

**FACTORS AFFECTING UTILIZATION OF YOUTH FRIENDLY
VOLUNTARY COUNSELING AND TESTING SERVICES AMONG
YOUTH ATTENDING DAY PUBLIC SECONDARY SCHOOLS IN
NAIROBI, KENYA**

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Declaration

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

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Dedication

This thesis is dedicated to my husband John Ndiira, my daughters; Ivy Kaninkio, Jenny Kathuni, Carol Mutabi and my mother, Jennifer Kathuni.

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Abbreviations and Acronyms

AIDS- Acquired immune deficiency syndrome

ACRC- Adolescence Counseling and Recreational Centre

ARHD- Adolescence Reproductive Health and Development

CEO- Chief Executive Officer

DSW- German Foundation for World Population

IEC- Information Education Communication

HIV- Human immuno-deficiency virus

JAPR- Joint HIV and AIDS Programme Review

KAIS- Kenya Aids Indicator Survey

KAPC- Kenya Association of Professional Counselors

KDHS - Kenya Demographic and Health Survey

KNASP- Kenya National HIV and AIDS Strategic Plan

LVCT- Liverpool Voluntary Counseling and Testing

MTCT- Mother to Child Transmission

NGOs- Non Governmental Organizations

NASCOP- National HIV/STD Control Programme

NCPD- National Council for Population Development

PLWHA- People Living with HIV and AIDS

SPSS- Statistical Package for Social Sciences

STIs- Sexually Transmitted Infections

UNAIDS- The Joint United Nations Programme on HIV/AIDS

UNGASS- United Nations General Assembly Special Session

UNICEF- United Nations Children's Fund

VCT- Voluntary Counseling and Testing

WHO- World Health Organisation

YFVCT- Youth Friendly Voluntary Counseling and Testing

YFHS- Youth Friendly Health Services

Operationalisation of Terms

Youth: According to Kenya National Youth Policy (2007), a youth is defined as somebody between ages 15-30 years. Popular use of the word youth refers to a person who is neither an adult nor a child, but somewhere in between, scientifically referred to as an adolescent and, in most English speaking countries, commonly referred to as a teen or teenager.

The age in which a person is considered a "Youth," and thus eligible for special treatment under the law and throughout society varies around the world. For the purpose of this study, a more narrow definition whereby Youth are between ages 14 and 24 years has been used. This is because of varying ages in our secondary schools where some students join form one at 14 years and others as late as 20 years.

VCT: Voluntary Counseling and Testing (VCT) refers to the process of giving professional counseling before and after HIV test. The process helps people prepare for and understand their test results. Those who test negative can learn ways to avoid getting infected, and those who are positive can learn how to live healthier lives, live longer, prevent transmission to others and avoid re-infection. In this way, VCT offers an important entry point to early prevention, care, and support.

HIV: It stands for the Human Immunodeficiency Virus and is a 'Retrovirus'. Retroviruses consist of Ribonucleic Acid (RNA) and were discovered by Robert Gallo in 1978. They contain a special viral enzyme called Reverse Transcriptase, which allows the virus to convert its RNA to DNA and then integrates, and takes over a cell's own genetic material.

Once taken over, the new cell, now HIV infected begins to produce new HIV retroviruses. HIV replicates in and kills the helper T cells, which acts as the main defense against illnesses in the body.

AIDS: Stands for acquired immune deficiency syndrome. When HIV infection becomes advanced it often is referred to as AIDS. At this stage infections take advantage of a weakened immune system for instant Pneumocystis carinii pneumonia; Toxoplasmosis; Tuberculosis; Extreme weight loss and wasting; exacerbated by diarrhea which can be experienced in up to 90% of HIV patients worldwide; Meningitis and other brain infections; Fungal infections; Syphilis; Malignancies such as lymphoma, cervical cancer, and Kaposi's Sarcoma.

Youth friendly services: Broad based health and related services provided to young people to meet their individual health needs in a manner and environment to attract interest and sustain their motivation to utilize such services. The World Health Organization (WHO) describes Youth Friendly Service (YFS) as: services that are accessible, acceptable and appropriate for adolescents.

Abstract

Young people aged between 15-24 years account for more than 50 percent of all HIV infections worldwide. More than 6,800 young people are newly infected with HIV and 5700 die each day throughout the world. Young people are particularly vulnerable to HIV because of social, cultural, biological, and economic reasons therefore VCT offers an important entry point to early prevention, care, and support of these youth. Research conducted in Kenya by the German Foundation for World Population estimates that one VCT prevents 1,104 infections. The main objective of the current study was to find out factors affecting utilization of YFVCT services among youth in day secondary schools in Nairobi. To achieve the objectives, the study adopted a cross-sectional survey on 400 students drawn from 10 day secondary schools. A ready-made sampling frame of all registered day secondary schools in Nairobi was carried out to come up with the study subjects. This study employed self-administered questionnaires. Descriptive statistical analysis was used for the analysis of the data by applying Statistical Package for Social Sciences (SPSS). In addition, cross tabulation was used to ease the discussion of relationship between different variables and qualitative analysis was applied to supplement the discussion of data presented. Age and religion of the respondents, education, occupation of mothers and type of school had a significant relationship with the utilisation of youth friendly voluntary counseling and testing services with a P value of less than 0.05. Utilization of youth friendly VCT services by the youth was low (30%). Out of all those who visited a VCT, half did not test. Accessibility to VCT services is determined by components like access to information and how this information is passed to them. Teachers were the most preferred in passing information on YFVCT at 40.2%. Most of the VCTs visited by the youth were not youth friendly VCTs. To improve on the knowledge and utilisation of students on Youth friendly voluntary counseling and testing services and for future programming the umbrella body coordinating HIV and AIDS issues; NACC and other stakeholders should step up campaigns on the importance of testing and inform the youth on where to find youth friendly VCTs. Many youths are willing to seek VCT services in future and would prefer these facilities situated in the health facilities as long as these facilities are non-discriminative, physically accessible, affordable and informative. Therefore more health facilities should have Youth Friendly VCT services integrated into them to attract more youth. Health service providers should be trained in handling of youth so that the youth can access friendly, welcoming, caring, informative, non-judgmental and trustworthy staff. Ministry of education together with NACC should capacity build the teachers on HIV and AIDS so as to empower them in handling HIV and AIDS programmes in schools. The results of this study are intended to inform programming of HIV activities in schools.

CHAPTER ONE: INTRODUCTION

1.1 Background information

UNAIDS HIV/AIDS updates indicate that 14000 people are getting infected everyday globally (UNAIDS, 2009). The number of people living with HIV has continued to decline with 33.3 million people living with HIV in 2009 down from 33.4 million in 2008 (UNAIDS, 2010). With over 1 billion youth (ages 15-24) worldwide, 10 million are living with HIV. Young people aged 15-24 account for more than 50 percent of all new HIV infections worldwide (UNAIDS, 2008). UNAIDS, (2008) estimates that, young women between ages 15 to 24 accounts for 2.2% HIV incidence in the world. In the United States, AIDS is the leading cause of death in African-American young people aged 15-24 years (UNAIDS, 2010).

Sub-Saharan Africa remains the region most heavily affected by HIV. The region accounts for 67% of HIV infections worldwide. Although there has been an 18% decline in annual HIV-related mortality in the region since 2004, the region accounted for 72% world's AIDS-related deaths in 2008. It has 10 million men and women who are living with HIV and AIDS (UNAIDS 2009).

Kenya has a prevalence rate of 6.3% with more than 1.4 million people living with HIV and AIDS (KDHS, 2008/09). Youth aged between the ages 15 to 24 account for 50% all new infection in the country (MOH, 2005). Even with the above indications, many youth are still ignorant about HIV and many myths and misconceptions prevail among them

(MOH, 2005). Just like many other countries, Kenya has taken steps to increase utilisation of HIV testing services as a way of reducing infection. HIV testing doubled between 2003 and 2007 although an estimated 83% of Kenyans living with HIV remain undiagnosed (KDHS, 2008/2009). Kenyans has been celebrating the decline of prevalence rate of 5.1% in recent years but the latest report shows that the prevalence has just stabilized. Current levels remain high with strikingly regional variations with some regions having prevalence rate of over 40 percent (KAIS, 2007).

Voluntary counseling and testing for HIV programs has become a major component of the expanded responses to the HIV/AIDS pandemic. VCTs were designed when treatment for AIDS was not available in most of the world. They focused on prevention of new infection through behaviour change (Ann, 2004). High-quality VCT enables and encourages people with HIV to access appropriate care and is an effective HIV-prevention strategy. VCT offers a holistic approach that can address HIV in a broader context. This includes poverty and its relationship to risky sexual behaviour. VCT has been recognized as major preventive measure especially for the youth in countries like Nigerian (Boswell and Baggaley, 2002). Comprehensive and youth friendly services will attract more youth to seek VCT services though its evident that they seek these services even where VCT are not designed for them (WHO/UNAIDS, 2001). Since 2000 there has been a rapid up scale of Voluntary Counseling and Testing (VCT) services, both in terms of sites and uptake in Kenya. The number of sites has increased from a mere 3 in 2000 to almost 700 by end of 2005 (UNAIDS, 2007).

Similarly the number of Youth who had used VCT services increased from 1,000 to 380,000, mainly as a result of client-initiated VCT which has been the dominant model of HIV testing in Kenya (NACC, 2005). Despite massive national campaigns, there remains a large unmet need for HIV testing and counseling. For those individuals, who do not seek routine or curative health services, voluntary counseling and testing (VCT) remains an essential mechanism to learn their HIV status and reduce HIV transmission. Research conducted in Kenya by the Johns Hopkins University, School of Hygiene and Public Health estimates that one VCT prevents 1,104 infections (DSW, 2008). The cost and distance involved in accessing a VCT also pose an obstacle, contributing little to bringing down prevalence rates among young people, especially the most vulnerable and least accessible (NACC, 2005). Many VCT sites have been established but few are Youth friendly. This is evident in Nairobi where there 120 VCT sites and out of these 9 are youth friendly (NASCOP, 2007). However, the vast majority living with HIV still do not know their status (KAIS, 2007) meaning that a big number of our populations have not gone for testing. It is important to carry out this study so as to find out factors affecting the utilisation of YF-VCT services among students in day secondary schools in Nairobi.

1.2 Problem Statement

HIV/AIDS pandemic is one of the greatest health challenges of the 21st century. Numerous research and experiments have been conducted to find a cure of HIV since it was discovered, but with little success. Today majority of young people in high-prevalence countries still do not have accurate and comprehensive knowledge of HIV (UNICEF/WHO/UNAIDS, 2007) and (WDR, 2008). In addition, sexually active youth in

Kenya and all round the world are at high-risk related to HIV infection. Kamau (2006) postulates that too often youth are encouraged to be tested only to be inhibited by VCT youth unfriendly services. Generally few youths are utilising youth friendly voluntary counseling and testing services. With this in mind, this study sought to determine factors affecting utilization of youth friendly voluntary counseling and testing services among youth in day secondary schools in Nairobi.

1.3 Justification

Policy makers and non-governmental organizations are spending a lot of time, money and energy establishing more VCT centers that are assumed to be serving the youth. They have gone further to establish youth friendly VCT centers but are these VCT centers sufficient and effective enough to ensure that youths utilize them? Little is known, however, about the use of VCT by youth, a group that comprises more than half of those newly infected with HIV. From the above discussion it is worth noting that VCT plays a vital role in the prevention of new infections especially through behaviour change. This study plays a pivotal role in increasing the provision of HIV testing through a wider range of effective and safe options among the youths. The current study brings more insight in HIV testing as a critical entry point to life-sustaining healthcare services for young people. The study presents a clear analysis of the findings and draw recommendations that can improve or strengthen the youth friendly voluntary counseling and testing services hence increasing utilisation.

1.4 Research questions

The study sought to answer the following research questions:

- i) What is the effect of demographic factors in the utilization of YFVCT services?
- ii) What is the effect of knowledge of youth on YFVCT services offered in Nairobi?
- iii) What is the effect of accessibility on utilisation of YFVCT services?
- iv) What is the effect of quality of service on utilisation of YFVCT services?

1.5 Hypotheses of the study

- i) Demographic variables, do not affect utilization of YFVCT services by youth in Nairobi secondary schools.
- ii) The level of knowledge of the youth on YFVCT and quality of service does not affect utilisation of YFVCT services.

1.6 Main objective

To determine factors affecting utilization of youth friendly voluntary counseling and testing services among youth in day secondary schools in Nairobi, Kenya

1.7 Specific objectives

- i) To determine the influence of demographic factors in the utilisation of YFVCT services.
- ii) To determine the levels of knowledge on YFVCT services among the youth in Nairobi.
- iii) To determine the level of influence that accessibility has on utilisation of YFVCT services.
- iv) To determine the association between quality of service factors and utilisation of youth friendly voluntary counseling and testing services.

1.8 Significance and expected output of the study

The findings of the proposed study could have both theoretical and practical implications for the future of youth friendly voluntary counseling and testing services in Nairobi and the whole country. The study is expected to contribute to the advancement of knowledge on factors affecting utilization of youth friendly voluntary counseling and testing services among youth in secondary schools both in Nairobi and other parts of the country. The study also has practical significance in that it can assist in mitigating the spread of HIV/AIDS among the youths. Its recommendations can be used by service providers to improve youth friendly voluntary counseling and testing services. The findings of this study can form a base on which others scholars can develop their studies.

1.9 Limitation of the Study

The study was conducted in day secondary schools within Nairobi whereby students aged between 14 to 24 years were the target population. These schools were selected from a list of day secondary schools in Nairobi Province. It is assumed that the findings from this study can be generalized to the entire country, but this may not be entirely acceptable considering that the study population is drawn from an exclusive urban area that could have different influencing factors from those of rural areas. However the results can be indicative of the situation in urban areas.

1.10 Delimitation of the Study

A sample size of 400 students was identified from 10 day secondary schools in references to students in all day secondary schools in Nairobi.

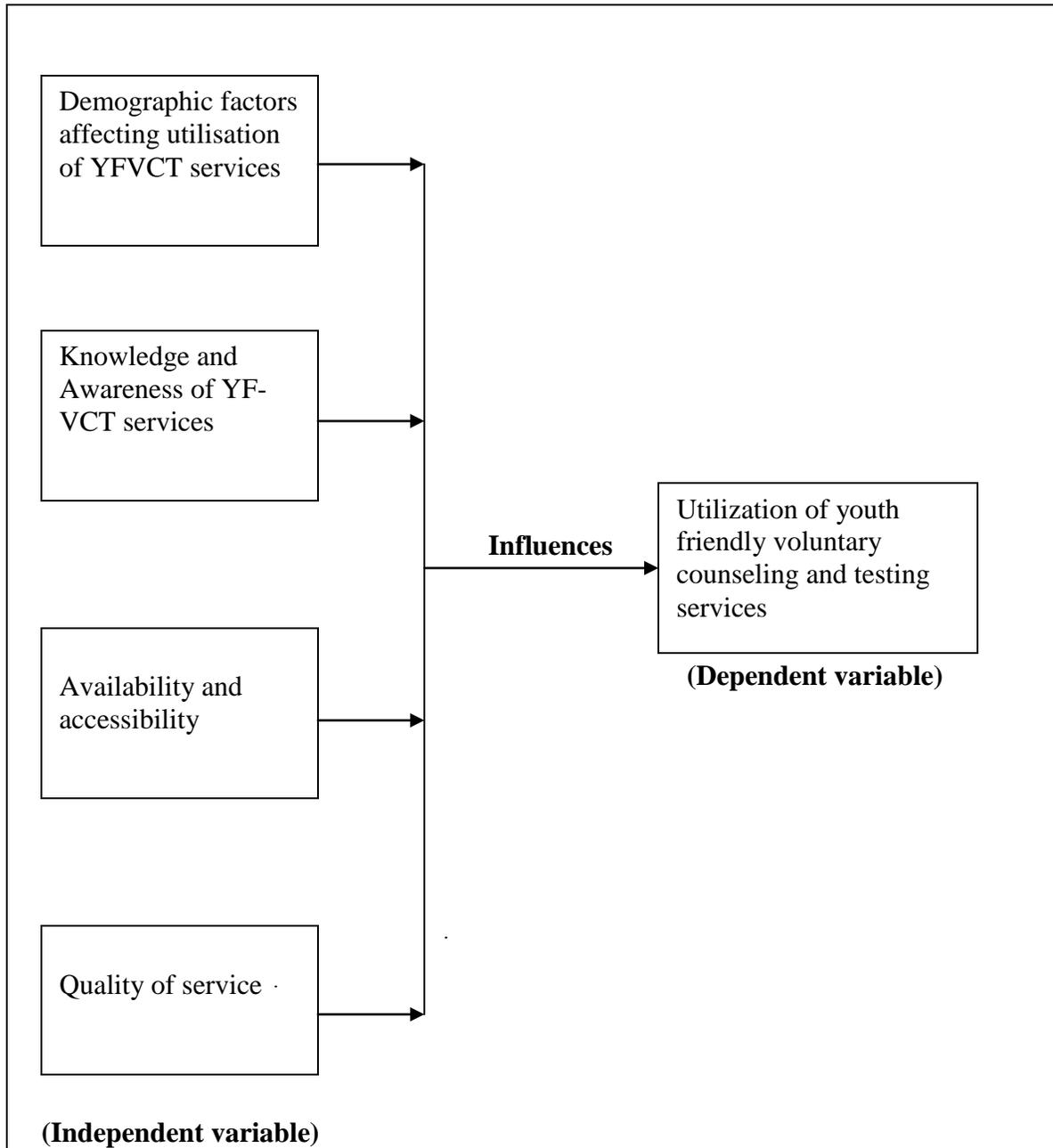
1.11 Assumptions

The study had the following assumptions:

All youths in day secondary schools in Nairobi would co-operative and provide reliable responses. This assumption was correct as all those that were approached responded.

Another assumption was that the findings of this study would be a representative of all the youth in the country which may not necessarily be true as the youth in rural and those in urban areas are brought up in different environments that influence their behavior differently.

1.12 Conceptual framework



Source: Author (2012)

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter identifies the general areas of concern related to availability and factors affecting utilisation of youth friendly voluntary counseling and testing services by the youth. It compares prior research studies with the current concerns and summarises individual studies and articles related to the topic in question hence bring out an academic lacuna that is being addressed.

2.2 HIV & AIDS risk factors among the youth

Behavioral, physiological and sociological factors make young people more vulnerable to HIV infection than adults. This is a time when young people explore and take risks in many aspects of their lives including sexual relationships. They may have several sexual partners whom they tend to trust hence end up having unprotected sex (Guttmacher, 2011). Early age at sexual initiation survey carried out in USA shown that 47% of high school students have had sexual intercourse while 7.4% of them reported first intercourse before the age of 13 years (Casey E. *et al.*, 2012). AIDS today is widely seen as a social crisis as well as a problem of individual behavior. The majority of young people who may be at risk of HIV infection are those who engage in unsafe sex, but young people often start sexual activities before this age, which will be discussed in relation to the legal and ethical dilemmas associated with VCT for this group. Young people may also be at risk for HIV infection from unsafe injection drug use (IDU), exposure to contaminated

blood and blood products or un-sterilized skin-piercing procedures e.g., tattooing or traditional medical practices such as scarification (Boswell and Baggaley, 2002).

2.3 Demographic factors

2.3.1 Socio and economic factors

Literature reviewed on demographic characteristics and utilization of YF-VCT has put emphasis on gender and age difference but leaving out other socioeconomic characteristics that are also deemed to be important such as parents' occupation, education level, and residential area among others. Past studies on youth's awareness and knowledge about YF-VCT is extensively lacking. This is an indication that not much has been done on awareness programmes for example, VCT services that take into consideration different sexual orientation among the youths. On the other hand, literature on factors attracting youths to VCT services is extensive, a lot of researchers have concentrated on this area. A research done in Uganda and Kenya by horizons program revealed several factors that prevented the youth from getting tested. These were cost, stigma, lack of youth friendly services, fear of people finding out that they want to test, fear of positive results, inconvenient hour of service, distances, peer influence, providers attitude, they do not feel at risk, they think testing is only for the ill, waiting period for test results among others (Horizons, 2001).

Young people often do not attend formal health services for their preventive health needs. Instead, they may seek sexual and reproductive health (SRH) services in a variety of settings, such as government health facilities, private clinics, chemists and friends. In

Zambia, traditional healers' services are sort more than other services (UNAIDS/WHO, 2001). From the above one can see how beliefs can play a big role in influencing health service seeking behaviour of the youth.

Age difference between the grownups providing health services in VCT sites and the youths have posed a big challenge in the provision of services in the VCTs. From Kamau (2006) the study, it is evident that there is a widening communication gap between service providers and the youth seeking reproductive services. Health workers have a perceived notion that young people are arrogant, uncompromising, secretive and opposed to guidance from adults. However young people have demonstrated the willingness to seek these services although they feel that the service providers are uncaring, judgmental, suspicious and untrustworthy. They expressed their desire to be served by friendly, welcoming, caring, informative, non-judgmental and trustworthy staff (UNAIDS/WHO, 2001). Differences in language plus cultures between service providers and the clients have played a role in influencing the youth against seeking VCT services. In sub-Saharan Africa, as in other regions of the world, a culture of silence surrounds most reproductive health issues (KAWI, 2006). Many adults are uncomfortable talking about sexuality with their children. Others lack accurate sexual health knowledge. Ignorance and traditional beliefs and values have hindered some parents from certain ethnicity to teach their children about the facts of HIV/AIDS and sexuality (Rosen *et al.*, 2004)

2.4 Youth's awareness and knowledge about VCT services

Today a majority of young people in high prevalence countries still do not have accurate and comprehensive knowledge of HIV (UNICEF/WHO/UNAIDS, 2007). Outdoor media, posters and other information education communication (IEC) materials such as brochures and marketing cards have been used to promote VCT sites as welcoming, confidential and high quality that can provide clients with non-judgemental and reliable results. Awareness creation has made the youth know what goes on in the VCT centres thus taking away their fears. An example is Uganda where youth were scared of going for testing for fear of being stigmatised and not knowing what they would do in case they turned positive. But this was demystified in the youth corners where they would get information about testing and what goes on during testing (Horizons, 2001).

In Kenya, a strategy of four mass campaigns was used to promote VCT services. The first VCT campaign in Kenya was done from May to September 2002. The second campaign “*Chanuka*” (August 2002 to January 2003) targeted the Youth between 15 to 24 years. The third campaign “*Chanuka Pamoja*” (July to December 2003) was meant for 18-28 year olds. Fourth campaign “*My Family Knows I'm HIV Positive and They are Grateful I Found Out*” (January to April, 2005; March to September 2006) targeted the low income urban and rural male family decision-makers and established couples aged 18-35 years, (PSI, 2008). The above campaigns have seen the number of people going for testing grow from 1000 in the year 2000 to more than 2 million in 2007, (UNGASS, 2008). The establishment of youth friendly services has also increased awareness of the youth on the benefits of VCT services. VCT communication messages that have been directly related

to the theme of hope and incorporates notions of the future, healthy attitudes (positive thinking/living) and safety are generally well received (Boswell and Baggaley, 2002). In Kenya today there are several programmes that are running and are aimed at informing the youth on the importance of knowing their status through VCT services. Programmes like the famous G-pange programme and Wayner video games referred to as Pamoja Mtaani for the youth that started in the year 2008 in Nairobi.

2.5 Service Availability and Accessibility

2.5.1 Availability

VCT being a health service, accessibility to these services is determined by components such as non-discrimination, physical accessibility, affordability and access to information (Horizons, 2001). If the youth lack the above then it becomes very hard for them to test. When VCT is linked with medical care, and effort is made to improve medical services for people with HIV, this will help to reduce this barrier to testing. Offering interventions to prevent MTCT can also be recognized as a major benefit of VCT (Klein *et al.*, 2012).

There is no “magic bullet” to get unmarried adolescents to increase use of clinic-based services. It has to take some innovative strategies for them to be attracted to these services and that is by making them youth friendly. VCT and counseling services can be integrated into YFHS easily and relatively inexpensively if VCT is already available in primary health care settings (Boswell and Baggaley, 2002).

Introduction of youth friendly health services has seen VCT services up take go up globally. Adolescent VCT services enables and encourages adolescents with HIV to

access appropriate care and is an effective HIV prevention strategy. In Zambia research done in 2000 showed that there was increase in number of youth seeking VCT services especially in the context of premarital testing (Misiri, H., A.S Muula, 2004). This is also evident in Uganda, Brazil and US where the percentages of youth seeking the services went up after introduction of youth friendly services (Boswell and Baggaley 2002; Villarosa 2001; UNAIDS, 2000).

Youth-friendly services can be provided in a variety of settings, ranging from a clinic reserved exclusively for young people, to adding ‘adolescents-only’ hours at existing facilities, providing emergency hotlines, or offering services in places where young people congregate, such as schools, youth centers, sporting events or work sites. When sexual and reproductive health services are provided within a larger healthcare facility, young people should be able to reach them without drawing attention, for example through a separate and discreet entrance/exit from the main clinic entrance (Elina and Juntunen, 2004). HIV Counselling services have been developed, though often in a piecemeal fashion or associated with research projects. However, VCT services are now being expanded with a few countries having VCT services specifically developed or adapted for young people.

In Kenya the Ministry of Health came up with national guide lines for the implementation of a health policy on Adolescent reproductive Health and Development (ARH&D) whose aim is to improve the well being and quality of life of Kenyan young people (MOH, 2005). In response to HIV, the Government of Kenya, NGOs, and donors

in the region have invested significantly in the establishment of VCT centres. Kenya gives VCT services through three models namely integrated, stand-alone and mobile VCT services. Youth friendly VCT fits better in the last two models. The number of VCTs established in the country has continued to increase significantly since the year 2000 when there were only 3 VCT sites in the country. The number increased to 585 in 2005 and by the year 2007 they had shot up to 900 VCT sites of which 36 offered Youth friendly services (NAS COP, 2007). These youth friendly sites were started by the government and other development partners like the adolescent Counseling and Recreation Centre (ACRC) established by the Kenya Association of Professional Counselors (KAPC) in February 2001, in response to youth VCT needs. KAPC felt youth needed a non-medical, youth-friendly, affordable, accessible and confidential center supported by trained counselors who are sensitive and non-judgmental toward youth issues. The centers offer: “Same-hour” HIV testing using simple/rapid tests, ongoing preventive and supportive counseling, awareness-raising and mobilization for VCT, recreational activities to facilitate interaction and relaxation among others (DSW, 2008).

2.5.2 Accessibility

Sexual and reproductive health services for young people should be easy to reach, closely situated to where they congregate, or easily accessible by public transport. It should be made clear both in promotional and informational materials and in health centre itself where to go and who to see. Services should be available at times when young people can attend (before and after school or work), and there should also be drop-in times when young clients can receive services without an appointment. In clinics that cannot offer

special hours for adolescents only, then a ‘fast-track’ system can be used so that young people do not have to wait (Harper *et al.*, 2005). There is no hard evidence to suggest that YFHS are effective or that YFHS successfully increase young people’s use of health services. School or college health services can integrate VCT within their health facilities. A study from the United States proposed that school-based clinics provide easier and more acceptable access to VCT services than other formal health settings. No VCT models within schools were identified that could be replicated or adapted, although a mobile service in Uganda run by the Kitovu Mission Hospital has successfully provided mobile VCT in school setting (Henry-Reid *et al.*, 1998). Many facilities are too close to youth's homes or too far away. Surveys reveal that young people do not want to run into family members and neighbors when entering, utilizing, or leaving sexual health facilities (Barnett and Katz, 2000)

2.6 Quality of service

2.6.1 Quality

Unless services are truly “youth-friendly” it is unlikely that they become key models. There are some successful examples in industrialized countries, for example, the Archway Center in North London, which attracts large numbers of young people due to its set up which is conducive environment for the youth. Uptake in many sites is low, as many young people do not favor services within hospitals/clinics due to service provider attitudes, access issues such as parental consent for services and judgmental approaches), (Cohen *et al.*, 1999). Other facilities-related barriers include: a lack of privacy; no area set aside where young people can wait to be attended; and décor that is overly clinical,

too adult like, and/or welcoming only to women and not also to men (Barnett and Katz, 2000).

Utilisation of health services has a lot to do with quality and procedure of health care services. Factors that affect use of sexual reproductive health services include the following; high cost of care and services, inconvenient hours of operation, travel time and opportunity cost linked to it, perceived quality of care and provider behaviour (Kamau, 2006). Rate of return is correlated with capacity to provide same-day services as is evidence in the United States, where same-day services are not available, only 63 percent of people who undergo HIV testing at publicly funded HIV testing centers returned for post-test counseling (Stephens *et al.*, 1998). Some VCT sites, usually those where quality counseling services and simple/rapid same-day services are offered, now have 100 percent return rates for test results (UNAIDS, 2000). People who attend freestanding VCT sites are more likely to return for post-test counseling than those who undergo VCT at STI or family planning clinics. Poor relationship between health care professionals and their clients, long waits, administrative red tape, lack of emotional support and privacy, and finally rude medical staff has been given as reasons for under utilisation of youth friendly services. Interpersonal process is the vehicle by which health care is implemented and on which its success depends. The relationship between the client and the service provider should be characterized by privacy, confidentiality, informed choice, concern, empathy honesty and sensitivity (Kamau, 2006)

2.6.2 Inequalities in service care

Most of the preventive programmes and approaches do not consider, particularly the vulnerability of adolescents and are not tailored to meet the special needs of the youth. Instead they focus on meeting the needs of adults and children (UNAIDS/WHO, 2000).

Kamau (2006) says “assuming that the disadvantaged groups present more health needs than general population, it is important to know more details not only about their health service utilisation but also their satisfaction with the services”.

2.7 Impact of voluntary counseling and testing on youth

To date there are no studies that have followed youth in the developing world to determine whether they reduce their HIV risk behaviors as a result of undergoing voluntary HIV testing and counseling. There are, however, such impact studies among adults in developing countries and among youth in industrialized countries (UNAIDS, 2001). Taken together, information from these sources suggests that VCT may be an appropriate and effective strategy for young people. Studies of VCT impact among youth in the United States do provide evidence that some youth adopt safe behaviors after testing (Boswell and Baggaley, 2002).

The combined evidence suggests that VCT may help youth in developing countries adopt safe behaviors (Horizons, 2001). A Voluntary HIV Counseling and Testing Efficacy Group of 2000, who had done a multi-center VCT efficacy trial found a number of changes due to VCT. The high proportion of young people in many of the programs that

have been successful in reducing risk behavior suggests that the youth in the VCT efficacy trial may be among those who changed behavior.

CHAPTER THREE: METHODOLOGY

3.1 Research design

The research design was a cross-sectional descriptive design which was aimed at generating quantitative and qualitative information on the factors affecting utilization among youth in secondary schools in Nairobi. Two approaches were applied to interview the students. The first one is where self administered questionnaires were given to students and the second is where focus group discussions were held. The focus group discussion was composed of all class prefects in the schools targeted. The criterion of inclusion was that the respondent had to be between ages 14 to 24 years.

3.2 Variables

The dependent variable of this study is utilisation of Youth friendly voluntary counseling and testing services since YFVCTs are expected to be utilised or under utilised by the youths in secondary schools. The independent variables of this study are the factors affecting utilization of youth friendly voluntary counseling. These include: socio/economic demographic variables like age, sex, class, occupation and employment of parents etc, knowledge and awareness of YF-VCT services, availability and accessibility, and quality of service factors.

3.3 Study area

The study was conducted in 10 day secondary schools in Nairobi Province (appendix 7), Kenya. Nairobi is located in the central part of Kenya. The city of Nairobi extends between 36 °4' and 37° 10' east and between 1° 17' and 1° 28' south. It covers an area of

696.1 Km². It shares common borders with Kiambu County to the west and north, Machakos County to the east and Kajiando County to the south. Nairobi is divided into eight Districts namely Kasarani, Embakasi, Makadara, Kamukunji, Starehe, Westlands, Dagoretti and Lang'ata.

Nairobi is one of the provinces worst hit by HIV infection with a prevalence rate of 8.8% with 183,000 cases of HIV infected adults aged between 15-64 years (KAIS, 2007). The youth residing in this town have a higher risk of HIV infection compared to other urban areas.

3.4 Target population

The current study targeted all the youths who were currently attending day secondary schools in Nairobi. As a representation of the schools in Nairobi the study subjects were drawn from 10 selected secondary schools. The sampling frame was a list of 57 day public secondary where a sample was drawn from.

3.5 Study population

The study population consisted of students in 10 selected day secondary schools in Nairobi that participated in the study and were aged between 14-24 years.

3.6 Inclusion criteria

The study included students who were registered and aged between 14 to 24 years. It also included only those who gave consent to be interviewed.

3.7 Exclusion criteria

The study excluded all the students who were under or over age and those who did not consent.

3.8 Sampling techniques

Selection of Nairobi as the province of choice was non-probability sampling where deliberate sampling was done for convenience. To come up with the schools, the researcher used probability sampling. Simple random was used to select one school from each district and Kasarani and Starehe districts were given two schools each since they had more day secondary schools than the other districts. The 10 schools represented the school population in Nairobi province. Stratified sampling was used to divide the school into levels, form 1 to form 4. In each form systematic sampling was applied to select 10 students per class so as to have a total of 40 students per school. Proportional numbers for girls and boy were selected from the mixed schools as depicted on table 3.1. The focus group discussions were composed of all class prefects in the targeted schools. The prefects were a representative of their class.

Table 3.1: Category, number of schools and sample size

Districts	Boys/Girls/Mixed	No. Schools	Sample size
Starehe	Mixed	1	40
	Girls	1	40
Kasarani	Mixed	1	40
	Mixed	1	40
Kamukunji	Boys	1	40
Lang'ata	Mixed	1	40
Dagoretti	Mixed	1	40
Embakasi	Mixed	1	40
Westlands	Boys	1	40
Makadara	Girls	1	40

3.9 Sample size

A sample size was obtained using the formula as used by Mugenda and Mugenda (2003).

$$n = \frac{z^2 pq}{d^2}$$

n = Desired sample size (population > 10,000).

z = Standard normal deviation at the required confidence level (set at 1.96).

p = The proportion in the target population (ages 15-24) estimated to have utilised VCT in the country was 49.6% (DHS 2008/2009)

$$q = 1 - p = 0.504,$$

d = level of statistical significance (usually 0.05)

$$n = \frac{1.96^2 \times 0.504 \times 0.496}{0.05^2} =$$

$$n = \frac{3.8416 \times 0.504 \times 0.496}{0.0025}$$

$$n = \frac{0.9603}{0.0025}$$

n= 384.135 minimum of 384 respondents.

To take care of attrition the sample size was increased to 400.

3.10 Research instruments

Questionnaires were used to collect primary data from respondents in selected day secondary schools and guiding questions for the focus group discussion. The questionnaires had two forms of questions that were asked: closed questions and open questions. However, the closed questions were utilised more and open questions were used to get recommendations and way forward on further studies.

3.11 Pre-test

The questionnaire was pre-tested at Our Lady of Fatima Secondary School in Nairobi. A sample size of 10 participants who were not part of the sample size was picked to fill the questionnaires. The questions that posed a problem to the participants were noted. Respondents made comments and drew recommendations which were noted. The necessary amendments were done on the questionnaire before administering it to the respondents.

3.12 Validity

The validity of the study instrument was established through the training of the research assistants. The research instrument information was cross checked and scrutinized for accuracy. The pre-testing was done at our lady of Fatima secondary in one class which was not involved in the main study. The necessary adjustments were done after analyzing the preliminary data.

3.13 Reliability

Administering of study instrument to a different population from the main study population increased reliability of the study. The questionnaires were administered within a sitting in every school to avoid collusion in answering the questions. The pre-test improved reliability of the study tool before it was given to the respondents.

3.14 Data collection techniques

The self-administered questionnaires were given to consenting respondents to complete. Guiding questions were also used for focus group discussions with class prefects in every targeted school. The exercise was supervised by two trained interviewers who had copies of identification letters from the Ministry of Education Science and Technology, Provincial Director of Education office and authority letter from Kenyatta University. The questionnaire and a letter with a brief introduction stating who the researcher was, the organization she represented and the purpose of the current study. Confidentiality and anonymity were stressed and guaranteed.

3.15 Methods of data analysis and Presentation

Descriptive statistical analysis was used to analyze the data. This was reinforced by the use of statistical package for social sciences (SPSS) version 16.0. Coding of responses was done according to appropriate scales; responses were keyed against the scale that generated statistical values. Chi-square was used to test the relationship between independent variables and dependent variable. Frequencies were generated for all variables from which percentages were computed. Pictorial presentations (graphs and tables) were used to ease the discussion of various findings.

3.16 Ethical considerations

In accordance with the principles governing research involving human participants, this study ensured that the following documents were available to uphold respondents' ethical rights. Approval letters from Kenyatta University, Nairobi Province Education office, and a research permit from the Ministry of Education Science and Technology. All participants were required to give informed consent prior to participating in the study. All reasonable efforts to ensure that confidentiality was not breached were exercised.

CHAPTER FOUR: DATA ANALYSIS AND RESULTS

4.1 Socio and economic demographic characteristics of the study population and their relationship with utilisation of YFVCTs

4.1.1 Age, Sex and Religion of the respondents

This study analysed ages of the respondents to establish whether utilization of YFVCT services is affected by age. A majority (66.5%) of respondents were aged between 14 to 17 years. This is by virtue of majority of high school student being in this age group. The study also analysed the sex of the respondents and how this affected utilization of VCT services. It targeted an equal number of respondents in terms of sex. Religious affiliation influenced utilization of VCT services by the youth (table, 4.4). The study results indicated that 53% were Protestants, 27.8% Catholics, 12.2% Muslims and the rest were Hindus or Sikhs as shown in the table 4.1.

Table 4.1 Age, Sex and Religion of the respondents (n=400)

Variable	Status	Frequency	Percent
Age	14-17	266	66.5
	18-21	130	32.5
	22-24	4	1
Sex	Male	200	50
	Female	200	50
Religion	Catholic	111	27.75
	Protestant	213	53.25
	Muslim	49	12.25
	Hindu	25	6.25
	Sikh	2	0.5

4.1.2 Level of education and occupation of the parents/guardians

Table 4.2 shows that 89% of the respondents reported that their parents/guardians had attained either college or university education, while 11.3% had no formal education. It was evident that, majority (74%) of the respondents' parents/guardians were on paid jobs while 22% were unemployed.

Table 4.2: Education level and occupation of parents/guardians

Status	Frequency and percentages	
	Mother No. (%)	Father No. (%)
University/ College	180 (45%)	176 (44%)
Secondary	123 (30.75%)	67 (16.75%)
Primary	69 (17.25%)	19 (4.75%)
Non formal	28 (7%)	17 (4.25%)
Not applicable	0 (0%)	121 (30.25%)
Occupation	No. (%)	No. (%)
Self employed	172 (43%)	106 (26.5%)
Paid employment	144 (36%)	152 (38%)
Unemployed	72 (18%)	16 (4%)
Casual	12 (3%)	5 (1.25%)
Not applicable	0 (0%)	121 (30.25%)

4.1.3 Marital status of the parents/guardian

Table 4.3 shows that about 70% of the respondent's parents or guardians were married, 15.75% were not married. It is clear from the table that quite a number of the respondents came from single mother parent homes at 30.25%.

Table 4.3 Marital status of guardians/ parents (n=400)

Marital Status	Frequency	Percent
Married	279	69.75%
Separated/Divorced	24	6%
Widowed	34	8.5%
Single	63	15.75%

4.1.4 Relationship between Socio demographic variables and utilization of YFVCTs

Age, religion and type of school of the respondents had a significant association with the utilization of youth friendly voluntary counseling and testing services as the p value was less than 0.05. This was at 0.004, 0.049 and 0.004 respectively. Ages 22 to 24 favoured utilisation of YFVCTs at 50% while Catholic among other religions had more respondents utilising YFVCT service at 36%. The type of school had a significant relationship with utilization of YFVCT services with a P value of 0.004. Mixed schools had more influence on the utilisation of YFVCT services with 38.71% utilizing YFVCT services. Table 4.4 shows that marital status of parents and guardians had no significant relationship with utilization of YFVCT services as the P value (0.57) is greater than 0.05. Those with married parents had utilized the YFVCT services more than those with separated, widowed or single parents at 1.25%, 3.25% and 6.25% respectively.

Table 4.4: Relationship between Socio demographic variables and utilization of YFVCTs

Socio demographic variables		Utilized	Not Utilized	Total	χ^2 statistical test
		N (%)	N (%)		
Age	14-17	60 (22.56%)	206 (77.44%)	266	$\chi^2 = 11.250$ df = 2 p = 0.004
	18-21	57 (43.85%)	73 (56.15%)	130	
	22-24	2 (50%)	2 (50%)	4	
Sex	Male	146 (73%)	54 (27%)	200	$\chi^2 = 0.293$ df = 1 p = 0.589
	Female	134 (67%)	66 (33%)	200	
Religion	Catholic	40 (36%)	71 (64%)	111	$\chi^2 = 9.477$ df = 4 p = 0.049
	Protestants	63 (29.58%)	150 (70.42%)	213	
	Muslim	12 (24.49%)	37 (75.51%)	49	
	Hindu	5 (20%)	20 (80%)	25	
	Sikh	0 (0%)	2 (100%)	2	
Type of school	Boys	33 (25.98%)	94 (74.02%)	127	$\chi^2 = 11.201$ df = 2 p = 0.004
	Girls	27 (22.88%)	91 (77.12%)	118	
	Mixed	60 (38.71%)	95 (61.29%)	155	
Marital status of parents	Married	77 (27.6%)	202 (72.4%)	279	$\chi^2 = 2.079$ df = 3 p = 0.57
	Separated	5 (20.83%)	19 (79.17%)	24	
	Widow	13 (38.24%)	21 (61.76%)	34	
	Single	25 (39.7%)	38 (60.3%)	63	

4.1.5 Relationship between socio economic variables and utilisation of YFVCT

Education and occupation of the mothers played a role in the utilization of YFVCT services as this had a significance level of $P=0.04$ and $P= 0.049$ respectively. Table 4.5 shows that those respondents who had parents with university education utilised YVCT more than those with parents with lower levels of education and also those with parents in paid employment utilized the YFVCT services more.

Table 4.5: Relationship between socio economic variables and utilisation of YFVCTs

Socio Economic variables		Utilised	Not utilised	Total	χ^2 statistic test
1. Level of Education		N (%)	N (%)		$\chi^2 = 5.142$ df = 2 p = 0.04
Mother	University	59 (32.78%)	121(67.22%)	180	
	Secondary	31 (25.20%)	92 (74.80%)	123	
	Primary	22 (31.88%)	47 (68.12%)	69	
	Non formal	8 (28.57%)	20 (71.43%)	28	
Father					$\chi^2 = 1.173$ df = 3 p = 0.742
	University	66 (38.15%)	107 (61.65%)	173	
	Secondary	7 (10.45%)	60 (89.55%)	67	
	Primary	1 (5.27%)	18 (94.73%)	19	
	Non formal	9 (45%)	11(55%)	20	
2. Occupation					
Mother	Self employed	56 (32.56%)	116 (67.44%)	172	$\chi^2 = 2.324$ df = 3 p = 0.049
	Paid employment	49 (34.03%)	95 (65.97%)	144	
	Unemployed	14 (19.44%)	58 (80.56%)	72	
	Casual	1 (8.33%)	11 (91.67%)	12	
Father	Self employed	19 (18.10%)	86 (81.90%)	105	$\chi^2 = 2.27$ df = 3 p = 0.51
	Paid employment	45 (33.09%)	91 (66.91%)	136	
	Unemployed	14 (48.27%)	15 (51.73%)	29	
	Casual	5 (55.5%)	4 (44.5%)	9	

4.1.6 School Type and category

This study was done in three types of schools namely girls, boys and mixed schools under two categories of schools. There were two girls, two mixed and one boys' school under the category of private schools. Under the category of public schools, there were two boys, one girl's and two mixed schools. Equal percentage (30%) of respondents came from boys and girls Schools and 40% came from the mixed ones (appendix 8).

4.1.7 Services offered by schools in relation to VCT

Figure 4.1 reveals that 70% of the students said that their schools offered counseling, 60% sex education and 60% HIV awareness and prevention campaigns.

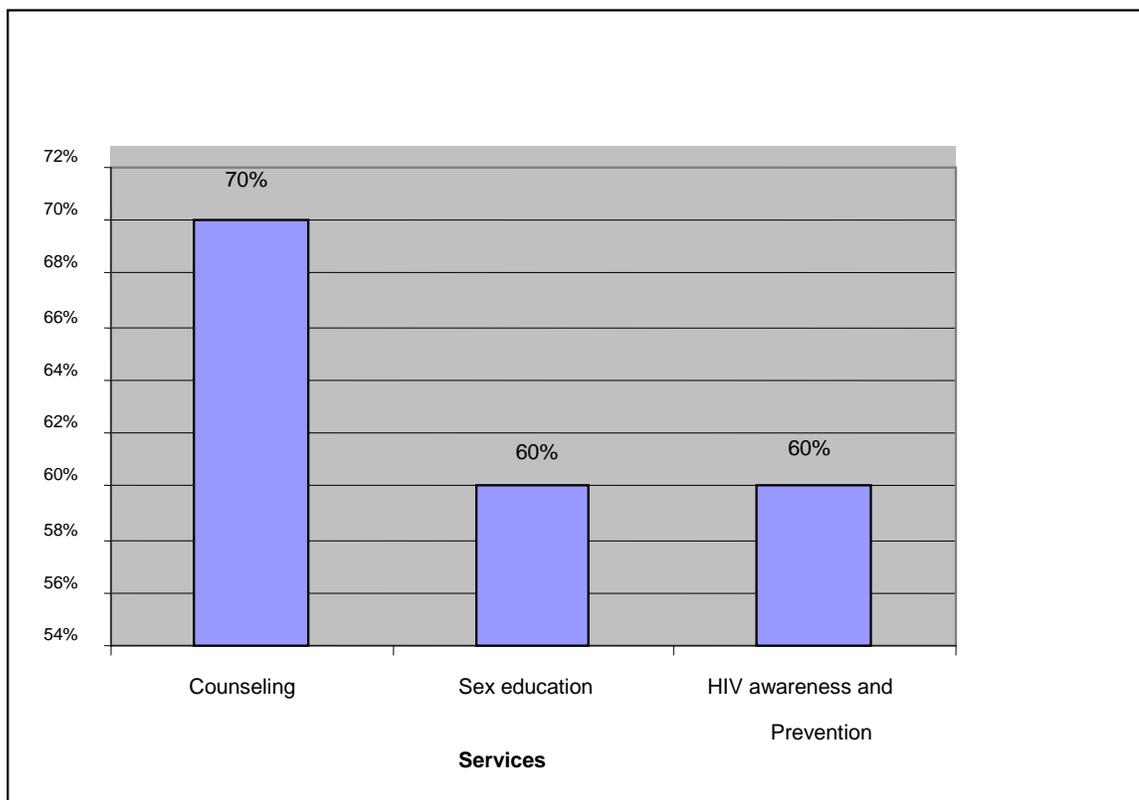


Figure 4.1: Services offered by schools in relation to VCT (n=400)

4.2 Knowledge levels of the Youth on YFVCTs

4.2.1 Sharing of information on YFVCT services

Asked whether anyone had shared with them information on YFVCT, results in figure 4.2 shows that majority (78%) the respondents had been talked to about YFVCT while 22% had not. The study reveals that 313 out of 400 respondents were knowledgeable about Youth friendly voluntary counseling and testing services.

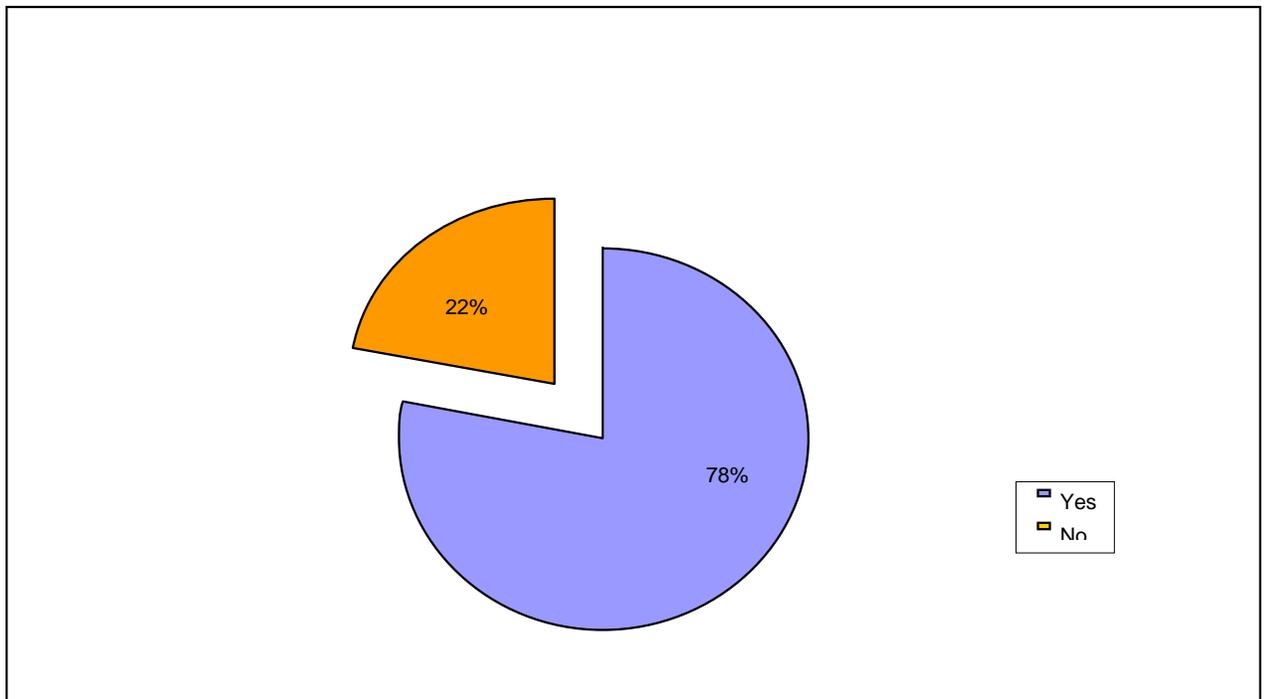


Figure 4.2 Information on YFVCT services (n=400)

4.2.2 Source of YFVCT information

Results in figure 4.3 shows that media played a big role in passing information on VCTs while teachers who are always with the students did not play a significant role in passing YFVCT information. The study found out that 70% got information from media, 60.7%

from peer/friends, 28.6% from teachers, 19.8% got the information from health workers, 8.3% from parent/guardians while the rest got it from religious and politicians. From the focus group discussion, it was clear that they do not get adequate information because teachers who are expected to discuss with them a lot of HIV issues try to avoid the topic. They were for the opinion that more should come from teachers as they can be able to ask questions and hold discussions in class, unlike the media where information given is one way.

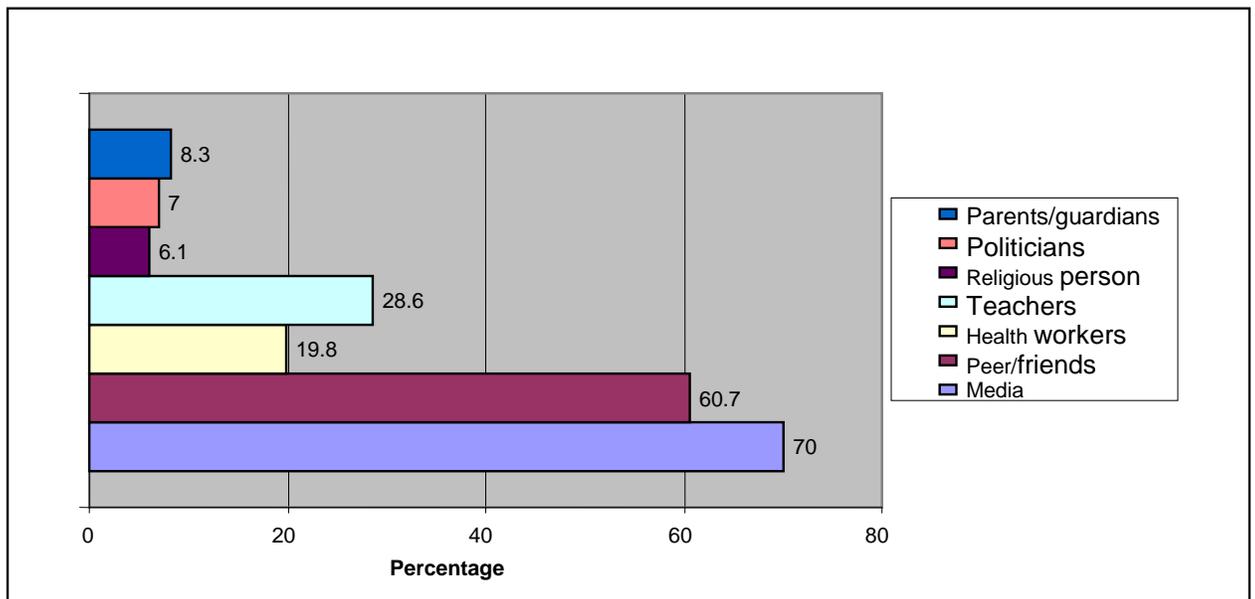


Figure 4.3: Source of YFVCT information (n=400)

4.2.3 Knowledge of any YFVCT center in Nairobi

The study also found out that 64.5% of the respondents were aware of at least one YFVCT offering youth friendly services in Nairobi while 35.5% did not as shown on figure 4.4.

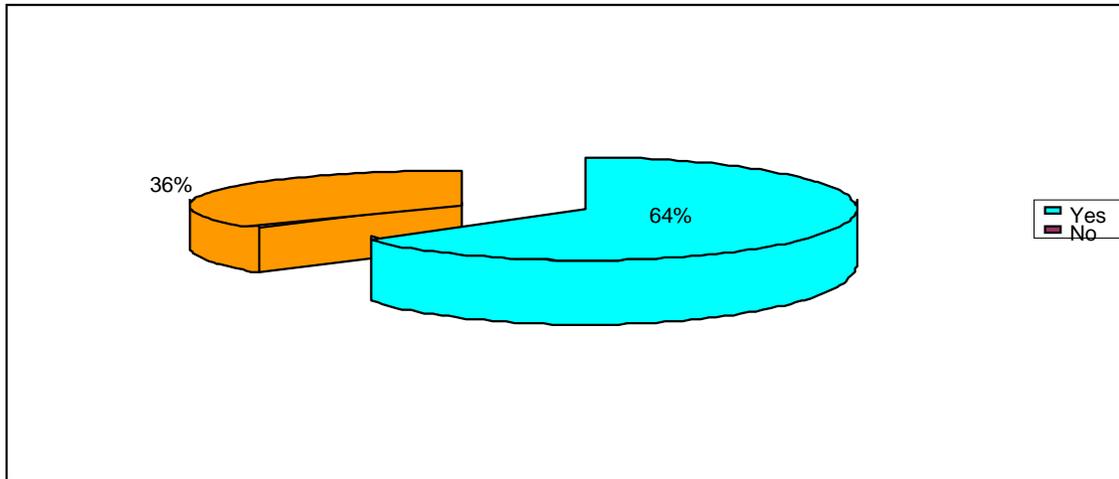


Figure 4.4: Knowledge of YFVCT Centres in Nairobi (n=400)

4.2.4 Knowledge of respondents on services offered in an YFVCT

Figure 4.5 shows the level of knowledge respondents had on the services offered in an YFVCT. The respondents indicated the following as the services offered in a youth friendly voluntary counseling and testing center. All (72%) respondents who had knowledge of what goes on in a youth friendly VCT said testing and counseling is done, 57% said that reading materials are provided while 21% mentioned games, 16% said video shows, 5% of them went for drinks. The above was supported by the group discussions where students seemed aware of what goes on in YFVCT centre.

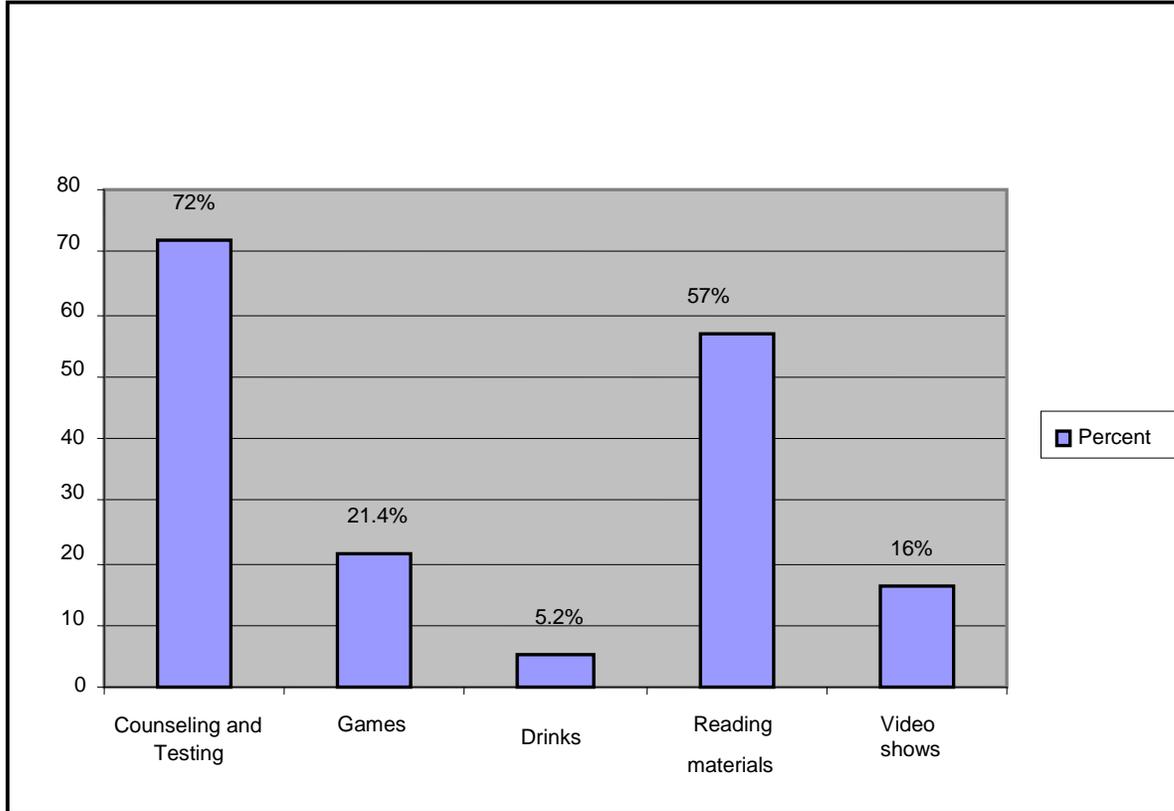


Figure 4.5: Knowledge of services offered in YFVCT (n=400)

4.3 Influence of availability factors on utilization of YFVCT services

4.3.1 Distance of YFVCT clinic from home/school

The distance of a VCT centre can affect utilization of its services. The study established distances where VCT are situated either from their school or home. 24.75% of the respondents had no idea of where the YFVCT were located. This could have been due to poor publicity of the services. Some (19%) indicated that the services were between 1-2 kms, 18.5% had the services situated less than a kilometer while 14.5% had services situated more than 5kms away and 12.5% had VCTs situated 3-5kms away as shown in the figure 4.6.

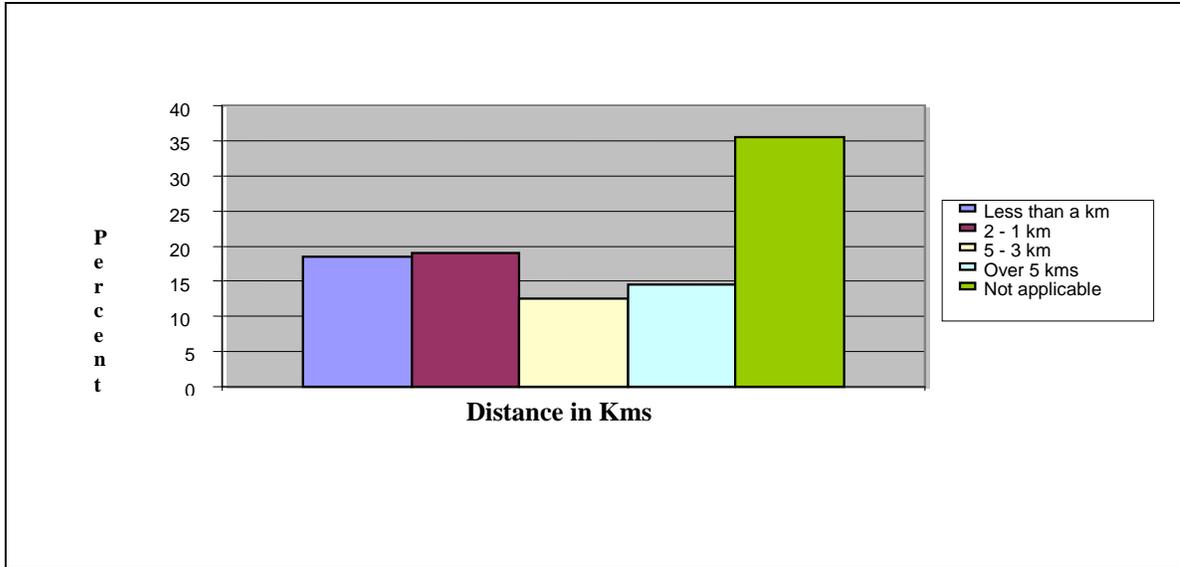


Figure 4.6: Distance of YFVCT from home/school centre (n= 400)

4.3.2 Relationship between Distance of VCT and utilization of YFVCT services

Table 4.6 shows that there was no significant relationship between the distances of the VCT centres and utilization of the services because the P value (0.648) is greater than 0.05. This came out clearly from the group discussions where students indicated that as long as the VCT was in a reachable distance it did not matter whether it is close to their home or school.

**Table 4.6: Relationship between Distance of VCT and utilization their services
n=400**

Category	Utilised VCT		Not utilised VCT		Total	χ^2 Statistic test
	N	%	N	%		
Less than a Km	29	(31.87%)	62	(68.13%)	91	$\chi^2= 1.653$ Df = 3 P = 0.648
1-2 Kms	35	(39.77%)	53	(60.23%)	88	
3-5 Kms	18	(34.62%)	34	(65.38%)	52	
5Kms and over	22	(31.43%)	48	(68.57%)	70	
Non-response					99	

4.3.3 Preferred location of VCT sites

Location of VCT site influences the utilisation of the services to some extent. If the site is in a place that the youth do not like, this becomes a hindrance to their visits. Figure 4.6 shows that a good number (41.5%) of the respondents preferred VCT centres to be located at the hospital where other health facilities are situated while 28.8% preferred the VCT site to be at the schools. There are others (18.5%) who preferred them to be on their own while 7.5% were for them being situated at the shopping centre. The above is a clear indication that stigma is greatly reducing as seen from the group discussions. A number of youth do not mind being seen going for HIV testing.

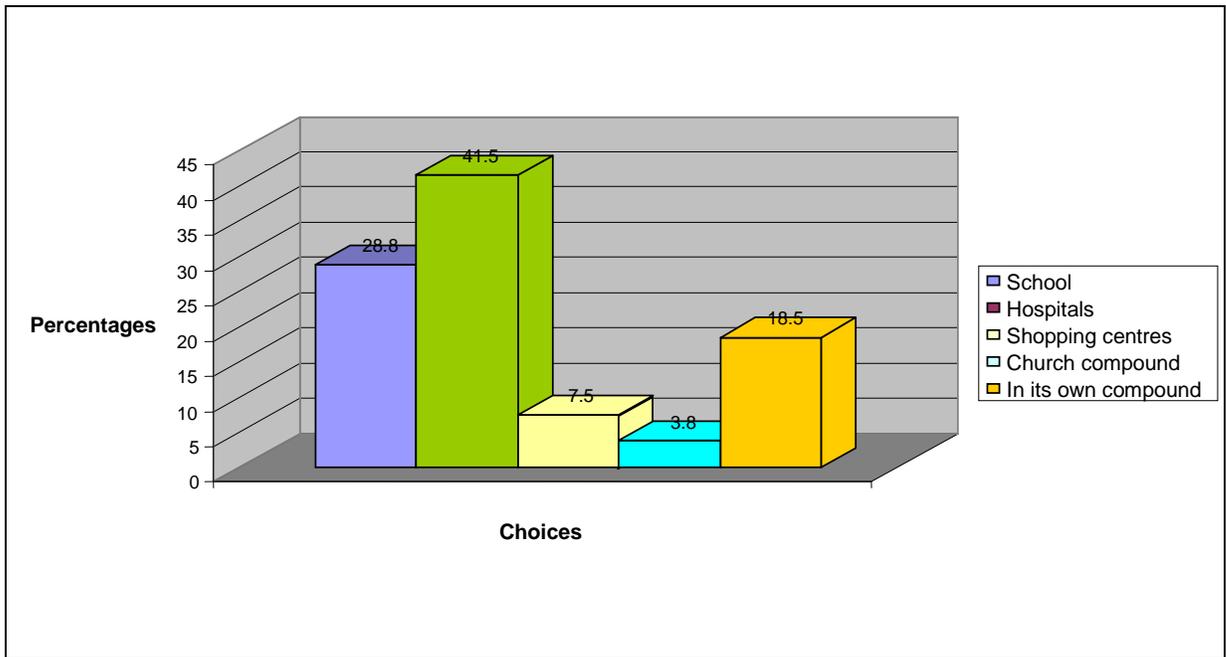


Figure 4.7: Preferred location of VCT sites (n=400)

4.4 Influence of quality of services factors in the utilization of YFVCT services

4.4.1 Visits to VCT centres for services and type of VCT visited

Figure 4.8 shows that a greater number (70%) of the respondents had not visited VCT centers for services while 30% had visited.

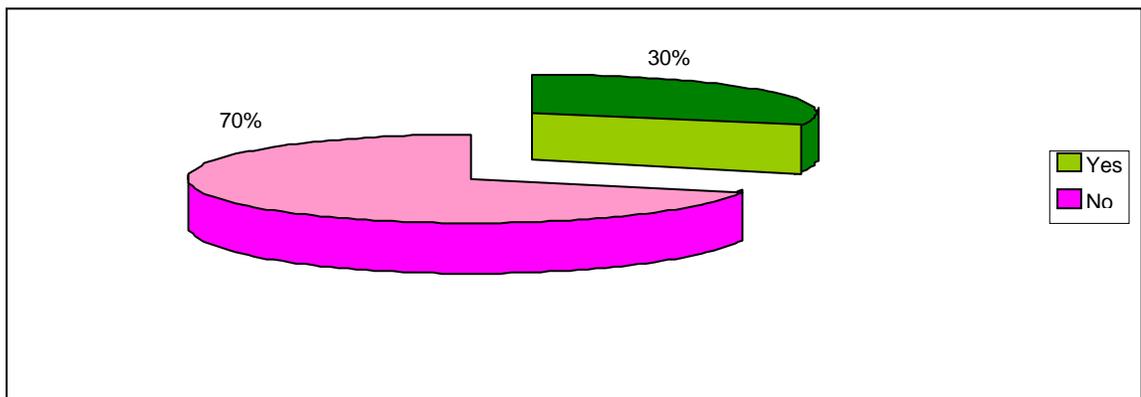


Figure 4.8: Visits to VCT Centres for services (n=400)

Figure 4.9 shows the findings of the type of VCTs visited. For respondents who had gone to a VCT centre for services, 41% of them felt that the VCT they visited was “youth friendly” while 59% felt otherwise.

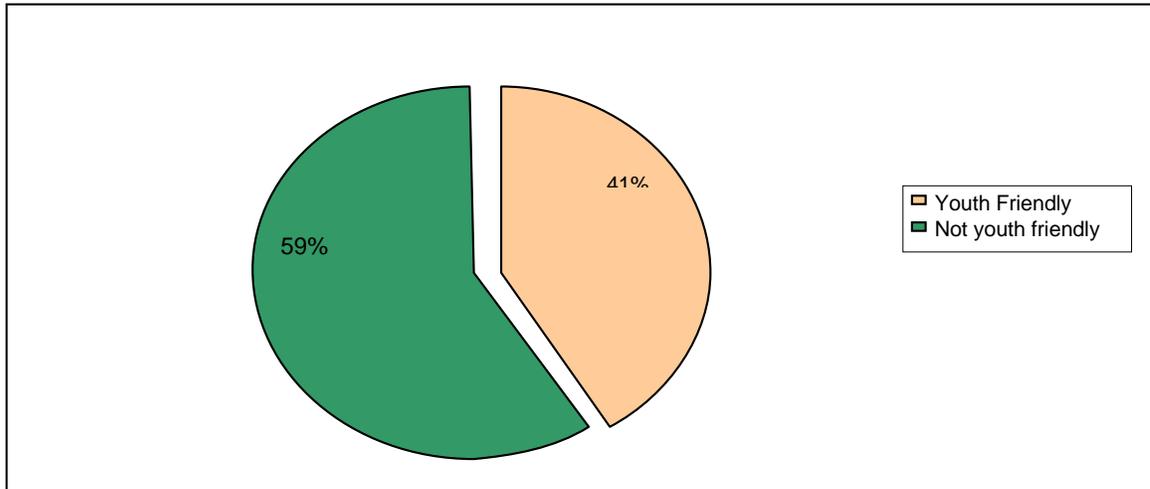


Figure 4.9: Type of VCT (n=400)

4.4.2 Services offered in the presumed YFVCTs

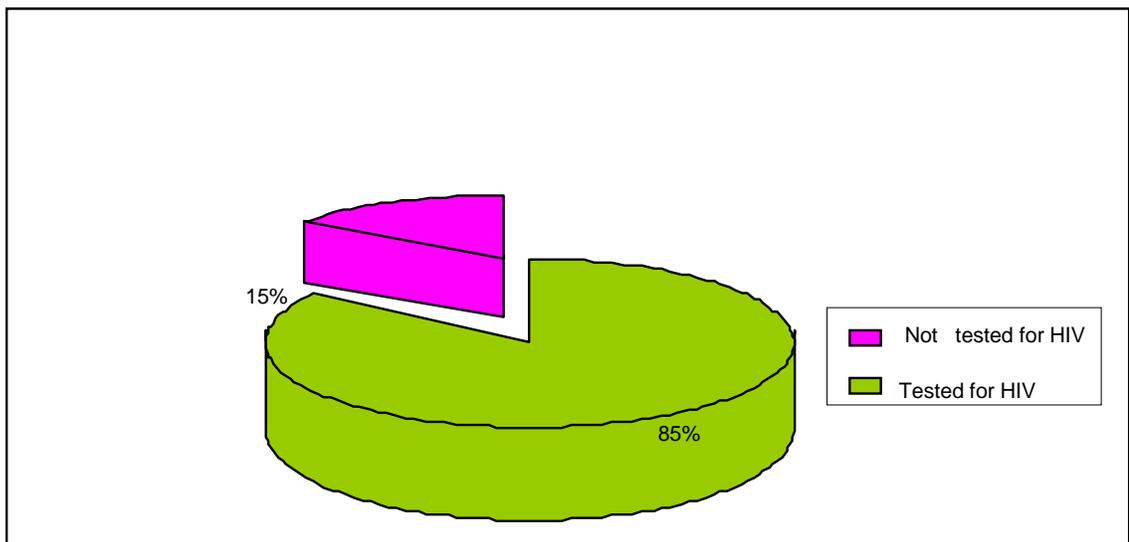
Some respondents indicated that they visited youth friendly VCTs and had to be verified using a matrix (Table 4.7). It shows that 50% of them went to a facility that was offering games which is one of the services that are offered in a youth friendly VCT. 83% of them found video shows, 58% went to a VCT with where they found young counselors. All (100%) found reading materials in the VCTs and only 12 of them were charged some fee which is not a characteristic of a youth friendly facility.

Table 4.7: Services offered in the presumed YFVCTs

S/ no	Services	Yes	NO
1.	Games	59 (50%)	59 (50%)
2.	Video shows	98 (83%)	20 (17%)
3.	Young counselors(18-30 years)	68 (58%)	50 (42%)
4.	Consultation fee	12 (10.2%)	106 (89.8%)
5	Reading materials	118 (100%)	0 (0%)

4.4.3 Testing for HIV and choice of preferred waiting time to get VCT results

Results in figure 4.10 show that majority (84.6%) of the respondents who visited tested for HIV while 15.4% did not. This shows that not all who visit a VCT centre actually test. Some are just counseled while others are counseled and tested.

**Figure 4.10: Testing for HIV (n=400)**

From the findings it is evident that majority (80%) of youth would prefer one hour service while 17% would like one day wait and 3% wished to wait for 24 hours before getting their results as shown in figure 4.11. The above shows that the services in the VCTs should be fast enough to accommodate the youths.

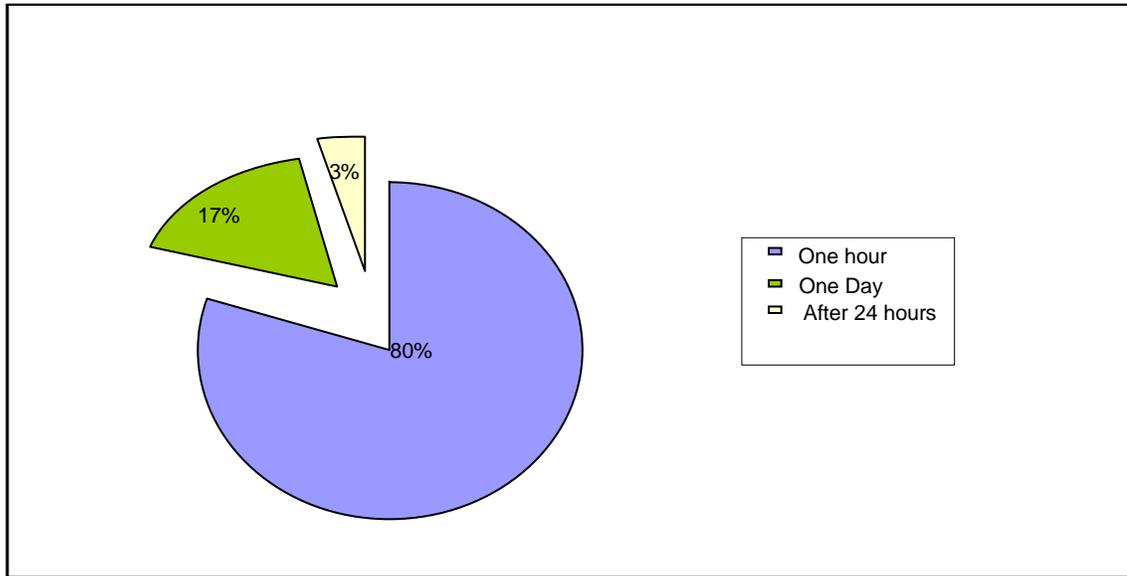


Figure 4.11: Choice of preferred waiting time to get VCT results (n=400)

4.4.4 Follow up after test

The study established that of those who went for testing, 89% had no follow up done after the test while 11% had a follow up done as shown in the figure 4.12.

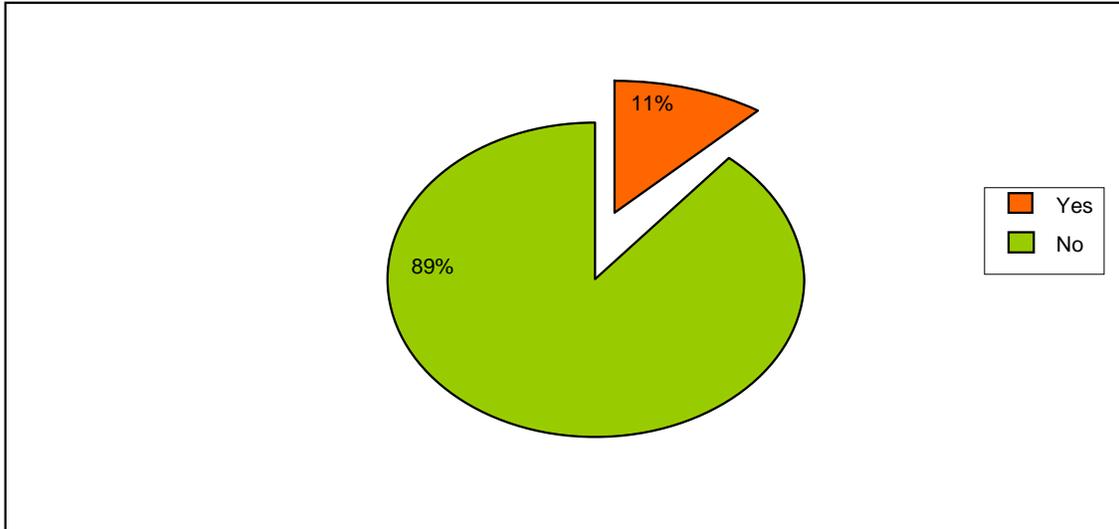


Figure 4.12: Follow up after test (n=400)

4.4.5 Relevance of the provided message to the youth

When asked for their opinions on whether awareness messages about VCT were targeting the youth, 39.5% strongly agreed, 41% agreed that the messages were targeting the youth while 10.2% disagreed and 9.2% strongly disagreed (figure 4.13).

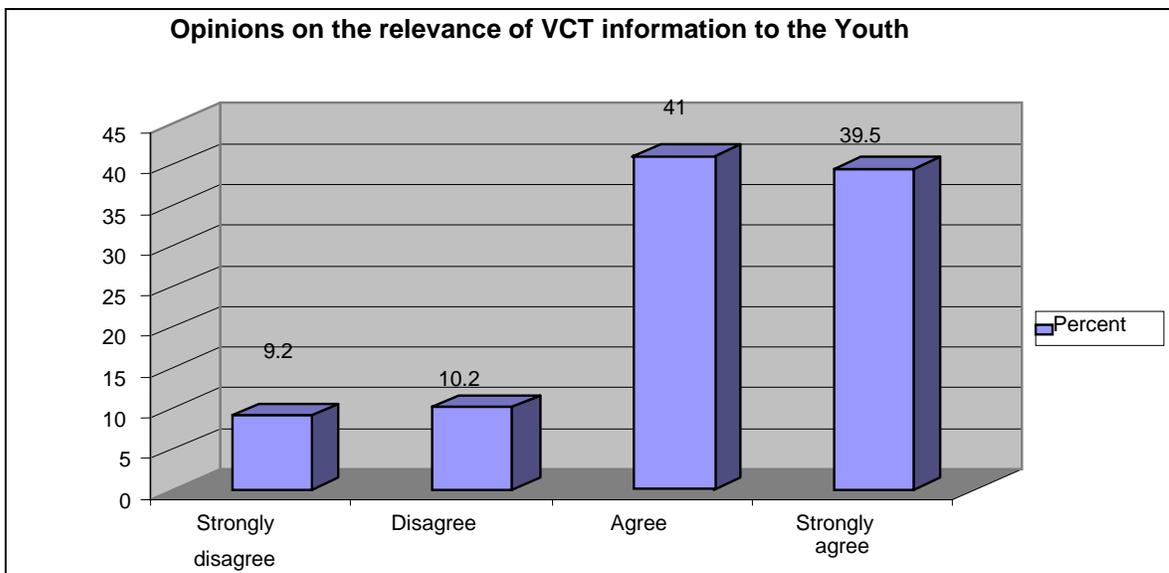


Figure 4.13: Opinions on the relevance of VCT information to the Youth

4.5 Services preferred by the Youth

4.5.1 Willingness to seek VCT services in future

Results on figure 4.14 below show that 75% of the respondents said that they would like to seek services in future while 18.2% were not sure whether they would seek the services and 6.8% said that they would not.

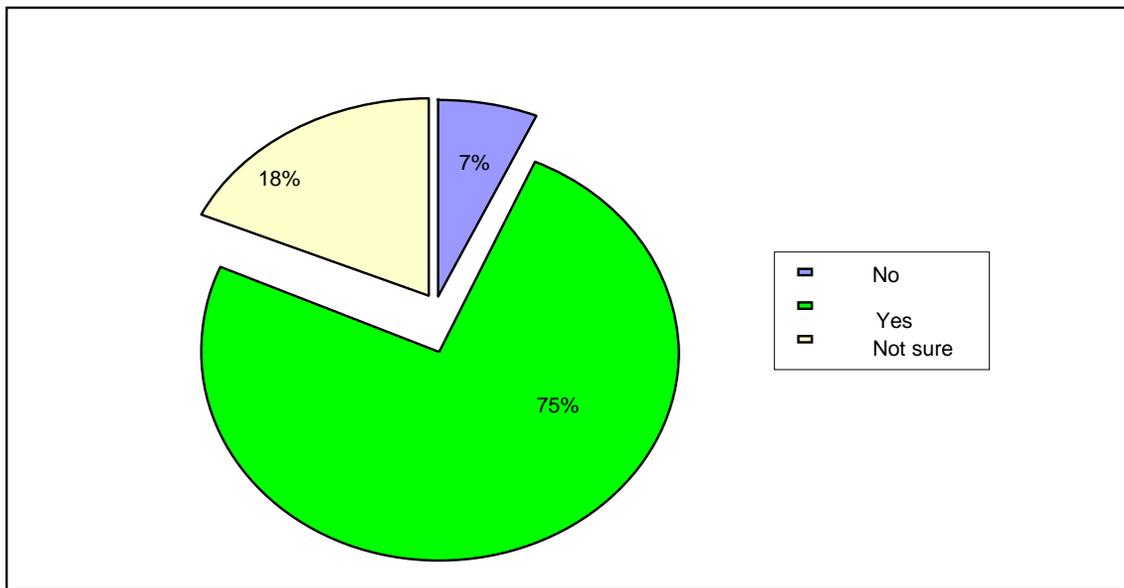


Figure 4.14: Willingness to seek VCT services in future (n=400)

4.5.2 Recommend to a friend to go for testing

From figure 4.15, majority (93.5%) of the respondents would recommend their friends to go for testing while 6.5% would not. This shows that many were willing to seek VCT services and even refer their friends

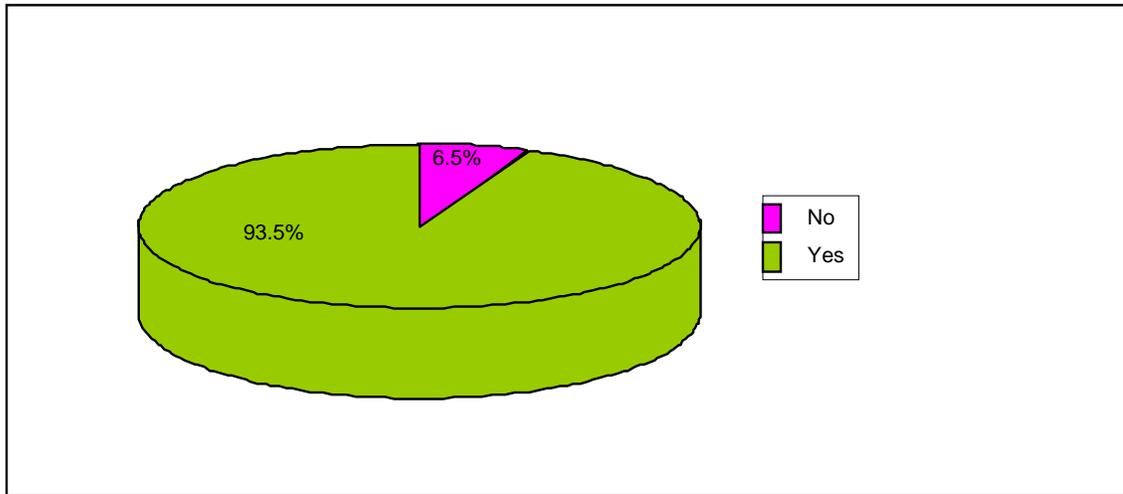


Figure 4.15: Recommend to a friend to go for testing (n=400)

4.5.3 Reasons for recommending a friend to test

The table 4.8 shows that students were willing to utilise the VCTs and even recommend their friends to do so. They had different reasons for recommending their friends to go for a test. Of the reasons given, 72.5% were for early treatment, 71% recommended a test so that their friends would stop worrying about their HIV status. Planning their lives was another reasons stated by 59% of the respondents while 45% said that they would advice their friends to go for VCT to avoid re-infection in case they were already infected.

Table 4.8: Reasons for recommending to a friend on HIV test.

Reasons	Frequency	Percent
i) Know their HIV status and get on treatment	290	72.5%
ii) End their worries	285	71%
iii) Avoid re-infection	180	45%
iv) Plan for their lives	239	59%

4.5.4 Reasons for not recommending any one to test.

The study established that those who did not recommend their friends to go for testing had reasons for this. A few (2.5%) said that they had not gone for testing meaning they could not recommend to anybody on testing. Some respondents (1.2%) gave wrong VCT results from some centres as the reason why they could not recommend testing to their friends. Another 0.2% said that they did not know what goes on in a VCT, others (0.2%) said their friends leave a careless life so it their own problem and many other reasons as depicted in table 4.9.

Table 4.9: Reasons for not recommending their friends for the test

Reasons	Frequency	Percentage
I have never gone	10	2.5%
Did not know what goes on in a YFVCT	1	0.2%
They live a carefree life	1	0.2%
Once positive one can commit suicide	3	0.8%
Because I am a victim	1	0.2%
They will die while still young	2	0.5%
Wrong results from some VCTs	5	1.2%
Its oneself business to know his/her status	3	0.8%
Not applicable	374	93.5%
Total	400	100%

4.5.5 Best method of giving student information on VCT

Figure 4.16 shows that teachers were rated as the favorite of the students in passing VCT information to them at 40.2%, 32% chose television, 16.2% went for students, 6.8% radio while 4.8% said that information should be passed through posters on the road. From the above information different forms of media put together had a bigger number of youth picking them as their favourite channel of passing VCT information.

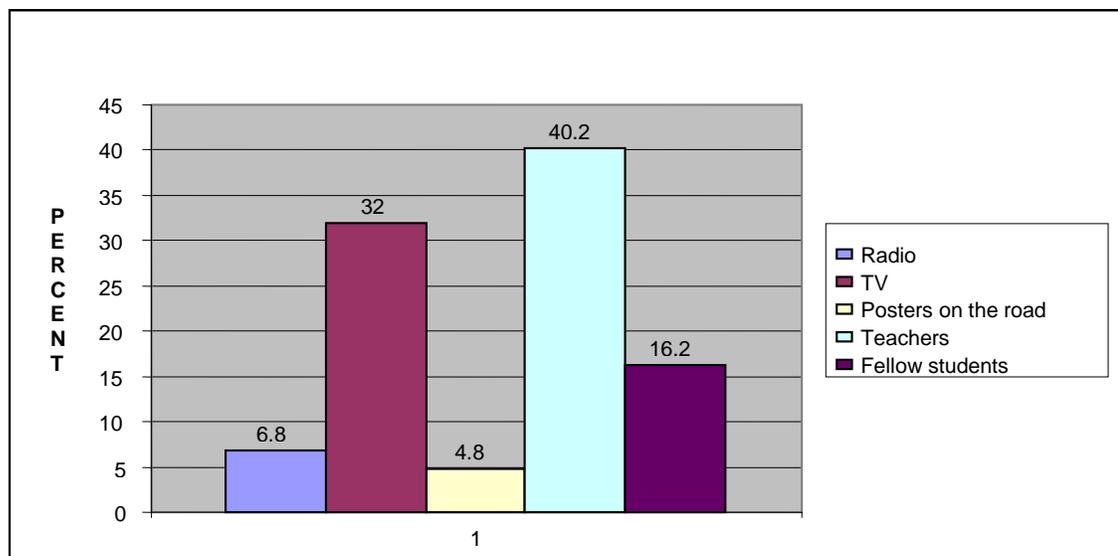


Figure 4.16: Preferred methods of giving student information on VCT

4.5.6 What need to be done to encourage youths to seek VCT services in future

Table 4.10 shows suggestions given by respondents on what can be done to encourage youth to go for VCT services in future. Majority (55.5%) of the respondents suggested that youth should be given more information on HIV/AIDS and importance of VCT. 14% suggested that more YFVCTs should be established while 7.25% were of the opinion that parents should be more involved in discussing HIV/AIDS and VCT issues with their children. Formation of youth associations, conducting VCT services at night, having

youth forums and groups, awarding of prizes to those visiting VCTs, having VCTs in schools and changing the name VCT to some other user friendly names, were some of the suggestions given to encourage more youth to go for testing among others.

Table 4.10: Suggestions on how to improve utilisation of VCT services by the youth.

Suggestions	Frequency	Percentage
Open more Youth Friendly VCTs	56	14%
Parents involvement in discussing HIV/AIDS issues	29	7.25%
More information on HIV /AIDS and VCTs through media	267	66.75%
Form youth forums and groups for sharing and encouraging others.	18	4.5%
Better services/social and friendly workers in VCT centres	6	1.5%
VCT services to be carried out at night	10	2.5%
Award prizes to those who visit VCTs	8	2%
Have VCTs in schools	3	0.75%
Change the name of VCT to a more integrity name	2	0.5
Total	400	100

4.6 Discussions

4.6.1 Utilization of YFVCT services among the youth.

Although the level of awareness was high utilisation of youth friendly VCT services was quite low. Only 30% of the respondents had gone to a VCT to seek services. Out of the 30% who visited a VCT 15% did not test showing that few of the youth are actually utilizing the services. This finding is in line with UNAIDS report that the same age group are afraid to seek VCT services for they have doubt about privacy and confidentiality also they consider themselves not at risk of getting HIV/AIDS (UNAIDS 2010). This could have been as result of absence of VCTs services that attract the youth. Even those presumed to be youth friendly did not provide some of the services. Half of respondents who had visited youth friendly VCTs site were offered VCT services. The other half of VCTs visited did not offer youth friendly services though they were presumed to be youth friendly. Few youth were utilizing youth friendly VCT services. From the group discussions the students gave various reasons to why many youth were not utilising the VCT facilities. These included; lack of adequate information, unfriendliness of the service providers, and lack of motivation by the parents and teachers, and fear of the unknown among others. The above finding is in line with Kamau's findings on why youth avoid health services which include VCT. Kamau (2006).

The study found that age and religion of the respondents had a significant association with the utilization of youth friendly voluntary counseling and testing services with the age having more influence than the religion. Occupations of the mothers plus the type of schools were significant in the utilization of YFVCT services. Education of the mothers

had a greater influence than latter where the study found that respondents who had parents with university education utilised YVCT more than those with parents with lower levels of education. Those had both parents living as husband and wife had utilized the YFVCT services more than those whose parents were either separated, widowed or living single at 1.2%, 3.25% and 6.25% respectively.

There was a significance relationship between awareness and utilization of VCT services because when the youth are not aware of what to expect it becomes very hard to convince them to go for testing even if they are aware of the existence of the service. The study found that 78% of the respondents were aware while 22% were not aware of the existence of youth friendly voluntary counseling and testing services. They got the information on YFVCT services from various sources. Majority (70%) got the information media showing that media plays a big role in passing of information to the youth although those in the group discussions wished that this channel was more interactive. Those who got the information from their peer were 60% which is also a clear indication that peer friends play a big role in passing information to their fellow youth. Teachers came in third with 28%. Teachers being the people who are with students most of the time would be expected to be leading in passing such information to their students but this is not the case. When asked who should give them information majority mentioned teachers. This is in line with a report from a research done in Nakuru by Cheruiyot where the youth felt that female teacher should be allowed to continue teaching HIV issues to students (Cheruiyot, 2011)

According to Barrett B, Schueller J. (2000) service availability in terms of physical accessibility, affordability and access to information is very crucial in influencing the youth to utilise the VCT services which is very evident in this study as the respondents would prefer having the VCTs situated in hospitals. This could be an indication that stigma is reducing and the youth are now becoming more open to go for HIV tests which was also supported by the discussions.

Although other researches show that location of YFVCTs in terms of distances played a role in determining the utilization of YFVCT services this study differed because distance did not affect utilisation of YFVCTs. Barnett and Katz (2000) in their study they said that utilisation of VCT services by Youth was affected by the location of the VCT services. In their research they found that utilization of VCT was favored positively or negatively by either being far or being close to the homes of the youth. This is because youth fear running into relatives or neighbors in the facility.

Quality and the environment in terms of services being offered in a VCT plays a big role in attracting the youth to the services. Cohen *et al.*, (1999) on the other hand says that uptake in many sites in North London was low, as many young people did not favor services within hospitals/clinics due to service provider attitudes, access issues such as parental consent for services and judgmental approaches. The findings of this study differ with Cohen *et al* (1999) findings in London. In this study, respondents preferred the VCTs situated in the hospital set up. There is a clear indication that youth are willing to test irrespective of the environment. It is also an indication that stigma is slowly reducing.

On reasons which could have deterred youth from utilizing YFVC services the study findings concur with those of Kamau (2006) who said that long waits, poor relationships between the youth and service providers, lack of privacy were some of the causes of poor utilisation of youth friendly services. Although Barnett B, Katz K. (2000) indicates that youth fear being victimised by health service providers who have negative attitude towards them the respondents in this study indicated that they still preferred services that were situated in the health service premises.

From the findings, most (59%) of the youth friendly VCT centres visited, half had all the qualities of a youth friendly VCT while others did not. This could have been the reason why most of the youth did not get attracted to the services. The youth preferred their peers as counselors in the VCTs as they share a lot in common. 58% percent of the counselors seen in the presumed youth friendly centres were youthful. The study found out that some of the VCTs visited were charging some fees. This could have deterred them from utilizing these services because many cannot afford money.

The study found out that youth had different reasons why they did not utilize YFVCT services in Nairobi. Some of the reasons are as follows; 55.5% of the respondents suggested fear of the outcome. This is in line with a report by Kawango who says that fear of the outcome deter many youths from utilizing VCT because of stress related to knowing about an imminent death (Kawango, 2007).. This shows that most of the youth were not aware of where to find the youth friendly services. Some (3%) suggested that youth were not been utilizing these facilities because they were discouraged by their

peers. A few (2.8%) said that the youth feared being mistaken for HIV victims if seen anywhere near a VCT. This is because there is a general assumption that anybody going to a VCT must be sick. A study done in Nakuru by Cheruiyot found out that some youth felt that going to VCT is like going to a hospital where one has to be sick (Cheruiyot 2011). Some (2.5%) of the respondents said that youth feared stigma once found positive. The above finding is in line with what Denison found in his study that perceived stigma can act as a barrier to accessing VCT among youths (Denison *et al.*, 2008). Distance was cited as one of the possible deterrent to utilisation of YFVCT where 1.8% said that youth friendly VCTs could be far from the reach of some youths. Others could have been lacking knowledge on the importance of testing as suggested by 1.5% of the respondents and 1% sited lack of time to go to VCTs.

4.6.2 Preferred services in the YFVCTs

For the youth to be attracted to VCT services there are certain factors that must come to play. Accessibility to VCT services is determined by components like access to information and how this information is passed (Horizons, 2001). Lack of qualified VCT staff has also remained a stumbling block to accessing VCT services (UNAIDS, 2010). This study found that respondents preferred information being passed to them through certain channels than others. For example teachers were most preferred in passing information on VCT to them at 40.2%, while television was at 32%. 16.2% preferred their fellow students, 6.8% radio while 4.8% said that information should be passed through posters on the road. Teachers being the people who spend most of the time with student had a chance to pass this information during their interactions with

students. The finding of this study concurs with Cheruiyot's report where the youth preferred female teachers to pass HIV information to students, (Cheruiyot 2011). Waiting time for results was another contributing factor in the attraction of students to VCT services. The study showed that 80% of youth preferred one hour wait and 17% preferred to wait for a day, while 3% wished to wait for 24 hours before getting their results. This showed that youth are very impatient as they would prefer very fast services. In his report on "*The Effect of Increased Access to Emergency Contraception among Young Adolescents*", Harper indicates that waiting time is very crucial for the youth as they are very impatient, (Harper *et al.*, 2005).

CHAPTER FIVE: CONCLUSION AND RECOMMENDATION.

5.1 Conclusions

- i) The study found out that utilisation of VCT services was low with 30% of the respondents attending the VCT facilities.
- ii) It also found out that there were several demographic factors that influenced utilisation of YFVCT service. Age, religion and type of school of the respondents had a relationship with the utilisation of YFVCT services. Education and occupation of the parents/guardians influenced utilisation of the YFVCT services.
- iii) On the Knowledge and awareness of YFVCT services and their influence on utilization of YFVCT, the study found out that quite a significant number of the respondents were knowledgeable about counseling and testing in terms of where to get the services. Although a big percentage of students were aware of testing centers some were not aware of what was offered in those youth friendly facilities. The students preferred being given the VCT messages by their teachers although they strongly suggested that there was also need to give more information on HIV/AIDS, and VCT through the media.
- iv) A good number (41.5%) of the respondents preferred YFVCT services being offered in health facilities. Two out of three VCTs that were visited by the respondents were not youth friendly. While those they assumed to be youth friendly did not offer some of the facilities that attract youths to them. They recommended that more youth friendly VCTs should be established and testing exercises done at night.

5.2 Recommendations.

To improve on the knowledge and utilisation of students on Youth friendly voluntary counseling and testing services and for future programming the government should do the following.

- i) Ministry of Education should step up sensitization campaigns on the importance of testing and locations of youth friendly VCTs in schools.
- ii) Majority (75%) youth are willing to seek VCT services in future and will not mind them situated in the health facilities as long as these facilities are non-discriminative, physically accessible, affordable and informative. Therefore more health facilities should have Youth Friendly VCT services integrated into them to attract more youth.
- iii) Health service providers should be trained in handling of youth so that the youth can access friendly, welcoming, caring, informative, non-judgmental and trustworthy staff.

5.3 Further research

The following are the areas that came out as areas of need in terms of further research;

- i) The data shows that most of the youth in school are not aware of what is offered in Youth Friendly VCTs which calls for a study to find out the best ways of passing the information to students.
- ii) Teachers being the people who spend a lot of time with student should rank first as the main source of information on VCTs to the students but this is not the case. A study should be done to find out their training needs as far as HIV issues are concerned.

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Appendix 1

STATEMENT OF ETHICAL CONSENT

- This study is being conducted by Mercy Mwendwa Ndiira of Kenyatta University, department of Public Health. The study is on *Factors Affecting Utilization of Youth Friendly Voluntary Counseling and Testing Services*.
- A representative sample of students in day secondary schools has been selected in this study.
- The questionnaire that follows is designed to gather general information on your opinion and view on the above subject.
- Please note that the information that you give will be treated with utmost confidence. Your name will neither be mentioned nor included in the report.

Appendix 2**QUESTIONNAIRE****SECTION (A): DEMOGRAPHIC CHARACTERISTICS**

Please provide the following details:

1. Age:

- a) 14 – 17 years () b) 18 – 21 years () c) 22 – 24 years ()

Other (Please specify)

2. Gender:

a) Female ()

b) Male ()

3. Religious affiliation:

a) Catholic ()

b) Protestant ()

c) Muslim ()

d) Hindu ()

e) Others, (Please specify)

4. Parents/guardians marital status:

- a) Married ()
- b) Separated/divorced ()
- c) Widowed ()

5. Tick the most applicable about your school

- a) Pure boys () b) Pure girls () c) Mixed school ()

6. Is your school private or public?

- a) Private () b) public ()
- d) Not married ()

SECTION (B): SOCIO- ECONOMIC CHARACTERISTICS**7. Parents'/guardian's education level:****Mother****Father**

- | | | |
|------------------------|-----|-----|
| a) No formal education | () | () |
| b) Primary | () | () |
| c) Secondary | () | () |
| d) College/University | () | () |

8. Parents'/guardian's occupation:**Mother****Father**

- | | | |
|--------------------|-----|-----|
| a) Paid employment | () | () |
| b) Self-employment | () | () |
| c) Casual labourer | () | () |

d) Unemployed () ()

SECTION (C): AWARENESS AND KNOWLEDGE OF YFVCT SERVICES

9. (i). Has anyone ever talked to you concerning VCT?

a) Yes ()

b) No ()

9. (ii) If yes, who was it?

a) Parents/guardians () b) Health workers () c) Teachers ()

d) Peer/friend () e) Religious person () f) Politicians ()

g) Media ()

10. Do you know any Youth Friendly VCT centre in Nairobi?

a) Yes () b) No ()

11. From the choices given tick all the services offered in a Youth Friendly VCT centre.

a) Guidance and counseling () b) Games () c) Drinks ()

d) Reading materials () e) Video shows ()

SECTION (D): AVAILABILITY AND ACCESSIBILITY

12. Have you ever gone to a VCT Centre for services?

a) Yes ()

b) No ()

13. (i) When you visited the VCT, were you tested?

a) Yes ()

b) No ()

14. (ii) If your answer to number 13 (i) above is yes, was there any follow up after the test?

a) Yes ()

b) No ()

15. Are you willing to seek voluntary counseling and testing services in future?

a) Yes ()

b) No ()

c) I am not sure ()

16. Was the VCT that you visited youth friendly?

a) Yes ()

b) No ()

17. How far is the Youth Friendly VCT centre from your school or home?

a) Over 5kms ()

b) 5-3kms ()

c) 2-1km ()

d) Less than a km ()

SECTION (E): QUALITY AND SERVICE ENVIRONMENT

18. Please tick against either yes or no depending on the services that were available in the VCT you visited.

	Services	Yes	No
1.	Games		
2.	T.V (Video shows)		
3.	Young counselors(18-30 years)		
4.	Consultation fee		
5	Reading materials		

19. When you go for a test in a VCT how long would you like to wait for your results?

- a) One hour b) One day c) 24 hours

20. Where would you prefer voluntary counseling and testing services to be situated?

- a) School () b) Hospitals () c) Shopping centre ()
d) Church compound () e) In its own compound ()

21 Awareness messages about voluntary counseling and testing services have been designed to target the youths:

- a) Strongly agree () b) Agree ()
c) Disagree () d) strongly disagree ()

22. (i) Would you recommend the service to your friends to go for testing?

- a) Yes () b) No ()

(ii) If yes to 20 (i) state your three reasons.

i) _____

ii) _____

iii) _____

(iii) If no to number 20 (ii) give three reasons.

i) _____

ii) _____

iii) _____

23. Which of the following channels of passing VCT information to students would you recommend?

- a) T.V () b) Teachers () c) Radio () d) Fellow Students ()
e) Posters on the road side ()

24. What can be done to encourage students to seek VCT services in future? Give one most appropriate suggestions.

i) _____

Appendix 3

Interview guide for the group focus discussions

1. In your own opinion do you think that you get adequate information on YFVCTs?
2. What do you understand by the term ‘Youth Friendly VCT Service’?
3. What do you feel about the distance of Youth Friendly VCT Clinic from your school or home?
4. Giving reasons, which is the best location for a YFVCT centre?
5. In general, what are the factors affecting utilization of youth friendly VCT in Nairobi?
6. What do you think needs to be done to encourage more youths to seek out for VCT services in future?
7. In your view, what characteristics should an “ideal” youth friendly VCT service possess?

Appendix 4: Map of Nairobi Province

Appendix 5: Authority letter from MOE

**Appendix 6: Permit letter
from MoHEST**

Appendix 7: Data collection authority from Kenyatta University

Appendix 8

Table: Name and number of Schools Selected

Districts	Boy/Girl/Mixed	No. Schools	Sample size
Starehe	Mixed (Ndururuno Secondary)	1	40
	Girls (St. Teresa girls)	1	40
Kasarani	Mixed (Our lady of Fatima)	1	40
	Mixed(Kahawa Garrison)	1	40
Kamukunji	Boys(Eastleigh high school)	1	40
Lang'ata	Mixed (Olympic high school)	1	40
Dagoretti	Mixed (Dagoretti Secondary)	1	40
Embakasi	Mixed (Dandora Secondary)	1	40
Westlands	Boys (Nairobi Milimani Sec)	1	40
Makadara	Girls (Huruma girls)	1	40