

**FACTORS INFLUENCING THE UTILIZATION OF VOLUNTARY
COUNSELLING AND TESTING SERVICES FOR HIV/AIDS AMONG THE
YOUTH IN NAIROBI PROVINCE, KENYA.**

BY

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DECLARATION

I declare that this thesis is my original work and has not been presented for a degree in any other university

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DEDICATION

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ABBREVIATIONS USED IN THIS THESIS

AIDS:	Acquired Immune Deficiency Syndrome.
ANOVA:	Analysis of Variance.
FGDs:	Focus Group Discussions.
HIV:	Human Immunodeficiency Virus
KAP:	Knowledge, Attitudes and Practices
MOH:	Ministry of Health.
NASCOP:	National AIDS/STD Control programme.
NGO:	Non-governmental Organization
PMTCT:	Prevention of mother-to-child transmission
RoK:	Republic of Kenya.
SPSS:	Statistical Package for Social Sciences.
STDs:	Sexually Transmitted Diseases.
STIs:	Sexually Transmitted Infections.
UNAIDS:	United Nations Joint Programme for AIDS.
VCT:	Voluntary Counselling and Testing
WHO:	World Health Organization

DEFINITION OF OPERATIONAL TERMS

- VCT –** This refers to the process whereby an individual, group or couple under goes counselling to enable them make an informed decision on being tested for HIV/AIDS
- Youth -** According to WHO, this refers to those aged 10-24 years (it includes the range from adolescents, teenagers and young adults)
- Prevalence -** This refers to the number of affected persons present in the population at a specific time divided by the number of persons in the population at that time.
- Incidence –** The incidence of a disease is defined as the number of new cases that occur during a specified period of time in a population at risk for developing the disease.
- Social group-** This refers to a conglomeration of people (young or old) with the same objectives and performing similar activities.
- Integrated VCT model-** This refers to the model of VCT delivery whereby the VCT services are incorporated in a health care setting like a hospital or clinic
- Stand-alone VCT model-** This refers to the model whereby a VCT Centre is situated in its own setting and here it offers exclusively the counseling and testing services with no other medical interventions

Age	This refers to the number of years that an individual has lived since date of birth. In this study the ages were from 15-29 with an age interval of 3 years.
AIDS	This refers to a progressive immune deficiency caused by infection of CD4+T cells with the human retrovirus HIV
CD4+	This refers to an antigen marker of helper /inducer T cell that recognizes antigens bound in class II MHC protein

ABSTRACT

Current global estimates suggest that 7000 young people are infected with HIV daily, translating to 2.6 million new infections each year with two million of the cases being in Africa alone. Furthermore, of the 30 million people living with HIV/AIDS, 20 million of them are young people aged 10-24 years. This means that the youth in the above age bracket comprise the most vulnerable group who must be targeted in any control programmes designed to reduce the spread of HIV/ AIDS. Voluntary counselling and testing (VCT) has become an integral part of programmes in many countries in the control and management of HIV/AIDS.

The major objective of this study was to determine the factors influencing the utilization of VCT services in the control of HIV/AIDS, among the youth in Nairobi province. The data was collected using questionnaires and interviews administered to the youth who were randomly and purposively sampled in the study area. Focus group discussions (FGDs) in which the youth were placed in groups of 8-12 and their views on the factors influencing their utilization of VCT services were carried out and views recorded. All data from the study was coded and entered in a computer using the Statistical package for social scientists (SPSS). Chi-square was used to test for the relationship between the variables determining the utilization of VCT.

A total number of five hundred and sixty three (563) questionnaires were administered to 232 female and 331 male respondents. Eight (8) FGDs were also held with the health providers from the selected voluntary counselling and testing

centres. Approximately 71% of the respondents had attained at least secondary school level of education. The results indicated that there was a significant relationship between the knowledge of individuals and whether or not they had sought VCT since 69% of those who had sought VCT had acquired a minimum of secondary school education.

The results also showed that 64% of the youth abused drugs and that there was a positive correlation between drug abuse and having several sexual partners with 79% of those who took drugs having had more than 2 sexual partners in the last 12 months.

The results indicated a lot of awareness on VCT since 87% of the respondents knew of VCT but this did not influence its utilization. About 63% of the youth had not used VCT services because there was no need for it since treatment was lacking and they feared stigmatization. The knowledge, attitudes and perception on HIV/AIDS and VCT influenced whether or not the youth utilized the services.

The findings of this study have policy implications and require attention especially by designing the programme on prevention, control and management of HIV/AIDS among the youth who form a great proportion of the world's population and are also the most vulnerable group.

CHAPTER 1: INTRODUCTION

Voluntary HIV counseling and testing is the process whereby an individual or couple undergoes counseling to enable him/her/them to make an informed choice about being tested for HIV/AIDS. This decision must be entirely the choice of the individual/s and he/she/they must be assured that the process will be confidential.

For the purposes of this research, the term “youth” referred to those aged 15-29 years. This age group was chosen based on the Voluntary Counselling and Testing guidelines produced by the Ministry of Health, which states that VCT can only be done to those aged 18 and above. However those aged 15-18 years may be tested but grouped as minor adults. It also goes ahead to state that those below 15 years of age may be tested only with consent from either parents or guardians. The majority of young people in this group are also at the highest risk of contracting HIV. Researches have also shown that most young people often start sexual activities before this age. The youth people may also be at risk for HIV infection from unsafe injection drug use (IDU), exposure to contaminated blood and blood products or unsterilized skin-piercing procedures (e.g., tattooing or traditional practices such as scarification).

VCT is much more than drawing and testing blood as well as offering a few counseling sessions. It is a vital point of entry to other HIV/AIDS services, including prevention and clinical management of HIV-related illnesses, TB control,

psychosocial and legal support, and prevention of mother to child transmission of HIV.

Voluntary counselling and testing (VCT) has become an integral part of HIV prevention and care programmes in many countries and services have evolved to reflect developments in treatment and care for HIV-related illnesses and recognition of the importance of VCT in reducing HIV transmission.

High-quality VCT enables and encourages people with HIV to access appropriate care and is an effective HIV-prevention strategy. VCT can also be an effective behavior-change intervention. VCT offers a holistic approach that can address HIV in the broader context of peoples' lives, including the context of poverty and its relationship to risk practice. VCT offers benefits both to those who test positive *or* negative. It also alleviates anxiety, increases clients' perception of their vulnerability to HIV, promotes behavior change, facilitates early referral for care and support—including access to ARV therapy—and assists in reducing stigma in the community.

Voluntary counselling and testing services have been a major component in HIV/AIDS prevention efforts in several countries since the beginning of the epidemic. However, they have not played a major role in prevention programs in developing countries. The myriad reasons include the high cost and sustainability of such services, doubts about their effectiveness in reducing psychological stress and in bringing about behaviour change, doubts about the level of demand for the

services, and potential undesirable consequences resulting from positive results, especially when follow-up services are unavailable and this is the premise under which this study was done.

VCT is provided to those infected with HIV, those affected by HIV, those seeking or agreeing to receive HIV testing as well as those worried about their risk of acquiring HIV. It also consists of emotional support, personal risk assessment, and planning for risk reduction and is supplemented by personalized information giving.

CHAPTER 2: LITERATURE REVIEW

2.1 General Background

2.2 Global Picture on HIV/ AIDS and VCT

It is estimated that since the beginning of the epidemic, some 42 million people worldwide were living with AIDS as at the end of the year 2002 (WHO/UNAIDS, 2002). Sub Saharan Africa is not only the epicenter of these infections (58%) but also led the world with 3.5 million new infections in the year 2002 alone. (WHO/UNAIDS, 2002)

UNAIDS also estimates that 9 out of 10 infected people in the world do not know that they are HIV positive. In absolute terms, this means that over 27 million people today are not aware of their HIV infection. Different population groups have unequal access to HIV testing, and , as a result, are unaware of their HIV status. Many discover their HIV status only when they are diagnosed with AIDS, and an even larger number of people living with AIDS are never diagnosed (UNAIDS/WHO, 2002)

There are more teenagers alive today than ever before: 1.1 billion adolescents aged 10-19 years, 85 percent of them living in developing countries. Young people aged 15-24 accounts for more than 50 percent of all HIV infections worldwide. More than 7,000 young people are newly infected with HIV each day throughout the world. (PANOS, 1999)

In the United States, AIDS is the leading cause of death in African-American young people aged 15-24. .” In the United States, 900,000 records of people who had undergone HIV testing were reviewed: 13 percent of them were 13- to 19-years-old (ROK:National Aids Policy,2000) Also in the United States, at least 25 percent of all new HIV infections are people under the age of 21(Bohmer and Kirumira,1997).

A major review of studies of HIV counseling and testing's effectiveness conducted by CDC researchers found that despite dramatic changes in sexual behaviors among gay men in the U.S, the extent to which counseling and testing played a role in these changes is much less clear (Higgins *et al.*, 1991).

Although prevalence in the general population remains low in Russia and the Newly Independent States, young people are becoming increasingly vulnerable to HIV while at the same time Uptake of VCT by young people (aged 13-19 years) is reported to be increasing in Brazil (Dehne *et al.*, 1999).

2.3 HIV / AIDS and VCT in AFRICA

In Africa alone, an estimated 1.7 million young people are infected annually (WHO/UNAIDS, 2000). Preventing HIV among young people is particularly urgent in sub-Saharan Africa, where in many countries young people (aged 13- 19 years) comprise more than 30 percent of the population and general HIV prevalence rates often exceed 10 percent (UNAIDS, 1999).

In Nigeria, the first populous country to have an average national HIV prevalence rate of >5 percent show the highest seroprevalence rates (4.2-9.7%). Since 1995, HIV prevalence rates among youth in the most affected state have increased by more than 700 percent. VCT for young people has been recognized as a major priority within the Nigerian HIV-prevention programme. (NACA, 2001).

A study in Ghana revealed that providers are often unsure or uncomfortable about dealing with HIV/AIDS among the youth. Some wonder even whether it is even legal for them to test young people and to offer preventive services. The potential for discrimination continues to be a real threat, deterring some who might benefit from seeking HIV testing. HIV-related discrimination has been reported in the form of denial of insurance, housing, employment, and other private or public benefits (Gostin, 1990).

Most sub-Saharan African countries face the dual challenge of lowering HIV prevalence and coping with the impact of existing high prevalence on their health systems and societies. Early government commitment and intervention can slow the spread of AIDS decisively. While incidence is still high, recent trend in Uganda show that government efforts can extremely be effective. In 1997, 5-9 percent of Ugandan adults were infected, compared to 7-13 percent in 1996. This decrease is most pronounced among the Ugandan youth, concurring with studies which have shown that they are adopting safer sexual behaviour after having had Voluntary counselling and testing (Higgins *et al.*, 1991)

A pilot study on acceptability of voluntary HIV counselling and testing was performed in a rural village in Kagera, Tanzania as a potential intervention against transmission of HIV. In this study, a significant proportion of participants were willing to volunteer for HIV counseling and test and to receive results, indicating a moderate level of acceptability of HIV counseling and testing. The results also indicated the need for developing innovative ways of enhancing acceptability of voluntary HIV counseling and testing. However, the relationship between knowledge of HIV status and behavioural change is complex and therefore several potential mechanisms may exist by which HIV testing in combination with counselling could influence behaviour (Killewo *et al.*, 1998).

A survey carried out among 79 HIV sero positive women involved in therapeutic trial in Bobo-Dioulasso, Burkina Faso following freely consented prenatal HIV testing, revealed that women were reluctant to inform their partners of their HIV-sero status and feared being stigmatized by relatives and friends (Issiaka *et al.*, 2001).

2.4 HIV and VCT in Kenya

In Kenya a comparative study looking at VCT centres in a youth centre, chiefs camp and also in a church compound in Kibera aimed at assessing the applicability of the community model to replace the integrated and stand alone model of VCT earlier used realized that there was more adaptability of the community model. (Marum, E *et al.*, 2002)

In Kenya voluntary counselling and testing is a major strategy in the intervention of HIV/AIDS as defined in the Sessional paper No.4 of 1997 on HIV/AIDS (MOH, 1994). A national survey carried out in 1998 showed high levels of knowledge of HIV/AIDS among respondents of reproductive age, in which 14% of women and 17% percent of men reported to have been tested for HIV and two-thirds of those who had not been tested were willing to be tested (NCPD, 1998).

A study done in Kenyatta Hospital, Nairobi revealed a significant number of patients were never told of their HIV test results due to lack of counselling, over-sight and ignorance of the doctors on counselling and lack of patients awareness and sensitization (Mulure *et al.*, 2000).

Lack of counselling services could lead to more infections, as persons who are not aware of their HIV sero status might not take appropriate preventive measures. Accessibility including hours of service, affordability, positive provider (client oriented), adequate number of counselors, strict quality assurance and supervisory measures, knowledge of a referral network, support for counselors, and an approach focused on sustained health impact will help break the silence which has characterized this epidemic (Gilly *et al.*, 2001).

2.5 Importance of VCT

In spite of considerable investment in informing young people about the prevention of HIV/AIDS and convincing evidence that tens of thousands of young people have

learnt a good deal about HIV transmission and AIDS prevention, there is consensus that knowledge acquisition has not generally led to behaviour change on a large scale among the young people. There is evidence from studies and programme experiences in the region that knowledge of sero-status through HIV testing can be a powerful motivating force for behaviour change among some population groups (Meursing and Sidindi, 2000).

The availability and quality of HIV testing and counselling services varies among countries in Africa, but even in those countries with availability of services, access is not sufficient to meet demand and to ensure that testing and counselling can be a strategic tool for the achievement of widespread behaviour change (Otten and Peterman, 1993).

Early testing for HIV/AIDS offers many benefits, especially for young people, but in most countries it is still rare. Especially as treatments become more available for HIV infection, early testing and counselling could lead to timely care, improve medical management of HIV-related illnesses, and provide an opportunity to reduce prenatal transmission of HIV (Weinhardt *et al.*, 1999).

Debate continues as to whether taking the HIV test leads to safer behaviour, although some researchers have demonstrated that, once aware of their status, some infected people change their behaviour to avoid transmitting the HIV virus (Higgins *et al.*, 1991).

In addition, starting antiretroviral therapy as soon as possible lowers the viral load (NASCO, 1998) and may therefore reduce the risk of transmitting the virus, for those who test HIV-negative, testing may provide an impetus to develop a plan for avoiding infection (CDC, 1987).

Nevertheless, only few young people get tested even in countries with the most severe epidemics. There are several reasons. First, testing facilities are scarce in many countries. Second, treatment for HIV positive persons is often lacking, so why bother getting tested? Third, the stigma of HIV infection can discourage many young people, as it does to many adults. Regardless of age many people do not seek testing until they develop symptoms or a spouse or sex partner dies of AIDS (Allen *et al.*, 1992)

2.6 Barriers to the use of VCT services

Among the youth, further barriers to testing include lack of information, perception of low risk, lack of confidentiality, costs, transportation problems and laws that require parental consent. A study in the US found out that the number of adolescents who were tested increased by 150% when parental consent was no longer required. In Kenya for example nearly one-third of the adolescents studied received their test result either in a letter or from their parents instead of privately from the health providers (Otten and Peterman, 1993).

Slightly less than a third (30%) of adults who are tested seek testing solely to find out whether they are infected. Other reasons for being tested include: hospitalization or surgery (12%); application for insurance (16%); military induction (7%); referral by doctor, health department or sexual partner (7%); or for immigration-related reasons (4%) (Schoenborn *et al.*, 1994).

In order to benefit from these interventions and other advantages of VCT, the youth must first know and accept their HIV status. Currently most young women attending antenatal care in areas of high HIV sero-prevalence do not know their sero-status and have no access to voluntary counselling and testing. Being tested for HIV/AIDS is stressful for every one and especially for the young people. Young people who test positive want to maintain the belief in their own invincibility but are suddenly confronted with their own mortality. It may take them months to accept their situation and to seek treatment (Centers for Disease Control, 1998)

It is however encouraging that young people at high risk are more likely than other young people to seek testing and to return for the results-perhaps because they are aware that their behaviour has placed them at high risk

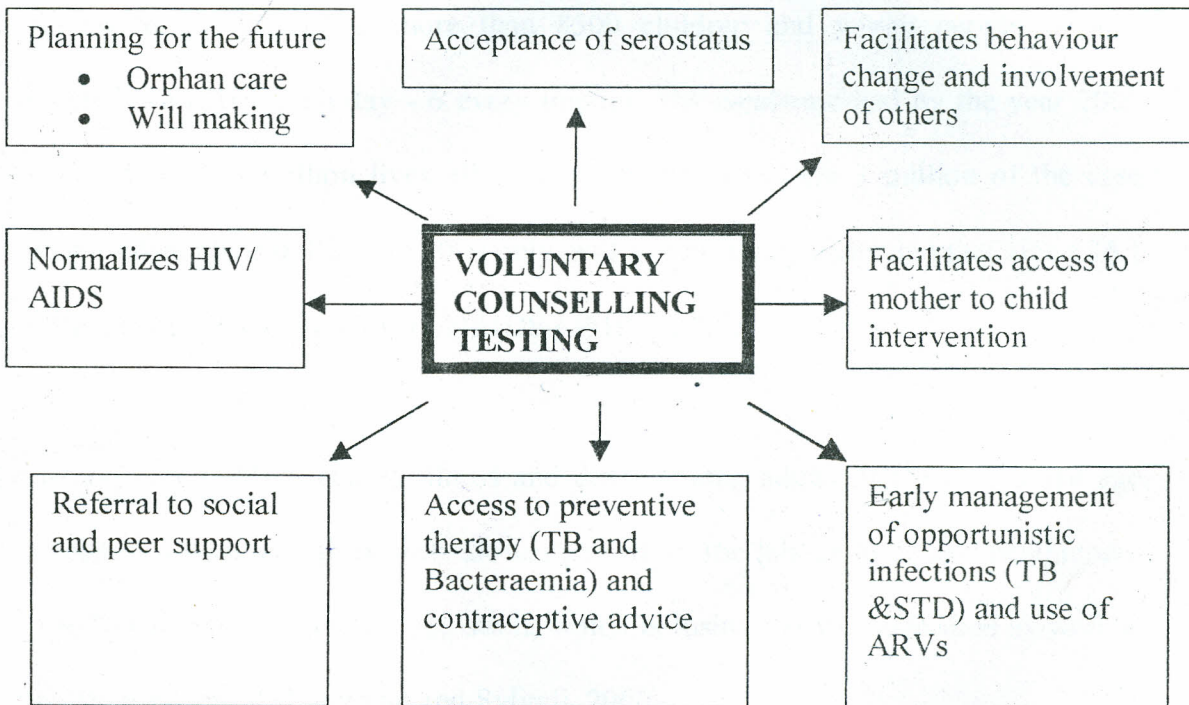
(Weinhardt *et al.*, 1999).

Some studies have shown behavioral changes following HIV testing and counseling, especially with both members of a couple. A programme in Rwanda, Africa provided education and confidential HIV testing and counseling to all participants in a

2.7 Conceptual and Theoretical Model

The conceptual framework in Figure 1 below is derived from theories and objective of the study highlighting the importance of voluntary counselling and testing's role as an entry point for HIV prevention and care.

FIGURE 1: A conceptual model showing VCT as entry point for HIV/ AIDS prevention and care



2.8 RATIONALE OF THE STUDY

2.8.1 Statement of the problem

Everyday, 7000 young people worldwide acquire HIV/AIDS. This translates to 2.6 million new infections each year among the young people –two million of the cases in Africa. Of the 30 million people alive today with the HIV/AIDS infection, 20 million of them are young people aged 10-24 (CDC, 1998).

Young people (10-24 years of age) account for more than 50% of all HIV infection worldwide. During 1998, more than 8500 children and young people became infected with HIV each day - 6 every minute. The pandemic had by the year 2000 taken about 21.8 million lives all over the world with over 3 million of the case having taken place in the year 2000 only, and it is currently estimated that about 36.1 million people have the virus (UNAIDS / WHO, 2000)

Further, HIV / AIDS causes illness and death among adults in the productive age groups, resulting in significantly slower growth of the labour force and heightening educational needs among a population, which is losing the well educated as well as the under educated (Meursing and Sidindi, 2000).

However, it has been realized that Voluntary Counselling and Testing (VCT) is an efficacious and pivotal strategy for both HIV/AIDS prevention and care. The youth are also at the highest risk of infection since puberty is a time of discovery, emerging feelings and exploration of new behaviours such as experimentation with substances

such as alcohol and bhang. Knowledge of their status will enable those infected to seek treatment with Anti-Retrovirals and also enhance behaviour change thus protecting ensuring those uninfected to remain safe while preventing further transmission among those already infected (Gostin,1990)..

2.8.2 Research questions

The major research questions that the study is intended to answer were:

- a) What social, economic, behavioural, cultural and psychological factors influence the utilization of VCT services among the youth in Nairobi?
- b) What are the knowledge, attitudes and practices of the youth as pertains VCT?
- c) What are the knowledge, attitudes and practices of the youth on HIV/AIDS that influence their utilization of VCT services?
- d) What are the sources of education and information on VCT and HIV/AIDS to the youth?

2.8.3 Justification of the study

Effective VCT services is an important entry point for care and support and promotes safe behaviour hence reducing the rates of HIV/AIDS transmission. It also breaks the vicious cycle of silence and stigma on ones' serostatus, there is therefore need for its expansion especially among the youth who are at the greatest risk of contracting the disease and also form the greatest proportion of the population of all developing countries like Kenya (Schoeborn *et al.*, 1994)

Another gap is created by the fact that most the studies that have been done examining young peoples knowledge, attitudes, practices and behaviours on HIV/AIDS, are mainly conducted among the accessible youth in schools. This study will therefore address this gap by considering also those out of school and with different educational levels. It also appreciates the fact that the youths have varied cultural, social, behavioural, economic and psychological backgrounds that may hinder reaching them with effective preventive programs and messages. Young people (10-24 years of age) account for more than 50% of all HIV infection worldwide. During 1998, more than 8500 children and young people became infected with HIV each day - 6 every minute (UNAIDS/WHO 2000).

Where they have been able to access appropriate knowledge and skills and means, today's young people have shown a remarkable propensity to adopt safer behaviours - more so than previous generations or older adults. Young people themselves are a tremendous resource. Initiatives that combine the strengths of young people and adults will be the ones that make a difference. The creativity, charisma, and energy of young people have brought insight and inspiration to programmes that listen to what young people have to say.

In spite of considerable investment in informing young people about HIV/AIDS prevention and evidence that young people "know the facts, " knowledge acquisition has not led to large-scale behaviour change among young people.

2.9 HYPOTHESES

The null hypotheses of the study were:

- a) That social, economic, behavioural, cultural and psychological factors do not affect the utilization of VCT services among the youth in Nairobi Province.
- b) That the knowledge, attitudes and practices of the youth on VCT services have no relationship with the utilization of such services.
- c) That the knowledge, attitudes and practices of the youth on HIV/AIDS have no effect on their utilization of VCT services.

2.10 OBJECTIVES OF THE STUDY

2.10.1 General objective

The general objective of the study was to determine the factors that influence the utilization of VCT services among the youth in Nairobi Province.

2.10.2 Specific objectives

The specific objectives of the study were:

- a) To establish the knowledge, attitudes and practices of the youth as on VCT and HIV/AIDS
- b) To establish and evaluate the sources of education and information on VCT and HIV/AIDS among the study subjects
- c) To determine the social, economic, behavioural, cultural and psychological factors that influence the utilization of VCT services among the youth in Nairobi

CHAPTER 3: MATERIALS AND METHODS

3.1 The Study area

The study was carried out in Nairobi, which is a province in the central part of Kenya. This area was chosen purposively because there are so many youths with varied social, economic and cultural backgrounds and also due to the fact that there are so many young people affected and infected by HIV in the area.

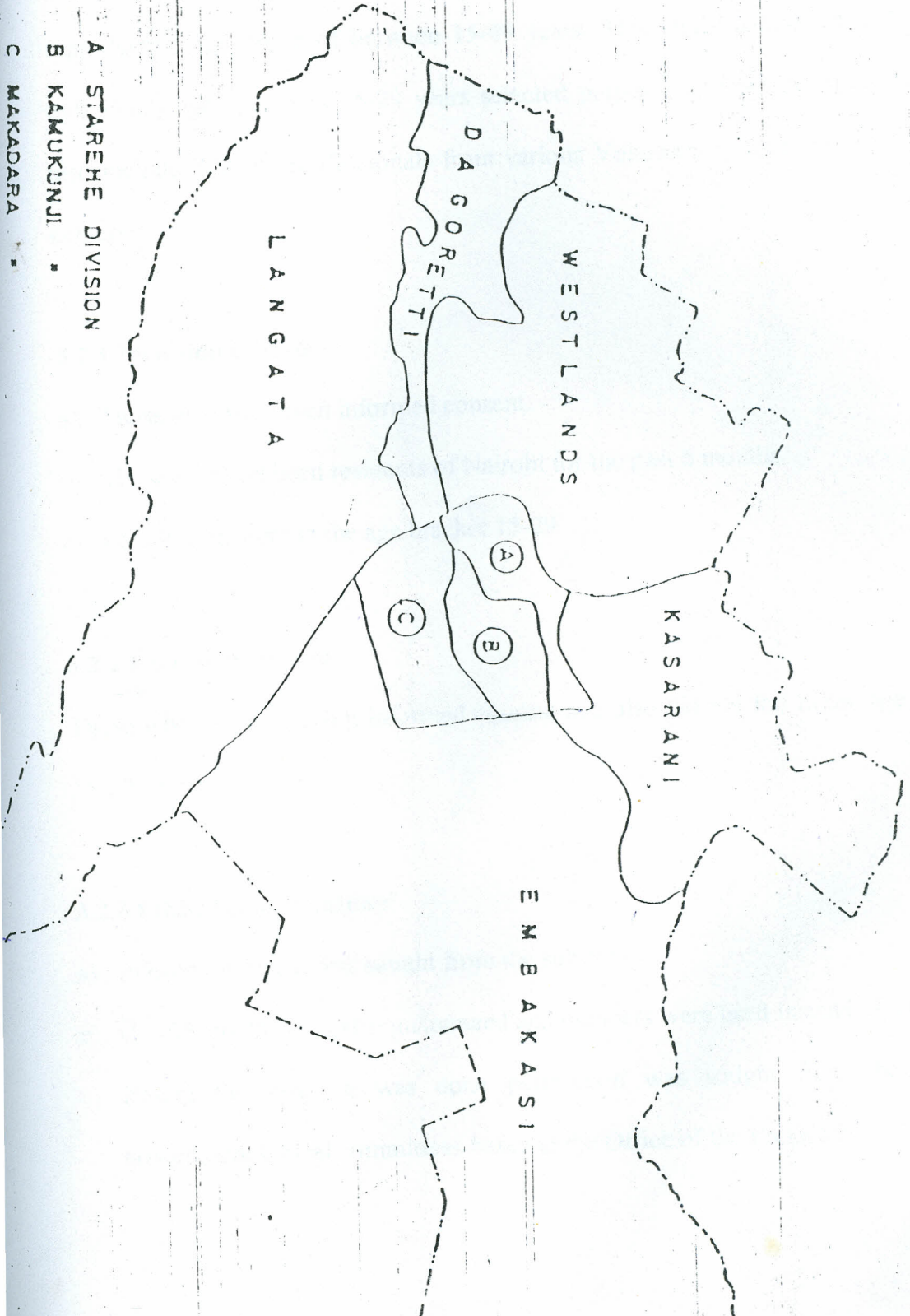
a) Physical description

Nairobi city extends between 36⁰4 and 37⁰10 and between 1⁰9 and 1⁰28 south. It covers an area of 696.1 Km². It shares common borders with Kiambu to the North, Machakos District to the East, and Kajiado District to the south. Administratively it is both a province and a District. (KDHS, 1998)

b) Administrative and political units

Administratively, the area is divided into eight divisions namely Kasarani, Embakasi, Makadara, Kamukunji, Starehe, West lands, Dagoreti, and Kibera each under a district officer (Figure 2). Politically it is divided into 7 constituencies namely Lang'ata, Dagorretti, Westlands, Kamukunji, Starere, Kasarani and Embakasi. (KDHS, 1998)

Figure 2: Map of Nairobi showing administrative divisions



3.2 THE STUDY POPULATION.

According to the 1999 population census, Nairobi has a population of 2,143,254 with 1,153,828 males and 989,426 females . About 63% of the population is within the reproductive age group of between 15-49 years. This study comprised 563 youth individuals aged between 15-29 years selected purposively from the study area. It also include 8 health professionals from various Voluntary Counselling and testing centers.

3.2.1 Inclusion criteria

- a) Those who had given informed consent.
- b) Those who had been residents of Nairobi for the past 6 months.
- c) People who were in the age bracket 15-29

3.2.2 Exclusion criteria

Those who had not given informed consent and also did not fall in the age bracket 15-29 years.

3.2.3 Ethical considerations

- a) Informed consent was sought from the subjects.
- b) Confidentiality was also guaranteed and numbers were used instead of names.
- c) Before the research was done permission was sought from the relevant government ethical committees based at the Office of the President.

3.3 STUDY DESIGN

The study was a cross-sectional survey that was done in two phases.

Phase one involved data collection using interviews and questionnaires administered to the youth who were selected randomly in the area. Phase two involved focus group discussions in which the youths were put in groups of 8-12 and also 8 health professionals and their views on the factors that influence their utilization of VCT services sought by the principal investigator.

3.3.1 Sampling procedure

The study mainly employed two sampling techniques

Simple random sampling method was used to identify the youth while purposive sampling method was used to identify the specific locations where the youths were got.

3.3.2 Sample size determination

The minimum sample size was obtained using a formula as used by Fisher *et al.*, (1998) as shown below:

$$N = \frac{Z^2 p q D}{d^2}$$

Where:

N -is the desired sample size.

z = normal deviate 1.96) which corresponds to 95% confidence interval

p = proportion of the target population estimated to have desired characteristics

$q = 1 - p$

d - degrees of freedom = 0.05

D - design effect = 1

$$\text{Thus } N = 1.96^2 \times 0.5 \times 0.5 \times 1 \\ \div 0.05^2$$

Approximately 384

Therefore a sample size of 563 was taken to increase the representativeness of the sample and also cater for any attrition. This large sample was collected because of the abundance of study subjects who met the inclusion criteria.

3.4 METHODS OF DATA COLLECTION AND RESEARCH INSTRUMENTS

The principal investigator did data collection. Pre-testing of the data collection instruments was done before the actual survey was carried to ascertain the feasibility of the research instruments. This was meant to determine if the questions were acceptable, askable, answerable, analyzable, and to enable the Principal investigator to discern, alter or modify the questions in order to enable the answering of the research questions.

The data was collected using questionnaires and interviews administered to the youth. Focus group discussions were also used whereby the youth were put in groups of 8-12 and their views taken (Wamahiu and Karugu., 1995)

3.4.1 Questionnaires

These were administered by the principal investigator with the help of trained research assistants to the youths in Nairobi collected both randomly and purposively and were willing to participate in the study.

In this regard about 587 questionnaires were administered in conformity with the sample size out of which 24 of the questionnaires were dismissed and 563 retained for analysis.

3.4.2 Focus group discussions

The principal researcher mainly conducted these. A total of 8 series of FGDs were held with the youths from various parts of Nairobi and also with the health providers from selected Voluntary Counselling and Testing centers. The purpose was to the views and opinions on the factors that affected whether or nor they had sought VCT.

3.4.3 Observations

These were mainly done by the principal researcher and were aimed at establishing any events/occurrences which would explain the causes of risky sexual behaviour among the youth in Nairobi. He observed the "Youth Public interactions" at Disco halls, video show rooms both during the day and night.

3.4.4 Interviews

I also carried interviews with the health providers in selected voluntary counselling centers to find out their views on the factors influencing the utilization of the VCT services among the youth.

3.5 DATA MANAGEMENT

3.5.1 Data storage and retrieval

All data from the study was coded and entered in a computer using the SPSS program. The data was also checked against data files to identify obvious inconsistencies. The data entry and checking was done continuously during the course of study.

3.5.2 Data analysis

Baseline characteristics such as demographic, sexual history, educational level, family background, income level, perceptions, knowledge and attitudes on HIV/AIDS and VCT were compared with whether or not the youth had sought VCT using Chi-square. Measures of central tendency such as mean, median and mode were also computed. Cross tabulation was done to establish the relationship between variables and Chi-square again used to test for the association.

Other information from in-depth interviews were analysed manually using qualitative methods. The research findings were presented using pie charts, and bar diagrams.

CHAPTER 4: RESULTS AND DISCUSSIONS

A total of five hundred and sixty three (563) youths within Nairobi were interviewed with the aim of identifying the factors that influenced whether or not they had sought VCT. The youths included those in secondary schools, tertiary colleges and universities. More others youths not in learning institutions were also interviewed in an attempt to establish any differences based on confinement of the youth in learning institutions, in this case very many out-of-school youths were interviewed to avoid any bias. I also conducted eight (8) series of Focus Group Discussions with selected youths in an attempt to obtain more qualitative data on the factors influencing their utilization of the VCT services.

Together with these, several observations were also made with the intention of gathering information from the youths on risky sexual behaviours and observing the youth's behaviours at Disco halls, Movie theatres, and games tournaments among others.

4.1 SOCIO-CULTURAL, ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF THE STUDY SUBJECTS

4.1.1 Distribution of the respondents study subjects by sex

Out of the five hundred and sixty three youth interviewed, 232 (41.2 %) were females while 331 (58.8%) were males . This higher majority of the boys in number of boys compared to females can be attributed to the fact that most of the males are more out going and could be got in social places more often than girls. It may also be concluded that due to the social chores that keep girls at home as well as social justice whereby the female children are more protected parents since it is assumed that they maybe at very high risks.

232
51%

One other way of justifying the difference in the proportion may be due to the fact that a good number of the questionnaires were also collected from the learning institutions hence confirming the theory that fewer girls than boys attend education especially at Post –Secondary and tertiary levels. The results indicated that more females (51%) used VCT services as compared to the males(49%) ($\chi^2 = 13.92$, Df=1, P =0.00018). This may be attributed to the fact that most females considered themselves more vulnerable or they may have been tested during pregnancy.

Table 1: Relationship between sex and use of VCT

		Use of VCT		
		No	Yes	Total
Sex	Female	123 (35%)	109 (51%)	232 (41%)
	Male	227 (65%)	104 (49%)	331 (59%)
	Total	350 (62%)	213 (38%)	563 (100%)

4.1.2 Distribution of respondents by age

The study subjects ages ranged from 15-29 years, with majority of them 58.8 % being in the age group 19-22. The three –year age interval was used because of the narrow range of ages of the study subjects (Figure 1). This was mainly because most of the respondents who were in college or campus were in the First or second years of study. Even those who were out of school had just finished form four and were waiting to join college or other institutions of learning. The age distribution could also be explained by the fact that in the 8-4-4 system of education most people finish secondary education at the age of 18-20 years and since most of them who qualify for campus may have to wait for 2 years before joining then by the time they get to First and second years of study they are aged 20-22 years. These results concur with those of a study by (Hardy, 1992) who also found out the group mostly at risk are those aged between 15-24 years.

Table 2: Relationship between Age and VCT use

Age	Use of VCT		
	No	Yes	Total
15-18	60 (17%)	34 (16%)	94 (17%)
19-22	195 (56%)	136 (64%)	331 (59%)
23-26	71 (20%)		71 (13%)
27-29	24 (7%)	43 (20%)	67 (12%)
Total	350 (62%)	213 (38%)	563 (100%)

The results indicated that as age increases more people use VCT since 43 out of 67 people in the age group 27-29 accounting for 64% had used VCT

($\chi^2 = 88.07$, Df=3, P=0.0001)

20 — 79

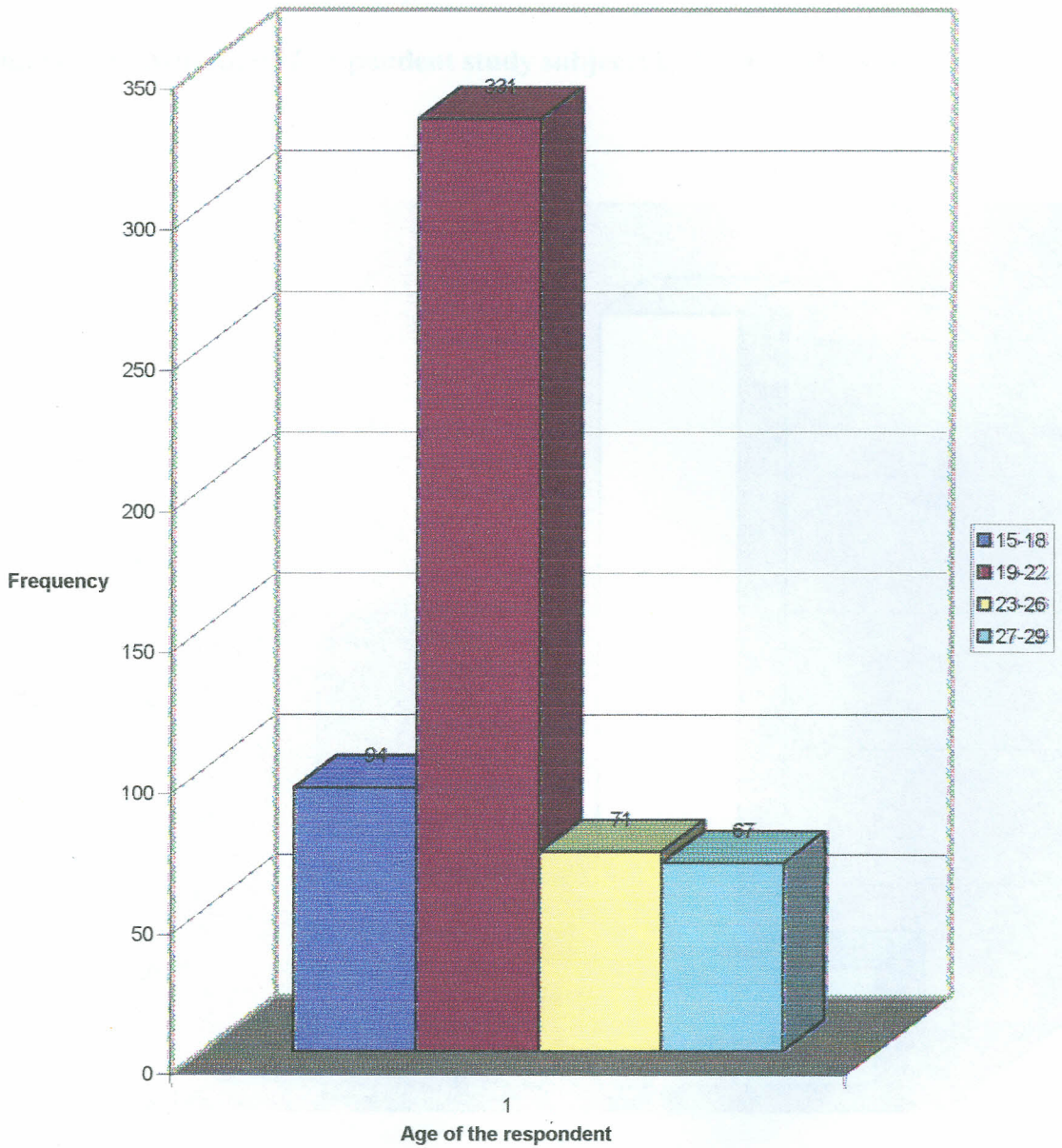
20 — 23

24 — 27

28 — 31

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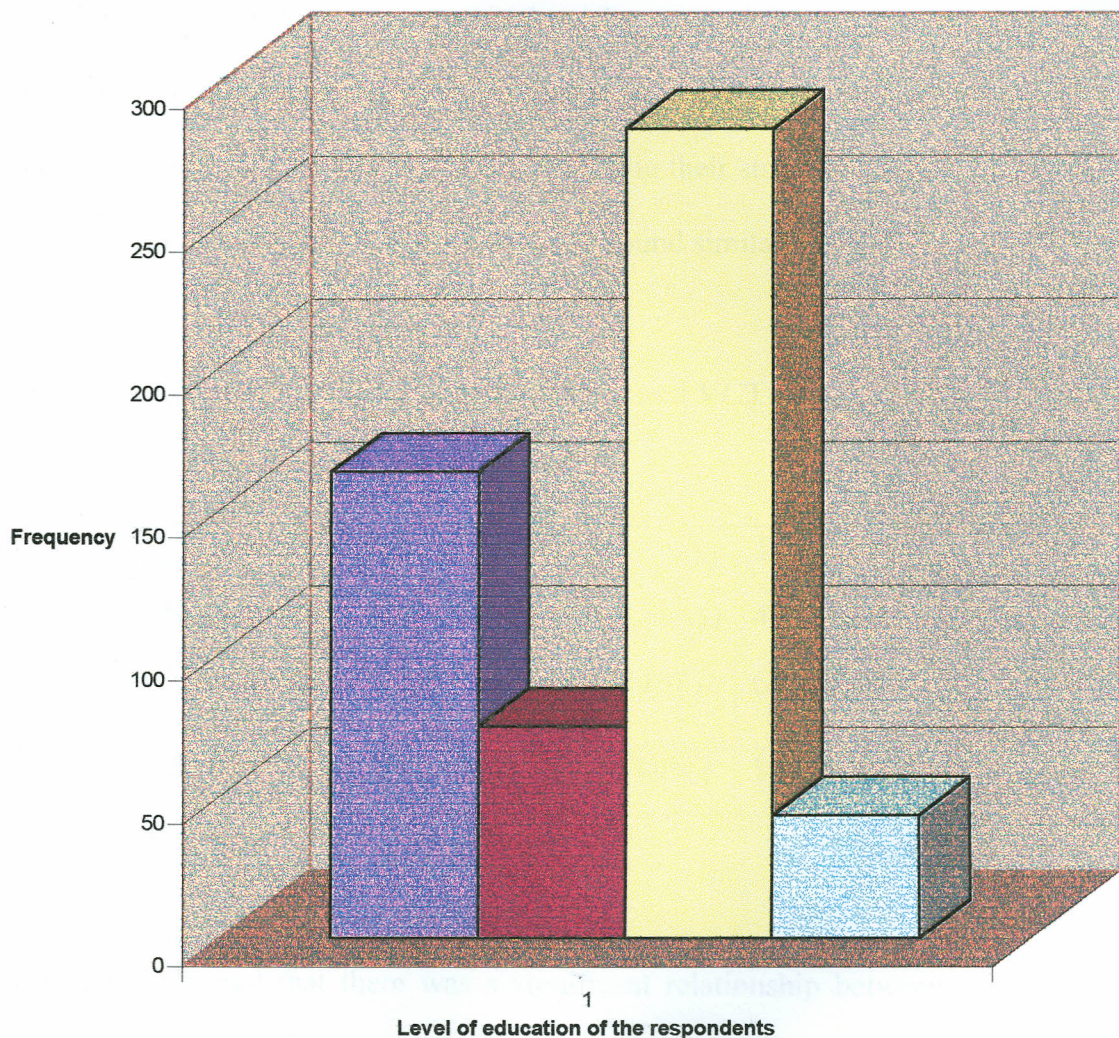
36 — 39

Figure 3: Distribution of respondents by age

4.1.3 Distribution of respondents study subjects by level of education

The study subjects were drawn from youths who had attained secondary education and above. At the same time it was realised that most of them were either in campus or other tertiary colleges (Figure 4).

Figure 4: Distribution of respondent study subjects by level of education



■ Secondary (not completed) ■ Secondary (completed) ■ College campus(not completed) ■ College campus(completed)

4.1.4 Distribution of respondents based on marital status

From the results it was found out that most of the people interviewed were single (88.1%) although a good number of them reported that they were in a serious intimate relationships though still calling themselves single while a the rest (11.9%) were either married or cohabiting. The fact that most of the respondents said they were single may be explained by the fact that most of them were in learning institutions and were also non-committal on the state of their relationships since it was evident that at point in life they change partner more often than note. This coincided with a study by Bohmer and Kirumira in their study of reproductive health services among Ugandan adolescents who also found similar results.

Table 3 : Relationship between marital status and VCT use

Use of VCT

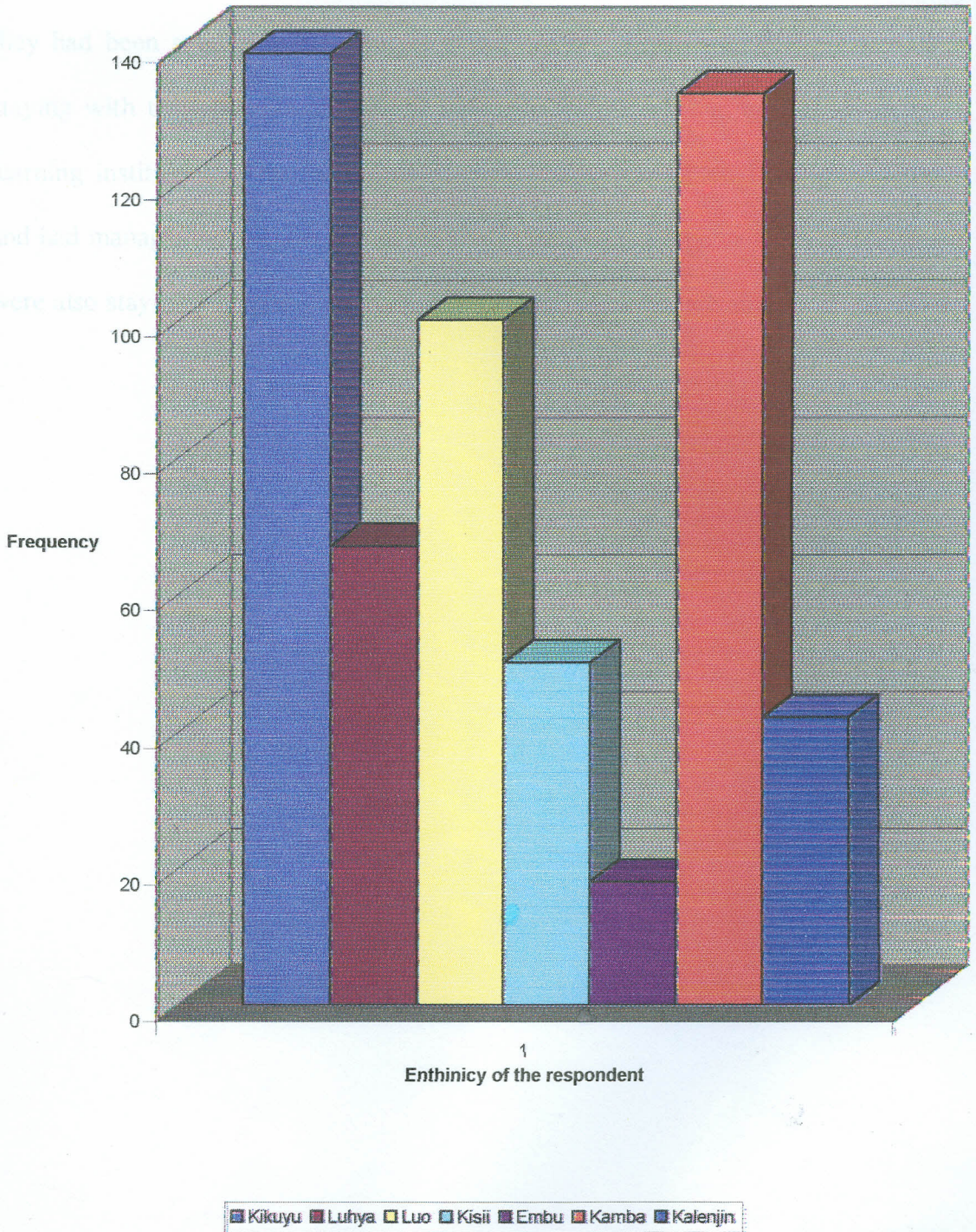
	No	Yes	Total
Single	326 (93%)	170 (79%)	496 (88%)
Married/ Cohabiting	24(7%)	43 (21%)	67 (12%)
Total	350(62%)	213(38%)	563(100%)

The results indicated that there was a significant relationship between the marital status of the respondents and whether or not they used the VCT services with 79% of those who had VCT were single ($\chi^2 = 21.69$, Df=1, P =0.000).

4.1.5 Distribution of the respondents by tribe/ ethnic group

On the ethnicity of the respondent it was found out that the single majority of the respondents were of Kikuyu origin (24.7%) and Kamba origin (23.6%). This may be due to the fact that both of the two-tribes/ communities have a smaller proximity to Nairobi from the rural areas. However the differences were not very significant owing to the fact that Nairobi being the capital city of Kenya is also a metropolitan society.

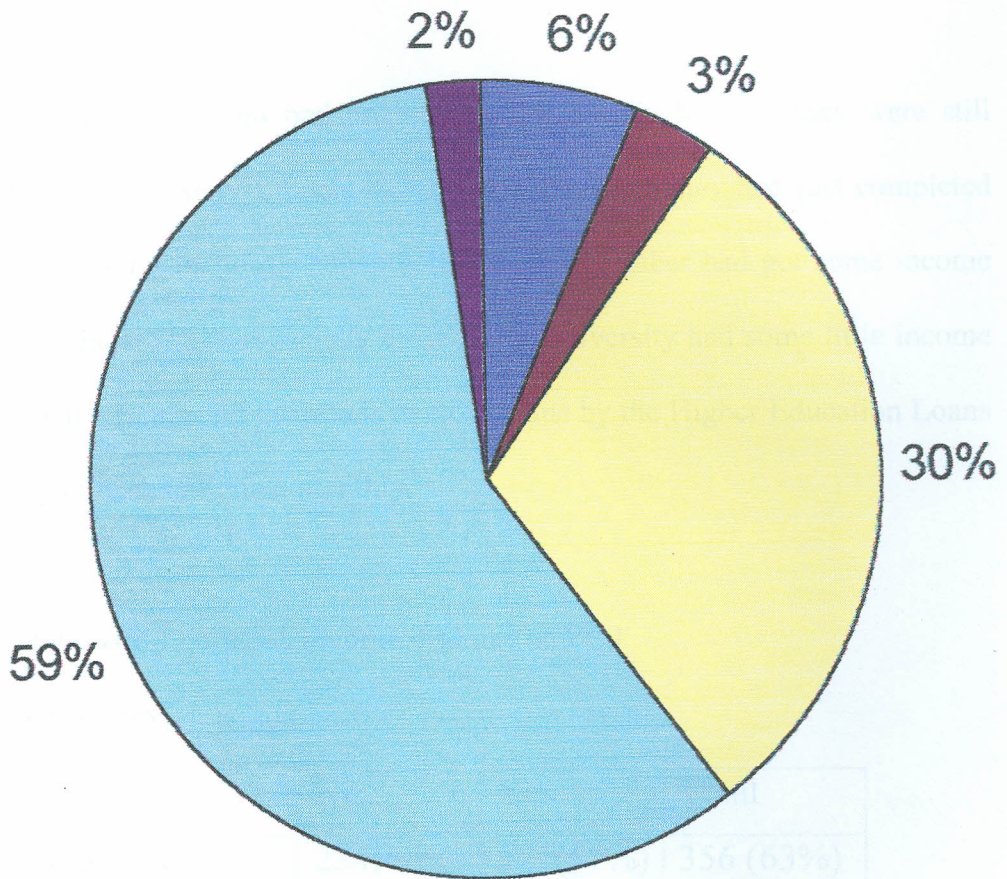
Figure 5: Distribution of the respondents by tribe/ ethnic group



4.1.6 Distribution of the respondents by duration of living in Nairobi

The results also indicated that majority of the respondents (58.3%) had been living in Nairobi for more than 6 years although about 2.1% did not indicate for how long they had been staying in Nairobi. This was mainly because a good number were staying with their parents in Nairobi while the others were at advanced stages in learning institutions. There were also others who had completed colleges/ campus and had managed to get jobs within the city. Another good percentage of the youths were also staying with parents or relatives who are working in Nairobi.

Figure 6: Distribution of the respondents by duration of living in Nairobi



■ less than 1 year ■ 1-3 years ■ 3-6 years ■ more than 6 years ■ missing

4.1.7 Distribution of respondents according to income

About the income levels of the respondents, it was found out that majority of the respondents (63.2%) interviewed had no income. Of the remaining proportion, 17.4% had an income less than Kshs 6,000, 8 % had an income ranging between Kshs 6000-10000 while another 11.4% had an income greater than Kshs 10,000 per month (Figure 7)

The fact that most of them had no income was mainly because they were still students either in secondary schools or tertiary colleges or they had just completed and were still looking for jobs. Nevertheless a good number had got some income while even for the students especially those in the university had some little income either from their parents and guardians or from loans by the Higher Education Loans Board although this is not given monthly.

Table 4: Relationship between income and use of VCT

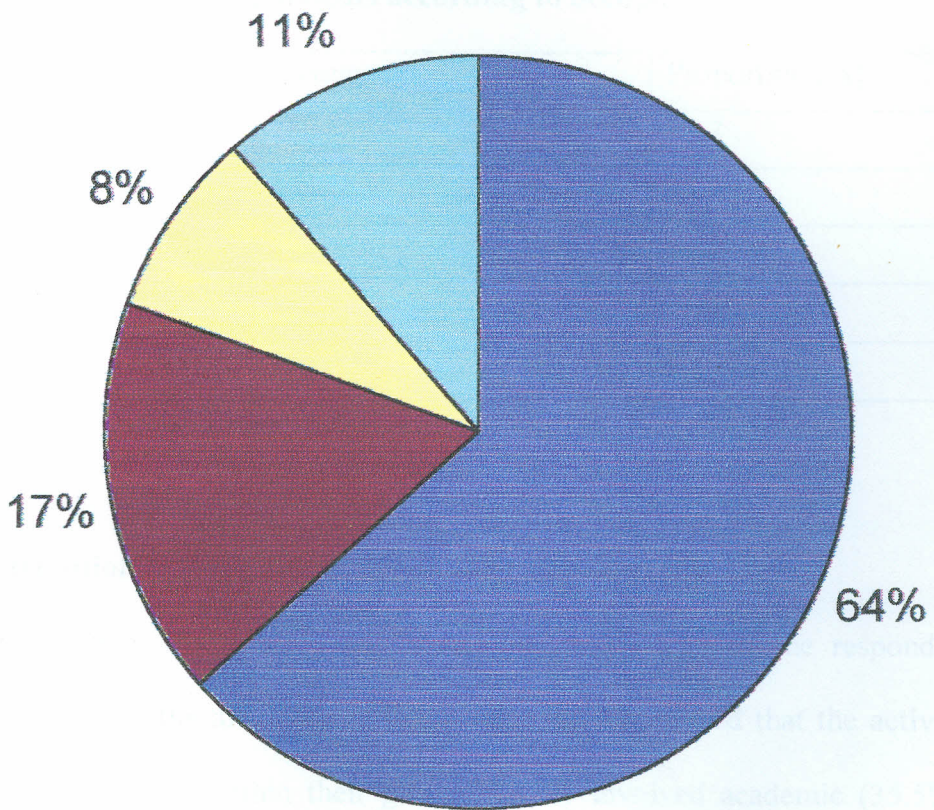
Use of VCT services

	No	Yes	Total
No income	234(66%)	122(57%)	356 (63%)
Less 6,000	74(21%)	24(11%)	98 (17%)
6,000-10,000	21(6%)	24(11%)	45 (8%)
More than 10,000	21(6%)	43(21%)	64 (11%)
Total	350(62%)	213(38%)	563(100%)

The results when cross tabulated indicated that there was a positive relationship between income and utilization of VCT- with 67% of those who had salary above

10,000 Kshs per month having had VCT. This could be attributed to the fact that they may have been tested when getting insurance at workplace or because they were able to $\chi^2 = 36.83, Df=3, P=0.000$

Figure 7: Distribution of respondents according to income



no income	less than 6000
6000-10000	more than 10000

4.1.8 Distribution of respondents according to occupation

Majority of the respondents (47.2%) were students either in secondary schools, tertiary colleges or campus/ universities. The others were unemployed (23.8%), casuals or on wages (10%) while 18.8% were trained professionals in various disciplines (Table 2)

Table 5: Distribution of respondents according to occupation

Occupation	Frequency	Proportion (%)
Student	266	47.2
Unemployed	134	23.8
Casual/wage	57	10.1
Professional	106	18.8
Total	563	100.0

4.1.9 Distribution of respondents according to social group

Asked whether they belonged to any social group, majority of the respondents (84.4%) answered in the affirmative. The results further showed that the activities that they participated in within their groups mainly involved academic (35.5%) , socializing (26.5%), religious (21.3%) and business (8.7%). However 8% did not state the activities they mainly indulged in their respective group. Whether or not the youth belonged to any social group was a very important factor as most messages are disseminated especially to the youths through the social groups. The large percentage of the youths belonged to academic groups because they were students. Quite a number were in religious groups especially for spiritual nourishment. Many others

were also in social groups as they were still in a stage of developing feelings since through these groups they went to clubs e.t.c. It must however be noted that these social groups are not registered. (Figure 8).

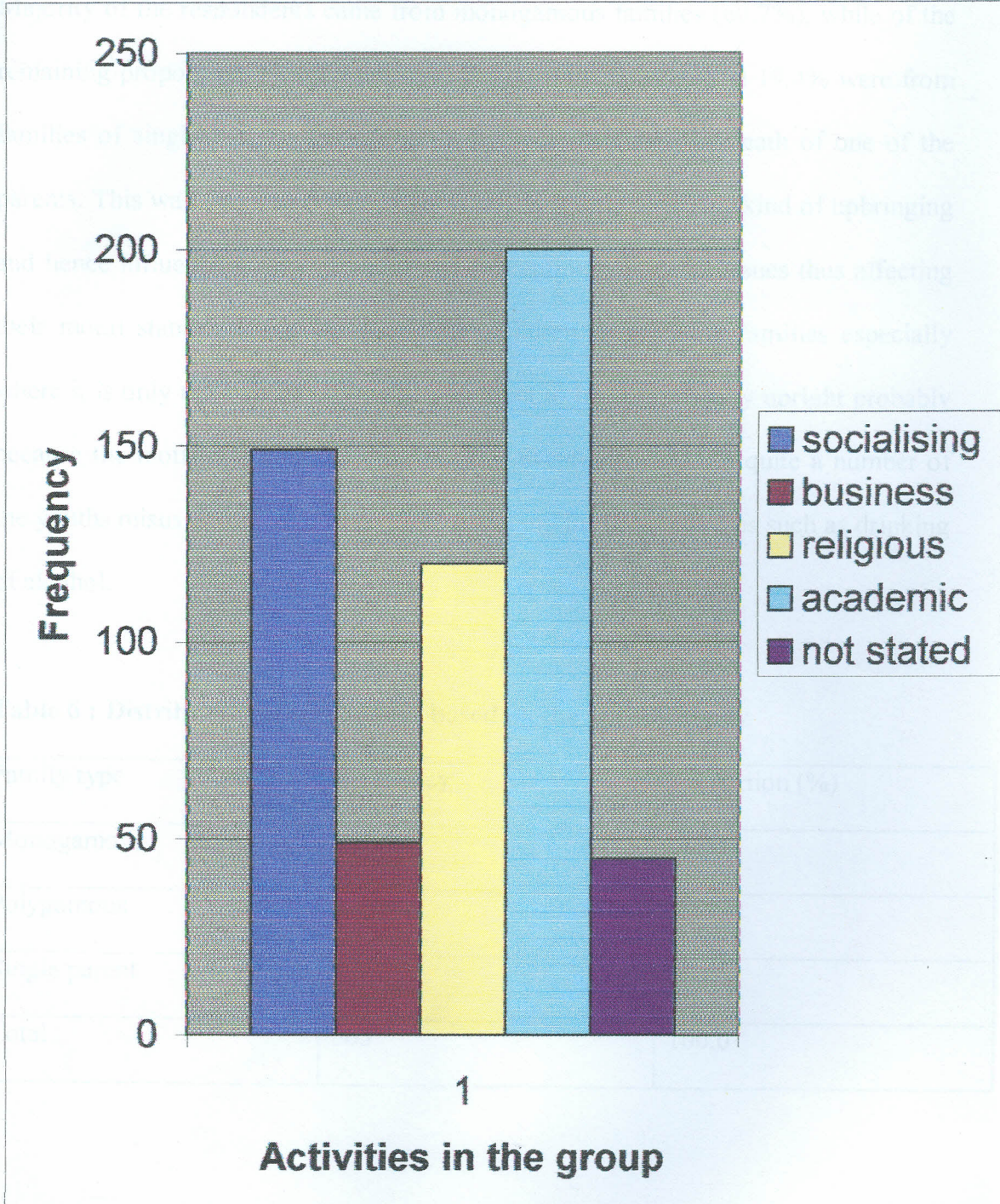
Table 5: Relationship between belonging to a social group and VCT use

		VCT take		Total
		No	Yes	
Social group	No	35 (10%)	53 (25%)	88
	Yes	315 (90%)	160 (75%)	475
	Total	350 (62)	213 (38%)	563

The results indicated that there was a significant relationship between the belonging to a social group and the utilization of VCT services since 75% of those who had taken VCT belonged to various social groups ($\chi^2 = 22.24022$, Df=1, P =0.000).

This may be attributed to the fact that most learning takes place in these groups, Where the youths discuss freely some of the pertinent issues affecting them.

Figure 8: Distribution of respondents according to activities in the social group



Consequently, the numbers of siblings in the respondents were as follows: 18.2% were in the group 0-3, 29.7% had 3-5 siblings, 19.7% had between 6-12 siblings while 32.6% had more than 12 siblings. This may also affect how much

4.1.10 Distribution of respondent based on the type of family

Majority of the respondents came from monogamous families (60.7%), while of the remaining proportion, 19.9% were from polygamous families and 19.4% were from families of single parents either due to divorce, separation or death of one of the parents. This was very important to the youth as it influenced the kind of upbringing and hence influencing their attitudes and perceptions on social issues thus affecting their moral standards. For instance most children from single families especially where it is only the mother present are seen not to be very morally upright probably because the mothers are not very strict. This eventually leads to quite a number of the youths misusing the opportunity and engaging in risky activities such as drinking of alcohol.

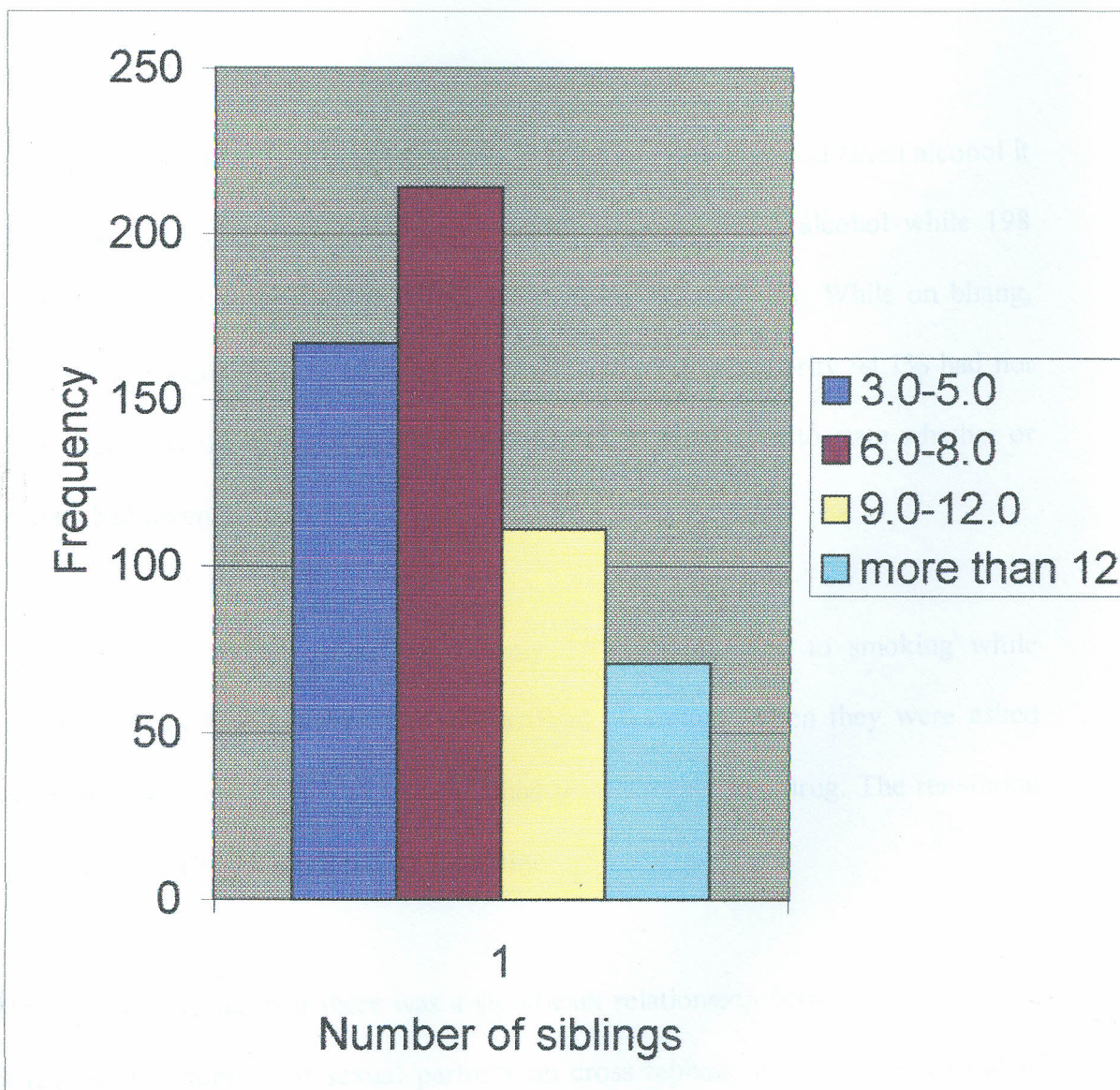
Table 6 : Distribution of respondent based on the type of family

Family type	Frequency	Proportion (%)
Monogamous	342	60.7
Polygamous	112	19.9
Single parent	109	19.4
Total	563	100.0

Consequently, the numbers of siblings to the respondents were as follows. 38.8% were in the group 6-8, 29.7% had 3-5 siblings, 19.7% had between 9-12 siblings while 12.6% had more than 12 siblings. This may also affect how much

concentration may be accorded to the children by the parents. When cross tabulation was done it indicated that most of the respondents who came from very large families i.e. those who had many siblings had their first sexual intercourse at an earlier age than the others. This can be attributed to lack of most family cohesiveness and hence little control as portion social behaviours among the youths.

Figure 9: Distribution of respondents based on number of siblings



4.2 BEHAVIOURAL AND PSYCHOLOGICAL CHARACTERISTICS OF THE YOUTHS

4.2.1 Substance/drug use and abuse

Majority of the respondents (64.8%) admitted having taken drugs while 35.2% had not indulged into drug taking activities. The drugs that they had been taking mainly involved the locally available drugs such as alcohol, bhang, cocaine, *miraa* and cigarettes etc.

However among those who had taken drugs asked whether they had taken alcohol it was found out taken that 365 respondents (55.8%) had taken alcohol while 198 respondents (44.2%) had not alcohol as at the time of the study. While on bhang, only 18 respondents (3.2%) admitted having taken it while majority 94.1% had not taken bhang. At the same time 15 respondents (2.7%) declined to state whether or not they had taken bhang.

Asked about the taking of cigarettes only 73(13%) admitted to smoking while majority 490 (87%) said they had not smoked cigarettes. When they were asked about cocaine, only 36 (6.4%) said they had used cocaine as a drug. The remaining proportion 527 (93.6%) had not used cocaine.

The results indicated that there was a significant relationship between the taking of drugs and the number of sexual partners on cross tabbing it showed that most of those who had taken drugs (75.7%) had more 2 sexual partners within the last 12

months. This in itself shows how much risks the subjects were putting themselves in since the method by which HIV/AIDS is spread is through heterosexual intercourse especially by having multiple sexual partners.

When the taking of drugs was cross tabbed against taking of VCT then the results indicated that (62%) of those who had not sought VCT were those involved in taking drugs especially alcohol. This may be because of perceived high risk since they could have been lured into sex when under the influence of alcohol. Owing to the fact that to date no cure for HIV/AIDS exists they did not see the need as it would only traumatise them.

Table 7: Use of drug by respondents

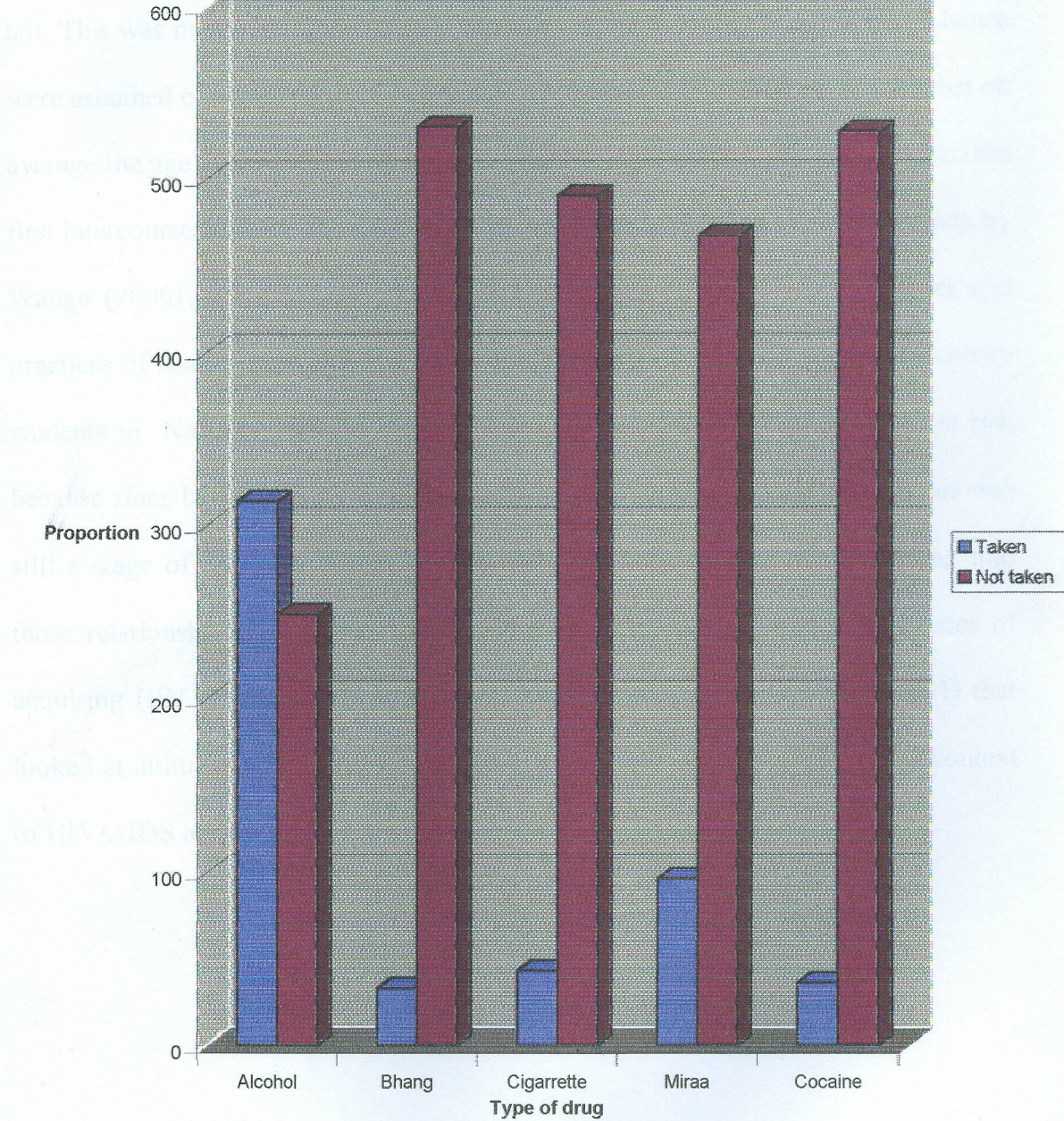
Have you taken any drug	Frequency	Proportion (%)
Yes	365	64.9
No	198	35.2
Total	563	100.0

Figure 10: Comparison of the individual drugs used by respondents

4.2.2 Age of first sexual intercourse

On the other hand the results indicated that 49 (3.7%) had never had sex in the

remaining respondents 74 (9%) declined to state whether or not they had had sex or



4.2.2 Age of first sexual intercourse

On the other hand the results indicated that 49 (8.7%) had never had sex as the remaining respondents 34 (6%) declined to state whether or not they had had sex or not. This was mainly because most of the study subjects were not married and hence were ashamed of exposing their past sexual experiences. The results indicated that on average the age at first sexual intercourse was 16 while quite a good number had the first intercourse between the ages 12-15 hence agreeing with the results of a study by Wanga (2000) in his Masters thesis while studying the knowledge, attitudes and practices of healthy reproductive habits and contraceptive use among the University students in Nairobi. This further elucidated the fact that most youths were at risk because since by the age of 15 well over 40% had engaged in sex and since this was still a stage of changing sexual experiences with high chances of not settling into those relationships leading to marriage hence this would increase their chances of acquiring HIV. These results concur with those of a study by Muthoni (2001) that looked at attitude and practices of adolescents towards premarital sex in the context of HIV/AIDS and gender perspective.

Table 8: Relationship between early sexual intercourse and VCT use

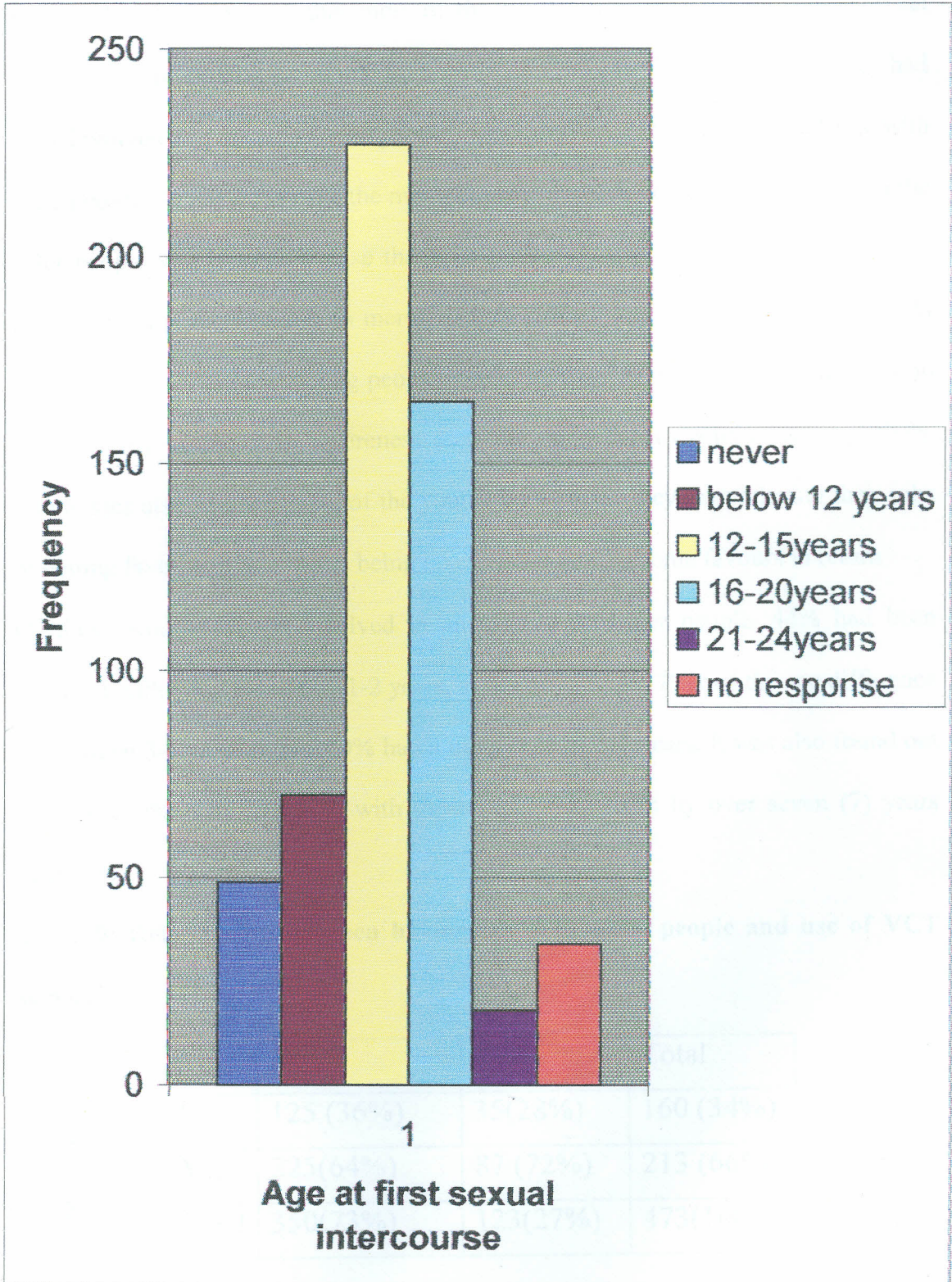
Age at first sex

Use of VCT

	No	Yes	Total
Never	15	34	49 (9%)
Below 12	37	33	70 (13%)
12-15	173	54	227(43%)
16-20	90	75	165(31%)
21-24	18		18 (4%)
Total	333(62%)	196 (38%)	529 (100%)

The results indicated a significant relationship between the age at first sex and the utilization of VCT services. This is evidenced by the fact that virtually all those who had taken VCT were engaged in sexual relationships before the age of 20 years. This may be attributed to the fact that they considered themselves very vulnerable to contracting HIV/AIDS ($\chi^2 = 63.83$, Df=4, P =0.0001)

Figure 11: Age at first sexual intercourse



4.2.3 Having sex with older people

The results also indicated that most of the youths had been involved in a sexual intercourse with older people, majority of the respondents (71.5%) admitted they had been involved in sex with older people while only (29.5%) had not had sex with older people. At the same time the major reasons for their sexual indulgence with the older people was mainly because the people were rich or because of peer pressure while a good proportion did so merely due to curiosity. (Okwesio, 2002). It should therefore be a policy that young people should be more responsible over their action especially by giving more awareness concerning the methods of avoiding getting AIDS. The bosses also coerced some of the youths into sex, as they feared losing their jobs or getting favours in return like being taken out or getting some favours in return. Of those who had been involved in an affair with older people, 44% had been involved with people older by 1-2 years, at the same time 27% had the age difference of between 3-5 years, while 20% had a difference of 5-7 years. It was also found out that some 9% were involved with those older than them by over seven (7) years (Table 7).

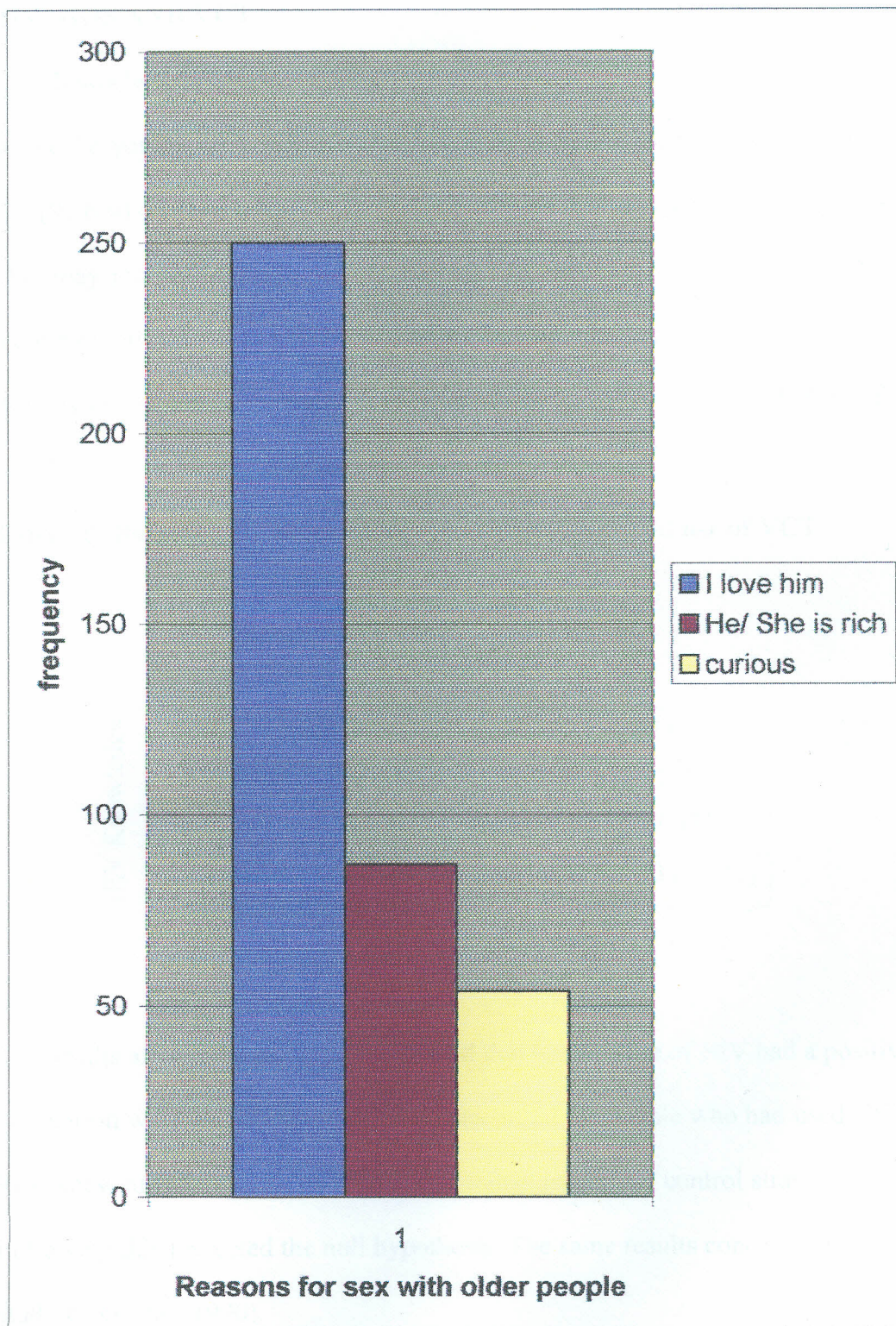
Table 9: Relationship between having sex with older people and use of VCT services

	No	Yes	Total
No	125 (36%)	35(28%)	160 (34%)
Yes	225(64%)	87 (72%)	213 (66%)
Total	350(73%)	123(27%)	473(100%)

The results indicated that there was a significant relationship between the involvement in sexual relationships with older people and the utilization of VCT services with actual figures indicating that over 72 % of those who had taken VCT had had sex with older people. This may also be associated to the fact that they suspect they may have been vulnerable having exposed themselves to sex with older people ($\chi^2 = 108.55$, Df=3, P =0.0001)

4.2.4 Reasons for having sex with older people

The results also indicated that among those who had been involved in sex with older people 64% said they genuinely loved the partners, 22% said it was because the partners were rich while a further 14% said it was because of curiosity of influence.

Figure 12: Reasons for having sex with older people

4.3 KNOWLEDGE, ATTITUDES AND PERCEPTION OF THE YOUTH ON HIV/AIDS AND VCT

4.3.1 Knowledge of HIV/AIDS

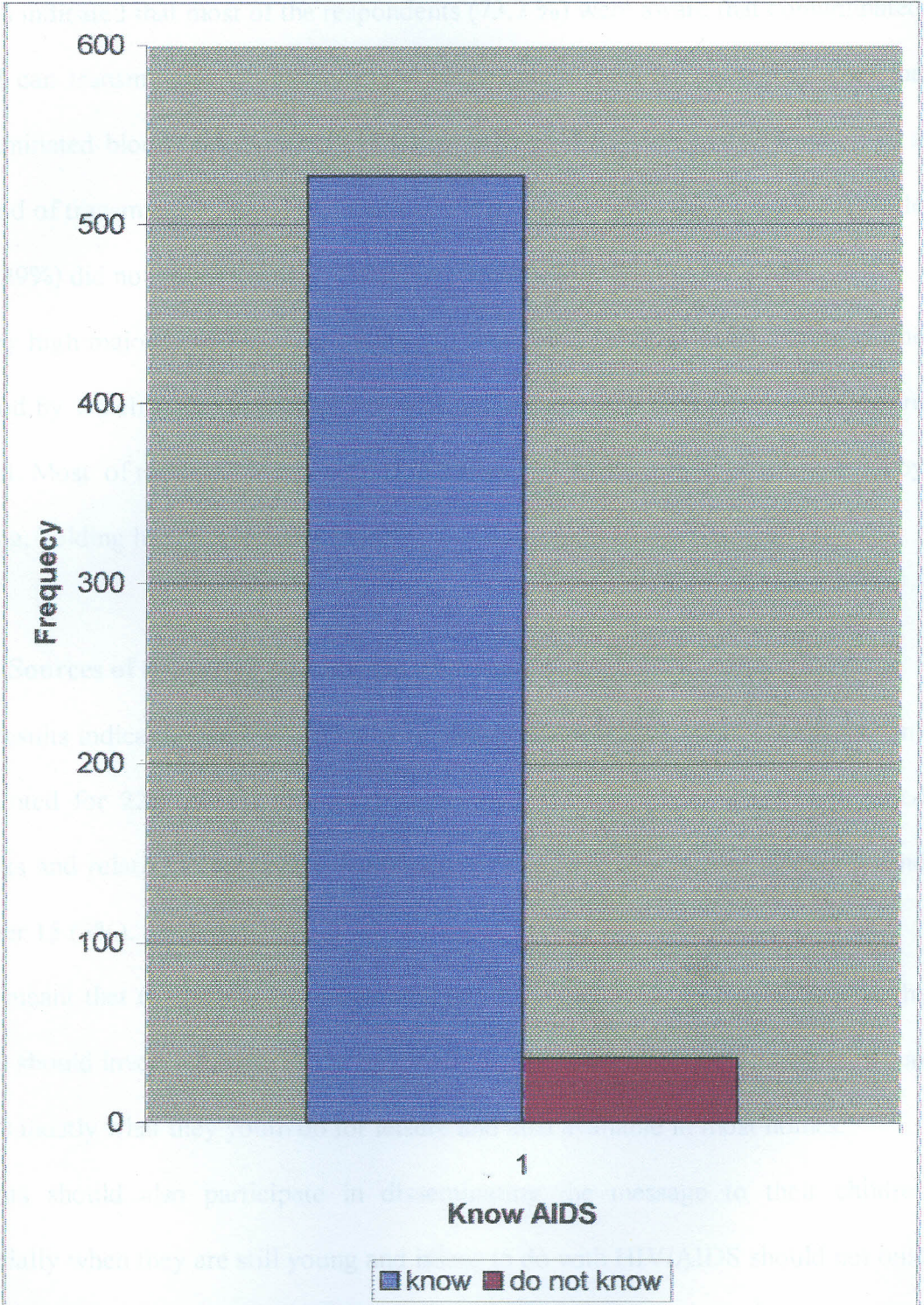
When the youths were asked if they knew of HIV/ AIDS, the results indicated that 527 (93.6%) of them knew of while a minority 36 (6.4%) said they did not know of it. This may mainly be attributed to the fact that most of them had acquired at least secondary education and had learn about the human sexuality in subjects such as Biology and science especially in primary level of education. ($\chi^2 = 428.2$, $df = 1$, $P = 0.032$)

Table 10: Relationship between knowing HIV/AIDS and use of VCT

		VCT take		
		No	Yes	Total
HIV Knowledge	No	18	18 (9%)	36 (7%)
	Yes	332	195 (91%)	527(93%)
	Total	350 (62%)	213 (37%)	563 (100%)

The results after cross tabulation indicated that Knowledge of HIV had a positive correlation with the utilization of HIV since of all the people who had used VCT, 91% knew of HIV/AIDS , its methods of transmission and control strategies.

Following this I rejected the null hypothesis. The same results concur with those of a study by Gostin (1990).

Figure 13: Distribution of respondents on knowledge of HIV/AIDS

A question was also asked to find out if they knew the methods of transmission. The results indicated that most of the respondents (73.7 %) were aware that contaminated blood can transmit the virus, while 148 respondents were not aware whether the contaminated blood could transmit the virus. On mother to child transmission as a method of transmission 398 (71%) were aware it was a method of transmission while 163 (29%) did not know it was a method of transmission.

A very high majority (90%) were aware that unprotected sexual intercourse was the method by which AIDS is normally spread while only 10% seemed not to be aware of that. Most of the respondents were also aware that AIDS cannot be transmitted by kissing, holding hands or sharing food.

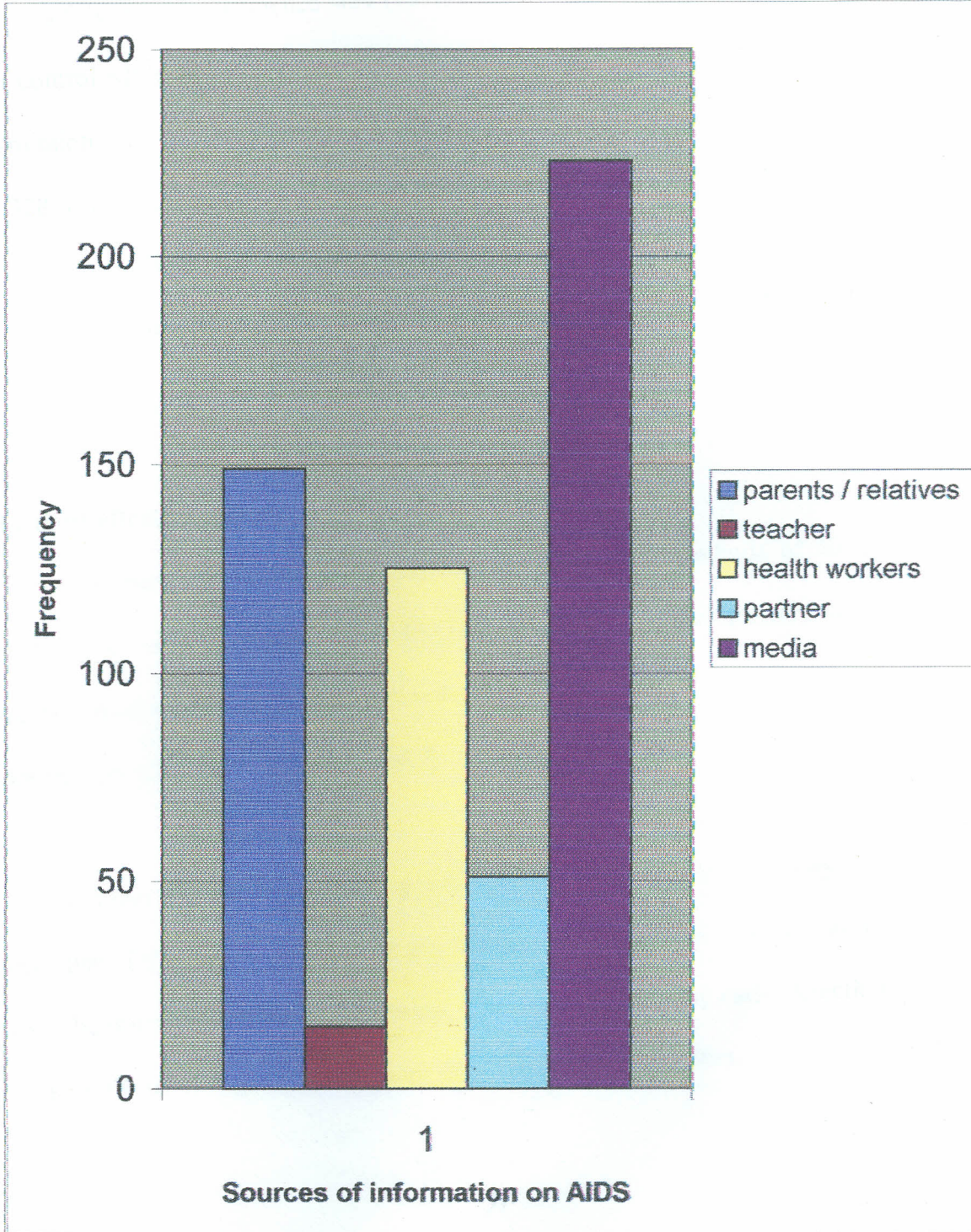
4.3.2 Sources of education and information materials on HIV/ AIDS

The results indicated that most of the youth learnt about HIV from the media and this accounted for 223 (40%). The other sources of education / information included parents and relatives 149 (27%), health workers 125 (22%), Partner 51 (9.1%) and teacher 15 (3%). ($\chi^2 = 239.673$, $df=4$, $P= 0.014$).

This meant that the most appropriate method of passing preventive messages to the youth should involve the use of the media such as the radio, Televisions and video as this is mostly what they youth do for leisure and also available in most homes.

Parents should also participate in disseminating the message to their children especially when they are still young and issues to do with HIV/AIDS should not only be left to the health professionals in fact it should a matter of collective responsibilities involving all stake holders and the community at large.

Figure 14: Distribution of respondents on sources education/ knowledge of AIDS



4.3.3 Current methods of HIV/AIDS control

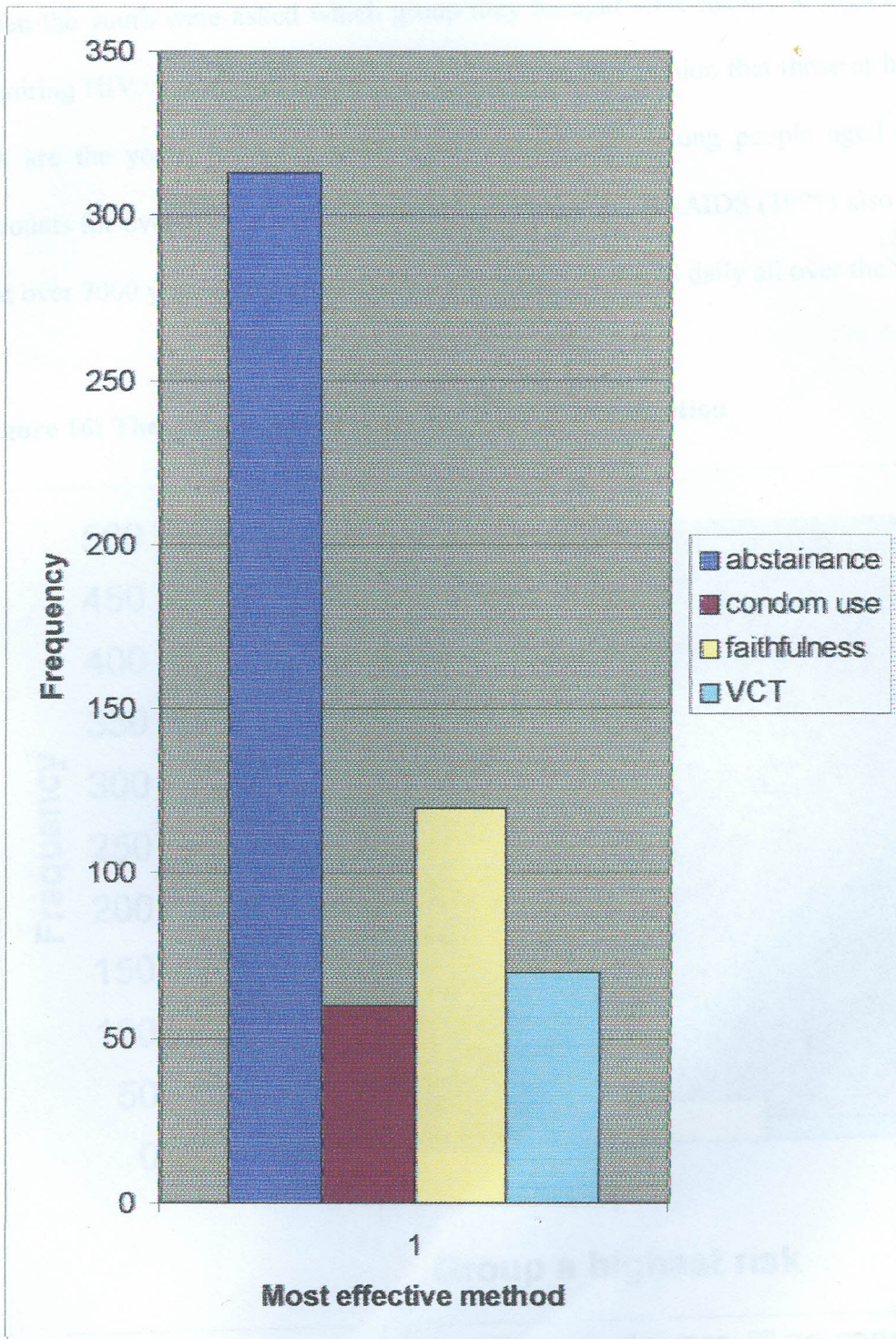
The youths were also asked what methods of HIV prevention they knew of and the results were as follows; On abstinence 439 (78%) of the respondents agreed it was a method of control while 124 (22%), were not aware it could help reduce chances of HIV transmission.

Another 328 (58%) admitted that Voluntary Counselling and Testing was an effective strategy while 234 (42%) did not agree to that. Another majority (90%) agreed that being faithful to ones partner would lead to HIV prevention, as 10% did not agree to that.

4.3.4 The most effective method of HIV/AIDS prevention

The results indicated that according to the study subjects, the methods of HIV prevention they knew of were abstinence 439 (78%) of the respondents agreed it was a method of control while 124 (22%), were not aware it could help reduce chances of HIV transmission. $(\chi^2 = 295.749; df = 3 \text{ and } P = 0.065)$

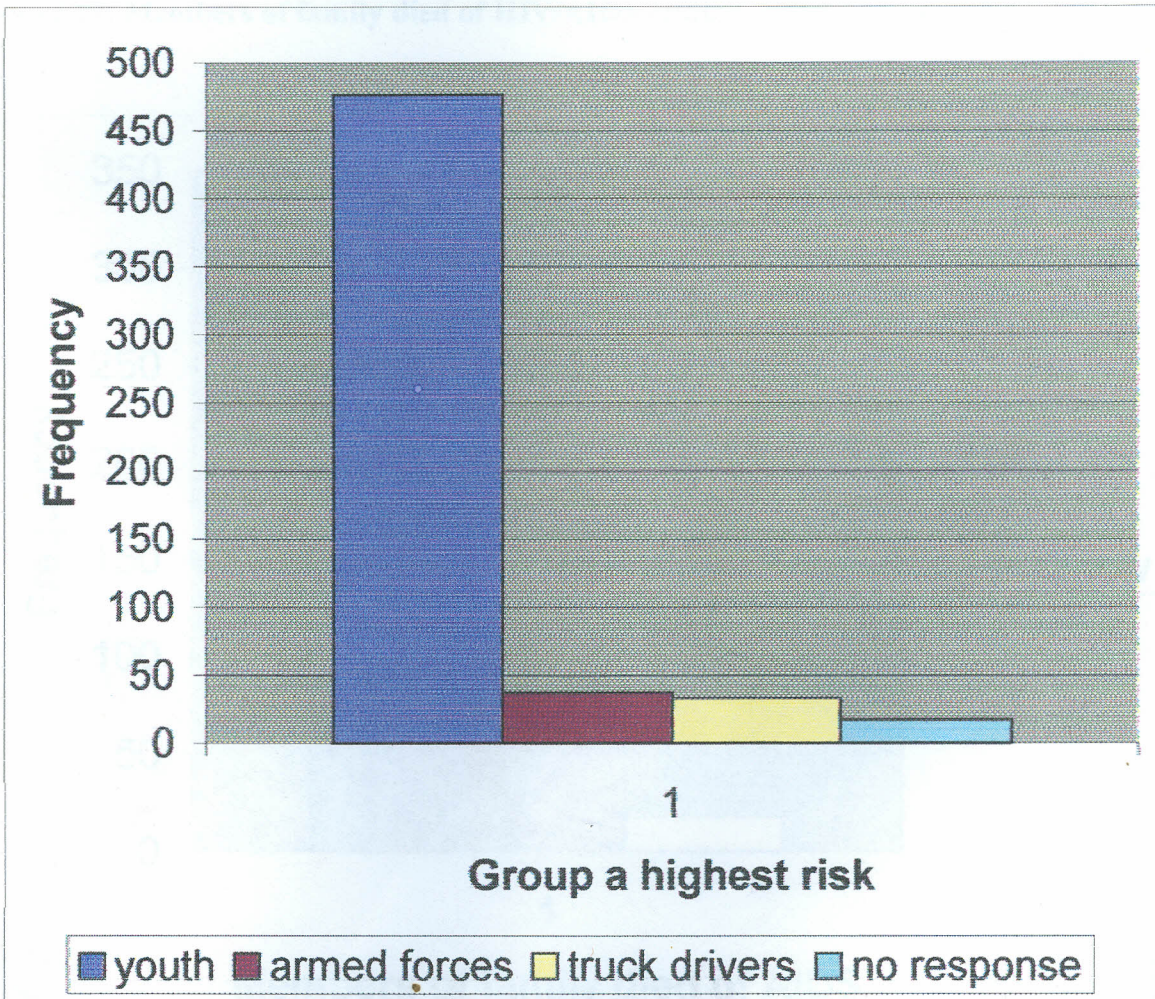
They also said that Voluntary Counselling and Testing was an effective strategy and this meant that if the proper policies are put in place they would do a long way in improving the utilisation of the VCT services as a method of getting early detection hence making the use of Anti retroviral more effective. (NASCOP, 1998)

Figure 15: The most effective method of HIV/AIDS prevention

4.3.5 The groups mostly at risk of contracting HIV/ AIDS

When the youth were asked which group they thought were mainly at high-risk of acquiring HIV, majority of the respondents were of the opinion that those at highest risk are the youth (85%). PANOS (1999) stated that young people aged 15-24 accounts for over 50% of all HIV infections worldwide. UNAIDS (1999) also stated that over 7000 young people aged 10-24 years acquire AIDS daily all over the world.

Figure 16: The groups mostly at risk of HIV/ AIDS infection

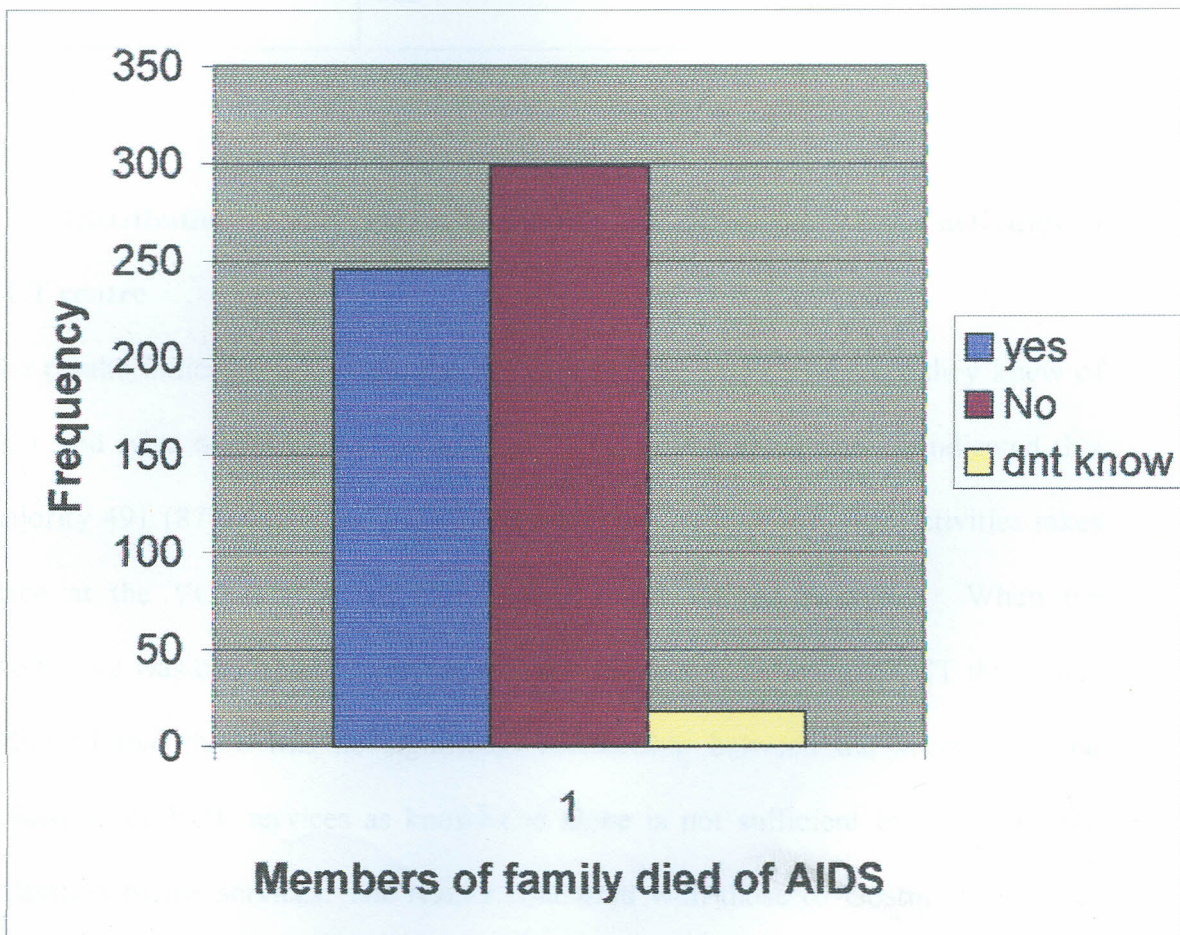


4.3.6 Members of family died of HIV/AIDS related complications

The youths were also asked if they any member of their family or a very close friend dying of HIV/AIDS. The results indicate that 246 (43.7%) of the respondents had actually lost a close friend or neighbour due to AIDS while 299 (53.1%) of the respondents said they had not lost any friend or relative to AIDS ($\chi^2 = 2.37.573$; $df = 2$ and $P = 0.0274$)

This actually confirms the fact that HIV/ AIDS is actually one of the major causes of mortality all over the world today as reported by CDC (1998).

Figure 17: Members of family died of HIV/AIDS related complications



4.3.7 Distribution of the respondents based on knowledge of VCT

The respondents were asked whether they knew of VCT and what activities take place at a VCT center and the results indicated that majority 491 (87%) knew of VCT and the activities involved while only 72 (13%).

Table 11: Distribution of the respondents based on knowledge VCT

Do you know of VCT	Frequency	Proportion (%)
Yes	491	87
No	72	13
Total	563	100.0

4.3.8 Distribution of the respondents based on knowledge of the activities at VCT centre

The results indicated that when the respondents were asked whether they knew of VCT and what activities take place at a VCT centre and the results indicated that majority 491 (87%) knew of VCT and when they were asked what activities takes place at the VCT center, 72 (13%) were aware of the activities. When the knowledge was cross-tabbed against whether or not one had sought VCT the results indicated that there was no significant relationship between the knowledge and utilization of VCT services as knowledge alone is not sufficient in enhancing the utilization of the services. The results concurred with those of Gostin (1990) who conducted a similar study in Ghana and realised that most of the people had not

sought VCT despite being aware of its importance in the control and management of HIV/AIDS.

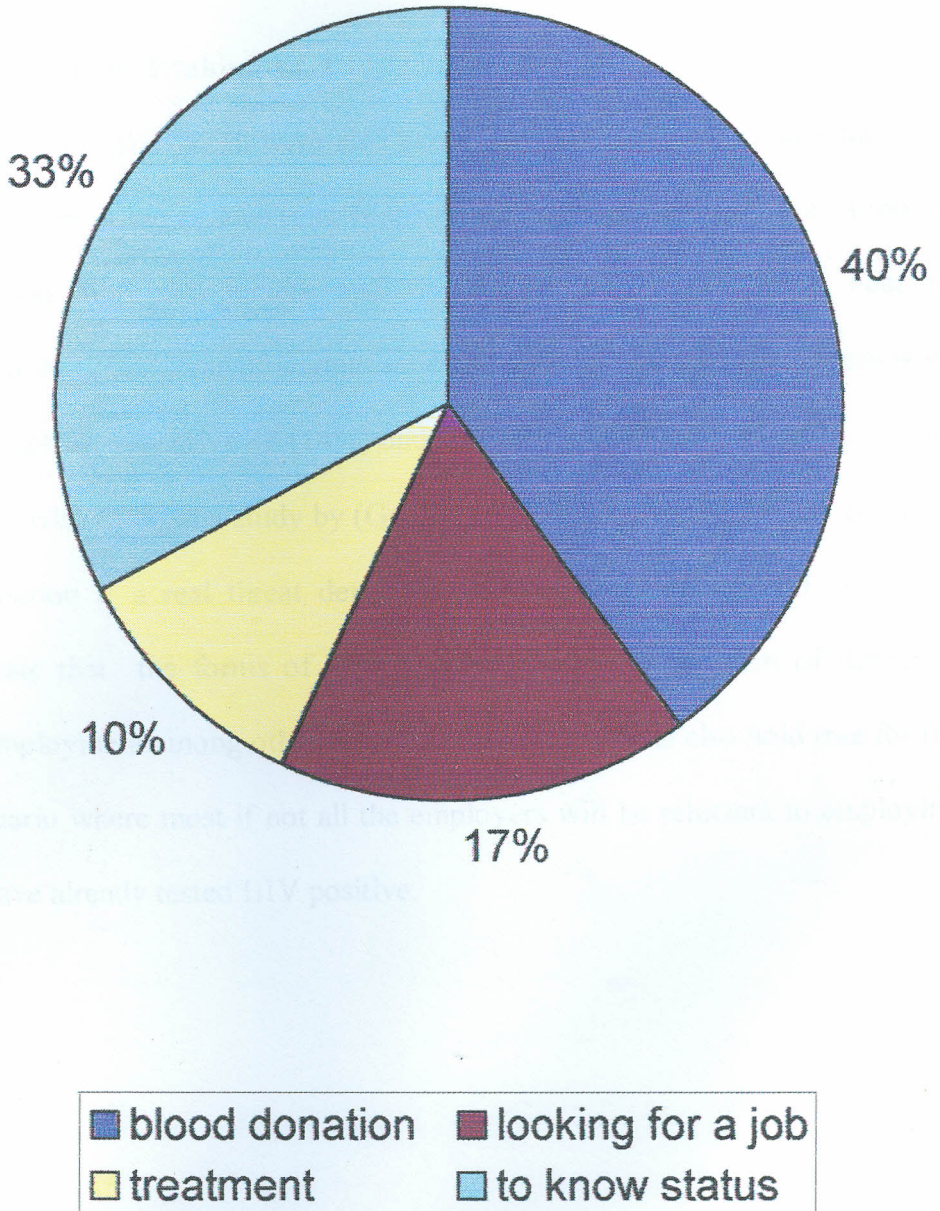
4.3.9 Distribution of respondents based on whether or not they had taken VCT

The youth were asked if they had taken VCT in the last 12 months and the results indicated that only 213 (38%) had taken a VCT test while the majority 350 (62%) had not taken the test.

4.3.10 Distribution of respondents according to reasons for taking VCT

In order to determine the reasons that lead to the youths taking VCT the results were as follows: Blood donation 85 (40%), looking for a job 36 (17%), undergoing treatment 22 (10%) and to know his/her status 70 (33%). These results concurred with those found out by (Schoeborn *et al.*, 1994) who asserted that about 30% only of those who seek VCT do so solely for the purpose of knowing their status. He went ahead to say that most other reasons for taking VCT included Hospitalisation or surgery, application for insurance, military induction, referral by health department and for immigration related reasons.

Those who had visited the VCT centre were also asked if they went with their partners and the results indicated that 41% of those who went for VCT did so with their partners while most of them 59 % went alone. This could be attributed to the fact that most of the respondents were single. It may also be due to the fact that as at the time of going for the test most people are not sure of themselves once again probably due to reckless past sexual relations.

Figure 18 Distribution of respondents according to reasons for taking VCT

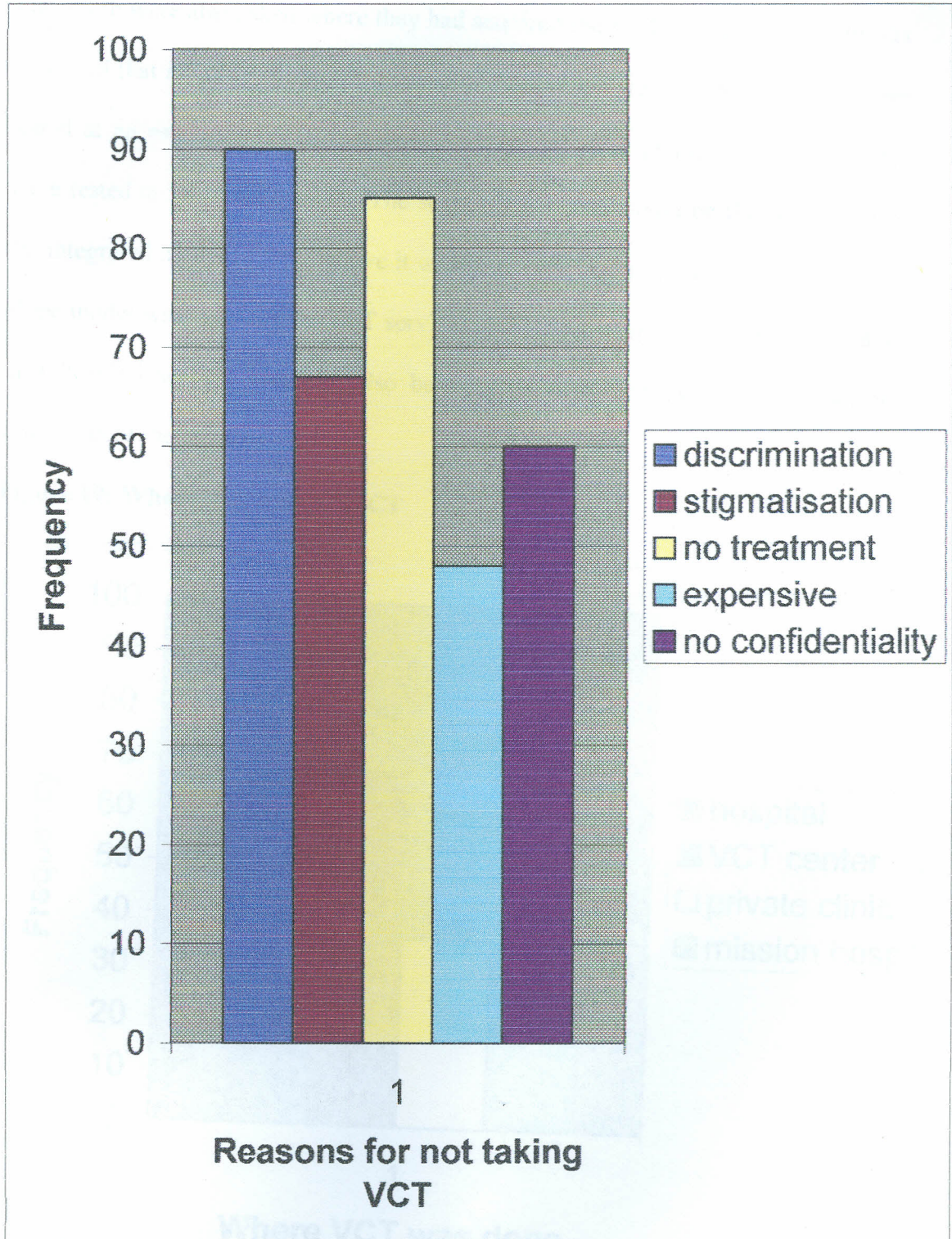
4.3.11 Whether they had gone with partner for VCT

Those who had visited the VCT center were also asked if they went with their partners and the results indicated that 41% of those who went for VCT did so with their partners while most of them 59 % went alone.

4.3.12 Reasons for NOT taking VCT

Those who had not taken VCT were also asked for the reasons as to why they had not taken VCT in a bid to intervene based on the importance of VCT as a tool in HIV prevention and management and the results were as follows. Fear of discrimination 90 (26%), fear of stigmatisation 67 (19%), No need since there is no treatment 85 (24%), expensive 48 (14%) and lack of confidentiality 60 (17%). These results concur with those of a study by (Gostin, 1990) who asserted that the potential for discrimination is a real threat deterring people from seeking VCT. He went further to state that the forms of discrimination would be in form of denial of insurance, employment among other benefits. These sentiments also hold true for the Kenyan scenario where most if not all the employers will be reluctant to employing those who have already tested HIV positive.

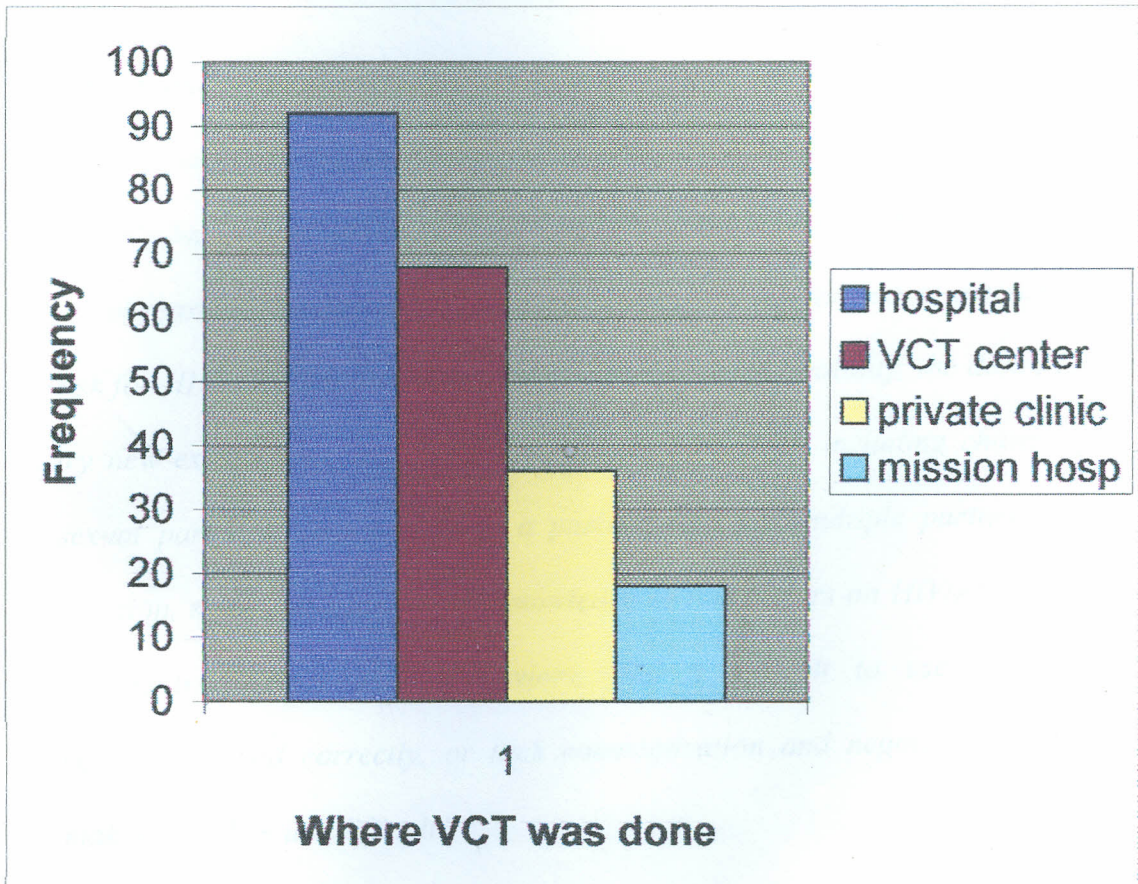
Figure 18: Reasons for NOT taking VCT



4.3.13 Where they had got VCT

The youth were also asked where they had acquired the VCT services and the results indicated that majority of the respondents (43%) were tested in hospitals, 31% were tested at an established VCT centre, 17% were tested at private clinics while 9% were tested at mission hospitals. The suggestion to this would be the promotion of the integrated model of VCT where it was in a hospital set-up rather than the stand-alone model with exclusively VCT services since most people who got tested did so in a hospital set up. This can also be suggestion on improving the access and utilization of the services.

Figure 19: Where they had got VCT



4.4 RESULTS FROM INTERVIEWS WITH THE HEALTH PROVIDERS

In this section a number of interviews were held with some of the health providers in selected Voluntary Counselling and Testing centers and some of their views on the factors affecting the utilization of VCT services among the youth taken. Some of their views were quoted verbatim.

4.4.1 Are adolescents more at risk of contracting HIV than adults? If so, why?

When the health providers were asked to state if they thought the youth were at a higher risk of acquiring HIV/AIDS as compared to adults, most of them had this to say:

“Yes. About seven of every ten HIV infections occur among individuals ages 15-24. Sexually active, unmarried adolescents are at high risk for HIV/AIDS not only for psychological and behavioral reasons but also for biological and social reasons. Psychological factors that put many adolescents at increased risk for HIV infection include a general sense of invulnerability, the desire to try new experiences, and the willingness to take risks, including changing sexual partners often or having a partner who has multiple partners. In addition, many adolescents lack knowledge of risk factors on HIV/AIDS that contributes to risk-taking behaviors, find it difficult to use condoms consistently and correctly, or lack communication and negotiation skills, making condom use difficult.”

4.4.2 What other factors put youth at greater risk for HIV/AIDS infection?

When they were asked what factors they thought put the youth at higher risk 80% of them said that Social and programmatic factors can increase risks associated with HIV. Programmatic factors include limited access to family planning or STI services; inconvenient clinic hours or locations; cost prohibiting purchases of condoms from pharmacies, other shops, or clinics; lack of confidentiality, trained clinic staff or staff members with negative attitudes about adolescent sexual activity and contraceptive use, and legal restrictions. Social factors include adolescents' relative lack of power in relationships with adults and others, who may be their partners. Some adolescents experience nonconsensual sexual relationships with older, more powerful partners with whom they may feel unable to negotiate safer sex practices.

4.4.3 What is the most important HIV prevention message for the youth?

Most of the health providers were in consensus that youth are more biologically vulnerable to HIV than adults, therefore abstinence from sexual intercourse or condom use when sexually active should be especially emphasized for young men and women. One of them had this to say:

“Abstinence is the most effective means of protection against pregnancy and HIV. “For sexually active adolescents, condoms are the only method that provides protection against both viral and bacterial STIs including HIV/AIDS.”

Because STDs increase an individual's susceptibility to human immunodeficiency virus (HIV) infection, it is extremely important for these diseases to be treated. Also, STD's can cause tubal infection and thus infertility.

4.4.4 Why are adolescents particularly vulnerable to STDs and HIV?

For biological, behavioral, and cultural reasons, young people are at especially high risk of contracting STDs, including HIV.

Sizable numbers of adolescents are sexually active. Sexual activity begins in early adolescence, either within or outside of marriage. Young age at first intercourse is a strong risk factor for HIV/AIDS contraction. Their immature reproductive and immune systems make adolescents more vulnerable to infection by various STD agents including HIV/AIDS.

Adolescents, especially young girls, are less able to refuse sex and/or less able to insist on adequate protection. Sometimes sexual activity involves abuse or coercion which, in turn, is linked to young age at first intercourse and to more than one sexual partner.

Conditions such as poverty, homelessness, political strife, and dislocation, which are increasingly common among young people in Kenya, are associated with sexual abuse or with sexual intercourse exchanged for money or support for basic needs.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

- 1) The results indicated that most of the respondents actually appreciate that the youth are at the highest risk of contracting HIV with 84 % of the respondents admitting to this
- 2) It was also eminent that knowledge of VCT affects the utilization of the services among the youth since 90% of those who used the service knew of VCT and what it entails
- 3) Age was also realized as a major factor influencing the use of VCT services with over 69% of the people in the age group 26-29 having used the services
- 4) Early sex was also found to be a major factor influencing the utilization of the services since 100% of those had taken VCT had had sex below 20 yrs
- 5) Economic hardships and drug abuse are some of the major factors influencing risky sexual behaviour especially among the youth since the results indicated that 72% of those who used drugs had more than 3 sexual partners in the past 12 months
- 6) The major sources of education and information for the youth on VCT and HIV /AIDS are Media (47%) and Medical practitioner (26%)
- 7) Income level affects the use of the VCT services because the results found out that 69 % of those who had income above 10,000/= had taken VCT
- 8) The less people know about the disease, the more negative they tend to be about HIV-affected families and the stronger the stigmatization. What is particularly

significant is that individuals tend to blame their partners for transmitting HIV, not themselves for engaging in high-risk sexual behaviour.

- 9) If behaviour change is to be effective, it should involve the youth itself in the generation of appropriate messages and should address socio-economic and cultural realities that influence the youth's sexual behaviour. Creating a forum for discussion and for interactive learning, where respect for HIV/AIDS as well as for young people's social and sexual needs co-exist, can help create an enabling environment for the generation of appropriate messages.
- 10) Socio-cultural and economic factors and customs as well as factors like the religion, economic status, type of family, ethnic background and level of education need to be taken into account when designing interventions especially targeting the youth.
- 11) Because most young people naturally reflect their communities, the variety of their behaviors and practices is diverse in the same way. Knowing how young people are infected and affected by HIV/AIDS in a given context is important in developing effective service delivery models.

5.2 OPERATIONAL RECOMMENDATIONS

- a) A strong youth programme aimed at increasing opportunities and creating choices for young people in urban through income-generating activities, leadership and management training, recreation, health education, and communication/negotiation skills is in itself a strategy to respond to the HIV epidemic should be developed .

- b) As a group, youth includes children (ages 10-14), adolescents -- some of whom are parents, particularly girls -- (15-18 years) and young adults, most of whom are parents (19-24 years). These groups may have to be targeted separately, given the fact that their lifestyles, sexual behaviours and learning abilities differ. Childhood/adolescence, marriage and parenthood are often very close together for girls/young women. This needs to be taken into account when designing interventions.
- * c) Communication messages must be designed with particular target audiences in mind. This will be of special importance especially in addressing the varying needs of the various populations who have varying social, economic, psychological, cultural and behavioral differences.
- d) Stigma and discrimination affect uptake of VCT in different communities. Normalizing testing and increasing the number of people who know their serostatus is an important strategy for reducing stigma and discrimination. Similarly, the declaration of role models or valued members of the community that they have been tested is important in reducing stigma and increasing the uptake of HIV testing. For example when the athlete Magic Johnson announced he had been tested and was sero-positive, there was a substantial increase in requests for VCT in the United States.
- * e) VCT for young people should be linked with support services following testing. These may include: Linkages with youth support groups; Involvement of and support from religious groups that advocate a holistic approach to AIDS prevention and care; Ongoing support for vulnerable young people, which may

include IDUs; Adequate support for orphans, street kids and children-headed households.

5.3 RECOMMENDATIONS ON THE STRATEGIES TO IMPROVE VCT ADOPTION FOR YOUNG PEOPLE

- a) Train and/or retrain health care service providers and counselors to work more effectively with youth in providing VCT and HIV care and support to address the varying differences among young people.
- b) Work with ministries of education to include promotion of VCT benefits for young people within existing life-skills training and other related educational curricula.
- c) Support innovative VCT promotional campaigns targeted to young people or subgroups of young people (e.g. couples, youth at risk, young men, etc.).
- d) Develop communication materials targeting young people or subgroups of young people at national levels, as appropriate.
- e) Young people must have opportunities to obtain information on modes of transmission, accurately assess their potential risk practices and be given opportunities to practice skills to reduce risk and to modify harmful behaviors as desired.
- f) Strengthen comprehensive medical care within existing services as well as learning sites for family planning, reproductive health preventive therapy, treatment of opportunistic infections, STIs, ARV therapy especially for the young people.

- g) In-depth critical evaluation of existing youth-friendly health services is required which explores levels of uptake and strategies addressing uptake by young people to date. Where successful models that could be replicated are identified (especially those demonstrating broad coverage and comprehensive service provision with VCT, potential to offer VCT, or direct linkages to such), these should be documented and widely disseminated.
- h) Support anti-AIDS clubs, youth ambassador programs, post-test clubs, drama clubs and edutainment initiatives that involve young people in fighting stigma and discrimination.

5.4 SUGGESTIONS OF FUTURE RESEARCH WORK

Based on the findings of this study I would like to suggest that other studies be done aimed at answering the following research questions that I deem important in enabling the improvement of the control and management of the HIV/AIDS epidemic in the developing countries like Kenya.

- a) What is the role of the family in promoting the adoption of behaviors to reduce risk of HIV acquisition and transmission? How is this affected by changes in the family brought about by HIV infection and AIDS deaths?
- b) What sex education messages, materials, and programs are being used, in which settings (e.g., community-based organizations, schools, churches, neighborhoods, families), and delivered by whom? Which elements are most promising in reaching intended audiences? Are psychologically and culturally appropriate

media messages, regarding the route of HIV transmission, and its prevention, reaching target populations and having an effect on sexual behavior?

- c) What behavioral, social, and contextual factors influence prevention program design and effectiveness among young people in Kenya?
- d) How do family structure and inheritance patterns, both legal and informal, influence both health-seeking and care-giving for HIV-infected and HIV-affected individuals?
- e) How do gender-based norms, values, and expectations affect the ability of female youths to avoid behaviors that expose them to HIV risk and how do they affect prevention efforts? What are effective interventions to integrate men into HIV prevention and care?
- f) What are the determinants of HIV-related stigma in Kenya? How are these determinants influenced? Do these determinants differ and, if so, how do they differ, from stigma associated with other diseases? Do they differ by gender, ethnicity, class or age of the individuals stigmatized? What strategies and interventions are effective in reducing stigma?
- g) What is the impact of stigma on HIV-infected children and adolescents?
- h) What is the link between provision of effective care and stigma reduction?
- i) What is the effect of increased knowledge and understanding of HIV transmission on stigma in both perpetrators and stigmatized? What impact does

perceived or potential stigma have on the willingness of individuals to engage in preventive approaches and on the success of prevention efforts?

- j) What is the influence on stigma reduction programs of integrating people living with AIDS in the design and implementation of prevention and care approaches?

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APPENDICES**APPENDIX I: RESEARCH INSTRUMENTS****A: STRUCTURED QUESTIONNAIRE****INTRODUCTION**

This study is aimed at investigating the factors that affect the seeking of VCT for HIV/AIDS among the youth in Nairobi. It is a survey among the youth and you are kindly requested to be very honest with your answers bearing in mind that you will not write your name in this questionnaire. The responses you give will be confidential and will only be used for the purposes of this study only. The responses will not be discussed with any member of your family or your friends and will not be linked to you in any way. Confidentiality will be maintained. I would very much like you to participate in the study. However, you are free to decide if you want to or not. So, do you want to participate in this study?

Yes No

Name of place/institution /school/ _____

Date of interview _____

SOCIO DEMOGRAPHIC INFORMATION.

Q1. Sex of respondent

[1] Female [2] Male

Q2 Highest level of education

None [1]

Primary [2]

Secondary [3]

College/campus [4]

Q3. Age of the respondent

15-18 years [1]

19-22 years [2]

23-26 years [3]

27-29 years [4]

Q4. Marital status?

Single [1]

Married/cohabiting [2]

Separated/divorced [3]

Widowed [4]

PART 1a) SOCIO-ECONOMIC AND CULTURAL INFORMATION

Q5 To which ethnic group do you belong?

Kikuyu [1] Luhya [2]

Mijikenda [3] Luo [4]

Kisii [5] Embu [6]

Kamba [7] Kalenjin [8]

Meru	[9]	Somali	[10]
Don't know	[11]	Other _____	[12]

Q6. What is your religion?

Christian	[1]	Buddhist	[2]
No religion	[3]	Muslim	[4]
Traditional	[5]	Other _____	[6]

Q7. How long have you been living in Nairobi?

Less than 1 year	[1]	1 year to 3 years	[2]
4 years to 6 years	[3]	more than 6 yrs	[4]

Q8. How much income do you earn per month?

No income	[1]	less than 3000	[2]
3001-6000	[3]	6001-9000	[4]
Above 9000	[5]		

Q9. What is your occupation?

Student	[1]	unemployed	[2]
Casual	[3]	professional	[4]
Business	[5]		

PART 1b) BEHAVIOURAL AND PSYCHOLOGICAL INFORMATION

Q10a) Have you ever taken any drugs?

Yes	[1]	No	[2]
-----	-----	----	-----

b) If yes, which ones?

Alcohol	[1]	Miraa	[2]
---------	-----	-------	-----

Bhang	[3]	Cigarettes	[4]
Cocaine	[5]	Other _____	[6]

Q11. If you think back of the last 12 months, how many different sexual partners have you had?

None	[1]	one	[2]
------	-----	-----	-----

2-4	[3]	more than 4	[4]
-----	-----	-------------	-----

Q12 At what age did you have your first sexual contact?

Never	[1]	Below 12 yrs	[2]
-------	-----	--------------	-----

12-15 yrs	[3]	16-20 yrs	[4]
-----------	-----	-----------	-----

21-24 yrs	[5]	25-29 yrs	[6]
-----------	-----	-----------	-----

Q13a) Have you ever had sex with people older than you?

Yes	[1]	No	[2]
-----	-----	----	-----

b) What was the age difference between you and him/her?

1-2 yrs	[1]	3-5 yrs	[2]
---------	-----	---------	-----

5-7 yrs	[3]	more than 7 yrs	[4]
---------	-----	-----------------	-----

c) What made you have sex with the older person?

I love him/her	[1]	He/she is rich	[2]
----------------	-----	----------------	-----

He/she is my boss	[3]	curiosity	[4]
-------------------	-----	-----------	-----

PART 2a: KNOWLEDGE, ATTITUDES and PERCEPTION ON HIV/AIDS.

Q14. a) Do you know about HIV/AIDS?

Yes [1] No [2]

b) (If yes) how can a person get HIV/AIDS (more than one answer allowed)

Don't know [1] Sexual intercourse [2]

Infected mother to child [3] Contaminated blood [5]

Many sexual partners [6] Kissing [7]

Holding hands [8] Through mosquitoes [9]

c) What are the symptoms of HIV/AIDS? (More than one answer allowed).

Do not know [1] Diarrhoea [2]

Persistent cough [3] Extensive cold sores [4]

Headache [5] Swollen glands [6]

Weight loss [7] Skin disease [8]

d) How can people avoid getting HIV/AIDS?

Do not know [1] Use pills [2]

Abstain from sex [3] Homosexuality [4]

Use condoms [5] Other, _____ [6]

Q15. Where did you learn about HIV/AIDS?

Parents [1] Teacher [2]

Health workers [3] Friends [4]

Partner [6] Media [7]

Relatives [8] Pastor/priest [9]

Q16.a) What are the current measures being used to prevent HIV/AIDS transmission? (More than one answer allowed)

- | | | | |
|----------------------|-----|----------------------------------|-----|
| Abstinence | [1] | Condom use | [2] |
| Faithfulness | [3] | STD treatment | [4] |
| Behaviour change | [5] | Voluntary Counseling and Testing | [6] |
| Other, specify _____ | | | [7] |

c) What suggestions would you give to improve on the effectiveness of the VCT as a method of HIV/AIDS control?

- | | |
|--------------------------------|-----|
| Make it Confidential | [1] |
| Cheap/ inexpensive | [2] |
| No parental confirmation | [3] |
| Increase the number of centers | [4] |

17a) Which groups of people are at greater risk of HIV/AIDS ?

- | | | | |
|-----------------|-----|--------------|-----|
| Youth | [1] | Armed forces | [2] |
| Pastors/Priests | [3] | Drivers | [4] |

Other, specify _____

b) Why the answer above?-----

PART 2b): KNOWLEDGE, ATTITUDES AND PRACTICES ON VCT

19. Do you know about voluntary counseling and Testing for HIV/AIDS?

Yes [1] No [2]

20. What happens at a VCT center?

Treatment for HIV/AIDS [1]

Testing for HIV status [2]

Counseling to cope with results [3]

Giving food [4]

Financial Support (e.g school fees) [5]

Q21. During the last twelve months, did you have any VCT?

Yes [1] No [2]

(If no go to question 24)

Q22a). If yes, what factors made you to seek VCT?

Blood test [1] blood donation [2]

Looking for a job [3] Immigration reasons [4]

Undergoing treatment [5] Application for insurance [6]

To know my status [7] forced by partner [8]

Partner risky behaviour [9] sick/unwell [10]

c) If Yes, where did you seek VCT?

Hospital [1] VCT center [2]

Private clinic [3] Herbalist [4]

Other _____ [5]

Q23. Did you go with your sexual partner for the VCT?

Yes [1] No [2]

Q24. Why haven't you sought for VCT?

Fear of discrimination if positive [1]

Fear of stigmatization if positive [2]

No need since there is no treatment [3]

Very expensive [4]

I don't need parental confirmation [5]

Q25. How did you learn about VCT

Through a friend /relative [1]

From medical staff [2]

Television [3]

Sex partner/spouse [4]

Church/mosque [5]

Q26. Where would you wish to get such messages?

Through a friend /relative [1]

From medical staff [2]

Television [3]

Sex partner/spouse [4]

Church/mosque [5]

THANK YOU FOR YOUR COOPERATION

B: GUIDE TO FOCUS GROUP DISCUSSION FOR YOUTH

- 1) What factors affect whether or not you have sought VCT?
- 2) What are your knowledge, attitudes and practices on VCT?
- 3) What are your knowledge attitudes and practices on HIV/AIDS?
- 4) Where did you learn about VCT and HIV/ AIDS?
- 5) Do you think knowing your HIV status would change your behaviour? If yes how?
- 6) What do you think should be done to make VCT more acceptable to the youth?
- 7) What in your opinion are some of the importance/s of Voluntary counselling and testing as a method of HIV prevention, care and support?

C: GUIDE TO INTERVIEW WITH HEALTH SERVICE PROVIDERS

1. Are adolescent more at risk of HIV infection than adults, if yes why?
2. What factors put the youth at a greater risk of infection
3. What are the HIV prevention messages that may be given to the youth
4. What factors influence the utilization of VCT services by the youth
5. Why are the adolescents particularly at risk of infection

APPENDIX 2: ETHICAL CLEARANCE DOCUMENTS

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

JOGOO HOUSE "B"
HARAMBEE AV
P.O. Box 300
NAIROBI



30th July

Subject: "EDUCATION", Nairobi
Reference: Nairobi 33411
Requesting please quote

MOEST 13/001/32C 136/2
and date

John Paul Oyore
Jenyaatta University
P.O. Box 43844
Nairobi

Dear Sir,

RE: RESEARCH AUTHORIZATION

Following your application for authority to conduct research on 'Factors influencing the utilization of voluntary counselling and testing services for HIV/AIDS among the youth in Nairobi Province, Kenya'. I am pleased to inform you that you have been authorized to conduct research in Nairobi Province for a period ending 30th August, 2003.

You are advised to report to the Provincial Commissioner and the Provincial Education Officer, Nairobi Province before embarking on your research project.

You are further expected to deposit two copies of your research findings to this office upon completion of your study.

Yours faithfully

G. KAARIA

FOR: PERMANENT SECRETARY EDUCATION

The Provincial Commissioner
Nairobi Province

The Provincial Education Officer
Nairobi Province

**APPENDIX 3: ABSTRACT FOR SEMINARS /CONFERENCES/
WORKSHOPS/ PUBLICATIONS**

Author: John Paul Oyore

Forum: Department of Zoology, Post-Graduate conference

Venue: Kenyatta University, Science Complex

Date: 8th-15th August 2002

TITLE: Factors influencing the utilization of voluntary counselling and testing services for HIV among the youth in Nairobi province.

NAME: JOHN PAUL OYORE

REG. NUMBER: 156/9109/2000

SUPERVISORS

1. Prof. Alloys S. S Orago, PhD, C Biol. , MI Biol
2. Prof. Romanus O Okelo, Ph D.

ABSTRACT

Current global estimates suggest that 7000 young people are infected with HIV daily, translating to 2.6 million new infections each year with two million of the cases being in Africa alone. Furthermore, of the 30 million of the people living with HIV/AIDS 20 million of them are young people aged 10-24. This means that the youth in the above age bracket comprise the most vulnerable group who must be targeted in any control programmes designed to reduce the spread of HIV/ AIDS. Voluntary counselling and testing (VCT) has become an integral part of programmes in many countries in the control and management of HIV/AIDS.

The major objective of this study was to determine the factors influencing the utilization of VCT services in the control of HIV/AIDS, among the youth in Nairobi province. The data was collected using questionnaire. Focus group discussions (FGDs) in which the youth were placed in groups of 8-12 and their views on the factors influencing their utilization of VCT services were carried out. All data from the study was coded and entered in a computer using the SPSS. Chi-square was used to test for the relationship between the variables determining the utilization of VCT.

A total number of five hundred and sixty three (563) questionnaires were administered to 232 female and 331 male respondents. Eight (8) FGDs were also held with the health providers from the selected voluntary counselling and testing Centres

The results indicated a lot of awareness on VCT since 87% of the respondents knew of VCT but this did not influence its utilization. 63% of the youth had not used VCT services because there was no need for it since treatment was lacking and they feared stigmatization. The knowledge, attitudes and perception of HIV/AIDS and VCT influenced whether or not the youth utilized the services.

The findings of this study have policy implications and require attention especially by designing the programme on prevention, control and management of HIV/AIDS especially among the youth who form a great proportion of the world's population and are also the most vulnerable group.