntary counselling and testing centres (VCTs). NACC produces a magazine called ‘Maisha’ aimed at educating the people about HIV/AIDS in particular. NACC encourages people to visit voluntary counselling and testing centres (VCTs) under popular slogan “chanuka, chukua control wewe mwenyewe” meaning one should take control of his/her life.

Role models like the current Kenyan president His Excellency Mwai Kibaki have been used in their adverts “pamoja tuangamize ukimwi” (together we eradicate HIV/AIDS). Another popular campaign is advocated through Kenyan youth who are popular with adolescents. They are depicted in adverts stating “Sex NO! Sisi tume-chill”, meaning adolescents to refrain from sex before the right time, for example, to wait until they are married. Another campaign encourages every one to drink and act responsibly. This is because it is easier to act irresponsibly when drunk and engage in unprotected sex (“unavyo kunywa zaidi, ndivyo unavyo teleza zaidi”). Another message encourages people in authority for example parents to talk with their children openly about HIV/AIDS (“fungua roho yako ongea”). There have been established constituency HIV/AIDS control committees headed by Members of parliament and other prominent personalities in these constituencies, to help prevent the spread of HIV/AIDS in Kenya.
There is a need to know where young people get their information about HIV/AIDS. For example, a UNAIDS (2000) report stated that where there has been successful proven approaches to HIV prevention, a need to put particular emphasis on young people has been recognised.

Sources of information on HIV/AIDS among adolescents in Kenya are varied. Some of the sources cited in various Kenyan studies reviewed are print and electronic media, books, posters, drama, youth clubs, churches and other places of worship. Others include health workers, parents and other relatives, teachers, peers and friends (Centre for Study of Adolescence [CFSA], 2002; Lema & Mulandi, 1992; Njau & Muganda, 1995; Wanga, 2000).

However it has been noted that many young people may be getting their sexual health information including HIV/AIDS education from unreliable sources like some of their peers who may not know all the facts about HIV/AIDS (KANCO, 1998; Lema & Mulandi, 1992). This may inevitably contribute to the spread of sexually transmitted diseases including HIV/AIDS.

Adolescents as a sub-group have different information needs than other people especially adults (KANCO, 1998). Studying their HIV/AIDS information preferences can in future help address their information needs better because of taking advantage of the most effective means to spread HIV/AIDS information
(Buseh et al., 2002). The potential to use preferred sources of HIV/AIDS information to educate adolescents has not been fully utilised in Kenya according to Njau and Muganda (1995). Therefore, this key research area needs to be emphasised. This is because as noted by Buseh et al. (2002) the choice of an effective medium determines the success of HIV/AIDS prevention messages.

1.2 STATEMENT OF THE PROBLEM

HIV/AIDS is a serious problem affecting people of Kenya especially the adolescents. In Kenya HIV/AIDS prevalence rates are twice as high in urban areas as in rural areas. Female adolescents are more affected than their male counterparts in Kenya. This problem has not escaped the notice of the Government of Kenya and by 1999; HIV/AIDS had been declared a national disaster. As a result, varied and numerous efforts by the government have been made in order to reach the adolescents in and out of school. NACC has been mandated to coordinate these efforts in the prevention and control of HIV/AIDS especially through the formation of Kenya National HIV/AIDS communication strategy. The Ministry of Education policy on HIV/AIDS (2004) encourages relevant and suitable teaching materials to be developed for use in all learning institutions. These government efforts are complimented by Non-Governmental organisations (NGOs) and other sources of information of HIV/AIDS information to adolescents. What this inevitably means is that considerable resources are being used in Kenya to fight HIV/AIDS.
Information about HIV/AIDS has been disseminated all over Kenya. Adolescents have cited various sources of HIV/AIDS information like friends, parents, electronic, print media, among other sources (CFSA, 2002; Njau & Muganda, 1995; Wanga, 2000) as major sources. However, despite all the efforts to reach the adolescents with HIV/AIDS information, HIV/AIDS continues to be a great health challenge in Kenya. This is especially among adolescents in and out of school. This means that the sources of HIV/AIDS information to adolescents despite being many and varied are not addressing adequately the HIV/AIDS information needs of adolescents.

To address the spread of HIV/AIDS among adolescents, several researchers (Buseh, Glass, McElmurry, Mkhabela and Sukati, 2002; KANCO, 1998) have suggested that HIV/AIDS information should target adolescents as a group. This is because adolescents have different information needs than other people because of uniqueness of the life stage they are in. Targeting adolescents is important because they are the future Kenyan adults.

Identification of major sources of information to adolescents is important because these sources are likely to be readily available and hence can be supported or strengthened to ensure adolescents receive the best information (Ndlovu and Sihlangu 1992).
In addition various researchers (Buseh et al., 2002; Njau and Muganda, 1995) have emphasised that the use of preferred sources of HIV/AIDS information could be a very powerful tool to spread HIV/AIDS information and help prevent its spread among adolescents. However the use of the preferred sources to educate adolescents about HIV/AIDS has been noted to be under-utilised in Sub-Saharan Africa, Kenya included (Buseh et al., 2002). This study anticipated to bridge this information gap. This was by finding out the sources and preferred sources of HIV/AIDS information to adolescents in Kenyan schools, especially in Nairobi. This was in consideration of various social demographic variables like age, gender and class/form of study, which had been shown in earlier studies (CFSA, 1995; Ndlovu & Sihlangu, 1992; Njau & Muganda, 1995), could affect the various sources/preferences of HIV/AIDS information.

The results of the present study were anticipated to help guide persons interested in providing HIV/AIDS information to adolescents in Nairobi schools on the best ways to do this. This would be an effective use of the limited resources and workforce available to combat HIV/AIDS in Kenya.

1.3 PURPOSE OF THE STUDY

The purpose of this study was to determine the sources of HIV/AIDS information among adolescent students in Nairobi public secondary schools. Also to find out if there were sex, age and form (class) differences among the students surveyed.
on sources of HIV/AIDS information and their HIV/AIDS information source preferences.

1.4 STUDY OBJECTIVES

The general objective of this study was to determine the sources of HIV/AIDS information among adolescents in Nairobi public secondary schools.

The Specific objectives were:

a) To find out if there were differences in preferred sources of HIV/AIDS information among adolescents in Nairobi secondary schools based on class/form of study, age and sex.

b) To find out if there were differences in sources of HIV/AIDS information among adolescents in Nairobi secondary schools based on class/form of study, age and sex.

1.5 RESEARCH QUESTIONS

This study aimed at answering the following research questions:

(a) What are the class/form differences in sources of HIV/AIDS information preference among secondary school students?

(b) What are the age differences in sources of HIV/AIDS information preference among secondary school students?

(c) What are the sex differences in sources of HIV/AIDS information preference among secondary school students?
(d) What are the class/form differences in sources of HIV/AIDS information chosen among secondary school students?

(e) What are the age differences in sources of HIV/AIDS information chosen among secondary school students?

(f) What are the sex differences in sources of HIV/AIDS information chosen among secondary school students?

1.6 SIGNIFICANCE OF THE STUDY

Findings of this study were aimed at generating data that could enlighten policy makers, educators, social workers and counsellors on the best ways to communicate HIV/AIDS information targeted at adolescents in secondary schools. Findings were anticipated to shed understanding of where the adolescents in Kenya especially in Nairobi received most of their HIV/AIDS messages and where they would prefer to obtain in future such messages. Hence, the present study was aimed at helping to bridge the knowledge gap that existed on where adolescents in Nairobi secondary schools preferred to obtain their HIV/AIDS information from. This information was anticipated to be necessary when designing and implementing future HIV/AIDS programmes for adolescents. This study on preferences was also anticipated to lead to further research on the best ways to reach adolescents with HIV/AIDS information.
1.7 DELIMITATION AND LIMITATION

This study was restricted to Nairobi secondary schools because the students are more heterogeneous than in many other parts of the country. The sample comprised students from a variety of ethnic groups, cultural, socio-economic backgrounds and religions. The sample of the study comprised students in form two and four only, to represent lower and upper classes, in public secondary schools. This was because of scarcity of resources and time constraints. There were also many factors that could have affected preferred sources of HIV/AIDS information to adolescents. However these factors could not be covered in this study due to time limit that was required to take this study. The type of school, for example, either boarding or day school and locality of the school was not covered in this study. The only variables covered in the present study were age, gender, and class/form of a student.

1.8 ASSUMPTIONS

The major assumption of this study was that students must have heard some information about HIV/AIDS at sometime in their lives. In addition, various sources of HIV/AIDS information for example, radio and newspapers were readily available to the students.
1.9 CONCEPTUAL FRAMEWORK AND THEORETICAL FRAMEWORK

1.9.1 CONCEPTUAL FRAMEWORK

This study utilized the classical conceptualization of a communication system where there is a source of information, the message to be passed, the medium or the channel used to pass this information and the audience or recipient of this information. There is a need to consider that a communication strategy should be localized for specific groups (UNAIDS 1999). Mass communication (which includes print and broadcast media) has been shown to be appropriate for reaching and influencing larger youth audiences (Frankowiak & Wenzel, 1994).

Frankowiak & Wenzel (1994) noted that for any source of information to be successful the source has to be: credible, sensitive, understandable, available, frequent, involving, stimulating, participatory, feasible and cost effective. Prior research (CFSA, 1995; Ndlovu & Sihlangu, 1992; Njau & Muganda, 1995) has shown that adolescent’s sources of HIV/AIDS information and also preferred sources may vary based on variables like age, gender of the student and form of the study and that adolescents have different information needs than other people.
Table 1.1 Conceptualized View of the Study Problem

Table 1.1 shows that the sources of HIV/AIDS information available to the adolescents though varied tend to be readily available to different groups of students at various times. However the preferred sources of HIV/AIDS information are choices made by students themselves based on different variables.

In this study the variables that were looked at were: age of the student, class/form of study and sex of the student.
1.9.2 THEORETICAL FRAMEWORK

The theory of agenda setting and social exchange theory were used to guide this study by helping to find the various influences that could lead the youth towards preferring some sources of HIV/AIDS information to the others.

1.9.3 THEORY OF AGENDA SETTING

Maxwell McComb's and Donald Shaw proposed the Theory of Agenda setting, in 1972 (as cited in Theory of agenda setting, 2003). They believed that mass media has the ability to transfer the salience of items on their news agendas to the public agenda. This theory states that the media does not influence what individuals think, but they are successful in informing the individual what to think about. Hence, this theory predicts that if people are exposed to the same media they will place importance to the same issues. McCombs and Shaw were content that the media may not only tell us what to think about, they also may tell us who and what to think about it, and perhaps even what to do about it.

Agenda setting emphasizes the power of media without contradicting the belief that individuals are free to choose what they believe (or reaffirm the power of the press while maintaining individual freedom). It should be noted that the media does not have the same effect on everybody. The media significantly impacts those who have a high need for orientation. For example, a person will be influenced more if the issue discussed in the media is relevant to their life or
affects them in some way. Also affected are those who are unsure about their positions on an issue and according to Berk (1998), adolescents sometimes do fall into this category.

When applied to this study this theory expounds the following: first, it is important to know various sources of HIV/AIDS information to the adolescent (for example, the newspapers, parents or any other source of information). Two, there is a need to know their preferred sources for this information. This is because there is bound to be differences among the adolescents due to psychological, social or emotional development. This is considering that adolescents sometimes have a high need for orientation and thus will be impacted highly by media. Also the availability of media in urban areas especially Nairobi is high compared to other parts of Kenya. Therefore, issues discussed in the media will more likely influence them. This may make them tend to prefer print and broadcast media as sources of HIV/AIDS information. If newspapers, for instance, are the preferred sources of information, they can help prioritise the effects of HIV/AIDS epidemic messages to the adolescent through various ways. For example, placement of HIV/AIDS information in full columns in these newspapers. Consequently this will make it clear to adolescents that this issue of HIV/AIDS is important and needs due contemplation.
1.9.4 SOCIAL EXCHANGE THEORY

John Thibault and Harold Kelly proposed this theory in 1952. However, it is Richard Emerson and Karen Cook who expanded this theory in 1970s and 1980s (as cited in social exchange theory, 2003). This is a theory based upon the rewards and costs of a relationship. It is based on a central premise that the exchange of social and material resources is a fundamental form of human interaction. Its practicality rests on the assumption that human beings recognise each other’s life situations, notice each other’s needs and in some ways are more likely to engage in reciprocity (a condition in which a response is correlated to the worth of original message). In other words, individuals minimise costs and maximise rewards within their relationships. Therefore, people act with other people in full recognition that their acts will be noticed and in some way reciprocated (or they will receive a return on their communicative investment). When communication outcomes are perceived to be greater, individuals are willing to self-disclose more. Thus a study of this nature was deemed important. For instance, which are those sources preferred to give HIV/AIDS information to the adolescents?

When this theory is used in mass context, one person (model) attempts to induce change in beliefs, attitudes or behaviour of a group of people, for example, adolescents, through using various means for instance, the use of charisma to convince others that the information is credible.
This theory was used to guide this study on some factors that could shape adolescents preferred sources of HIV/AIDS information. The people who communicate about HIV/AIDS information to adolescents are varied. Role models like teachers, parents, and radio personalities among others do communicate information about HIV/AIDS. As already stated, social exchange theory is based upon rewards and costs of a relationship. The relationship between the giver of the message and the receiver determines the quality of the communication. In addition, time given to the relationship depends on the worth of the relationship. In other words the way adolescents prefer to receive their HIV/AIDS information will also be a reflection of the way they see their HIV/AIDS information providers being important to their lives. This leads to some sources being preferred to others. This partly answers the question of where adolescents in Nairobi secondary schools would be comfortable getting their HIV/AIDS information from.

1.10 OPERATIONAL DEFINITIONS OF TERMS

Source of HIV/AIDS information: Referred to as a place (where) or from who (people) HIV/AIDS information was obtained. An example of “where” was the school, hospital or clinic. “Who” referred to people who provide this information for example teachers, parents, peers, and religious elders. The term source was used interchangeably with modes of HIV/AIDS information.
Modes of HIV/AIDS information: referred to the system or method through which HIV/AIDS information was transmitted or passed for example through radio, television and newspapers.

Preferred sources of HIV/AIDS Information: This referred to adolescent students’ greater interest or significance for one source of HIV/AIDS information over the other.
CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter contains a review of literature related to this study. This chapter has a review of literature about the sources of HIV/AIDS information and the preferred sources of HIV/AIDS information to the adolescents in secondary schools. A summary of literature review and research hypotheses are stated.

2.1 PSYCHOSOCIAL AND EMOTIONAL DEVELOPMENT OF ADOLESCENTS

Adolescence is a very intriguing period. Our perceptions of this period are largely influenced by our own experiences with teenagers as well as current information available to us about them. As Heaven (1994) states, print and electronic media have become powerful and influential sources of information that serve to shape our perceptions, expectations and stereotypes of adolescents. Berk (1998) points out that those pubertal events affect the adolescent’s self-image, mood and interaction with friends and peers. During adolescence, Berk quoting from Jean Piaget states that adolescents have reached formal operational stage or can think in abstract forms. One of the consequences of this is argumentativeness as they try to use their formal operations. Adolescents can also be very self-conscious and self-focusing, this being a new form of egocentrism. Adolescents for a time do become very wrapped up in the importance of their own thoughts, appearances
and behaviour. As a result, two distorted images are said to appear between self
and the other people. These images are ‘imaginary audience’ and ‘personal fable’
explained below.

As Berk (1998) explains, in the “imaginary audience”, young people regard
themselves as always on stage or the focus of everyone else’s attention and
concern. They can go to great lengths to avoid embarrassment. If a source of
HIV/AIDS or a situation is thought as embarrassing to them they will go to great
lengths to avoid contact with it. Hence they can avoid places like voluntary
counselling and testing centres (VCTs) because people might think they have
HIV/AIDS, avoid people who discuss HIV/AIDS or even discussing about the
disease themselves.

Berk (1998) gives the second cognitive distortion as “personal fable”. Teenagers
are so sure that others are observing and thinking about them, they develop an
inflated opinion of their own importance. Hence they can feel very special and
important. For this reason, adolescents feel that they can sometimes reach great
heights of glory as well as sinking to unusual depths of despair, experiences
others could not possibly understand. This can make them feel unique and
invulnerable. They would feel that for example, adults in their life like teachers
and parents do not understand the world they live in especially issues to do with
HIV/AIDS as they concern them. As such they should not be the ones to talk
about it or ‘dictate’ to them. Also they may feel that they are very special or 'macho' hence they can risk with sexual experimentation. This is to feel great and as they sometimes think, nothing can possibly happen to them, since they feel unique.

Therefore, sources of information on HIV/AIDS to adolescents should consider the uniqueness of adolescents, and perhaps find messages that will incorporate sometimes the ‘macho image’ and other conflicting feelings that adolescents sometimes experience.

During adolescence, there are self-esteem changes that provide the cognitive foundation for identity development. Four paths to identity have been identified these being: identity achievement, moratorium, identity foreclosure, and identity diffusion. Adolescents keep on shifting from one status to another until full identity is achieved (Berk, 1998). This perhaps partly explains why adolescent preferences can vary through age, class/form of study among other factors.

Explaining the four paths to identity, Berk (1998) states that identity diffused individuals lack clear direction. They are not committed to values and goals nor are they actively trying to reach them. They may never have explored alternatives or they may have tried to do so, but found the task is too threatening and overwhelming. The identity foreclosure individuals have committed themselves to
values and goals without taking time to explore alternatives and instead adopt ready-made identities that authority figures have chosen for them. Moratorium means those individuals have not yet made definite commitments. In identity achievement, those individuals are committed to a clearly formulated set of self-chosen values and goals.

These four identity statuses affect reception to HIV/AIDS information sources and preferences. Sometimes adolescents would take the initiative for example, visiting VCTs and actively seeking information from parents, teachers, radio presenters and other sources and take responsibility for their individual actions. They will sometimes need some guidance and other times full control to be taken over them. For this reason no one way is sufficient, hence their information sources preferences need to be varied. This will take care of their changing status.

Newman and Newman (1987) study (as cited in Heaven, 1994) suggested the following developmental tasks for 12-18 year olds. First, is physical maturation and ability to adjust to the changing body image. Two, is a formal operation that is the ability to reason and think abstractly. Three, is the emotional development that is the ability to accept volatile emotions and mood swings. Four, is the ability to join peer groups. All this will affect the preferred sources of HIV/AIDS information. Information sources that take advantage of various developmental tasks will tend to be more valued and preferred. HIV/AIDS information sources
should take note that adolescents need to be treated as more of adults than children as they are sometimes treated. HIV/AIDS information sources should instead focus more (or take advantage) on their ability to reason and think abstractly. This is because adolescents can think of future consequences of their present actions. They know that some activities can lead to infection by HIV, and AIDS leads to death. Information sources of HIV/AIDS should use this ability to reason abstractly to enhance their effectiveness.

Adolescents can see contradictions abound in the society especially by authority figures that are called upon to lead by example at all times. There are times when real models like church leaders, teachers or the parents involve themselves openly in promiscuous activities seemingly, oblivious of HIV/AIDS menace. The same people may turn around and ‘counsel’ the youth about the danger of unprotected sex. This would make their message credibility to go down. This links with social exchange theory where adolescents should see the source of HIV/AIDS information as credible or respectable.

Peer groups are important for psychological development; conformity to peer pressure is greater during adolescence. Peer groups draw their membership from individuals of the same age whom the adolescent may know, but who might not necessarily be close friends. Heaven (1994) explains that it is the peer group that forms a vital and often useful avenue by which adolescents make the transition
from the family to the wider world. Subsequently, the amount of time spent with peer group increases while that with family members decreases. Hence peers will even influence the sources of HIV/AIDS information and preferred sources. This should be taken advantage of by forming for example, youth HIV/AIDS prevention club groups and generally using youth models like ‘Miss Kenya’ beauty competition winner, popular local musicians like ‘Nameless’, ‘Nonini’, ‘Jua Kali’, ‘Red Sun’ and other music groups like ‘Necessary Noise’. This is in conformity with social exchange theory where relationships need to be seen as rewarding or useful.

Parents also have their own influence on adolescents. Heaven (1994) states they serve as role models because adolescents also learn by observation and imitation. Parenting styles and childrearing practices also have an important influence on adolescents’ social and emotional development. Parents as well transmit their values and morals to their children, particularly adolescents, and are important sources of information on a wide range of topics such as parents teaching their adolescents about HIV/AIDS. Parents indeed have special roles to play as adolescent HIV/AIDS information source as explained below.

Various researches on adolescents for example, (Berk, 1998; Steinberg, Belsky & Meyer, 1999) have noted the following. When parents and peers disagree, adolescents do not always rebel against the family. Instead, where parents and
peers usually differ is on their spheres of influence. Parents have more influence in adolescents’ basic values like the choice of religion and educational plans of an adolescent. Peers on the other hand are more influential in short term day to day matters such as the choice of dressing (fashion), the type of music they listen to and the type of people they move out with. This information is relevant to the present study as the type of people who influence the adolescents will sometimes be gauged as credible hence preferred. Thus, this study was done to establish the preferred sources of HIV/AIDS information. Is it parents, other authority figures or other adolescents/peers?

2.2 STUDIES ON SOURCES OF HIV/AIDS INFORMATION TO THE YOUTH

In the whole world and sub-Saharan Africa in particular, HIV/AIDS campaigns use many information sources in order to reach the youth and to prevent the spread of HIV/AIDS. Sources of HIV/AIDS information to the youth must gain an understanding of where adolescents would prefer to obtain this information on HIV/AIDS. As already stated in the preceding chapter, to maximize the effectiveness of youth HIV/AIDS programmes, it is essential to determine which sources are available to adolescents and from which ones they would prefer to obtain future information on HIV/AIDS. However, when it comes to the sources of HIV/AIDS information to the youth, many studies reviewed have reported different results. Rosenthal and Smith (1995) study done in Australia noted that
Despite widespread belief that parents should be the primary (first source) source of information about HIV/AIDS and sexuality, in practice they usually are not. This result was also found in a study done in Korea among adolescents (Yoo, Lee, Kwon, Chung & Kim, 2005).

An earlier study by National Health Interview Survey (NHIS) in the United States of America held in 1987 among the youth and cited in Lemelle, Harrington, and Leblanc (2000) showed that broadcast media (television and radio) accounted for almost 58% of information sources to the youth. Also print media (newspapers, magazines, medical journals, libraries) accounted for 30.2% with health sector channels accounting for 4.9%. Related studies (Austin, 1995; Brashers, Haas, & Neidig, 1998; Wallack, 1990) have reported that in United States, public information campaigns that include the mass media are major sources of information for a variety of health problems including HIV/AIDS among the youth, and including awareness about strategies for combating them. A study done on Iranian students reported that TV was the most important source of HIV/AIDS information (Tavoosi, Zefarani, Enzevaei, Tajik and Ahmadinezhad, 2004).

Studies in Sub-Saharan Africa on sources of HIV/AIDS information to the youth have also reported among other findings the importance of print and broadcast media. Zimbabwean high school students mentioned print and broadcast media as
both the first and the most informative sources on AIDS (Kasule et al., 1997; Ndlovu & Sihlangu, 1992). This is in line with theory of agenda setting where media houses can set an agenda for a given country or a group of people.

In Ethiopia, Gebre (1990) surveyed the various sources of HIV/AIDS information among high school students. Of the total population surveyed, radio (33.6%), medical institution personnel (20.7%), newspapers (22.7%) and television (16.4%) were ranked as the most important sources of information of HIV/AIDS. Even though research done on the sources of HIV/AIDS among the youth has shown varied results, the various studies reviewed below can provide significant guidelines on the present study on the preferred sources of HIV/AIDS information among adolescents in Nairobi secondary schools.

Ndlovu and Sihlangu (1992) research highlighted the reality that sources of information were an indication of information channels accessible to a given group. Their study results showed specific patterns when frequencies of the respondent choices were reviewed by form/class, gender and school location. Sources of information associated with reading skill like print media (for example, newspapers, magazines and booklets) were more frequently identified as sources of information in higher forms than in lower forms. This they stated suggested students at higher forms are more likely than those in lower forms to get information from written materials. On other hand, television was the most
frequently cited as first source of information in lower forms suggesting that they could be reached in greater numbers through visual than written media could. In this study, classmates emerged as an important source in higher forms (form 3 and above) than lower forms. This finding they suggested might be in line with developmental tasks of adolescent’s stage where close ties are developed with peers around ages 17 and 20. Classmates and radio were more frequently identified as sources of information by girls than by their male counterparts. This information concurs with several studies done in Kenya (KDHS, 1998; Lema & Mulandi, 1992; Wanga, 2000). Newspapers and magazines were cited as sources of HIV/AIDS information by more boys than girls. There were also differences based on socio-economic status and type of school that is urban or rural school.

Buseh et al. (2002) study was on primary and preferred sources for HIV/AIDS and sexual risk behaviour information among adolescents in Swaziland. The results of this study showed a familiar trend where broadcast and print media was a major source of HIV/AIDS information to adolescents. However, several significant results were reported. Buseh et al. (2002) reported that the majority of participants reported print and broadcast media as their primary source of HIV/AIDS information (62%), followed by siblings and friends (13.9%), and parents, family and elders (6.3%). Being a study that was done in both urban and rural high schools in Swaziland, the primary sources for HIV/AIDS information differed significantly by location of the school, which was either urban or rural.
\( \chi^2 = 18.33, p < 0.001 \). There was also a significant difference for primary sources for HIV/AIDS information by grade or form of students \( \chi^2 = 45.07, p < 0.001 \).

In Kenya, several studies (KDHS, 1998; Lema & Mulandi, 1992; Wang a, 2000) show sources of HIV/AIDS information for adolescent students to be principally the radio, television and newspapers. However, according to the KDHS study, there are gender differences in sources of HIV/AIDS. Male adolescents in urban areas ranked radio, newspapers, television, pamphlets, friends and relatives in that order of importance as sources of HIV/AIDS information. For female adolescents in urban areas the radio, friends, television, newspapers and health workers were ranked in that order of importance as sources of HIV/AIDS information.

As shown in several studies reviewed, not all studies concur on the issue of information sources to adolescents. This is because a variety of sources are ranked as major sources of HIV/AIDS information to adolescents. In two studies done in Trans Nzoia and Makueni districts in Kenya for example, various results were cited. Kasonde (1996) ranked the mass media, schoolteacher, hospital worker, parents and friends in that order of importance as sources of HIV/AIDS information to the youth. Koribo (1997) ranked health workers, parents, teachers, friends, community and mass media in that order of importance. The varying results in the several studies reviewed on sources of HIV/AIDS information to adolescents made a case for this area’s continued research.
Therefore, as the results on the sources of HIV/AIDS information are wide-ranging, a person wishing to work with the youth in public secondary schools in Nairobi especially in informing them about HIV/AIDS would have difficulties identifying the best methods to reach them. This study was anticipated to address this issue to some extent.

2.3 STUDIES ON PREFERRED SOURCES OF HIV/AIDS INFORMATION TO THE YOUTH

There is usually a widespread belief that the sources of information to adolescents are also the preferred sources of informing the youth about HIV/AIDS. This is usually not the case (Abrams, Abraham, Spears, & Marks 1990; Buseh et al. (2002); Rosenthal and Smith 1995).

Two studies done in Zimbabwe on preferred sources of HIV/AIDS by the youth gave the following varied reports. First, Kasule et al. (1997) study done among 10 – 19 year olds Zimbabweans as noted earlier, showed television and radio as their top sources of information on HIV/AIDS and sexually transmitted diseases. However, clinics were their preferred source of information. Secondly, Ndlovu and Sihlangu (1992) study on Zimbabwean High School students mentioned print and broadcast media as both their first and most informative sources on AIDS. Their preferred sources of information on HIV/AIDS in order of preference were health workers, the print and broadcast media, and teachers.
However the research done by Buseh et al. (2002) in Swaziland high schools reported the following findings. First, although 62% of the students reported the print and broadcast media as their primary source of HIV/AIDS information, only 18.3% of the participants would prefer to receive HIV/AIDS information from print and broadcast media. Two, only 10.3% reported healthcare workers as their primary source of HIV/AIDS information. Three, 42% of the students indicated they would prefer to obtain information about HIV/AIDS from health care workers or clinics, followed by the religious leaders, teachers or school personnel (14.7%), siblings and friends (14%) parents and other relatives and elders (11.6%).

In a summary, Buseh et al. (2002) study noted a gender ($\chi^2 = 16.09, p=0.003$) and class/form difference($\chi^2 = 29.42, p=0.003$) in HIV/AIDS information source preferences. First, more males (21.9%) preferred HIV/AIDS information from print and broadcast media compared to 14.7% of their female counterparts. Two, males’ preferred sibling and friend’s sources more often than females (12.2%), for HIV/AIDS information. Three, more females (47%) indicated that they would prefer HIV/AIDS information from health care workers or clinics compared to 35.8% of males.

In conclusion, it is a fact that there have been previous researches done on the area of sources of HIV/AIDS information and even preferences among the youth.
In fact the area of sources of HIV/AIDS information among adolescents has been widely researched in Kenya and other parts of the world. However, it is important to note that most of the studies reviewed have different results regarding the influence of various variables like gender, location of the school and class level (form) upon HIV/AIDS information sources and subsequently preferences of these information sources. This inevitably calls for more research into this area.

2.4 SUMMARY OF LITERATURE REVIEW

Throughout the literature review, the importance of HIV/AIDS information sources being considered especially toward the adolescents has been stressed. Based on the theory of agenda setting, the print and broadcast media would notably affect those who have a high need for orientation. Reviewed literature has shown that adolescents do sometimes fall into this category. Also, in the social exchange theory, the relationship between the giver of the message and the receiver determines the quality of the communication. Based on the two theories reviewed, some sources will be commonly cited in one group of adolescents than in others and also some of these sources will be more preferred than others.

Pubertal events usually affect the sources of HIV/AIDS information and also their preferences. This is because it affects among other things: the adolescent’s self-image, mood and interaction with friends and peers. Peer groups are important for psychological development and conformity to peer pressure is greater during
adolescence. The time spent with peers during this time is greater and their sphere of influence is great especially in the day-to-day matters like the type of dressing and the music they listen to among others. Parents on the other hand are important influence on basic values like choice of school, religion and educational plans. This calls for a critical look at sources of HIV/AIDS (and preferences) in order to include the most effective sources that will incorporate all these influences.

Therefore, the various sources of HIV/AIDS information should be studied in detail. This will ensure the maximisation of available HIV/AIDS information sources (resources) based on variables such as gender and age. This is because specific patterns emerge when various sources are reviewed based on form/class, sex, age, locality among other variables. Print media and classmates for example, are commonly cited in higher forms in studies reviewed. Also radio and classmates are cited more by females than males in secondary schools.

The sources of HIV/AIDS information mostly common to adolescents are not usually the preferred sources. In the studies reviewed, the medical personnel are usually the more preferred source of HIV/AIDS information although this is not a common source of HIV/AIDS information among adolescents.

Based on the literature reviewed, the following hypotheses were formulated for this study.
2.5 RESEARCH HYPOTHESES

1. There will be class/form differences in the preferred sources of HIV/AIDS information chosen.

2. There will be age differences in the preferred sources of HIV/AIDS information chosen.

3. There will be sex differences in the preferred sources of HIV/AIDS information chosen.

4. There will be a class/form differences in the sources of HIV/AIDS information chosen.

5. There will be age differences in the sources of HIV/AIDS information chosen.

6. There will be sex differences in the sources of HIV/AIDS information chosen.
CHAPTER THREE
METHODOLOGY

3.0 INTRODUCTION
This chapter outlines the research design that was engaged to find answers to the research questions posited in chapter one. Described in this section are the research design, variables and location of the study. Also described is the target population, sampling and data collection techniques, research instruments, and how the pilot study was done.

3.1 RESEARCH DESIGN
This study employed a descriptive survey design in order to obtain the information needed. A survey is a planned collection of data for the purposes of description. It consists of asking people for information, and for descriptive use. Also it can be for gathering data from a relatively large number of cases at a particular time (Cohen & Manion, 1994; Coolican, 1994).

Descriptive survey design was considered appropriate since what this study was concerned with primarily was describing and interpreting what were the preferred sources of HIV/AIDS information among adolescents in Nairobi secondary schools. This description was based on various variables like form/class of study, age and sex differences. As Lovell and Lawson (1970) stated, a descriptive survey research describes and interprets “what is”. It is concerned with conditions that
exist, practices that prevail, beliefs and attitudes that are held, processes that are \ongoing and trends that are developing.

3.2 VARIABLES

The research title was sources of HIV/AIDS information among adolescents in public secondary schools and their implications in Nairobi, Kenya. The independent variables of the study were: the student class/form of study, the age of the student and the gender (sex) of the student. The dependent variables were the sources of HIV/AIDS information and preferred sources of HIV/AIDS information.

3.3 LOCATION OF THE STUDY

Nairobi was selected as the main area of study due to several reasons. First, this study on HIV/AIDS depended to some extent on the availability of print and broadcast media resources for example the radio, television and newspapers. Studies where availability of media is an issue have shown urban areas to be more advantaged than rural areas (Buseh et al., 2002). Two, Nairobi is one of the two provinces in Kenya, the other being Nyanza, with HIV/AIDS prevalence among the general population higher than the national one (KDHS, 2003; Muchemi, 2007; NACC 2007). Three, students in Nairobi province were thought to be heterogeneous in terms of variety of ethnic groups, cultural, socio-economic
backgrounds and religious groupings. It was hoped that this would increase this study’s results generalisation.

3.4 TARGET POPULATION

The target population of this study was secondary school going male and female adolescent students in public schools in Nairobi province. Their numbers according to the Ministry of Education website (2004) were 8,235. The Students in secondary schools are usually in adolescent years, with ages ranging from 14 years to 24 years.

3.5 SAMPLING TECHNIQUES AND SAMPLE SIZE

3.5.1 SAMPLING TECHNIQUES

The sampling procedure used was as follows. The researcher obtained a list of all public secondary schools in Nairobi province. Also obtained was the current number of streams per secondary school for sampling. 6 out of 48 secondary schools were selected from the total number of secondary schools in Nairobi through the stratified random sampling. Coolican (1994) elaborates that this method is ideal where there is variance in population, but there is also some homogeneity in some sections of the population. This means that the population is divided into two or more mutually exclusive segments (strata) based on categories of one or more combinations of relevant variables. A table of random numbers was used to sample population in each stratum. To select individual
schools the following was done. From the list of schools in Nairobi, three strata were used: males only, females only and co-educational schools. From each stratum, simple random sampling was used to select two schools using a table of random numbers. To select classrooms to be used, the following method was used. Where a school had more than one stream, a stratified random sampling was done. In schools having only one stream, two classes (form two and four) were used.

The rationale used for the number of schools sampled was as follows. The sample required was 384. This was based on a number comprising 192 male students and 192 female students in forms two and four (calculated using the online sample size determination calculator, 2003). The online calculator is based on the assumption of 95% confidence level and a confidence interval of 5. The students used for this study were selected from form two and form four in order to represent the lower and upper classes. The total number of secondary schools according to the data obtained from Ministry of Education website in December, 2004 were forty eight. This number comprised of twenty males only schools, sixteen female only schools and twelve co-educational schools. The total population of males and females in Nairobi secondary schools is almost equal (Ministry of Education Website, 2004). Hence, the researcher assumed that they needed a 50-50 representation. The average class calculated from the total population was about forty. Based on the proportional allocation of each type of
school, the males sampled from males’ only schools was: Total number of males’ only schools multiply by sample size (384) divide by total number of secondary schools in Nairobi. Therefore, this was calculated as: 20 divided by 48 multiplied by 384 = 159.

In doing the calculations, the researcher assumed that a class had forty students. Two classes were to be sampled in a school. The calculated number of male only schools required was: 159/80 = 1.99. This number was rounded to 2. Based on the above calculations the number of female only and co-educational schools required for sampling was calculated to be 2 each. Therefore, the total number of schools sampled was 6.

To select participants in the study (the students), the following method was used. From each classroom selected, an admission register was used to find out the actual number of students. Then all the students present at the time of study were given questionnaires, which were numbered. In single sex schools, the students sampled were those who had odd numbers (up to 32 students). In co-educational schools, all the males with questionnaires having even numbers were used. For females the odd numbers were used. This was done until the required number of 16 males and 16 females per class was obtained.
3.5.2 SAMPLE SIZE

As initially proposed, 384 students were sampled for this study. However, eight questionnaires out of 384 given to students could not be used because of failure of the students to respond as instructed. The final composition of the study was therefore 190 male students (50.5%) and 186 female students (49.5%). Of the participants, 194 students were form twos (51.6%) while 182 students (48.4%) were form fours. The age of the participants varied from 15-24 years. The mean age was 17 years (17.16, SD 1.25). Students aged 15 years were 26(6.9%), 16 years were 101(26.9%), 17 years were 99(26.3%), 18 years 104(27.7%) and students aged 19-24 were 46(12.2%).

3.6 CONSTRUCTION OF RESEARCH INSTRUMENTS

Questionnaires used for surveys are usually constructed for a specific research topic and tend to test for current opinion or patterns of behaviour. Berg (1989) states that a questionnaire is a valid instrument for obtaining information that is not observable. A questionnaire has several advantages. First, it requires minimum expenses in terms of money. Furthermore, it allows for selection of a large and representative sample. Also a questionnaire tends to be more reliable because of its anonymous nature hence encouraging more honesty.

This study used background information and HIV/AIDS preferred sources questionnaire. The researcher used the questionnaire to obtain demographic
information such as the student’s gender, age, form/class and school and to solicit information about preferred sources of HIV/AIDS information. This instrument had been adopted from a comprehensive self-administered questionnaire from World Health Organisation’s knowledge, attitude, beliefs and practise (KABP) done in 1987 (as cited in Buseh et al., 2002). In the said questionnaire, local health educators and experts at University of Swaziland evaluated the appropriateness of the items of the study for content validity. Since this study was initially done in Zimbabwe, items were modified for the present study done in Nairobi, Kenya. The questionnaire used in this study-contained items validated by academic staff from Kenyatta University, Department of Educational Psychology.

3.7 PILOT STUDY

The researcher pre-tested the instrument in three schools (one males’ only, one co-educational school and one females’ only school) purposively selected. The participants were fifteen male and fifteen female students (10 participants from each school). The participants in the pilot study did not take part in the main study. This pilot study was helpful in considering the relevancy of the questions to the adolescent students in Nairobi schools, ability to understand the items in the study as well as the time necessary for completion of the survey. Questions two and five were revised based on feedback. The pilot study helped to improve the data collection techniques and allowed a thorough check of the planned statistical and analytical procedures.
3.7.1 VALIDITY OF THE RESEARCH INSTRUMENT

Validity is the extent to which a test measures what it is supposed to measure.

Validity of this questionnaire especially the face and construct validity was ensured by distributing the questionnaire among the staff of education psychology department, Kenyatta University and through a departmental seminar held there. This is an experienced multidisciplinary staff that helped to revise some of the questions. The questionnaire used had been adopted from the comprehensive self-administered questionnaire from World Health Organisation’s knowledge, attitude, beliefs and practise (KABP) done in 1987 (as cited in Buseh et al., 2002). KABP is a standardized survey instrument developed by WHO for measuring AIDS related knowledge, attitude, beliefs and practice of adolescents. Validity was also improved by doing a pilot study of the questionnaire. Based on feedback from the participants, who were encouraged to give their comments, the items were improved.

3.7.2 RELIABILITY OF THE RESEARCH INSTRUMENT

Reliability is the extent to which a test is repeatable and yields consistent scores.

The reliability method that was used to check this instrument was inter-rater reliability. This is where different raters who are experts in a given area give their views to ensure accurate assessment. The input by my supervisors and the academic staff members at Education Psychology Department at Kenyatta University was used to gauge the appropriateness of items in the questionnaire.
The questionnaire had items adopted from the comprehensive self-administered questionnaire from World Health Organisation’s knowledge, attitude, beliefs and practise (KABP) done in 1987 (WHO, 1987).

3.8 DATA COLLECTION TECHNIQUES

After permission was sought from relevant authorities to proceed with actual data collection the following was done. With the help of schoolteachers, the students were placed at least one metre apart to make sure they did not discuss among themselves while responding to the questionnaire. Before they started to fill in the questionnaire, the students were given ten minutes to go through the instructions and ask any questions where they did not understand. After that, the students were given thirty minutes, which was ample time to fill in the questionnaires after which the researcher collected them.

3.9 LOGISTICAL AND ETHICAL CONSIDERATIONS

The researcher applied for and obtained a research permit given by the Ministry of Education to conduct research in Kenya. Using this permit, the researcher approached the school heads of the schools sampled and obtained permission to conduct research in their schools. The students sampled were told the purpose of the study and their role as participants. This was to aid them to give informed consent. The students were informed that they were participating out of their own free will and that the information they were giving was anonymous hence their privacy was assured.
CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.0 INTRODUCTION

In this chapter, the methods used to do data analysis are discussed. In addition, the results of the present study are presented and discussed. The researcher set out to survey the sources of HIV/AIDS information among adolescents in public secondary schools in Nairobi.

4.1 METHODS OF DATA ANALYSIS

The data obtained from the students was nominal and ordinal scale. Nominal and ordinal scales are safer when using unstANDARDIZED scales or if estimation is based on human estimation rating as there can be errors due to factors like “experimenter effects”, lying by interviewee to appear good or bad among other effects. By ranking this data, data was reduced to ordinal. Since the data did not meet all parametric assumptions, Chi-square and Kruskal-Wallis tests were used.

The questionnaire used in this study contained items where the researcher was interested in the number of subjects or responses which fall into various categories. Chi square goodness-of-fit is suitable when the researcher is interested in the number of subjects, objects, or responses, which fall into various categories (Siegel & Castellan, 1998). The number of categories may be two or more. This technique is goodness-of-fit type in that it may be used to test
whether a significant difference exists between an observed number of responses in each category and an expected number based on the null hypotheses.

The other test used to analyse data was Kruskal Wallis. This tests the hypothesis that \( k \) independent groups or samples are the same against the alternative hypothesis that one or more of the groups differ from others (Siegel & Castellan, 1998, p.216). Kruskal-Wallis has power over large samples (population over seven).

The data collected was coded and entered into the computer. Research questions one to three were seeking answers about sources of HIV/AIDS information preference according to class/form of study, age and sex of the participants. The preferred sources were of two types. The first option was preferred people, with the options specified being health workers, friends, parents, teachers, relatives, siblings and others. The second option was preferred way, with options specified being TV, radio, Daily newspapers, school lessons, film/videos, books and magazines, drama, music and posters. The multi response answers were analysed through cross tabulations and significance was tested using Kruskal Wallis test at \( \alpha 0.05 \).

Research questions four to six were seeking answers about common sources of HIV/AIDS information according class/form of study, age and sex of the
participants. The multi response answers were analysed through cross tabulations and significance was tested using chi-square test at $\alpha 0.05$. The data obtained was analysed using the Statistical Package for Social Sciences version twelve (Nie, Stein and Bert, 2001). Significance of the results was at $p < 0.05$ level. The hypothesis testing was done as follows.

4.2 HYPOTHESES TESTING

1. There will be no significant class/form differences in the preferred sources of HIV/AIDS information chosen. Kruskal-Wallis test was used. This is because the data obtained did not meet parametric assumptions and participants ranked their answers. The data was on ordinal scale.

2. There will be no significant age differences in the preferred sources of HIV/AIDS information chosen. Kruskal-Wallis test was used. This is because the data obtained did not meet parametric assumptions and participants ranked their answers. The data was on ordinal scale.

3. There will be no significant sex differences in the preferred sources of HIV/AIDS information chosen. Kruskal-Wallis test was used. This is because the data obtained did not meet parametric assumptions and participants ranked their answers. The data was on ordinal scale.
4. There will be no class/form differences in sources of HIV/AIDS information chosen. Chi-square test was used. This is because the data obtained did not meet parametric assumptions and participants just categorised their answers. The data was on nominal scale.

5. There will be no age differences in sources of HIV/AIDS information chosen. Chi-square test was used. This is because the data obtained did not meet parametric assumptions and participants just categorised their answers. The data was on nominal scale.

6. There will be no sex differences in sources of HIV/AIDS information chosen. Chi-square test was used. This is because the data obtained did not meet parametric assumptions and participants just categorised their answers. The data was on nominal scale.

4.3 RESULTS AND DISCUSSION

In this section, the results of the present study are presented. In discussion, the results of the present study are commented on and explanations of the results given. In explaining the results, the researcher will comment on whether or not the results were expected and present explanations for the results particularly for those that are unexpected or unsatisfactory. Comparison of the results with those reported in literature review will be done.
4.3.1 CLASS/FORM DIFFERENCES IN PREFERRED SOURCES OF HIV/AIDS INFORMATION

Research question one was, are there class/form differences in sources of HIV/AIDS information preference among secondary school students?

Tables 4.1 and 4.2 show the results of this question.

**Table 4.1 Most Preferred People Source of getting HIV/AIDS Information by class**

<table>
<thead>
<tr>
<th>Class/ Source</th>
<th>Health workers</th>
<th>Friends</th>
<th>Parents</th>
<th>Teachers</th>
<th>Relatives</th>
<th>Brothers /sisters</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Within Form II</td>
<td>40.8</td>
<td>6.3</td>
<td>35.2</td>
<td>10.6</td>
<td>2.8</td>
<td>0.7</td>
<td>3.5</td>
<td>100.0</td>
</tr>
<tr>
<td>% of Total</td>
<td>18.5</td>
<td>2.9</td>
<td>15.9</td>
<td>4.8</td>
<td>1.3</td>
<td>0.3</td>
<td>1.6</td>
<td>45.2</td>
</tr>
<tr>
<td>% Within Form IV</td>
<td>59.9</td>
<td>8.7</td>
<td>17.4</td>
<td>10.5</td>
<td>-</td>
<td>0.6</td>
<td>2.9</td>
<td>100.0</td>
</tr>
<tr>
<td>% of Total</td>
<td>32.8</td>
<td>4.8</td>
<td>9.6</td>
<td>5.7</td>
<td>-</td>
<td>0.3</td>
<td>1.6</td>
<td>54.8</td>
</tr>
<tr>
<td>% of all classes</td>
<td>51.3</td>
<td>7.6</td>
<td>25.5</td>
<td>10.5</td>
<td>1.3</td>
<td>0.6</td>
<td>3.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.1 shows that for form four and form two students, the most preferred people to give HIV/AIDS information were found to be health workers. Among form twos, 40.8% chose health workers as compared to 59.9% of form fours. When Kruskal-Wallis test was done, the difference was found to be significant, $\chi^2(1)=38.651, \ p<0.05$. However, the most preferred way to get HIV/AIDS information
was different as most form two students chose school lessons and form fours chose TV. Table 4.2 shows these results.

Table 4.2 Most Preferred way of getting HIV/AIDS Information by class

<table>
<thead>
<tr>
<th>Class/ preferred way</th>
<th>Televisi\n\on</th>
<th>Radio</th>
<th>School lesson s</th>
<th>Films/ video</th>
<th>Books</th>
<th>Drama</th>
<th>Music</th>
<th>Poster s</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Within form II</td>
<td>23.7</td>
<td>1.5</td>
<td>40.7</td>
<td>16.3</td>
<td>4.4</td>
<td>6.7</td>
<td>5.2</td>
<td>1.5</td>
<td>100.0</td>
</tr>
<tr>
<td>% of Total</td>
<td>10.7</td>
<td>0.7</td>
<td>18.4</td>
<td>7.4</td>
<td>2.0</td>
<td>3.0</td>
<td>2.3</td>
<td>0.7</td>
<td>45.2</td>
</tr>
<tr>
<td>% Within form IV</td>
<td>44.5</td>
<td>1.8</td>
<td>27.4</td>
<td>15.9</td>
<td>3.7</td>
<td>3.0</td>
<td>2.4</td>
<td>0.6</td>
<td>100.0</td>
</tr>
<tr>
<td>% of Total</td>
<td>24.4</td>
<td>1.0</td>
<td>15.1</td>
<td>8.7</td>
<td>2.0</td>
<td>2.0</td>
<td>1.3</td>
<td>0.3</td>
<td>54.8</td>
</tr>
<tr>
<td>% of all classes</td>
<td>35.1</td>
<td>1.7</td>
<td>33.4</td>
<td>16.1</td>
<td>4.0</td>
<td>5.0</td>
<td>3.7</td>
<td>1.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.2 shows that among form twos 40.7% preferred school lessons, \( \chi^2 (1) = 3.425, p > 0.05 \) ns. Among form fours, the most preferred way to get HIV/AIDS
information was found to be TV with 44.5% preferring TV, $\chi^2 (1) = 44.985$, $p<0.05$.

The results of this study showed that there were significant class/form differences in the preferred sources of HIV/AIDS information chosen. In form two and form four, the most preferred people to give HIV/AIDS information were health workers. More form four students preferred health workers than form two students did. The preferred way to get HIV/AIDS information was school lessons for form twos and TV for form fours.

The study results relate to earlier studies cited in literature review. Kasule et al. (1997) and Ndlovu and Sihlangu (1992) studies indicated health workers as most preferred sources of HIV/AIDS information among adolescents. In addition, Buseh et al. (2002) study results indicated that the preferred medium for HIV/AIDS information was significantly different by grade/form of study.

Based on social exchange theory, where the adolescents would prefer to get their HIV/AIDS information would be a reflection of the way they see their HIV/AIDS information providers to be important to their lives. This preference is based on how comfortable they are with a source of HIV/AIDS information. Adolescents have reached a stage where they can think abstractly and this means credibility of a
source of information is gauged. Also, healthcare workers and school lessons guarantee anonymity, which most adolescents’ value. Hence those sources are preferred.

Adolescents can sometimes be self-conscious and self-focusing (Berk, 1998). The sources where anonymity is guaranteed will tend to be preferred. This is according to states mentioned in literature review by Berk (1998) about ‘personal fable’ and ‘imaginary audience’. It is also noteworthy that print and broadcast media especially television which are common in urban areas, are mentioned as preferred ways of getting HIV/AIDS information.

The results supported the theory of agenda setting, that print and broadcast media can affect what people think about or how they place importance to various issues. TV would appeal to adolescents in schools because in addition to its anonymity, there are various appealing features like the presence of role models like favourite TV presenters.

**4.3.2 AGE DIFFERENCES IN PREFERRED SOURCES OF HIV/AIDS INFORMATION**

Research question two was, are there age differences in sources of HIV/AIDS information preference among secondary school students? Table 4.3 and 4.4 show the results of this question.
Table 4.3 Most Preferred People Source of getting HIV/AIDS Information by age

<table>
<thead>
<tr>
<th>Age of Student/ Source</th>
<th>Health workers</th>
<th>Friends</th>
<th>Parents</th>
<th>Teachers</th>
<th>Relatives</th>
<th>Brother/sister s</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Within 15 years</td>
<td>31.8</td>
<td>4.5</td>
<td>40.9</td>
<td>18.2</td>
<td>4.5</td>
<td>-</td>
<td>-</td>
<td>100.0</td>
</tr>
<tr>
<td>% of Total</td>
<td>2.2</td>
<td>0.3</td>
<td>2.9</td>
<td>1.3</td>
<td>0.3</td>
<td>-</td>
<td>-</td>
<td>7.0</td>
</tr>
<tr>
<td>% Within 16 years</td>
<td>42.3</td>
<td>5.1</td>
<td>35.9</td>
<td>7.7</td>
<td>3.8</td>
<td>-</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>% of Total</td>
<td>10.5</td>
<td>1.3</td>
<td>8.9</td>
<td>1.9</td>
<td>1.0</td>
<td>-</td>
<td>1.3</td>
<td>24.8</td>
</tr>
<tr>
<td>% Within 17 years</td>
<td>49.3</td>
<td>12.0</td>
<td>22.7</td>
<td>12.0</td>
<td>-</td>
<td>2.7</td>
<td>1.3</td>
<td>100.0</td>
</tr>
<tr>
<td>% of Total</td>
<td>11.8</td>
<td>2.9</td>
<td>5.4</td>
<td>2.9</td>
<td>-</td>
<td>0.6</td>
<td>0.3</td>
<td>23.9</td>
</tr>
<tr>
<td>% Within 18 years</td>
<td>61.6</td>
<td>7.1</td>
<td>19.2</td>
<td>8.1</td>
<td>-</td>
<td>-</td>
<td>4.0</td>
<td>100.0</td>
</tr>
<tr>
<td>% of Total</td>
<td>19.4</td>
<td>2.2</td>
<td>6.1</td>
<td>2.5</td>
<td>-</td>
<td>-</td>
<td>1.3</td>
<td>31.5</td>
</tr>
<tr>
<td>% Within 19-24 years</td>
<td>57.5</td>
<td>7.5</td>
<td>17.5</td>
<td>15.0</td>
<td>-</td>
<td>-</td>
<td>2.5</td>
<td>100.0</td>
</tr>
<tr>
<td>% of all ages</td>
<td>7.3</td>
<td>1.0</td>
<td>2.2</td>
<td>1.9</td>
<td>-</td>
<td>-</td>
<td>0.3</td>
<td>12.7</td>
</tr>
</tbody>
</table>
It was found that there were age related differences in preferred sources of HIV/AIDS information. Among 15 year olds the most preferred people to give HIV/AIDS information was found to be parents with 40.9% (within 15 year olds) choosing parents. When Kruskal-Wallis test was done, the result was, $\chi^2 (4) = 4.444$, $p > 0.05$ ns.

From 16 year olds to 24 year olds, the most preferred people to give HIV/AIDS information were health workers. Among 16 year olds the percentage was (42.3% within 16 year olds), within 17 year olds it was (49.3%), (61.6%) within 18 year olds and 57.5% within 19-24 year olds. Kruskal-Wallis analysis showed that this was a significant result, $\chi^2 (4) = 25.834$, $p<0.05$.

Table 4.4 below shows that the most preferred way of getting HIV/AIDS information among 15-17 year olds was school lessons. This way was chosen 33.3% (within 15 year olds). Among 16 year olds, it was 34.3% and 41.8% within 17 year olds. Among 18 to 24 year olds, the most preferred way was TV with 53.3% within 18 year olds and 37.8% within 19-24 year olds choosing this option as the most preferred way. Kruskal-Wallis test showed a significant result only in the choice of TV, $\chi^2 (4) = 31.671$, $p<0.05$. For school lessons, the result was $\chi^2 (4) = 4.444$, $p > 0.05$ ns.
Table 4.4 Most Preferred Way of getting HIV/AIDS Information by age

<table>
<thead>
<tr>
<th>Age of student/preferred way</th>
<th>Television</th>
<th>Radio</th>
<th>School lessons</th>
<th>Film/Video</th>
<th>Books</th>
<th>Drama</th>
<th>Music</th>
<th>Posters</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Within Age 15</td>
<td>19.0</td>
<td>-</td>
<td>33.3</td>
<td>14.3</td>
<td>14.3</td>
<td>9.5</td>
<td>9.5</td>
<td>-</td>
<td>100.0</td>
</tr>
<tr>
<td>% of Total</td>
<td>1.3</td>
<td>-</td>
<td>2.3</td>
<td>1.0</td>
<td>1.0</td>
<td>0.7</td>
<td>0.7</td>
<td>-</td>
<td>7.0</td>
</tr>
<tr>
<td>% Within Age 16</td>
<td>25.7</td>
<td>2.9</td>
<td>34.3</td>
<td>20.0</td>
<td>2.9</td>
<td>7.1</td>
<td>5.7</td>
<td>1.4</td>
<td>100.0</td>
</tr>
<tr>
<td>% of Total</td>
<td>6.0</td>
<td>0.7</td>
<td>8.0</td>
<td>4.7</td>
<td>0.7</td>
<td>1.7</td>
<td>1.3</td>
<td>0.3</td>
<td>23.4</td>
</tr>
<tr>
<td>% Within Age 17</td>
<td>25.3</td>
<td>1.3</td>
<td>41.8</td>
<td>15.2</td>
<td>5.1</td>
<td>6.3</td>
<td>2.5</td>
<td>2.5</td>
<td>100.0</td>
</tr>
<tr>
<td>% of Total</td>
<td>6.7</td>
<td>0.3</td>
<td>11.0</td>
<td>4.0</td>
<td>1.3</td>
<td>1.7</td>
<td>0.7</td>
<td>0.7</td>
<td>26.4</td>
</tr>
<tr>
<td>% Within Age 18</td>
<td>53.3</td>
<td>2.2</td>
<td>27.2</td>
<td>9.8</td>
<td>3.3</td>
<td>2.2</td>
<td>2.2</td>
<td>-</td>
<td>100.0</td>
</tr>
<tr>
<td>% of Total</td>
<td>16.4</td>
<td>0.7</td>
<td>8.4</td>
<td>3.0</td>
<td>1.0</td>
<td>0.7</td>
<td>0.7</td>
<td>-</td>
<td>30.8</td>
</tr>
<tr>
<td>% Within Age 19-24</td>
<td>37.8</td>
<td>-</td>
<td>29.7</td>
<td>27.0</td>
<td>-</td>
<td>2.7</td>
<td>2.7</td>
<td>-</td>
<td>100.0</td>
</tr>
<tr>
<td>% of all ages</td>
<td>4.7</td>
<td>-</td>
<td>3.7</td>
<td>3.3</td>
<td>-</td>
<td>0.3</td>
<td>0.3</td>
<td>-</td>
<td>12.4</td>
</tr>
</tbody>
</table>

The results showed that there were significant age differences in the preferred people sources of HIV/AIDS information chosen. The most preferred sources according to different ages were as follows: while most 15 year olds preferred parents, 16-24 year olds preferred health workers. The most preferred way of getting HIV/AIDS information was school lessons among 15-17 year olds. However, among 18-24 year olds, the most preferred way was TV.
The results of research question two seem to confirm that at the age when students are at secondary school they have not yet clearly had a definite direction in life. Berk (1998) explaining the four paths of identity would put these students in identity-diffused category. Identity diffused individuals are not committed to values and goals nor are they actively trying to reach them. They would tend to follow what authority figures provide. This is probably why among their preferred sources are parents and health workers.

However, it should be noted that adolescents keep on shifting from one status to another until full identity is achieved (Berk, 1998). As adolescents mature, their preferred sources of information may change. According Heaven (1994), information sources that take advantage of various developmental tasks will tend to be more valued and preferred. In latter adolescence, this study results have shown that they would prefer health workers to any other people sources to give HIV/AIDS information. Most probably the reason being they are seen as anonymous, credible, respectable or more knowledgeable.

In addition, school lessons and TV are preferred ways of getting HIV/AIDS information. In addition to these sources being anonymous, at latter adolescence, peer pressure becomes stronger and TV is perhaps more accessible. On TV, popular youth role models can be seen, for example, musicians like ‘Nameless,’
‘Nonini’, ‘Amani’, ‘Jua kali’. The youth role models are usually used to spread HIV/AIDS awareness through adverts like ‘true love waits’ and ‘a real man/woman waits’ campaigns. This maybe explains why TV is a preferred source of HIV/AIDS information for ages 16-24.

4.3.3 SEX DIFFERENCES IN PREFERRED SOURCES OF HIV/AIDS INFORMATION

Research question three was, are there sex differences in sources of HIV/AIDS information preference among secondary school students? Tables 4.5 and 4.6 show the results of this study.

Table 4.5 Most Preferred People Source of getting HIV/AIDS Information by sex

<table>
<thead>
<tr>
<th>Sex/ Source</th>
<th>Health workers</th>
<th>Friends</th>
<th>Parents</th>
<th>Teachers</th>
<th>Relatives</th>
<th>Brother /sisters</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Within males</td>
<td>44.4</td>
<td>10.6</td>
<td>26.3</td>
<td>11.9</td>
<td>0.6</td>
<td>1.3</td>
<td>5.0</td>
<td>100.0</td>
</tr>
<tr>
<td>% of Total</td>
<td>22.6</td>
<td>5.4</td>
<td>13.4</td>
<td>6.1</td>
<td>0.3</td>
<td>0.6</td>
<td>2.5</td>
<td>51.0</td>
</tr>
<tr>
<td>% Within females</td>
<td>58.4</td>
<td>4.5</td>
<td>24.7</td>
<td>9.1</td>
<td>1.9</td>
<td>-</td>
<td>1.3</td>
<td>100.0</td>
</tr>
<tr>
<td>% of Total</td>
<td>28.7</td>
<td>2.2</td>
<td>12.1</td>
<td>4.5</td>
<td>1.0</td>
<td>-</td>
<td>0.6</td>
<td>49.0</td>
</tr>
<tr>
<td>% of all students</td>
<td>51.3</td>
<td>7.6</td>
<td>25.5</td>
<td>10.5</td>
<td>1.3</td>
<td>0.6</td>
<td>3.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>
It was found that among both male and female students the most preferred people to give HIV/AIDS information were health workers. Within males, the source was 44.4% against 58.4% within females. When Kruskal-Wallis analysis was done, the result was $\chi^2 (1) = 2.571$, $p > 0.05$ ns.

Table 4.6 Most Preferred Way of getting HIV/AIDS Information by Sex

<table>
<thead>
<tr>
<th>Sex/ preferred way</th>
<th>Television</th>
<th>Radio</th>
<th>School lessons</th>
<th>Film/video</th>
<th>Books</th>
<th>Drama</th>
<th>Music</th>
<th>Posters</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Within Males</td>
<td>36.5</td>
<td>2.0</td>
<td>31.1</td>
<td>16.9</td>
<td>2.7</td>
<td>6.1</td>
<td>4.1</td>
<td>0.7</td>
<td>100.0</td>
</tr>
<tr>
<td>% Of Total</td>
<td>18.1</td>
<td>1.0</td>
<td>15.4</td>
<td>8.4</td>
<td>1.3</td>
<td>3.0</td>
<td>2.0</td>
<td>0.3</td>
<td>49.5</td>
</tr>
<tr>
<td>% Within females</td>
<td>33.8</td>
<td>1.3</td>
<td>35.8</td>
<td>15.2</td>
<td>5.3</td>
<td>4.0</td>
<td>3.3</td>
<td>1.3</td>
<td>100.0</td>
</tr>
<tr>
<td>% Of Total</td>
<td>17.1</td>
<td>0.7</td>
<td>18.1</td>
<td>7.7</td>
<td>2.7</td>
<td>2.0</td>
<td>1.7</td>
<td>0.7</td>
<td>50.5</td>
</tr>
<tr>
<td>% Of all students</td>
<td>35.1</td>
<td>1.7</td>
<td>33.4</td>
<td>16.1</td>
<td>4.0</td>
<td>5.0</td>
<td>3.7</td>
<td>1.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.6 shows that TV was the most preferred way of getting HIV/AIDS in both males and female students in Nairobi secondary schools. Males chose this option 36.5% (within males) and 33.8% within females. Kruskal-Wallis test done showed $\chi^2 (1) = 0.866$, $p > 0.05$ ns.

The results of research question three showed that there were no significant sex differences in the preferred sources of HIV/AIDS information chosen. The most
preferred people sources among both males and females were health workers. More females chose this option than males. The most preferred way to get HIV/AIDS information among both males and females was TV. More males chose this option than females.

Buseh et al. (2002) study cited in literature review noted that the preferred sources for HIV/AIDS information differed significantly by gender. The result of this study is different since there were no significant sex differences in the preferred sources of HIV/AIDS information chosen. This result therefore was not expected. However the study results concurred with Buseh et al. (2002) study that more males compared to females would prefer to obtain HIV/AIDS information from print and broadcast media. In addition, more females compared to males would prefer to obtain HIV/AIDS information from health workers.

To put the present study in its context, Buseh et al. (2002) study was done in Zimbabwe, while the present study drew its participants among public secondary schools in Nairobi only. Buseh study had participant variables based on the school location among other variables. Hence, students were sampled from both urban and rural areas. It is noteworthy that the results of Buseh study also showed that preferred sources of HIV/AIDS information were significantly different by school location. The present study did not consider this variable as part of the study.
This might have affected the results, as gender demographics of rural and urban areas may be different especially in sub Saharan Africa where there are more people in rural areas than in urban areas. Another study should perhaps be taken in future that will include the location of the school, either urban or rural, as one of the study variables.

4.3.4 CLASS/FORM DIFFERENCES IN SOURCES OF HIV/AIDS INFORMATION

Research question four was, are there class/form differences in sources of HIV/AIDS information chosen among secondary school students? It was found that there were class/form differences in sources of information chosen. Tables 4.7 and 4.8 show the 5 most common sources of information within form twos and within form fours surveyed.

Table 4.7 Five Most Common sources of HIV/AIDS information among form two’s surveyed

<table>
<thead>
<tr>
<th>Class</th>
<th>Five common sources of HIV/AIDS information</th>
<th>Count</th>
<th>% (Within form twos)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form 2</td>
<td>TV</td>
<td>139</td>
<td>72.8</td>
</tr>
<tr>
<td></td>
<td>Radio</td>
<td>103</td>
<td>53.9</td>
</tr>
<tr>
<td></td>
<td>Film /Videos</td>
<td>100</td>
<td>52.4</td>
</tr>
<tr>
<td></td>
<td>School lessons</td>
<td>99</td>
<td>51.8</td>
</tr>
<tr>
<td></td>
<td>Parents</td>
<td>94</td>
<td>49.2</td>
</tr>
</tbody>
</table>
Table 4.8 Five Most Common sources of HIV/AIDS information among form four’s surveyed

<table>
<thead>
<tr>
<th>Class</th>
<th>Five common sources of HIV/AIDS information</th>
<th>Count</th>
<th>% (Within form fours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form 4</td>
<td>TV</td>
<td>149</td>
<td>82.3</td>
</tr>
<tr>
<td></td>
<td>Radio</td>
<td>109</td>
<td>60.2</td>
</tr>
<tr>
<td></td>
<td>Parents</td>
<td>105</td>
<td>58.0</td>
</tr>
<tr>
<td></td>
<td>Friends</td>
<td>90</td>
<td>49.7</td>
</tr>
<tr>
<td></td>
<td>School lessons</td>
<td>89</td>
<td>49.2</td>
</tr>
</tbody>
</table>

When chi square test was done results showed that the choice of TV and friends had a significant class/form difference. For the TV the result was $\chi^2 (1) = 5.470$, $p<0.05$ while that of friends was $\chi^2 (1) = 4.881$, $p<0.05$. The other sources results were as follows: radio $\chi^2 (1) = 1.764$, $p > 0.05$ ns, film/videos $\chi^2 (1) = 1.865$, $p > 0.05$ ns, School lessons $\chi^2 (1) = 0.170$, $p > 0.05$ ns, and Parents $\chi^2 (1) = 3.217$, $p > 0.05$ ns.

The results of research question four show there was a significant class/form difference in sources of HIV/AIDS information chosen. Among form four students, TV, radio, parents, friends and school lessons were cited in that order as common sources of HIV/AIDS information. Among form two students, TV, radio, film and videos, school lessons and parents were cited in that order as common sources of HIV/AIDS information.
Previous studies done on sources of HIV/AIDS information have shown the importance of print and broadcast media, being one of the major sources of information. For example, studies done in the United States among adolescents (Austin, 1995; Brashers, Haas, & Neidig, 1998; Wallack, 1990) reported that public information campaigns that include the mass media are major sources of information for a variety of health problems including HIV/AIDS. This is the same in Sub-Saharan Africa (Buseh et al., 2002; Kasule et al., 1997; Ndlovu & Sihlangu, 1992).

In the present study, it was noted that friends emerged as an important source in form four. This may be in line with developmental tasks of adolescent’s stage where close ties are developed with peers around ages 17 and 20 (Heaven, 1994).

According to agenda setting theory, media has the ability to transfer the salience of items on their news agendas to the public agenda. Print and broadcast media are emerging as stated, as important sources of HIV/AIDS information to adolescents in Nairobi. Media availability especially in major urban areas like Nairobi maybe is a major contributor to this state of affairs.
4.3.5 AGE DIFFERENCES IN SOURCES OF HIV/AIDS INFORMATION

Research question five was, are there age differences in sources of HIV/AIDS information chosen among secondary school students? It was found that there were age differences in sources of HIV/AIDS chosen. This is as shown in table’s 4.9, 4.10, 4.11, 4.12 and 4.13.

Table 4.9 Five most common sources of HIV/AIDS information among 15 year olds

<table>
<thead>
<tr>
<th>Age</th>
<th>Five common sources of HIV/AIDS information</th>
<th>Count</th>
<th>% (Within 15 year olds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 years</td>
<td>TV</td>
<td>21</td>
<td>80.8</td>
</tr>
<tr>
<td></td>
<td>Friends</td>
<td>14</td>
<td>53.8</td>
</tr>
<tr>
<td></td>
<td>Parents</td>
<td>14</td>
<td>53.8</td>
</tr>
<tr>
<td></td>
<td>Radio</td>
<td>12</td>
<td>46.2</td>
</tr>
<tr>
<td></td>
<td>Film and Videos</td>
<td>12</td>
<td>46.2</td>
</tr>
</tbody>
</table>

Table 4.10 Five most common sources of HIV/AIDS information among 16 year olds

<table>
<thead>
<tr>
<th>Age</th>
<th>Five common sources of HIV/AIDS information</th>
<th>Count</th>
<th>% (Within 16 year olds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 years</td>
<td>TV</td>
<td>71</td>
<td>71.7</td>
</tr>
<tr>
<td></td>
<td>Radio</td>
<td>57</td>
<td>57.6</td>
</tr>
<tr>
<td></td>
<td>Parents</td>
<td>54</td>
<td>54.5</td>
</tr>
<tr>
<td></td>
<td>School lessons</td>
<td>53</td>
<td>53.5</td>
</tr>
<tr>
<td></td>
<td>Film and Videos</td>
<td>46</td>
<td>46.5</td>
</tr>
</tbody>
</table>
Table 4.11 Five most common sources of HIV/AIDS information among 17 year olds

<table>
<thead>
<tr>
<th>Age</th>
<th>Five common sources of HIV/AIDS information</th>
<th>Count</th>
<th>% (Within 17 year olds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 years</td>
<td>TV</td>
<td>72</td>
<td>73.5</td>
</tr>
<tr>
<td></td>
<td>Film and Videos</td>
<td>52</td>
<td>53.1</td>
</tr>
<tr>
<td></td>
<td>School lessons</td>
<td>46</td>
<td>46.9</td>
</tr>
<tr>
<td></td>
<td>Parents</td>
<td>46</td>
<td>46.9</td>
</tr>
<tr>
<td></td>
<td>Radio</td>
<td>46</td>
<td>46.9</td>
</tr>
</tbody>
</table>

Table 4.12 Five most common sources of HIV/AIDS information among 18 year olds

<table>
<thead>
<tr>
<th>Age</th>
<th>Five common sources of HIV/AIDS information</th>
<th>Count</th>
<th>% (Within 18 year olds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 years</td>
<td>TV</td>
<td>88</td>
<td>85.4</td>
</tr>
<tr>
<td></td>
<td>Radio</td>
<td>68</td>
<td>66.0</td>
</tr>
<tr>
<td></td>
<td>Parents</td>
<td>59</td>
<td>57.3</td>
</tr>
<tr>
<td></td>
<td>School lessons</td>
<td>56</td>
<td>54.4</td>
</tr>
<tr>
<td></td>
<td>Friends</td>
<td>53</td>
<td>51.5</td>
</tr>
</tbody>
</table>

Table 4.13 Five most common sources of HIV/AIDS information among students aged 19-24 year olds

<table>
<thead>
<tr>
<th>Age</th>
<th>Five common sources of HIV/AIDS information</th>
<th>Count</th>
<th>% (Within students above 18 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 19-24 years</td>
<td>TV</td>
<td>36</td>
<td>78.3</td>
</tr>
<tr>
<td></td>
<td>Radio</td>
<td>29</td>
<td>63.3</td>
</tr>
<tr>
<td></td>
<td>Parents</td>
<td>26</td>
<td>56.5</td>
</tr>
<tr>
<td></td>
<td>School lessons</td>
<td>24</td>
<td>52.2</td>
</tr>
<tr>
<td></td>
<td>Film and Videos (Daily Newspapers also had the same count and %)</td>
<td>23</td>
<td>50</td>
</tr>
</tbody>
</table>
When a chi square test was done results showed that none of the sources had had a significant difference based on the age of the student. TV results was $\chi^2 (4) = 7.117, p > 0.05$ ns. The other sources results were as follows: radio $\chi^2 (4) = 9.323, p > 0.05$ ns and film/videos $\chi^2 (4) = 1.304, p > 0.05$ ns. For School lessons the result was $\chi^2 (4) = 3.906, p > 0.05$ ns, while that of parents was $\chi^2 (4) = 2.523, p > 0.05$ ns. For Daily newspapers the result was $\chi^2 (4) = 3.329, p > 0.05$ ns while the results of friends was $\chi^2 (4) = 6.062, p > 0.05$ ns.

The result of research question five showed no significant age differences in the sources of HIV/AIDS information chosen. Among 15 year olds TV, friends, parents, radio, and film and videos were cited in that order as five most common sources of HIV/AIDS information. 16 year olds cited TV, radio, parent, school lessons and film and videos. Among 17 year olds TV, film and videos, school lessons, parents, and radio were cited in that order as five most common sources of HIV/AIDS information. 18 year olds cited TV, radio, parent, school lessons and friends. 19-24 year olds cited TV, radio, parent, school lessons and film and videos (Daily newspapers).

Print and broadcast media, as results of the present study show, are important sources of HIV/AIDS information among all age groups. Hence, this source should be used regardless of the age of the adolescent. As stated in the literature
review, a source like this needs to be supported to ensure completeness and accuracy of information given to adolescents.

4.3.6 SEX DIFFERENCES IN SOURCES OF HIV/AIDS INFORMATION

Research question six was, are there sex differences in sources of HIV/AIDS information chosen among secondary school students? It was found that there were sex differences in sources of HIV/AIDS information chosen. This is shown in tables 4.14 and 4.15.

Table 4.14 Five Most common sources of HIV/AIDS information among Male students

<table>
<thead>
<tr>
<th>Sex</th>
<th>Five common sources of HIV/AIDS information</th>
<th>Count</th>
<th>% (Within males)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>TV</td>
<td>146</td>
<td>78.1</td>
</tr>
<tr>
<td></td>
<td>Radio</td>
<td>114</td>
<td>61.0</td>
</tr>
<tr>
<td></td>
<td>Film and Videos</td>
<td>95</td>
<td>50.8</td>
</tr>
<tr>
<td></td>
<td>School lessons</td>
<td>92</td>
<td>49.2</td>
</tr>
<tr>
<td></td>
<td>Parents</td>
<td>89</td>
<td>47.6</td>
</tr>
</tbody>
</table>
Table 4.15 Five most common sources of HIV/AIDS information among female students

<table>
<thead>
<tr>
<th>Sex</th>
<th>Five common sources of HIV/AIDS information</th>
<th>Count</th>
<th>% (Within females)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>TV</td>
<td>142</td>
<td>76.8</td>
</tr>
<tr>
<td></td>
<td>Parents</td>
<td>110</td>
<td>59.5</td>
</tr>
<tr>
<td></td>
<td>Radio</td>
<td>98</td>
<td>53.0</td>
</tr>
<tr>
<td></td>
<td>School lessons</td>
<td>96</td>
<td>51.9</td>
</tr>
<tr>
<td></td>
<td>Film and Videos</td>
<td>86</td>
<td>46.5</td>
</tr>
</tbody>
</table>

When chi square test was done results showed a significant sex difference on the choice of parents as a source of HIV/AIDS information among adolescents in Nairobi secondary schools ($\chi^2 (1) = 5.705, p<0.05$). The other sources results were as follows: radio $\chi^2 (1) =2.043, p > 0.05 \text{ ns}$, film/videos $\chi^2 (1) =0.533, p > 0.05 \text{ ns}$, School lessons $\chi^2 (1) =0.383, p > 0.05 \text{ ns}$, and TV $\chi^2 (1) =0.013, p > 0.05 \text{ ns}$.

As the results of research question six show, there was a significant sex difference in sources of HIV/AIDS information chosen. Among males, TV, radio, film and videos, school lessons and parents were cited in that order as five most common sources of HIV/AIDS information. Females cited TV, parent, radio, school lessons and film and videos in that order. Females were found to be more close to their parents when it comes to sources of HIV/AIDS information. This means that parents can be more useful in the education of girls on HIV/AIDS.
This is probably because of family setup where girls are probably more at home hence interactions with parents are higher. However this issue would need to be researched further to identify the real cause. The results of the present study correspond with earlier studies (KDHS, 1998; Lema & Mulandi, 1992; Ndlovu & Sihlangu, 1992; Wanga, 2000) that noted a gender difference in sources of HIV/AIDS information.

4.4 RESULTS OF NULL HYPOTHESES

Based on the above results, the null hypotheses can be summarised as follows.

1. There were significant class/form differences in the preferred sources of HIV/AIDS information chosen.

2. There were significant age differences in the preferred sources of HIV/AIDS information chosen.

3. There were no significant sex differences in the preferred sources of HIV/AIDS information chosen.

4. There were significant class/form differences in sources of HIV/AIDS information chosen.

5. There were no significant age differences in sources of HIV/AIDS information chosen.

6. There were significant sex differences in sources of HIV/AIDS information chosen.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.0 INTRODUCTION

This chapter is divided into three sub sections. The first section is a summary of the contributions the study has made then the implications of this study. Finally, there are recommendations for future studies.

5.1 SUMMARY

The role of healthcare workers as the most preferred source of HIV/AIDS information to adolescents has been shown in the previous chapter. School lessons are also preferred ways of getting HIV/AIDS information. Hence this probably means that anonymity to adolescents is valued.

The sources of HIV/AIDS information to adolescents in Nairobi public secondary schools are varied, with TV and radio emerging as the most common sources of HIV/AIDS information. However, lack of health workers as one of the common sources of HIV/AIDS information to adolescents is noteworthy. In general, apart from TV, the usage of preferred sources of information to inform adolescents about HIV/AIDS in Nairobi public secondary schools is lacking. More emphasis should therefore be placed on the use of preferred sources of HIV/AIDS information to educate the adolescents. This is a more effective way to reach adolescents.
5.2 IMPLICATION OF FINDINGS

The results of the present study have several implications for HIV/AIDS information sources for students in public secondary schools especially in Nairobi.

The most common sources of HIV/AIDS information are TV and Radio. Also parents and friends feature among the common sources of information. The only source that is preferred here is the TV. This means there is need to beef up the other common sources which are available to increase their credibility among adolescents.

The role of peers (friends) in HIV/AIDS awareness promotion needs to be recognised. Deliberate efforts need to be made in order to equip this group with necessary skills to educate their peers on HIV/AIDS. Parents are also very important in the education of students on HIV/AIDS. In the African setup parents provide a wide range of information to adolescents. There has to be very visible efforts to encourage and equip parents with the skills required. There is a need to encourage them to take more initiative to know more about the disease since they spent considerable time with adolescents at home.

The preferred sources of HIV/AIDS information among adolescents are health workers, school lessons and TV. This has implication for future since deliberate efforts should be made to increase the use of above sources. Also, content of media
should be evaluated to make sure the information targets the adolescents as required. There should be cooperation between the Ministries concerned in Kenya that is the Ministries of Health and Ministry of Education. The doctors and other health personnel need to be sensitised of the unique role they play in the prevention of HIV/AIDS among adolescents. There is therefore a need to incorporate in their curriculum the adolescent psychology and other aspects of HIV/AIDS information.

The Ministry of Education is vital in HIV/AIDS information to adolescents. They are in charge of secondary schools in Kenya. Also Kenya Institute of Education (KIE) falls under the Ministry as well as the employer of teachers in Kenya, Teachers Service Commission. School lessons have been identified as preferred sources of HIV/AIDS information among adolescents. KIE has therefore several roles. First, they have radio broadcasts to schools under educational media service. Radios are preferred source among adolescents; hence the service can be used among adolescents. KIE is also in charge of curriculum development in secondary schools. HIV/AIDS instructional materials should have appropriate content suited for this group.

5.3 CONCLUSION

The purpose of the study was to survey the sources of HIV/AIDS information among adolescent students in Nairobi public secondary schools. In addition, it was to find if there were sex, age and form/class differences among the students
surveyed on sources of HIV/AIDS information and their HIV/AIDS information preferences. In summary this study resolved the issue that rose in chapter one on where adolescents in Nairobi public secondary schools get their HIV/AIDS information.

The results of the study indicated that there were significant differences in preferred sources of HIV/AIDS information based on class/form of study and age of the student. However there were no significant differences in preferred sources of HIV/AIDS information based on sex of the student. In addition, the results of the study also indicated that there was a significant class/form and sex difference in the sources of HIV/AIDS information chosen among adolescents in Nairobi public secondary schools. However, there was no significant age difference in the sources of HIV/AIDS information chosen.

The most preferred sources were noted to be the ones where anonymity of the adolescent is guaranteed for example health workers, school lessons and TV. In conclusion the use of preferred sources identified in this study to educate adolescents on HIV/AIDS will help to maximise the use of available resources.

5.4 RECOMMENDATIONS

A successful HIV/AIDS prevention program is a complex process. Assessing the current efforts to reach adolescents in secondary schools is also complex. This study
has shown that there is currently under-utilization of the preferred sources of HIV/AIDS information to educate adolescents in Nairobi secondary schools. For example, despite of being the most preferred people source, health workers are not cited among the five most common sources of HIV/AIDS information to adolescents.

Therefore, there is a need for concerted efforts to encourage Health workers in Kenya to take active roles in prevention of HIV/AIDS among adolescents in Nairobi. Towards this end, the government should also address the perennial shortage of health care workers if headway is to be made in reduction of HIV/AIDS among adolescents especially in Nairobi.

In summary, the use of education television is important.

The current efforts by the government of Kenya to encourage people to visit voluntary counselling and testing centres through the use of TV/Radio adverts is a good idea that should be marketed vigorously among adolescents. The present study showed that TV is a preferred medium to get HIV/AIDS information among adolescents in Nairobi public schools.

This study is important in furthering the development of Kenya education sector policy on HIV/AIDS developed in 2004. School lessons have been identified as preferred sources of HIV/AIDS information. This means a well thought out
HIV/AIDS curriculum to be used in Nairobi public secondary schools will be a very effective means to fight against HIV/AIDS infections in schools.

Media campaigns are likely to be successful in combating HIV/AIDS especially the use of TV, a preferred source by adolescents. There is an added advantage that Nairobi has availability of print and broadcast media. However there should be well thought out HIV/AIDS awareness policies developed by media houses owners to encourage prioritisation of HIV/AIDS issues. The Agenda setting theory proposes that if HIV/AIDS is given due priority, HIV/AIDS prevention efforts will be greatly improved.

In summary, the use of identified preferred sources of HIV/AIDS information will have the effect of saving resources by only utilising maximally the sources that are necessary to target adolescents. Therefore, findings of this study have enlightened the policy makers, educators, social workers and counsellors on the best ways to communicate HIV/AIDS information in Nairobi public secondary schools. Of special importance is how peer groups, identified as one of the common sources of HIV/AIDS information by form fours, can be strengthened to be a self-sufficient source of HIV/AIDS information. This is especially through empowerment of peer/youth counsellors and other peer cubs/groups.
Parents and other authority figures like religious leaders and teachers need to be encouraged to take an active role in education of adolescents in Nairobi public schools about HIV/AIDS than is currently the case. Perhaps there should be a deliberate policy to educate these people in order for them to gain credibility among adolescents especially as sources of HIV/AIDS information.

5.5 FURTHER RESEARCH

a) A similar study needs to be done in rural schools in Kenya especially because some rural areas have limited access to print and broadcast media especially TV which was found to be most preferred.

b) This study can be replicated in private schools in Nairobi as coming from relatively well to do families can affect some variables like the accessibility of print and broadcast media and access to emerging sources of information like internet, CD ROMs and others.

c) This study can be replicated with a larger sample taking care of the various adolescent age groups. This will take care of students in upper primary schools and some students in other higher institutions in Kenya.
REFERENCES


Kawewa, J. (2004). *Situational Analysis on HIV/AIDS in Kenya (Department of...*


sub_African_2006_Epiupdate_eng.pdf.


APPENDIX A: BACKGROUND INFORMATION AND HIV/AIDS

PREFERRED SOURCES OF INFORMATION.

Instructions: This is a confidential questionnaire. Do not indicate your name anywhere on this paper. Answer the following questions as honestly as possible in the spaces provided. Note: The information provided will be kept confidential and will not be made available to anybody.

How old are you? .................................................. years

What is your gender, Male or Female? ..................................

In which class are you? Form ........................................

What is the name of your school? .................................. 

Q 1. Have you ever heard of HIV/AIDS (tick √ where appropriate) Yes ○ No ○

Q 2. If your answer is YES, from whom or where did you get HIV/AIDS information? (Tick ONLY FIVE MOST Common sources you might have heard HIV/AIDS information from. NB: First check options a-p on page 84 &85).

(a) Healthcare workers (doctors, nurses etc) ○

(b) TV programs ○

(c) Radio Programs ○

(d) Daily Newspapers ○

(e) School lessons ○

(f) Friends/peer group discussions/classmates ○

(g) Parents ○

(h) Films/videos ○
(i) Teachers
(j) Books/magazines
(k) Relatives (uncles, aunts, cousins etc)
(l) Drama/skits
(m) Music
(n) Brothers/Sisters
(o) Posters/cartoons/pamphlets/brochures
(p) Others (not mentioned above)

(IF you answered yes to the option P above the state where else you got this information) ---------------------------------------------------------------------------------------------------------------------------------------------------

Q 3. Have you ever seen or heard any of HIV/AIDS messages?
Yes ○ No ○ Not sure ○

Q 4. Have you ever tried to get information about HIV/AIDS on your own?
Yes ○ No ○ Not sure ○

Q 5. In case you wanted information about HIV/AIDS, who would you prefer to inform you on HIV/AIDS? (Choose up to 5 and rank them 1 being the most preferred and 5 the least preferred. NB: First check options a-g on page 85&86)
(a) Healthcare workers (nurses, doctors etc)
(b) Parents
(c) Friends/peers/classmates
(d) Teachers
(e) Relatives (aunts, cousins, uncles)
(f) Brothers/sisters

(g) Others (not mentioned above)

(Who are the others if you answered yes to option (g) -------------------------------

Q6 Would you like to know more about HIV/AIDS?

   (a) Yes  ○   (b) No  ○   (c) Not Sure  ○

Q7. If you would like to know more about HIV/AIDS through which way would you like to be educated about HIV/AIDS? (Choose up to 5 and rank them 1 being the most preferred and 5 the least preferred)

   (a) TV programs

   (b) School lessons

   (c) News papers

   (d) Radio programs

   (e) Films/videos

   (f) Books/magazines

   (g) Drama/skits

   (h) Music

   (i) Posters/pamphlets/brochures/cartoons

Q8. Who of the following have been most helpful in talking to you about issues related to HIV/AIDS? (Choose up to 5 and rank them 1 being the most useful and 5 the least useful)

   (a) Friends/peers /classmates
(b) Teachers  
(c) Relatives  
(d) Parents  
(e) Healthcare workers  
(f) Brothers/sisters  
(g) Other (not mentioned above)

(Explain {g}).

Q9. Have you heard of a place you could go to get HIV/AIDS test?
(a) Yes  
(b) No  
(c) Not sure

Q10. If your answer is yes to question 15, from who or where did you get this information from? (Tick ALL options that apply).
(a) Daily newspapers  
(b) Healthcare workers  
(c) School lessons  
(d) Friends/peer group discussions/classmates  
(e) TV programs  
(f) Teachers  
(g) Radio Programs  
(h) Relatives (uncles, aunts, cousins, etc)  
(i) Films/videos  
(j) Drama/skits
(k) Posters/cartoons/pamphlets/brochures
(l) Music
(m) Brothers/sisters
(n) Parents
(o) Books/magazines
(p) Others

(Explain option P, (others))

THANK YOU FOR YOUR CO-OPERATION
### APPENDIX B: LIST OF NAIROBI PUBLIC SECONDARY SCHOOLS

<table>
<thead>
<tr>
<th>BOYS ONLY</th>
<th>GIRLS ONLY</th>
<th>MIXED SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquinas High School</td>
<td>Buruburu Girls</td>
<td>Kamukunji Secondary</td>
</tr>
<tr>
<td>Dagoretti High School</td>
<td>Kenya High</td>
<td>Kangemi High Sc</td>
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<tr>
<td>Eastleigh High School</td>
<td>Moi Girls</td>
<td>Kayole Secondary</td>
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<tr>
<td>Lenana School</td>
<td>Muslim Girls</td>
<td>Langata High School</td>
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<td>Moi Forces Academy</td>
<td>Nembu Secondary</td>
<td>Maina Wanjigi</td>
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<td>Muhuri Muchiri</td>
<td>Embakasi Girls</td>
<td>Hospital Hill</td>
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<td>Mutuini Secondary</td>
<td>Huruma Girls</td>
<td>Kamiti Secondary</td>
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<tr>
<td>Nairobi Milimani</td>
<td>Ngara Girls</td>
<td>Our Lady of Fatima</td>
</tr>
<tr>
<td>Nairobi School</td>
<td>Nile Road Sec</td>
<td>Ruthimitu mixed</td>
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<tr>
<td>Highway Secondary</td>
<td>Pangani Girls</td>
<td>Ruaraka high school</td>
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<tr>
<td>Jamhuri High School</td>
<td>Parkland Arya Girls</td>
<td>Kahawa Garrison Sec</td>
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<td>Ofafa Jericho School</td>
<td>Precious Blood</td>
<td>Dandora Secondary</td>
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<td>Parklands High School</td>
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<td>St. George’s Girls.</td>
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<td>St. Theresa’s Girls</td>
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<td>State House Girls</td>
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<tr>
<td>Starehe Boys</td>
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<td>Our Lady of Mercy</td>
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<td>Sunshine Secondary</td>
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<td>Kabete Approved</td>
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