ASSESSMENT OF UTILIZATION OF VOLUNTARY COUNSELING AND TESTING SERVICES BY MASENO UNIVERSITY STUDENTS, KENYA

BY

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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 work is dedicated to my parents Mr. Lucas Apondi Magero and Risper Achieng Apondi who are delighted to share this great occasion with me. My loving husband James Aggrey Mwamu, my loving children James Hagin Mwamu and Nozipho Nicole Mwamu who always stood by my side and gave me enough time to do my hard work.

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ABSTRACT

Globally, 4.9 million young people aged between 15-24 years are living with HIV and AIDS, and 75% of them live in sub-Saharan Africa. Maseno University students fall in this age bracket. In 2001, Commission for University Education (formerly Commission for Higher Education) encouraged Universities to set up Voluntary Counseling and Testing (VCT) centers as a strategy to reduce HIV infection by promoting behaviour change among students. Despite the fact that Maseno University set AIDS Control Unit (ACU), records show low levels of utilization of VCT services by students for reasons that are not clearly known. Therefore, this study set out to: determine the knowledge of students on VCT services, find out the perception of students on VCT services and identify other factors that influence student's uptake of VCT services. The study adopted the theory of reasoned action (TRA) developed by Ajzen and Fishbien (1980) and theory of planned behavior (TPB) by Ajzen (1991). The study used a cross–sectional survey design. The study was conducted in Maseno, Main Campus, which has 12 Schools with 6535 students. Fisher et al. (1992) formula was used to obtain a sample size of 363 students. Stratified random sampling was first used to select samples from each school. Simple random sampling was then used to select the sample from each stratum based on gender and year of study. Data were collected using semi-structured interviews, key informant interviews and focus group discussions (FGDs). Qualitative data from interviews and discussions were analyzed using thematic analysis and presented inform of verbatim quotations. Quantitative data were analyzed using descriptive statistics and presented in tables of frequencies and percentages. The results show that students had basic knowledge on the utilization of VCT services. However, they did not identify VCT as a preventive mechanism. They perceived VCT in the university as scary, unreliable, where university obtains names of HIV positive students and place for immoral people. Other factors which influenced student's uptake of VCT were; fear of stigma in case they were found HIV positive, time, and peer influence, fear of unknown, confidentiality, and geographical location. The study recommends that the university should integrate HIV activities with other services within the unit, reinforce confidentiality and decentralize VCT sites. The findings of this study are relevant for policy making, especially those targeting tertiary institutions in terms of promoting utilization of VCT services in order to reduce new HIV infections among students.

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LIST OF ABBREVIATIONS AND ACRONYMS

ACU	-	AIDS Control Unit
AIDS	-	Acquired Immune Deficiency Syndrome
BCCG	-	Behaviour Change Communication Group
CHE	-	Commission for Higher Education
CUE	-	Commission for University Education
HIV	-	Human Immunodeficiency Virus
ICF	-	Intermediate Care Facility
ICL	-	I Choose Life Africa
KAIS	-	Kenya Aids Indicator Survey
KDHS	-	Kenya Demographic and Health Survey
KNBS	-	Kenya National Bureau of Statistics
MSAA	-	Medical Students Against AIDS
MUACU	-	Maseno University AIDS Control Unit
MOH	-	Ministry Of Health
MDGs	-	Millennium Development Goals
NACC	-	National AIDS Control Council
NASCOP	-	National AIDS and STI Control Programme
NGO	-	Non – Governmental Organizations
PLWHA	-	People Living with HIV and AIDS
PMTCT	-	Prevention of Mother to Child Transmission of HIV
SRH	-	Sexual Reproductive Health
STIs	-	Sexually Transmitted Infections
TOWA	-	Total War Against Aids
UNAIDS	-	United Nations Joint Programs on HIV and AIDS
UNESCO	-	United Nations Educational, Scientific and Cultural Organization
USIU	-	United States International University
VCT	-	Voluntary Counseling and Testing
WHO	-	World Health Organization

OPERATIONAL DEFINITON OF TERMS

Utilization	Means students going for the VCT services including counseling testing and referrals
Voluntary HIV Counseling and Testing	is the process by which an individual undergoes counseling to enable him/her to make an informed choice about being tested for the HIV

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CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Globally, approximately 2 million (1.9 – 2.2 million) people became newly infected with HIV in 2014 (UNAIDS, 2015). An estimated 40% of these new cases of HIV infections occurred among young people aged between 15–24 years in 2014 (UNAIDS, 2015). In the same year, a total of 5 million people were living with HIV in South, South East and East Asia. Majority of these youths were involved in injecting drugs and sex workers (UNAIDS 2015). In 2014, there were an estimated 340,000 new HIV infections in the region, where China and India accounted for 78% of those new infections (UNAIDS, 2015). Similarly, China has over 4,000 voluntary counseling and testing (VCTs) open nationwide yet the number of clients attended to, especially young adults, is less than two per day Wang et al., (2011).

Sub-Saharan Africa remains the most heavily affected region, with approximately 25.8 million people living with HIV and AIDS (UNAIDS 2015). This underscores the importance of continuing to strengthen HIV prevention efforts in the region. Half of all HIV infected persons are young adults aged between 15-24 years, a category where university students fall. For example, in Namibia, the overall adult HIV prevalence is 15.3%, where young people of 20-24 years of age constitute one of the groups at highest risk of HIV infection (De Beer et al., 2012). Various studies conducted in African countries such as in Ghana (Oppong, & Oti-Boadi, 2013), Nigeria Abeshi et al, (2013) have identified university students as a group at high risk for HIV infection due to their risky sexual behaviour, including female students engaging in cross-generational sex with older men who are able to offer financial compensation in the form of school fees, clothing, food and cell phones. The Association of African Universities (2007) also noted that a number of students concede to having an 'on campus' and an 'off campus' partner. The report furthermore notes that the 'Gold Rush' tradition (where continuing students hook up with the first years in sexual relationships) still holds sway at the beginning of each academic year (Association of African Universities, 2007).

The report, however, failed to address the determinants of utilization of VCT services among university students including their knowledge, perceptions and ability to access the VCT services within the university.

A study conducted by De Beer et al, (2012) shows that in several Universities, there have been scanty HIV and AIDS reports specific to utilization of VCT services by students and how the social contexts within the university influence utilization of VCT services. For example, in Namibia, a study conducted in the two largest universities in the country indicated that these institutions provide family planning and health education on sexually transmitted infections such as HIV and AIDS De Beer et al. (2012). The reports by De Beer et al. (2012) further indicate that awareness of one's own HIV status and perceptions of risk were low among University students. The same report shows underutilization of the VCT services at the two institutions but with little information explaining the causes of underutilization. Similarly, there are limited findings which show that Zimbabwe increased the number of VCT services in her universities but the utilization was low due to stigma and discrimination (Madebwe et al., 2011).

Several studies conducted in East Africa such as in Tanzania (Vermeer et al., 2009), aimed to predict medical students' uptake of voluntary counseling and testing services, reported low uptake of VCT, due to fear of being HIV positive, fear of being stigmatized and fear of being associated with VCT. However, they did not touch on other factors which might cause the low uptake. Similarly, Uganda also reported low VCT service attendance among university students (Ron et al., 2009)

Lake Victoria Basin Commission-East African Community (2010) reported that male students in the Kenyan universities also engage in cross-generational sex. Other contributing risk factors include; desire to explore one's sexuality, pressure from peers or partners to engage in sex, access to alcohol and drugs, forced sexual intercourse amongst students themselves, limited access to sexual and reproductive health information and services as well as lack of knowledge on their sexual and reproductive rights (Mengistu & Melku, 2013).

Voluntary HIV counseling and testing is the process by which an individual undergoes counseling to enable him/her to make an informed choice about being tested for the HIV (UNAIDS, 2002). In order to respond effectively to prevention and care, it is preferable for one to know his or her HIV status (UNAIDS 2002). It has been widely implemented in both industrialized and developing countries to inform clients of their HIV sero-status (Wang, et al, 2011). The VCT centers offer those wishing to be tested for HIV both pre and post-test counseling as well as on site rapid testing (Cornelssen, 2005). The centers can provide the necessary support to change risky sexual behaviour and prevent the transmission of HIV (Cornelissen, 2005). They are also the gateway to prevention, treatment, care, and support (UNAIDS, 2012). In as much as VCT is used as a strategy to prevent transmission of the infection through behaviour change, risk reduction, condom use, and sero-status disclosure, statistics about the level utilization of VCT services especially among the youths in Universities is not clearly documented.

Voluntary Counseling and Testing (VCT) is a critical component of treatment, care and prevention of HIV and AIDS in Kenya (MOH, 2001; Cornelissen, 2005). This is because individuals who test HIV negative are motivated to protect themselves from getting infected, while those that test positive can be counseled on how to protect their partners from infection and referred to health care facilities for treatment and care (MOH, 2001). In Kenya, several studies that have been conducted such as Kenya Aids Indicator Survey (KAIS) of 2012 and Kenya Demographic Health Survey (KDHS) 2008-09 on behaviour change intervention showed an increase in condom use, delay in sexual debut and reduction in number of sexual partners as ways of HIV prevention among young adults (Kenya National Bureau of Statistics and ICF Macro, 2010; National AIDS and STI Control Programme Waruiru et al., (2014).However, these studies did not provide information on the knowledge, perception and how the different socio-cultural contexts influence access and utilization of VCT services among this critical segment of young adults in the universities, who are highly at risk of contracting HIV.

Due to the foregoing situation, the then Commission for Higher Education(CHE),Nzioka encouraged Kenyan universities to come up with policies and approaches that could fight HIV and AIDS in the institutions. In response, institutions of higher learning, such as Daystar University, Kenyatta University and Maseno University established with comprehensive HIV and AIDS policies in to fight HIV and AIDS among university students in Kenya (Mwangi *et al.,* 2014).

The intention to utilize VCT may depend on the students' perception about the services, the services offered and the location of the site. Studies have shown that those who perceive themselves as being at risk of HIV infection are more likely to undertake HIV test while those who feel less susceptible are less likely to go for the VCT services (Nuwaha et al., 2002; Mwangi et al., 2014). Research has shown that Students in the Kenyan Universities who feel less susceptible to the risk of HIV are less likely to undertake VTC services. (Mwangi et al., 2014)At the same time, according to Nuwaha et al. (2002), anticipating consequences of being found positive would discourage an individual from undertaking HIV testing. This means that potential users become anxious about the implications of turning out HIV positive. Consequently, the worry about whether the university VCT facility can be trusted to keep their HIV status confidential. Although Mwangi et al. (2014) argue that confidentiality and support were loosely associated with the motivation to test for HIV among university students', it depends on social contexts of each university. For example, if students' feel the facility lacks confidentiality, they may not go for the VCT services. They might fear that their friends would stigmatize them when upon learning of their HIV status. At the same time, social influence is significant. Although decision to undertake VCT is mainly a personal individual decision, it is also influenced by important others such as sexual partners, prospective marriage partners and friends who have undergone VCT in the past (Nuwaha et al., 2002). That means, when others talk well about it, the students will feel free to undertake the services.

Maseno University is one of the public universities in Kenya that initiated an Aids Control Unit (ACU) in the year 2001(Othero et al.2009). The AIDS Control Unit at Maseno University houses VCT that serves students, staff and surrounding

communities. The university is situated within Kisumu County, where HIV and AIDS prevalence among women is higher (20.6%) than that of men (17.8%) Waruiru et al,(2014). In the year 2011, annual summary report of ACU submitted to the MOH shows HIV prevalence of the neighbouring community was 8.9%, student 1.1% and staff 7.8% while in 2012, HIV prevalence was 5.5% for community, 0.5% for students and staff 2.0% ACU, Annual report, (2012). In as much as prevalence seems less among students, in general, Maseno University students operate in a high HIV risk environment. This is also compounded by their lifestyle which includes freedom from parental control, drinking, weekend parties and sex within the university (Othero et al.2009). These behavioural factors influence their attitude towards utilization of VCT Ferguson, (2006). Othero et al (2009) indicates that many Maseno University students are sexually active during their first to second years of exposure to university education and this is followed by inconsistent use of condoms. However, their studies did not provide information regarding students' utilization of VCT services.

Moreover, Maseno University normally holds a VCT services' week where all students are encouraged to undertake the voluntary HIV counseling and testing (ACU, 2011). The services include communication on the need for behaviour change and providing HIV testing for all first year students, and annual HIV and AIDS VCT day for all students Ferguson, (2006). Moreover, VCT attendance of students dropped from 1,986 in 2011 to 998 in 2012, yet clear reasons for the drop in utilization has not been clearly documented. In the year 2013 and 2014, the attendance of the students increased to 2,467 and 3,214 respectively. This was attributed by more sensitization done during the NACC TOWA fund.

Making a decision to utilize VCT facility in the university may also depend on whether the students are aware of their existence. Being that ACU in collaboration with ICL and other partners conduct sensitization about HIV and AIDS and availability of the services on campus (Ferguson, 2006). It may not be assumed that every student knows the physical location of the services. There are thousands of new students who report to campus for the first time while old students graduate and go. During "orientation week" when vigorous HIV campaigns are conducted (Ferguson,

2006) perhaps not all first year students converge to be given information and may not be aware of the VCT services on campus.

Besides the factors mentioned above, issues of distance to the location may also have an influence on the uptake of VCT services by the university students. For example, according to Maseno University Annual Academic Report (2013), there is only one ACU in Maseno University, with a big population while the lecture halls as well as halls of residence are far apart which might not favour all the students. Some students may feel discouraged when they go for VCT services and queues may be too long. They consider the long waiting time a waste of time since it may interfere with their lectures. Other factors may include issues of stigma and discrimination which may create fear among the university students to undertake VCT services. Not much information exists on these issues dynamics that may influence utilization of VCT services.

1.2 Statement of the Problem

In 2001, Maseno University established VCT services as a response to HIV and AIDS prevention and care. However, the VCT has continued to record low levels of utilization and yet the cause of this low uptake is not yet established. This is despite the fact that ACU in collaboration with ICL and other partners have been conducting sensitization sessions about HIV and AIDS regarding availability of the services on the campus. Many old students' graduate and new students join. However, it is not clear whether there is continuity in the transmission of knowledge about VCT from old to new students and sustained utilization levels. Broader literature on the utilization of VCT services has pointed at low service utilization due to students' perceptions about the ability of the VCT to keep confidentiality and maintain non-discriminatory services to the clients. However, it has not been properly documented whether similar barriers could cause the low VCT utilization by Maseno University students. Besides the above mentioned factors, other factors that may influence utilization of Maseno University VCT services are not clearly documented, yet they may be important for intervention to improve VCT utilization by Maseno University students.

1.3. Research Questions

i. What is the knowledge of students on voluntary counseling and testing services in Maseno University?
ii. What are the perceptions of students on Voluntary Counseling and testing services in Maseno University?
iii. What other factors influence uptake of Voluntary Counseling and Testing services by Maseno University students?

1.4 Objectives of the Study

1.4.1 General Objective

To assess the knowledge, perception and utilization of voluntary counseling and testing services by Maseno University students.

1.4.2 Specific Objectives

i. To determine the knowledge of students on voluntary counseling and testing services in Maseno University
ii. To find out the perceptions of students on voluntary counseling and testing services in Maseno University
iii. To identify factors that influence students' uptake of Voluntary Counseling and Testing services in Maseno University.

1.5 Study Justification

One of the Sustainable Development Goals (SDGs) and Vision 2030 is to lower HIV and AIDS incidence in Kenya (UNAIDS, 2015). Similarly, the UNAIDS vision is zero new HIV infections, zero stigma and discrimination and zero AIDS related deaths (UNAIDS, 2012). Voluntary Counseling and Testing (VCT) therefore plays a critical role in the achievement of the above goals. The results of this study would show determinants of utilization of VCT services which would then guide in policy formulation aimed at effectively lowering new HIV infections, reducing stigma and discrimination and AIDS related deaths. The findings of the study also provide information needed by university students to increase utilization of VCT services. Peer counselors and educators obtain necessary information to help improve on their services as they create awareness on the importance of VCT services to university students. The results from this study would have policy implications to Maseno University policy makers, NACC, Ministry of Health by providing information on how to improve on utilization and uptake of VCT services among university students so as to prevent new infections and accelerate the fight against HIV and AIDS. The study findings may also add new knowledge on utilization of VCT services and elicit further prevention of HIV infections among university students.

1.6 Scope and Limitation of the Study

The study focused on the utilization of VCT services by Maseno University's Main Campus students because this is where the majority of the students pursue their studies. The students' here stay in the university hostels, out of parental control unlike other campus such as City Campus, Homabay campus and E-learning Campus where majority of students' are day scholars. The study focused all faculties/schools, undergraduates both male and female in the age bracket of 17-24 years. It included students' knowledge about the VCT services in the university, their perceptions about the services as well as other determinants of utilization of VCT in the university.

One major limitation is that the study findings may not be used to make generalization about other campuses of Maseno University because of differences in the university contexts including social and infrastructural set ups. In addition, the study adopted a cross-sectional study design which did not provide an opportunity to observe the

changing dynamics of the students' behaviour and utilization of VCT services over a long period of time.

1.7 Theoretical Framework

1.7.1 Theory of Reasoned Action and Theory of Planned Behaviour

Theory of Reasoned Action (TRA) was first introduced in 1967 by Fishbein in order to understand the relationship between attitude and behaviour (Fishbein, 1967). It attempts to explain the relationship between beliefs, attitudes, intentions and behaviour. This theory assumes that behaviour is the result of intentions, which are derived from two sources, namely; attitude towards a behaviour and subjective norms (Fishbein, 1967). This implies that intention precedes behaviour and is an indicator of preparedness to implement a particular behaviour. Fishbein (1967) says that attitude is determined by a person's beliefs about the outcomes or attributes of performing a specific behaviour (that is, behavioural beliefs), weighted by evaluations of those outcomes or attributes. An individual's attitude towards a behaviour may be either positive or negative feelings about performing the behaviour. Subjective norms hold that an individual's behaviour is determined by whether people who are important to the person approve or disapprove of the performance of a behaviour (that is, normative beliefs), weighted by the person's motivation to comply with what those people think (Fishbein, 1967; Ajzen & Fishbein, 1980).

According to Montano and Kasprzyk (2002), the theory of reasoned action is successful in explaining behaviour when volitional control is high. In conditions where volitional control is low, the theory of planned behaviour (Ajzen, 1991) is more appropriate to explaining behaviour. Ajzen (1991) proposed the Theory of Planned Behaviour (TPB) by adding perceived behavioural control (PBC*)* to TRA. This is done in an effort to account for factors outside a person's volitional control that may affect his or her intentions and behaviour. This extension was based on the idea that behavioural performance is determined by motivation (intention) and ability (behavioural control). According to Montano and Kasprzyk (2002), perceived behavioural control is similar to Bandura's concept of self-efficacy, which refers to an individual's belief in his or her ability to perform a particular behaviour under various conditions. The success of the theory in explaining behaviour therefore depends on

the degree to which the behaviour is under volitional control (that is, individuals can exercise a large degree of control over the behaviour (Ajzen, 1991). According to Ajzel (1991) a person's perception of control over behavioural performance, together with intention, is expected to have a direct effect on behaviour. The effect of perceived control declines, and intention is a sufficient behavioural predictor in situations in which volitional control over the behaviour is high (Ajzen & Madden., 1986).

Apparently, TRA and TPB have been used to understand the use of condoms as a preventive mechanism in HIV infections. For instance, a study conducted by Vanlandingham (1995) among Northern Thai young Males used TRA to examine inconsistency in condom use among commercial sex workers. Similarly, Kashima (1993) used both the theories to examine sexually active unmarried heterosexuals aged 17 to 21 years among university students to give information about their intention with respect to condom use. Kashima (1993) found that normative belief for sexual partner had a direct influence on attitudes, subjective norm and intention.

In this study, TRA and TPB were applied to help understand students' utilization of VCT services in Maseno University. In particular, TRA helped to understand whether having knowledge about the benefits of VCT would motivate students' uptake of the services. Secondly, it helped to explain how students' perceptions of VCT services either motivate or discourage them from going for the services. That is, perceptions and uptake of services may contribute to whether their peers approve or disapprove of it. The last component of the theory, TPB, helped to explain issues relating to factors beyond the control of students. For example, time factors and location of the VCT site also emerged as determinants of VCT uptake among students.

CHAPTER TWO
LITERATURE REVIEW

2.1. Introduction

This chapter discusses literature related to the utilization of Voluntary Counseling and Testing among university students. It particularly focuses on students' knowledge and perception on Voluntary Counseling and Testing Services as well as factors which influence students' uptake of Voluntary Counseling and Testing services. The chapter also presents the theoretical framework of the study.

2.2. Overview of HIV and AIDS and VCT utilization among Young People

In 2014, an estimated 40% of new cases of HIV consisted of young people aged between 15–24 years. About half of the new HIV infections each day occur among youths in Africa (UNAIDS, 2015). In 2011, nearly a total of 5 million people were living with HIV in South, South East and East Asia, majority being youths injecting themselves with drugs and sex workers (UNAIDS 2012).

By 2001, Joint United Nation Programme on HIV and AIDS, World Health Organization (WHO) and many other organizations endorsed the concept of universal access to prevention, treatment, care, and support (UNAIDS, 2002; WHO,2012). As was mentioned earlier, VCT is a critical component of treatment, care, and prevention efforts and have been widely implemented in industrialized and developing countries (UNAIDS, 2002). However, the VCT centers have over the past years recorded low attendance rates, especially among young adults (UNAIDS, 2002; Wang et al., 2011; Tsegay et al, 2013). For instance, China has over 4,000 VCTs open nationwide yet they record low attendance per day especially of young adults. (Wang et al, 2011). Wang et al. (2011) in their study did not however explain the reasons why there was low young adults utilization of VCT services by young adults in China.

According to UNAIDS (2002), there are many factors that may cause reluctance among young people to go for VCT services. Firstly, in many cultures, it is socially unacceptable for young people to be sexually active and as a result, sexually active young people do not talk openly about their experiences with adults, including health workers (UNAIDS, 2002). At the same time, health workers' attitudes towards young

people's sexuality are sometimes negative and young people perceive them as intimidating (UNAIDS, 2002).The same UNAIDS Report (2002) continues to indicate that other factors that cause low uptake of VCT among young people include fear that confidentiality might not be maintained in health facilities, misconceptions about VCT and a low HIV risk perception. However, these UNAIDS reports were did not touched on factors which might cause low uptake of VCT services among university students.

Studies specific on uptake of VCT services among university students have shown similar trends. For example, Tsegay et al. (2013) found that there was low uptake of VCT services among Ethiopian students. These results also concur with Dirar, Mengiste, Kedir and Godana (2013) in their study in Harar, Ethiopia. On the other hand, Ron et al., (2011) found low VCT service attendance among Ugandan and Zambian university students. In Tanzania, Meda (2013) also reported that university students recommended VCT services to other people but would not go themselves.

2.2.1 Students' Knowledge of VCT Services in Universities

In Ghana and Ethiopia, studies found that there was low uptake of VCT services despite high knowledge of VCT services among university students (Asante, 2013; Tsegay et al., 2013). Other studies with similar findings include Ndababora and Mchunu (2014), Dirar et al., (2013), Mengiste et al., (2013) and Meda (2013). These studies have indicated that over 50% of university students were aware of VCT services and their benefits yet this high level of awareness did not translate into high uptake of the services. However, it must be noted that there exists variations of contexts. It might not mean that all university students are aware of VCT services.

In Kenya, vigorous HIV and AIDS awareness campaigns have been conducted in all the public universities. These campaigns have been conducted by I Choose Life Africa (ICL), which is an Non-Governmental Organization (NGO) founded in 2001 (Ferguson, 2006). The organization collaborated with the Commission for University Education (CUE) formally Commission for Higher Education (CHE) and NASCOP to introduce HIV and AIDS programmes in the public institutions of higher learning across Kenya (Ferguson, (2006). The programme adopts a moral approach to HIV and AIDS education based on positive peer pressure (Weiler et al, 2008). The

programme sets out to deepen knowledge of HIV and AIDS, delay sexual debut, reduce the number of sexual partners, increase condom use, strengthen policy development and implementation, and finally encouraged students to undergo VCT (Ferguson, (2006)).

In view of high HIV prevalence rates among the youths aged 15–25 years, the Commission for Higher Education, Nzioka, emphasized that institutions of higher learning must respond to HIV and AIDS since no institution is immune to the pandemic. After the then President Daniel Arap Moi declared HIV and AIDS a national disaster in 1999, the Ministry of Education, Science and Technology was instructed to introduce HIV and AIDS education into all institutions of learning across the country. All Kenyan universities were expected to establish an AIDS Control Unit (Nzioka, 2001). The AIDS Control Units (ACUs), therefore, were launched in all the Kenyan Universities as one of the major interventions developed in response to the HIV and AIDS in the institutions of higher learning in the early 2000s (Nzioka, 2001).

Voluntary Counseling and Testing was one of the main activities to be undertaken by the ACUs. The government of Kenya has been training VCT counselors and laboratory supervisors from each district so as to create a national pool of competent staff to run VCT centers (Noor et al, 2006). These pools of staff have been deployed to university VCT facilities. In addition, many universities have been using their annual ACU Bulletins to disseminate available information on HIV and AIDS to students and staff (Agoro, 2006). Besides, by 2003, a number of institutions of higher learning including Kenyatta University, Moi University and University of Nairobi had introduced HIV and AIDS policies to foster prevention and provide care and support (Nzioka,2001). Private Universities have followed suit such as United States International University (USIU).

Awareness of the HIV and AIDS pandemic has led students to create other anti HIV association to further raise awareness among the student population. The University of Nairobi, for example, has a very strong student association known as Medical Students Against AIDS (MSAA), which does not limit its activities to the campus alone (University of Nairobi, 2003). It has been invited by UNESCO to conduct peer

education activities in secondary schools in some of the Kenyan provinces (Weiler et al, 2008). Kenyatta University has also formed a student AIDS Control Organization to discourage risky sexual behavior (Weiler et al, 2008). These activities obtain funding from National Aids Control Council (NACC) through CHE which disburses funds for university activities such as information, education and communication, peer education, voluntary counseling and testing and the development and publication of workplace policies (Agoro, 2006).

In this regard, studies such as those reported by Mwangi et al. (2014), show that significant awareness of HIV and AIDS exists among students in the universities but the impact of this on risky behaviour remains low. According to Mwangi et al. (2014), the majority (82%) of students acknowledged that one should test for HIV at any time. Similarly, Lake Victoria Basin (2010) found that 89.7% of the university students were aware that one should seek VCT services in order to know their HIV status. In addition, currently, most universities are offering HIV and AIDS common course to all first years in order to increase their knowledge on the same (Weiler et al, 2008). However, the students' knowledge on when and why to test for HIV did not translate to the expected behaviour of seeking the VCT services. This leaves one to speculate on the kind of knowledge students have about VCT services and their location within the universities. That is, just knowing about VCT may not be enough. The students need to know where the services are located in the universities in order to access them. At the same time, more students graduate but knowledge dissemination may not be sustained across all new coming students. In as much as HIV and AIDS is taught as a common course in the Kenyan universities, the packaging of the information may not motivate the students to go for VCT services within the universities. This study, therefore, investigated the knowledge of the students with regard to the utilization of the VCT services in Maseno University.

2.2.2 University Students' Perceptions on Voluntary Counselling and Testing Services

Apart from knowledge, Medical Anthropology has demonstrated that individuals' perceptions determine seeking of health care services (Kleinman, 1978,). Making a decision to undertake VCT services may depend on the perceived susceptibility to

HIV infection and perceived benefits (outcome) of the services-which include satisfaction with the services received (Rosenstock, 1974). Literature on health related behaviour emphasizes the perception of being at risk of infection as one of the necessary conditions for behavioral change, especially being able to go for HIV test (Lavra, 2002). In that regard, a few studies focusing on students perceptions of VCT services in the universities have begun to emerge. For instance, De Beer (2012) reports from Namibia that university students' awareness of one's own vulnerability to contracting HIV was low, which may be a contributing factor to low uptake of VCT services. Similarly, in South Africa, the studies have also shown that people who do not view themselves as being at risk of HIV infection were less likely to utilize VCT services (Kilewo et al, 1998; Hutchinson & Mahlalela, 2006). However, these risk perceptions are likely to vary from one socio-environment to another.

In a study of perceptions towards VCT in one of the universities in Ghana, Donkor, (2012) revealed that students had both positive and negative perceptions. Donkor (2012) indicates that about 65% of the students would regard those who went for VCT as promiscuous and 49% thought people would assume such individuals were HIV positive and point fingers (Donkor, 2012). This implies that students who do not want to be suspected of any antisocial behaviour would not want to go for VCT services.

From 2000, fear of confidentiality and the subsequent stigma have been reported to prevent people from attending VCT, acknowledging and disclosing their HIV-status, suggesting safe sex, and seeking treatment, care and support due to discrimination hence underutilization of the VCT services (Goldin, 1994; Muyinda et al., 1997; 2001; UNAIDS, 2002; UNAIDS, 2007). For example, Madebwe et al. (2011) reports fear of stigma as a hindrance among Zimbabwean University students' uptake of VCT services. As a result, most students prefer using either external VCTs or 'moonlight testing' due to lack of confidentiality in VCTs on campus (Lake Victoria Basin Commission, 2010).

There has been an increasing amount of international level policy and campaigns against HIV-related stigma and discrimination (Parker & Aggleton, 2003; UNAIDS, 2007). These campaigns seem to bear fruits. For example, according to Kenya

National Bureau of Statistics and ICF Macro (2010), people are beginning to accept individuals who test HIV positive. Another study such as Mwangi et al. (2014) in four Kenyan universities indicates that students generally seem to have positive perceptions towards the VCT services. For example, majority (92%) of students' felt that it was extremely useful to test for HIV while 89.4% felt that testing for HIV was extremely beneficial. At the same time, most of the students (81.8%) did not support the statement that portrayed HIV testing negatively. For instance, they indicated that it was embarrassing to test for HIV. Comparatively, Museve et al, (2012), found out that in Mount Kenya University (MKU), majority of the students perceive VCT to be important in the fight against HIV and have a positive attitude towards VCT with over 80% of them willing to go for the service.

Although literature indicates both positive and negative perceptions towards VCT and the individuals who utilize the services, it depends on social context of a particular university. For example, where students doubt that the VCT staff may breach their confidentiality, their turn out for VCT services may be minimal. Because of differences in social context in the universities, there could be differences in the uptake of VCT services by the students, although little has been documented on it.

2.2.3 Other Factors Influencing University Students' Uptake of Voluntary Counselling and Testing Services.

Apart from knowledge and perceptions, other factors may also play a role in influencing students' utilization of VCT services. Factors such as fear of the unknown, access, and cost, waiting time, location and quality of VCT services have been identified in other studies as other determinants of VCT uptake (Sherr et al., 2007; Bwambale et al., 2008). For example, high risk groups tend to be less likely to participate in VCT for fear of getting a positive test result (Spielberg et al., 2001; Matovu et al., 2005). However, a study in Zambia contradicts this by showing that individuals willing to seek VCT were more likely to be at high risk and were more likely to test positive (Fylkesnes & Siziya, 2004).

Similarly, piggnatelli, et al (2006) reported that some students went for VCT to know their status after having a relationship with an unfaithful partner. This means that,

they had wanted to know if they were HIV positive so that they are initiated on life prolonging antiretroviral therapy. However, these contrasting results are likely to occur even in one given setting. Whereas other individuals would fear knowing their HIV status because they would be stressed to learn that they are already HIV infected, others would feel free to know their sero-status in order to seek early treatment and care before experiencing any symptoms of opportunistic infections. In a supportive environment, an individual would not fear knowing his or her HIV status as compared to a setting where stigma and discrimination is still high. However, in as much as Mwangi et al. (2014) argues that students are beginning to see HIV test as beneficial, it is not known whether they would be willing to support individuals who test HIV positive.

In terms of proximity, Sherr et al. (2007) indicated that location of VCT, presence of rapid testing and home visiting for palliative care significantly influence VCT uptake. Similarly, in Uganda, Bwambale et al. (2008) found that proximity and convenience motivated people to utilize VCT services. Some scanty reports that have emerged such as (Lake Victoria Basin Commission, 2010) indicating minimal VCT service utilization by students in some East African universities including Kenya. Lake Victoria Basin Commission (2010) continues to suggest that this may be because locations of the VCT sites are not convenient to students and further, many open during working hours only and therefore are not easily accessible to students all the time due to their time table schedules. For example, it is not known whether the single VCT center is found convenient for all students within Maseno University.

Age and gender may also be factors that affect VCT uptake among University students. Although Ndabarora and Mchunu (2014) found that student demographics such as age and gender were not predictors of utilization of VCT services. Senior students, that is, third and fourth year students are likely to go for VCT services because they plan to get married and they would want to be sure that their partners are safe and faithful as opposed to first and second years. (Museve et al.,2012). In a study conducted by Iliyasu et al. (2006), gender was found to be a factor when determining the willingness of participants to have VCT, with only 57% of female respondents willing to undergo VCT in contrast to 83% of males. However, it is not known

whether these two demographic factors (age and gender) may have similar influence on utilization of VCT services among Maseno university students too.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents the methodology that was used in this study. It gives a description of the study design, study area, study population, sampling procedures, and methods of data collection. It further explains the methods of data analysis and presentation. In addition, it presents the ethical considerations.

3.2 Study Design

The study used a cross-sectional survey design combining both qualitative and quantitative techniques. This design was preferred because the study was carried out at a particular point in time and it allowed collection of data from a cross-section of the population to obtain a snapshot of the uptake of VCT services among university students. The study involved obtaining participants from the office of University Academic Registrar who has students' data base. The office of the Dean of students was used to identify the participants based on the register provided by the Academic Registrar. Consent forms, and structured questionnaires were administered; while key informants' interviews, individual in-depth interviews and focus group discussions were conducted.

3.3. Study Area

This study was conducted in Maseno University's main campus located in Kisumu West Sub-County of Kisumu County in Western Kenya. Maseno University, main Campus, was purposively selected because this was where many of the students' were residing away from parental control. It has a total population of 6,535 students (Academic Registrar, 2013). It has a VCT center under Maseno University Aids Control Unit (MUACU) (Ferguson et al 2006). Maseno University Aids Control Unit has a coordinator, a site in charge, four VCT counselors, one VCT receptionist and a demonstrator who is in charge of outreach activities (Ferguson et al, 2007). It has three VCT rooms for HIV counseling, a resource center for HIV literature and a waiting bay. Its aim is to provide information on HIV prevention and reproductive health services through various activities to staff, students and the surrounding community. Other activities include; home based care to the infected and affected

people, prevention of Mother to Child Transmission of HIV (PMTCT), youth peer education programme, strengthening STIs management and prevention, strengthening AIDS education and awareness, elimination of stigma and discrimination through formation of lobby groups of PLWHA, conducting Outreach, operating a resource Centre, Research, acquisition and distribution of condoms and behaviour change materials (Ferguson et al, 2007). The main goal of MUACU is to promote HIV and AIDS prevention, care and support activities in Maseno University and surrounding communities (Othero et al., 2009).

The University currently has four Campuses. Namely; Main Campus, Kisumu City Campus, Homa-Bay Campus, and the E-Campus. Aids Control Unit (ACU) coordinates programmes and activities for the prevention and management of HIV and AIDS within the University and its neighbouring communities. Maseno University AIDS Control Unit (MUACU) partners with Ministry of Health and I Choose Life-Africa (ICL) (Ferguson et al, 2006). I Choose Life Africa has a memorandum of understanding (MOU) with Maseno University to support activities such as Peer Education, Sexual Reproductive Health(SRH) messaging among students involving capacity building on HIV and AIDS issues, Behaviour Change Communication Group (BCCG) peer education Training (ICL, 2007). They also support first years' orientations on HIV prevention issues. The organization also helps the university in integration of sexual and reproductive health and HIV (SRH-HIV) strategy such as HIV counseling and testing, condom distribution and promotion, STI screens and cervical cancer screening (Ferguson et al, 2007).

3.4. Study Population

The study population consisted undergraduate students of Maseno University at the Main Campus. The study sample was drawn from a student population of 6,535, 5 VCT counselors, 102 peer counselors and 192 peer educators (Maseno University, 2013).

3.5. Sample Size and Sampling Procedure

3.5.1. Sample Size

The sample size of students was determined by the formula as proposed by Fisher et al. (1992) as quoted in (Mugenda, 2003).

The desired sample size when the population is more than 10,000 was then obtained from the equation below; $n = \frac{z^2 pq}{d^2}$

Where:

n = the desired sample size when the population is more than 10,000

Z = the standard normal deviate at the required confidence level

p = the proportion in the target population estimate to have characteristics being measured

q = 1 – p

d = the level of significance set

For a population of less than 10,000 as shown below;

$$n_f = \frac{n}{1 + (n/N)}$$

Where:

n_f = the desired sample size when the population is less than 10,000

n = the desired sample size when the population is more than 10,000

N = the estimate of the population size

The study further assumed a value of p of 50%, z of 1.96 and d of 0.05 as proposed by Fisher et al (1992) (Mugenda, 2003)

The sample size when the population is more than 10,000 (n) will then be:

$$n = \frac{(1.96)^2 (0.5)(0.5)}{(0.05)^2}$$

= 384

The sample size (n_f) for students whose population is 6,535 (less than 10,000) was therefore:

$$n_f = \frac{384}{1 + (384/6,535)}$$

= 363

Table 3.1 Sample Distribution of Students

Stratum	SAFS	SCI	SPH	SPA	SEES	SDSS	SBE	SMA	SM	SASS	SEE	SBPS	Total
Population	111	240	172	137	271	332	976	514	208	1040	2013	521	6,535
Sample size	6	13	10	8	15	18	54	28	12	58	112	29	363

Source: Maseno University's Annual Academic Report, 2013

Sample size for each stratum

$$= \frac{\text{Population of Stratum}}{\text{Total student Population}} \times \text{Required Sample Size (363)}$$

Example SAFS $= \frac{111}{6,535} \times 363$

$= 6.1$

Key:

SAFS - School of Agriculture and Food Security

SCI - School of Computing and Informatics

SPHCD- School of Public Health and Community Development

SDSS - School of Development and Strategic Studies

SPA - School of Planning and Architecture

SEES - School of Environment and Earth Sciences

SBE - School of Business and Economics

SMA - School of Mathematics, Statistics and Actuarial Science

SM - School of Medicine

SASS - School of Arts and Social Sciences

SEE - School of Education

SBPS - School of Biological and Physical Sciences

Samples of 10 key informants were selected using purposive sampling based on their availability and knowledge of the services offered in the VCT that target students during the data collection. They consisted of 2 VCT staff; director of student health, 3 peer counselors and 4 peer educators.

3.5.2 Sampling Procedure

A list of students was obtained from the office of the Registrar Academic and Students Affairs. Stratified random sampling was used to sample the students within the 12 schools. The sample size of each stratum was proportionately determined according to the population of each school. For each stratum (school), the proportionate of males and females was obtained. Subsequently, an equal number of random numbers were generated for males and females separately. Numbers were then randomly drawn for each group randomly for the equivalent number in the sample. Simple random sampling was then used to select the sample from each stratum based on gender and year of study. The names of the students whose serial numbers matched the numbers drawn were taken to form the sample and given consent forms.

3.6 Data Collection Methods

The study used both quantitative and qualitative methods of data collection. Key Informant Interviews (KIIs), Focus Group Discussions (FGDs) and in-depth interviews were used to generate qualitative data while semi-structured questionnaires generated Quantitative data. Data was collected from a sample of undergraduate students, VCT counselors, peer educators and peer counselors through interviews. Primary data were obtained through the use of semi-structured questionnaires, Key Informant Interviews, Focus Group Discussions and observations while secondary data was obtained from document review of reports in the Aids Control Unit (ACU).

3.6.1. Semi-Structured Interviews

Semi-structured questionnaires were administered to 363 students selected according to gender and year of study, to collect qualitative and quantitative data. The semi-structured interviews consisted of both closed and open ended questions. The data collected using this method included; students' socio-demographic characteristics, information about their feelings, values and ideas on the utilization of VCT services within the University.

3.6.2 Key Informant Interviews

The study involved interviews with 10 Key Informants purposively selected, comprising of 2 VCT counselors and 4 peer educators and 4 peer counselors. The information collected included students' experiences of VCT services in the university, the perceptions of students towards the VCT counseling services offered and the opinions and feelings of the students towards the VCT services within the university. The mode of recording the interviews was note taking while a voice recorder was used to capture information that may be missed while taking notes. The interview established the student's practices, perceptions and knowledge towards utilization of the VCT services. An interview guide or checklist was used in order to ensure every aspect of interest is covered accordingly in relation to the study objectives.

3.6.3. Focus Group Discussions

Four Focus Group Discussions were held with purposively selected students from selected strata and grouped according to year of study and gender to ensure fair representation of all categories of students. Fourth and third years were put together with two groups of male and females likewise for first and second year. In each session, there were 12 participants giving a total of 48 students for group discussions composed by year of study and gender. The objectives of the FGDs were to obtain views about feelings, values and ideas on the utilization of VCT services within the University by the students and the quality of service offered by the facility. It also explored how best the utilization of VCT services can be increased within the University. The discussions were tape recorded and the verbatim notes were taken with the help of one research assistant. A guide for the discussions was provided to ensure homogeneity in the discussions and the language of discussion was English. The discussions were facilitated by the researcher together with a research assistant who had been trained on how to conduct the discussions to help facilitate group.

3.6.4 In-depth Interviews

This qualitative research technique involved conducting intensive discussions with a small number of respondents to explore their perspective on a particular idea. It is useful when detailed information about a person's thoughts; feelings and behaviour is required or needed to explore a new source in-depth (Boyce & Neale, 2006). According to Bernard (2000), in-depth interview technique is appropriate for sensitive topics and it will allow thorough probing for clarification and detailed understanding of experience and complex systems in the lives of students where face-to-face interviews were conducted. In this case, students who frequent VCT services were used to identify and invite other students for the interview. A total of 22 in depth interviews were used to collect qualitative data on the opinion, perceptions and frequency of other students on the VCT site of Maseno University.

3.6.5 Secondary Sources

Secondary data was obtained from ACU publications. These were obtained from document review of reports in the ACU office VCT section in Maseno University and Kisumu West Sub-County NACC offices.

3.7 Data Analysis

The qualitative data from in-depth interviews with key informants as well as FGDs were analyzed using content analysis method, which involved identifying recurring themes (Ritchie & Lewis, 2003). The process involved going through the whole data set and identifying recurring themes (Emerson *et al*., 1995). The data were then organized into themes and generalizations formulated based on the objectives of the study.

The quantitative data collected from semi structured questionnaires were coded and entered into Statistical Package for Social Sciences (SPSS) spreadsheet for analysis. Analysis was done using descriptive statistics and presented in frequency tables and charts. Both descriptive and inferential Statistics were used, cut off p-value of less than or equal to 0.5 was taken as significant.

3.8 Ethical Considerations

Before conducting fieldwork, an ethical approval was obtained from the School of Graduate Studies (SGS) of Maseno University. A research permit was also from the National Council of Science Technology and Innovations (NACOSTI). Ethical clearance was also sought from Maseno University Ethics Review Committee. Informed consent was then sought from respondents after thorough explanation of the subject of research. It was also left open for them to accept or decline to participate. The study assured participants of confidentiality by not revealing any details of the interviews and keeping their names anonymous.

CHAPTER FOUR
KNOWLEDGE OF STUDENTS ON UTILIZATION OF VOLUNTARY COUNSELING AND TESTING SERVICES

4.1. Introduction

The main focus of this chapter is to present the results, interpretation and discussion of data collected on the knowledge of students on utilization of VCT service. The chapter is divided into two sections. The first section presents the socio-demographic characteristics of the respondents. The second section provides the students' knowledge on utilization of voluntary counseling and testing services and how awareness of VCT access to VCT services.

4.2. Socio Demographic Characteristics of Respondents

A total of 363 respondents were interviewed. The majority (69.9%) of respondents were between the ages 21–25 years, followed by 17 – 19 years. The male students interviewed were 51.5% of the total respondents which was almost equal to that of female students at 48.4%.

About 18.4% of respondents were found to be married. Among the married respondents, majority (60%) were females. Of these married respondents, 28% were from the School of Education, while 55% of them were taking Arts and Social Sciences based courses. Over 80% of the respondents were Christians and 11.1% were Muslims, while the remaining 8.9% did not mention their religion.

Table 4.1: Socio- Demographic Characteristics

Characteristics	Frequency (n)	Percentage (%)
Sex		
Female	176	48.4
Male	187	51.5
Age Category		
17-19	109	30.1
≥ 20	254	69.9.
Religion		
Christians	334	88.1
Muslims	42	11.1
Traditional	3	0.8
Marital status		
Married	67	18.4
Single	296	81.5
Course Categories		
Biological Sciences	104	27.4
Physical Sciences	68	17.9
Arts	207	54.6
Academic Year of study		
First Years	82	22.6
Second Years	116	32.0
Third Years	92	25.3
Fourth Years	73	20.1

4.3 Students' Knowledge and Utilization of Voluntary Counselling and Testing

The study investigated the level of students' knowledge on the number of VCT sites within the university. An overwhelming majority of 98.1% was aware of the existence of a VCT site in Maseno and 88.2% of respondents accurately identified the site and know it as the only VCT site that provides HIV services. The 11.8% who were not sure of the number of VCT sites in Maseno University is an indication of a fraction that needs to be targeted with aggressive sensitization. They were not aware of the VCT facility because of various reasons, namely; (i) they were mainly first years who

reported to campus late after orientation week. (ii) They had neither been sensitized by ICL nor met by ACU on the existence of VCT in Maseno University. ICL peer educators are few as compared to the number of all students. Consequently, they do not reach most students with awareness campaigns. Nonetheless, the high level of awareness of HIV and AIDS among the respondents concurs with the National AIDS Control Council (NACC) (2008) whose findings show that Kenya's level of HIV and AIDS awareness prevention is high at 98%. This is an indication that information about the VCT facility and utilization has been disseminated to most young adults in the institution.

When students were asked if they have heard of VCT services within the university, majority (98.1%) of respondents agreed that they have heard of VCT. Of these, 63% heard it from media, especially radio and television and ICL. This finding is supported by Museve et al (2012) that most common sources of VCT information is radio, television and open forums. Media here was mentioned because there was sensitization of HIV through Equator FM (Maseno university communication and media Technology Dept. Radio Training section) supported by ACU through NACC, Total War Against Aids (TOWA) fund.

In this study, Maseno University VCT was frequently mentioned to give free services hence the high percentage, while 27.5% heard about it during university orientation days in the first week of opening. Usually, when first year students report, a one week orientation is organized to acquaint the new students with the university and its activities. It is attended by all departments in the university, including ACU, which is in charge of HIV and AIDS activities in the university. Only about 9.5% of all respondents heard about VCT from their lecturers.

I Choose Life Africa (ICL) that was mentioned by the same high percentage (63%) as a source of HIV and AIDS knowledge, is an NGO founded in 2001, by the Commission for University Education (CUE) formally CHE to promote HIV and AIDS programmes in the public institutions of higher learning across Kenya (Weiler et al, 2006). The programme adopts a moral approach to HIV and AIDS education based on positive peer pressure. I Choose Life Africa has been conducting HIV

prevention awareness campaigns in all the public universities in Kenya. I Choose Life (ICL), therefore, was commonly mentioned during Focus Group Discussion (FGDs) as a students' friendly body that mobilizes students to seek VCT counseling services every semester. For instance, a discussant noted that:

> Yes there are students who have been trained through ICL and they come to our hostels to encourage us to go for VCT or visit the site and then they leave you with a packet of CDs (condoms). Most of the time they are the same people who come and tell us to go for HIV testing, they are in clubs called G-jue, G-pange, and salsa dance. At times they teach us things like…can I say, ha-ha mmm. .ok, Money for sex, or sex for money or sex for grades then risk your life. (Male participant, 21 years old 3rd year student).

The trained students use their powers to convince and facilitate towards the use of VCT services by their fellow colleagues. According to Ajzen (1991), perceived control is determined by control beliefs concerning the presence or absence of facilitators and barriers to behavioural performance, weighted by their perceived power or the impact of each control factor to facilitate or inhibit the behaviour.

In most of the public universities, ICL in collaboration with National AIDS Control Council (NACC) organizes mobile VCT counseling services every semester for students (Fergerson et al, 2006). This study established during in-depth interviews and FGDs that due to awareness of HIV and AIDS pandemic, ICL has led Maseno University students to create other anti HIV association to further raise awareness (as mentioned in the verbatim report above) among the student population such as G-Jue, G-Pange and salsa dance and has extended the same to neighboring secondary schools such as Kwoyo Mixed secondary school. Similarly, such kind of anti-HIV associations have been employed by both University of Nairobi and Kenyatta University. For example, the University of Nairobi has a very strong student association known as Medical Students Against AIDS (MSAA), which does not limit its activities to the campus alone, but also extends to conduct peer education activities in secondary schools in some parts of Kenya (Fergerson et al, 2006).

Beyond Kenya, the study findings are in agreement with Asante (2013) in Ghana. According to Asante (2013), the high level of HIV knowledge among the students was attributed to sustained and improved health education programmes. This is similar to Maseno University which has sustained health progammes within ACU. These programmes are organized in collaboration with ICL where the students have

anti-HIV activities and training such as G-jue and G-pange as mention in the foregoing verbatim quote. Relating to the TRA (Fishbein, 1967), these findings imply that when students have knowledge, they have the ability to reason and execute actions that are perceived as beneficial to them. Over the past decade, the government of Ghana through the Ghana AIDS Commission and its development partners increased public awareness on the causes and prevention of STIs including HIV and AIDS. Such government efforts should be complemented by the establishment of more HIV and AIDS clubs in tertiary institutions (Asante, 2013). This should be scaled up to cover all secondary schools as well. The main aim of HIV and AIDS clubs is to train young tertiary students to effectively contribute to HIV and AIDS awareness on their respective campuses as peer educators. This has the potential of helping more students to become knowledgeable about prevention, thereby facilitating positive behaviour change among them.

Some respondents raised concerns about ICL. During in-depth interviews, a participant indicated that ICL was also found to be biased because they register their friends leaving a larger population of students. As a result, other students felt that VCT was for a particular group of people. A respondent therefore commented that:

> ICL is very good but the problem is that you must know somebody to help you get into the club. This is why we people from school of medicine we are left out of the club. They need to get a representative from all the courses so that we feel accepted (First year female student, 19 years)

Secondly, a key informant was concerned with the lifestyle of peer educators who have been trained by ICL to pass messages of HIV prevention to students. The leader was concerned because peer educators are not showing a good example to others and some are involved in alcohol and drug abuse. This hinders most of the students from trusting the VCT since they are linked with it.

> Otherwise, ICL are doing a great job by providing youth friendly activities but, the peer educators should act more as counselors, approachable and should have a goal… I can't trust them with information some of them are involved in risky behaviour especially male, some of them take bhang and I can't trust them with my girlfriends. For the ladies they speak everything I can't trust them. (Male student leader, 23years)

From this verbatim quote, ICL has done good work and offer friendly activities that can help scale up VCT uptake. However, they (ICL) are being let down by their very

own ambassadors (peer educators) who do not show good examples to the rest of the students. Some male peer educators are involved in alcohol and drug abuse while the female peer educators do not keep confidentiality. The students felt that they should act like counselors who are approachable. This means that the VCT information passed over to the students by peer educators is correct but their behaviour is contrary to what students expect of them. This could easily affect attendance and VCT utilization given the fact that, the ACU use the peer educators as VCT ambassadors.

On the part of lectures as a source of information on HIV and AIDS, it emerged that Maseno University offers a course on the subject. The title is HIV and AIDS Determinants, Prevention, and Management, whose code is PHT 112. The course is offered on-line where a student is registered and gets feedback through chatting with a lecturer on-line. It is expected to prepare students to be all-rounded with regard to HIV prevention and management. It is examined just like any other common courses offered in Maseno University. If a student fails to register for it, he or she will not be allowed to graduate. However, according to the students, lectures on PHT online were a waste of time and most of the students considered it as a punishment. To them *"PHT is zero effective."* This was captured during a focus group discussion where participants argued strongly that it is not effective. They often mentioned that live sessions where lecturers interact with students would make them face the course courageously like any other. It would also help the students to share their experiences. The on-line sessions done through internet makes the students feel lonely and it is more like a punishment to them. This was also affirmed during an in-depth interview with another student:

> We just take it as a course, we do exams we pass and go. But if somebody would come and talk to people with the drama, giving relevant example, it makes it memorable to the student,- you cannot forget and you will keep it in your memory like forever we would prefer where a lecturer comes in class. This will make many of us to be serious. Otherwise it's like a punishment. You are just alone in the internet; furthermore the orientation part of it is too complex. (A second year female student, aged 21 years).

This was furthermore reinforced during a key informant interview with a facilitator that the students do not take this course seriously:

> Yes…and they look at it as a punishment where you do these things online. Ok the problem is registering and getting access to orientation so you take it as a

> punishment? But people don't take it as something helpful; they think that it is an examination course, I see. (Facilitator, 40 years old).

These verbatim quotations indicate that students prefer face to face methodology for passing on HIV information than on-line. Currently, most universities offer HIV and AIDS as a common course to all first years in order to increase their knowledge on the same (Lake Victoria Basin, 2010). On further probing, the students indicated that operating the website is too complex, Wi-Fi sometimes is out or too weak, there is no interaction with others, some do not have laptops or cannot access a computer during the lessons, orientation is difficult and most of the time the facilitators do not reply emails yet there are deadlines. However, the students suggested a way forward that: University should design specific room fully connected with Wi-Fi with desk tops during class time, facilitators should not take long in replying mails and calls or they use customer-care option and finally the orientation should be done in a short time possible.

Students were asked their opinion on the importance of VCT to the students, where 87.9% strongly agreed that it is important in knowing one's HIV status while 6.0% agreed and 6.1% disagreed. To others, only those who suspect to be HIV positive should go for the test. For example, 63.6% of the respondents agreed that one who suspects his or her HIV status should visit a VCT Centre to seek assistance and direction while 36.4% disagreed. This findings are comparable with Fishbein, (1967), student's attitude/perception inform the intention to go for VCT services. This is because of the perception that only those whom they perceive to be at risk are the ones to go for test.

Table 4.2: Students' opinion on Importance of VCT (n=363)

	Knowledge Of Status	Assistance to Positive Clients	Prevention of Infection of Others	Prevention of Ones Infection
Strongly Disagree	0	9.1	39.4	42.4
Disagree	6.1	27.3	33.3	27.3
Agree	6.0	51.5	21.2	21.2
Strongly Agree	87.9	12.1	6.1	9.1.
Total	100	100	100	100

A majority of students 42.4% strongly disagreed that the VCT plays an important role in prevention of HIV infection. Only (6.1%) strongly agreed that VCT is a key approach towards HIV prevention. Majority of the students do not perceive VCT as a way of preventing STIs including HIV. Instead, it is meant for people who are immoral and have gone through risky behaviour. Students also believe that VCT is only concerned with HIV issues alone and not any other health reproductive matters. This can reduce the uptake of VCT services. This is contrary to findings from Mount Kenya University students, where the knowledge was found to be high with reasons that students wanted to satisfy their curiosity and to determine a partner's degree of faithfulness (Museve et al, 2012). According to the theory of Reasoned Action (Fishbein, 1967) these findings imply that students will reason and execute action depending on the knowledge have they on the VCT services.

Only (9.1%) strongly agreed that VCT plays an important role in prevention of new infections where after knowing one's status, for example, the individual would take great care to avoid acquiring the virus. This contradicts the perception that high knowledge of HIV and AIDS and VCT would translate into reasoned action of going for VCT services. This shows that having knowledge does not automatically translate into taking a step towards knowing one's HIV status.

Based on high knowledge of VCT services in the university, it would be expected that the students utilize the facility. However, only 40% of the students said they had undergone an HIV test. This percent age of students who know their status was observed to be high among third and fourth year students compared to the others namely first and second year. This can be attributed to the fact that the students have been in the university long enough and have had an opportunity to learn more about VCT services.

A report from the National AIDS Prevention and Alleviation Committee (2010) indicated that around 85% of Thai youth have knowledge about HIV yet they do not see HIV and AIDS as something that they should be concerned about, and that premarital sex has become a common issue among young Thais (Durongritichai, 2012). Similarly, according to Asante (2013), a study conducted in Ghana University, shows that over 90% of the students were knowledgeable about where to get an HIV test, but only 45% had tested for HIV. This finding supports a similar one by Tsegay (2013) in Ethiopia which found a very high percentage of students' knowledge on HIV and VCT services were unwilling to use it. These findings show that knowledge alone does not translate into taking preventive measures such as knowing one's HIV status. This is supported by (Aggor, 2009) who found that majority of public university students had not taken an HIV test. However, these studies did not consider other factors which may contribute to low uptake or level of utilization of the VCT services.

In as much as knowledge is significant in taking action, it has proven futile in taking HIV preventive measures. According to TRA, other factors such as perception among others have more influence as discussed in subsequent chapters.

CHAPTER FIVE

PERCEPTIONS OF STUDENTS ON VOLUNTARY COUNSELING AND TESTING SERVICES

5.1 Introduction

This chapter presents and discusses the perceptions and other factors that influence students' uptake of voluntary counseling and testing services within Maseno University's Aids Control Unit. The chapter is divided into the following sections, perception and influence on uptake of voluntary counseling and testing, and other factors that influence students' uptake of voluntary counseling and testing services.

5.2. Perception of Students on Voluntary Counseling And Testing

Informants were asked to explain their perception on voluntary counseling and testing services within Maseno University. It was frequently mentioned in FGDs and in-depth interviews that the VCT services in Maseno University is perceived to be "very unreliable and a waste of time." The students were concerned about the opening and closing time as well as disruption from frequent departmental meetings that might delay the services or waiting time, which in turn, hamper uptake of VCT services, as narrated in the excerpt below:

> I personally see the place, VCT, as very unreliable and waste of time. You can never be sure of the results and sometimes you go there, you find the place closed. When you ask you are told they are holding a meeting. So, going back may not be very easy since I don't like to be frequently seen there. Sometimes when they work, you find queues. It is a waste of time. For example, there was a day I went there in the morning. I found them in a meeting and I was told to come in the afternoon. So, I went back after lectures at around 3pm. They told me to come the next day, since their meeting had not ended. I mean, meeting a whole day! I felt so bad and I told my friends that I will never go back and I will not and I haven't gone back. You know going to VCT means taking courage and if you cannot be tested the very time, you get discouraged. (A 21-year old 3rd year female student, during in-depth interview)

As illustrated in the excerpt above, the "unreliability of the VCT services" in Maseno University is in reference to multiple issues. Firstly, the operating times and long queues which make the students unsure of the availability of services whenever they for them. It inconveniences their learning activities too, leading to low uptake of the services.

The majority (54.5%) of students interviewed were not sure of the accuracy of the VCT test kits used at the ACU. One of the student informants thus explained.

> I have been going to VCT and the counselors always advise me to go back after three months because I have been tested HIV negative, therefore to me going to VCT sometimes is misleading because the test kits is not able to show the results immediately, this makes me perceive that the kits are not very accurate. I don't trust those kits. I would rather wait until I see symptoms of the HIV. (2rd year female student)

According to a key informant from ACU, the test kits used at the facility are proven and supplied by the government and they are accurate. One of the informants thus explained:

> If the accuracy of the test kits were not credible, then the government would have shut down the facility long ago and it would have been big news in the media. The students must understand we do a rapid test and if the person is found to be HIV negative, we advise the person to return for a similar test after three months. This is meant to take care of the window period. (VCT counselor).

Besides waste of time, the students feared their colleagues seeing them waiting because of delaying services every time. Being frequently seen on the waiting bay make the students perceive them as already HIV positive persons. The students feared to be stigmatized by their colleagues as HIV positive. Additionally, others view AIDS as "scary and that when one is having AIDS it's like a dead person and therefore people who go to VCT are considered to be on their way to death". This, therefore, hindered the students from going for VCT services. See the explanation below of how a student narrated his view of AIDS Control Unit:

> HIV and AIDS is a big issue. When you talk about AIDS, it is a big thing, ooh! It's a big monster. So, to us AIDS control unit is to control it and people who go there are considered dead. When you are there, you are already declared, you are on your way to death. Nobody wants to associate with a dead thing. To be honest, other people will start rejecting you. You're no longer a person, you're going to die. Therefore, I would rather die without knowing my HIV status. (A 19 year-old, 1st year male student)

As much as the student is talking about AIDS as a monster, this is just one isolated view. It is contrary to the general situation whereby stigma is going down and awareness is high because PLWHAs have come out openly. Subsequently, there is antiretroviral therapy and people living with HIV and AIDS are currently healthy and live longer (UNAIDS, 2014). Mostly, students anticipate negative reactions from their friends if they learned that they may be HIV positive. That is, their friends would not

like to be associated with someone who is HIV positive. They then weigh the option of knowing their status and see that it would cost their social life. Consequently, they decide not to go for VCT services. The findings concur with those of Meiberg (2008) which found that most South African undergraduate students feared negative social reactions from their colleagues and families. He also found that fear of AIDS related stigma and fear of being identified with AIDS often keeps young people, especially undergraduate students, from seeking to know their HIV status. Boswell et al (2002) also found that young people were generally not motivated to attend VCT services due to the perception of HIV and AIDS and its related stigma and discrimination.

Since the names of clients are recorded in HTC lab book as required by the Ministry of Health, a number of students perceived that VCT is a place where university administration gets the list of names of students who are living with HIV and AIDS and that it is part of School of Medicine. Being in the School of Medicine, it is therefore, believed that the medical students can easily diagnose people with HIV and AIDS leading to fear among other students, which then cause low uptake of VCT services. This was captured during in-depth interview as below:

> I have never gone there myself, but others say…mmmm…that there is always a list containing names which is given to the university administration. This is so because usually there is a book they always write names. (2rd year female students, 19years old)

Another student added that:

> You know medicine students are always the brightest and this is in their department. Associating with them is also difficult because, they are able to do a rapid diagnosis to view you as HIV positive person, therefore it should be in a central place or have a sub VCT in other parts of the university and that one remain a bigger office or even put it at millennium because most of the Art Students go there for lectures and they can just visit the place. (2rd year male student, 20 years)

It also emerged that students perceived VCT as a place for immoral people. There has always been the belief that VCT services are only meant for people whose sexual practices have been questionable. For example, Jürgensen et al., (2012) says that in Zambia it was common to assume that those presenting for testing were already suffering from AIDS and that they had ‘misbehaved’ sexually. That is, HIV was still

after several decades, strongly associated with promiscuity and prostitution, particularly among those who had not been tested (Jürgensen et al., 2012).

The students also believed that VCT services were only meant for mature fellow students. This was reported during the focus group discussions, in-depth interviews and key informant interviews. The students in their first and second year of university studies said that the VCT was only for third and fourth years. This was because first year students they were considered to be very young and were not at risk while the third and fourth year students were perceived to be at risk because most of them may have had risky sexual practices and therefore needed to know their HIV status before they went out of the university. One of the student informants narrated this:

> In my opinion, this is a reproductive health centre which is youth friendly. However, in most cases, majority of the students perceive VCT as a place for immoral comrades who might have messed in their life and are looking for a consolation on how to live after they have messed up in life…this equally leads to low turnout for VCT services at the VCT Centre. (A second year female student aged 21 years).

To some extent, the views of the first and second year students were reflected in the statements made by their counterparts in the third and fourth years of study. During an FGD with third and fourth year male students, they said they have seen a lot in "this place," University. That they have "passed through many girls," (they have had sex with many girls). So, before, they graduate they need to know their HIV status. They added that first year students are still young and considered to know nothing about sex, "they are still fresh" and need not to go for the test. This implies that the students' reason that VCT is meant only for people who have engaged in sexual activities, yet HIV can be transmitted through various other sources such as mother to child transmission and sharing of contaminated sharp objects. Theory of Reasoned Action depends on the knowledge and perception of the individual. Students here have had knowledge on the risk of having many girls and are also advanced in their level of study. They are therefore now able to decide on knowing their HIV status.

This was supported by Museve et al. (2012), in their study among Mount Kenya University students, where they found that one of the reasons for non-uptake of VCT was "Not feeling to be at risk". However, even at the level of first and second year, a student is able to be in long term or casual sexual relationships.

As Mwangi et al. (2014) noted students tend to decline in primary abstinence and HIV prevention as they advanced in their studies, the students would be at risk of HIV transmission. This is also in line with De Beer (2012) who found that most Namibia University students were not aware of their vulnerability to contracting HIV, hence contributing to their low uptake of VCT services.

During the FGD with third and fourth year students, it emerged that students had perceptions that the VCT counselors may breach confidentiality of the students' HIV status and also that they do not like the way counseling is done. The students therefore preferred other VCT services away from the one in Maseno University to avoid being unveiled. This is illustrated in the excerpt from a 3rd year student:

> I think I had gone in that VCT center six times but it shocked me when I heard a friend of mine speaking about what I thought was the top secret in my life…I had discussed the matter with one of the counselors. It reflected in my mind that the counselor leaked my secret which eventually reached my good friends. I don't think you can convince me to go back there now…if it is a must then, I can go to a VCT far from Maseno. (3rd year student)

Although it may be difficult to prove the allegation of such kind of breach of confidentiality, such allegations may also be triggered by sheer fear that their secrets may not be kept and it would cause stigma towards them if others learn about it. Apart from confidentiality, other students felt that there no privacy in the way counseling was done. The students felt that the "rooms were too close to one another and it was very easy to hear what was being said in the next room". This could be because the rooms in the VCT are partitioned with plywood and not blocks.

At the same time, the students said, there was little quality interaction between the counselors and the students. They frequently said:

> I hear the counselors rush people through the counseling session and quick to start conducting tests before one is prepared. Yet HIV is not a joking matter. One should be prepared enough to undergo the process of testing. Even after test, they need quality time to prepare them further. But that I am told is lacking. Me, I can't go there. (A male 2nd year student aged 22 years)

As the student says in the above verbatim report, according to a VCT counselor, counseling requires quality time and interaction in order to realize acceptance of results and adherence to treatment. It is unethical for the counselors to rush the clients without giving clients time to process whether they are ready for the test. Usually, the

time for VCT counseling as per the MOH protocol is between 30-45 minutes. Often, the quality of interactions between clients and counselors particularly inappropriate confidentiality safeguards has limited the acceptability of VCT and reduced the likelihood that people will attend VCT (Coovadia, 2000). Similarly, one study noted inhibiting factors such as lack of privacy and lack of follow-up support following diagnosis (van Dyk & van Dyk, 2003). In general, although 97% of the students would be willing to undergo VCT, less than 40% would do it at the university facility. In terms of gender, more males were willing to undergo VCT within the University than females. This concurs with Sherr et al. (2007) who found that more male students were likely to attend VCT than females in a college set up because of engaging in risky sexual behaviour including having multiple sexual partners, unprotected sex and as a way of reassuring themselves of their HIV status.

Table 5.1: Willingness to undergo VCT

	Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Yes	353	97.0	97.0	97.0
No	11	3.0	3.0	100
Total	**363**	**100.0**	**100.0**	

To increase the uptake of VCT and avoid wrong perception of the VCT, this study found that the students would prefer that other services be included within ACU so that it does not appear to be handling only HIV issues. Other services suggested to be offered by the ACU were soft drinks to infected people, STI screening, cervical cancer screening, awareness creation and BMI level. Others had no idea on what more to be offered while others were satisfied with what was being offered by the ACU. Table 5.2 below shows other related services to be provided at the VCT site as recommended by the students. Relating to the TPB (Ajzen 1991), these findings imply that the students would like other things to be added in order to increase uptake but they do not have control over the situation.

The students confirmed that they did not like being referred to the university hospital for STI and cervical cancer screening because of certain procedure to follow such as long queue and at times services are not available. They preferred ACU to handle all the reproductive services mostly STIs together with HIV. The students noted that, this would increase the uptake of VCT. According to Matovu and Makumbi (2007), individual attitudes and personal perceptions of the available VCT services created further barriers to testing, especially where health systems are weak and resources are limited.

Table 5.2: Other Related Services to be provided at the VCT site

	Frequency	Percent
No Idea	66	18.2
Screening of Cancer	22	6.1
None	44	12.1
STI Screening	55	15.2
Valid BMI Level	22	6.1
ARV Administration	11	3.0
Awareness Creation	22	6.1
Offer soft drinks to PLWHA	77	21.2

The study revealed that students were generally not motivated to attend VCT services because of how they perceived the VCT. This was because Students' considered VCT as unreliable and waste of time, place of immoral people. They also associated HIV and AIDS with immorality and ignorance of other factors such as mother-to-child and sharing of contaminated objects. Students also perceived VCT as being for mature students thus, only meant for students who are about to leave the university but not freshers. Apart from that, students perceived VCT as a place for controlling HIV transmission, and a department where university gets the list of names of students who are HIV positive. Finally students perceived the facility as a place with no privacy and that staff would breach their confidentiality. All these are beyond and outside their control as explained by TPB (Ajzen 1991).

CHAPTER SIX

OTHER FACTORS THAT INFLUENCE STUDENTS UPTAKE OF VOLUNTARY COUNSELING AND TESTING SERVICES

6.1. Introduction

This chapter presents other factors that influence students' uptake of voluntary counseling and testing services, such as stigma and uptake, opening and closing time, gender, marital status and academic level, mobile and moonlight VCT, geographical location and name of the site, confidentiality, fear of the unknown and peer influence as discussed below.

6.1. Stigma and VCT Uptake

According to this study, only 38.9% of the students had been tested in Maseno University VCT and received their result on the same day through face to face communication. All the respondents who received their results were happy with the mode of communication of the results. A student narrated:

> It was my second time to be tested. When I was tested first, I was sick in hospital and my blood sample was taken for test. After one day the nurse told me that I will be fine because they did the entire test including HIV. For VCT, I was told my result there and I waited. I like it that way where you talk to the person face to face. (2nd year student, 19 years)

Voluntary counseling and testing is done between the client and the counselor. Pre-testing, testing, and post-testing are done as they interact. Usually results are given on the same day, within 30-45 minutes. This study found that the students preferred results to be given on the same day and face to face as supported by the verbatim quotation above. This concurs with a study done among Debra Markos University students in North West Ethiopia, which found that students preferred face to face channel to get their HIV test results (Tsegay et al., 2013).

The biggest percent (52%) of the students sought VCT services outside the university for Lack of privacy and confidentiality issues. Knowledge of VCT services and HIV and AIDS related stigma have been found to be a factor influencing VCT uptake (Kalichman, & Simbayi, 2003). This finding captures the fear and stigma associated with being confirmed to be HIV positive as one way of hindering students' knowledge of their HIV status.

Stigma is still the most significant issue that hinders HIV prevention (Goldin, 1994). Fear of being identified with HIV often keeps people from seeking to know their HIV status, discussing prevention, changing unsafe behaviour, and supporting care for People Living with HIV and AIDS (PLWHA). This is also supported by Herek (1999), who argues that stigmatization threatens the utilization and effectiveness of HIV and AIDS prevention and care efforts. Stigma and discrimination also increases the pain and suffering of PLWHA and their families (Herek, 1999). Moreover, Ajzen, (2001); Bentler & Speckart, (1981), state that attitudes towards performing behaviour reflect favourable or unfavourable evaluation of the particular behaviour. Attitude towards the behaviour - in this case, uptake of VCT – is determined by individuals'beliefs about the outcome of performing the behaviour in relation to stigma and discrimination.

Furthermore, students reported that they did not want to be seen as a friend of somebody with HIV and AIDS, because they feared to become stigmatized themselves. This so-called stigma by association as reported by Neuberg et al (1994) illustrates that such fear of stigmatization is still deeply rooted among university students in South Africa. The current study also students did not like being seen frequenting the VCT site and therefore could visit once or twice in a year. Most of the respondents were tested for HIV and AIDS between six to twelve months as shown in the figure below.

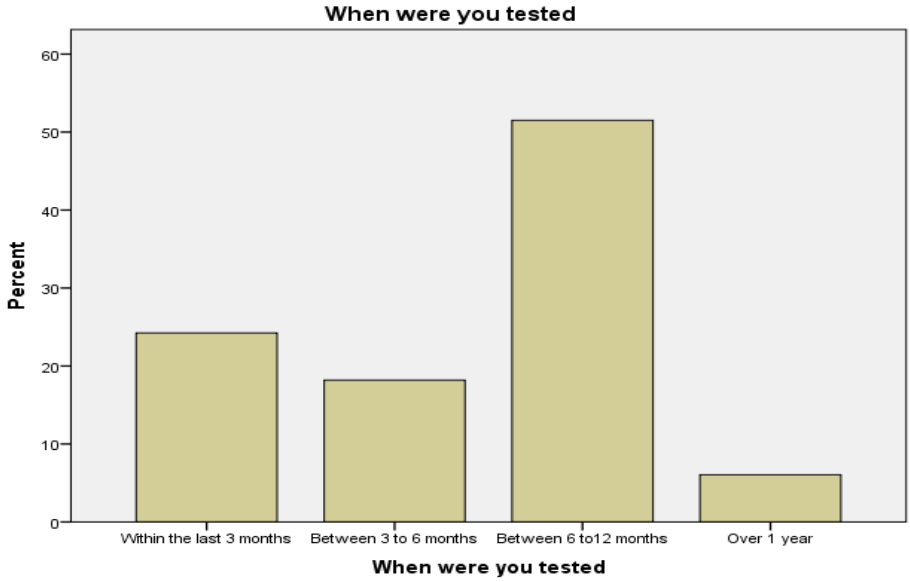

Figure 6 1: The period within which the respondents were tested of HIV and AIDS.

6.2 Gender, Marital Status and Academic Level

There was an association between VCT uptake and other factors such as gender and academic year. The study found that there was a higher uptake of VCT services among males than female students and among single students than married ones. The uptake was also witnessed to be high among third and fourth year students compared to the others. This is also supported by the annual data found in Maseno University VCT which indicated high attendance in male than female, and more singles than married. This is because the VCT clinic lacked male counselors yet the female preferred male counselors. During an in-depth interview, a student narrated:

> When I came in first year during orientation I went to VCT and found just women and I didn't like women attending to me, I prefer men because they handle you well and listen to your views without judging you (A female student second year)

High attendance of 3rd and fourth year could be attributed to the fact that most of them have now involved themselves in risky sexual behaviours and the students could also be preparing to leave college and face the 'outside world.' This was captured during key informant interview with a peer counselor who narrated that;

> When I joined this university I was still young and feared being seen around VCT because of stigma from my peers therefore I did not bother to know my HIV status. Since I am a Biomed student having gone through my course I realized the importance of knowing my status. However, I tested in second

> year second semester and I am yet to go for another test now that I am in fourth year. We fourth years we have passed through many girls, and by the time you reach this level you need to know your HIV status, we fear knowing our status when still have many years because of stigma especially when you are HIV positive you will not get friends to groove with.(Peer counselor, 22 years old).

Even though utilization of VCT services was low, the age and marital status of students were crucial. Marital status was important given the fact that the current HIV prevalence has been found to be high among married couples and young adults, especially females aged between 15 to 25 years (NASCOP, 2012). In this current study, it was found that students have been cohabiting or staying together in the hostels as 'husband and wife'. This is supported by sentiments below:

> Some of us stay as husband and wife, they don't stay in hostels, and instead they rent a house outside the university. The male pays the rent and play the role of a father while me the (female) I cook, wash clothes and all that the wife is supposed to do, divorce *kando* (divorce you put aside) even if we quarrel you just stay even if you don't talk. In this case we pretend to be faithful and real" partners" But one thing is that we have many boyfriends at home shags, in town and for school. (3rd year female student)

Moreover, the university's VCT annual report summary 2012 indicates that 9.2% of the VCT clients were tested as couples and were aged between 17 to 24 years. This therefore means that for the cohabiting students, the risk of acquisition of infection may be high especially if they do not access VCT services due to lack of knowledge that VCT services exists within the institution. The implication is that as 'husband and wife,' the use of condom is compromised and exposure to HIV infection increased. This finding is in agreement with a study done on behaviour change among Maseno University students which found that many students were sexually active when they joined the university and the inconsistent use of condoms was rampant (Othero et al., 2007). Ajzen (1991) and Fishbein (1967) assume a causal chain that links behavioral beliefs, normative beliefs, and control belief to behavioural intentions. They further hypothesized causal relationships among model components, (Ajzen & Fishbein, 1980; Ajzen, 1991; Ajzen, 2006). This therefore means that normative belief for sexual partner have direct influence on attitude, subjective norm and intention. In normal circumstances, it is believed that there should be no barrier such as condom use between people who are married. In this study, students also tend to borrow this, as they relate as husband and wife within university.

6.3. Confidentiality

Kenya's national HIV testing and counseling (HTC) follows the international standard in regard to requirements of consent and confidentiality in the context of HIV testing (Eileen, 2013). This study revealed that 81.8% of respondents did not have trust on the VCT counselors to keep on their findings secret and would not freely discuss their personal behaviour that put them at risk of HIV infection. A few respondents (18.2%) trust those (VCT counselors) because they have an obligation to do so. They cited confidentiality as their main concern in declining to attend VCT. In the questionnaire interviews, students were asked why they would not trust VCT counselors with their information. Over half of the students (55.4 %) considered them not confidential,18.3% as not friendly, and 17. 2% as not welcoming while only 9.1% regarded them as non- professionals.

In VCT, the major factor for VCT providers is to keep confidentiality. This is in accordance with Fulkeness, (2004), who said that trust in the professionalism and confidentiality in health structure, is a key factor in assuring the success of VCT utilization and the opposite affects the utilization. It is supported by Simpore et al. (2004) who found that for young adults, strengthening of peer education and assuring confidentiality might encourage more utilization, the route to both early treatment and prevention.

The findings of this study concur with that of Wang et al. (2009), in their study among sex workers' willingness to utilize VCT services in northern China. This study revealed that those who declined cited confidentiality as their main concern. This revelation is of concern because it can be an important contributor to few students visiting the VCT site and would require immediate attention for the ACU to achieve its targets. During a focus group discussion, one of the students thus narrated:

> As it has been said, loss of confidentiality makes most students to seek external VCT services where they are not known. So I think door to door testing will be a very appropriate approach to enhance uptake of VCT here in Maseno University (4th year male student).

An In depth interview with an informant also noted that:

> I actually do not go to the campus VCT because, there was a time when my information got leaked out…I had contracted STI and my boyfriend did not know about it, even my closest friend was not aware but after some weeks the information was all over…I was so shocked about this ….I swore never to go back there. (3rd year female student)

From the above quotations, students expressed concern about confidentiality of VCT services. According to Horizon (2001), young people seem to be concerned about the confidentiality of VCT services because of the stigma associated with HIV/AIDS (Horizons, 2001). Research conducted in Kenya and Uganda to identify opportunities and barriers to providing VCT found that young people would like to access VCT services but are concerned about the confidentiality of results (Population Council, 2002). In South Africa, a study also found that concern about confidentiality was a key barrier to participating in VCT services (Dyk & Dyk, 2003). Similarly, a study among women in South-West Uganda found that many were anxious about the confidentiality of the HIV test and expressed fear that maternity staff would refuse to assist them in child delivery if they were HIV positive (Pool, Nyanzi & Whitworth, 2001). On the other hand, a survey among women attending antenatal clinic in Ogun state, Nigeria, found that the perception that the clinic offered privacy encouraged women to undergo VCT (Adeneye, et al., 2004). Attitudes towards performing behaviour reflect favourable or unfavourable evaluation of the particular behaviour. In this case, utilization of VCT services is determined by individuals‟ beliefs about providers' beheviour or attitude towards the clients (Ajzen, 2001; Bentler & Speckart, 1981).

It emerged that before counseling sessions, especially when there are many students visiting the VCT Centre, the queue on the bench was long. Most students therefore felt that this was a loss of privacy since some of them could hear the counselor speaking with a client during the counseling sessions and some of them decided to leave the centre without necessarily getting the services.

> Just as my colleague has said, I would rate it as poor and in my opinion the main factor is privacy because I have been to that VCT and the day I went there I found so many people and some people were like are you also here and in their mind there are thinking that she is like this and that… There is also no privacy when in the VCT room because while waiting all the counseling that was being given to the person inside I was hearing everything at the waiting room and I was like if I get inside they will also hear what is going inside. (2nd year female student).

Issues of privacy have been a major concern not only in Maseno University but in most health facilities. For instance, a study conducted by Van Dyk, (2003) mentioned long lines and lack of privacy as a problem in uptake of VCT services among South African university students. Similarly, Mrisho et al, (2007) also reported patients' privacy as a key determinant when it comes to issues of heath facilities.

A study conducted by MacQuarrie, (2001) among Kenyan and Ugandan university students shows that to improve a youth friendly service determinants such as affordability, confidentiality and privacy are criteria to consider. In the current study, it also emerged that confidentiality was a key component on the utilization of VCT service among students. Students who observe confidentiality in the VCT service site were more likely to utilize VCT service as compared with those who did not. Confidentiality therefore is something that counselors were meant to have learned during their HIV training but it is a still challenge to the staff. Even in Health care facilities that purport to use the national HTC guidelines, maintaining confidentiality can be a challenge (Eileen, 2013). During a discussion, it emerged that confidentiality is a key issue in their profession. However, it is quite a challenge for counselors because a few individuals may not follow ethical issues. Furthermore, it also depends on the client issues. The counselor reveals that certain issues which involve life ethically cannot be confidential, however, the client should be told this at the beginning of the session.

6.4. Mobile and Moonlight VCT Services

Since the students were very concerned about confidentiality issues, the study found that they preferred mobile and moonlight VCT. Moonlight VCT is done at night while mobile VCT is done outside and away from the usual centre. Mobile VCT denotes the provision of HIV counseling and testing services by mobile teams from a van

equipped with HIV testing facilities (Matovu et al., 2007).The principle of mobile VCT is to take VCT to a population that is considered to be hard-to-reach.

During an in-depth interview with a key informant, the study found that mobile and moonlight VCT catalyzed the uptake of VCT services because students go at night when their comrades are not seeing them and usually the number is big. The study also found that most students preferred being tested at night and during mobile VCT at the graduation square. This was because their colleagues would not easily identify them and the counselors are also people they do not know (Counselors who are from outside the site). This is supported by Anika, (2013) on a study on behaviour change in Pwani University, which revealed that students moonlight testing does very well and it was most liked by the students of Pwani University. A student respectively narrated the following verbatim quote

> Occasionally we resort to moonlight VCT to give every student and the staff members an opportunity to know their HIV status and general reproductive health education. During this time, we do have large turnout I think because of our clients gather courage during night and maybe it is also an ample time since most of them are not on pressure of classes and administrative issues. (VCT counselor)

This concurs with what students say as narrated below:

> The best thing with VCT at the graduation square is because people are many with different services offered and the counselors are also visitors who we only see that day, there is no fear that people will look at you differently...I think I prefer that. (3rd year female student FGD)

As stated above, the students preferred integrated services (includes VCT, STIs screening cervical screening, and Voluntary Medical Male Circumcision) where their colleagues cannot predict what exactly they have gone to do. They also preferred being seen by new counselors who do not know them. The new counselors in this case are normally hired by the university and the supporting organizations to meet the demand. This indicates how serious the students are with confidentiality issues.

Research in the United States and Australia suggest that anonymous services may be more desirable to young people and that the introduction of anonymous testing increases uptake in higher-risk populations (Boswell & Baggaley, 2002). Young people may prefer to have tests in facilities where they will not run into colleagues

and where it is not clear to casual observers that they are there to have an HIV test (Horizons 2001). These cases indicate, as suggested by Dyk & Dyk (2003) that although people [including young people] are not necessarily against VCT, they have serious doubts about the confidentiality of HIV testing services.

Further, some respondents explained that once the clients are exposed, it brings mostly self stigma (internal stigma) because they do not know whether their names were mentioned. This makes them feel guilty and they feel like it is easy for their fellow colleagues to guess who it is leading to external stigma and discrimination. This concurs with findings by Eileen, (2013), who found that, when confidentiality is broken and a patient's status becomes known on the ward, it is not uncommon for patients to experience discrimination and/or stigmatization from their ward mates. The findings above have an implication on the utilization of the VCT services being offered at Maseno University. The findings are in tandem with a study done in northern Tanzania which found that high personal susceptibility to HIV and AIDS and barriers related to confidentiality affect VCT uptake (de Paoli et al., 2004). The current study revealed that, mobile VCT are helping to scale up the VCT uptake among Maseno university students. Mobile and moonlight VCT helped to reach out to the students who were not able to come up in the open and others who are sometimes are very busy during the day, thereby increasing the uptake.

6.5. Time and Waiting period

Concepts such as time could be easily interpreted differently depending on the context. According to data obtained from semi-structured questionnaire, students had issues with regard to time. On the time for opening and closing of the VCT site, 90.9% felt that the time was adequate while 9.1% felt that it was short. When asked what time they would prefer, majority 82.9% of respondents suggested that the time for opening and closing of the site should remain 8 am to 5 pm from Monday to Friday. A further 8.1% suggested that it be opened an hour early and closed an hour late. Interestingly, 9.0% felt that it should be opened throughout the week. It is important to note that most of the students felt that time was adequate, but the few felt that it should be opened early and throughout the week, because they felt that time was too short considering other commitments in their daily schedules.

Opening and closing time of VCT always goes together with the normal working hours which most of the students supported. This is in line with HTC national guidelines which stipulate eight working hours in a day (NASCOP, 2010).The guideline states that more working hours should be handled carefully to avoid counselors' burnout which results in poor quality of services. Those that felt that it should be opened an hour early and close an hour late gave their reason being due to tight timetable schedule and assignments. It was mentioned that when a student's timetable schedule is tight and packed, attending VCT does not feature anywhere in the students' plan of activities and during free time the student thinks of completing their assignments. A first year student narrated that:

> It's about the timetable schedule and sometimes it's packed and you have no time to go and during your free time may be you want to complete your assignment and at times you want to go for lunch and that way it's not easy to plan for VCT. (1st year female student)

The long waiting period to secure an appointment for VCT has also been found to discourage students from seeking VCT services. Several respondents who had attended VCT services expressed dissatisfaction with the long waiting period before securing an appointment. This suggests that ACU are experiencing difficulty in meeting the demand for VCT services especially during mobile VCT services. In order to address the issue of the long waiting period before securing an appointment, the study found that there was an urgent need to decentralize VCT sites and the facility to reduce the number of meetings and find ways of reducing waiting time of client. The students also did not like to be seen by friends and colleague's booking for VCT appointments.

When kept waiting for long in the resource Centre (waiting room), students felt that people passing could easily tell that one was enquiring about VCT. A few students also felt that other students might recognize them and, as a result, they might experience discrimination and stigma. A student responded that I would rather go to Maseno mission hospital which is private.

This concurs with the statement made by Njagi & Maharaj, (2006) that most young people in South African universities did not like waiting long on the queue for HIV testing for fear of their friends and colleagues. According to Hutchinson, (2006), availability of VCT services was significant in utilization of VCT. In his study in East

Cape, South Africa, he found that young people were generally not motivated to attend VCT services and that there was a range of barriers such as availability of services and long lines (Worthington, & Meyers, 2003). The issue of time is beyond the student's control, thus affecting their utilization of VCT services. Similarly, Ajzen et al (1991) added the perception that behavioral control to TRA account for factors outside individual control which may affect intentions and behaviours.

6.6. Peer Influence and Role Model

Although the university makes an effort to sensitize first years about university life through the orientation process, the role of peer influence cannot be downplayed. During FGDs, it emerged that when first years join the university, they do not know what is going on in the campus in terms of socialization. Since they would like to feel prestigious to be in university, they then link up and copy the senior students. The senior students would then share their experiences and life in campus to the new students, called "freshers". This was especially so with third and fourth year students. Othero, (2007) noted that fourth year students were sharing their life experiences with new students because they were stable in their relationships and have also matured in the system. This is expected as the Theory of Planned Behaviour indicates that attitudes sometimes arise partly from the influence of others (Ajzen, 1991). Taylor and Todd (1995) argue that the two types of influence are not independent and that attitudes will often be influenced by social-normative factors. In their social life, Students do not believe that one should be going to VCT especially for first years that are considered to be still young.

The culture in this study area has several explanations when it comes to peer influence. Some of the explanations that emerged from FGDs and In-depth interviews included sexual activity and generally the social lifestyle. Therefore, for one to feel free in campus, they must adhere to the lifestyle. The sexual activities are mostly influenced by peer pressure as mentioned by Other et al, (2007).

Aids Control Unit has peer educators who reach their colleagues in order to campaign for HIV and AIDS prevention. These students are trained on behaviour change communication (BCC) and to create awareness on HIV and AIDS to increase VCT

uptake. The group nature of the VCT campaign appeared to harness peer influences that encouraged many students to test for HIV.

The responses suggest an element of conformity, however, with some participants indicating that they felt obliged to test because their colleagues were doing so or out of fear for what their colleagues would think if they did not test. Such an approach is also questionable when it comes to VCT, because this should be voluntary (NASCOP, 2010).This is supported by Bhagwanjee,(2008), who said that induced social pressure of clients attending VCT is questionable in that the individual choice is infringed in this case, hence not ethical.

Students further mentioned that there were no HIV positive staff members or their fellow students who had disclosed openly to let people know their status. The students argued that this would let them know how the university reacts to the students living positively. There was a feeling that a good number of students could seek VCT services if there could have been their peers to encourage them. A student narrated this:

> How comes there is no student or staff member who has come up publicly on their HIV status? Let people know their status openly. This will make most of us feel free in attending the VCT because we will learn the importance of knowing our status. (Second year female student)

Role models usually encourage others to disclose their status because it predicts to the students the university stand on HIV and AIDS. The student further mentioned that there is no university policy on HIV and AIDS and therefore a role model would speak to them. The study found that the university did not have a role model who should be focal on HIV and AIDS in order to prepare students on the same.

6.7. Fear of the unknown

Fear of the unknown is one of the factors which hindered the students to know their HIV status. This could be, fear of knowing their HIV positive status, fear of stigma and discrimination from collogues, life after testing, fear of being neglected by their sexual partners in case of couple counseling and fear of facing challenges faced by PLWHA.

The students felt that there is an element of fear of the unknown which prevents students from knowing their status, (57.6%) strongly agreed, and 18.2% agreed, 9.1% disagreed while 15.2% strongly disagreed. The above response was because students believe that there is no intensive sensitization of students on the importance of knowing one's status and to remove the fear in them. From structured questionnaires, the reasons for not undergoing VCT had mixed reaction; fear of own ability to accept positive status had 57.6% strongly agreed, 39.4% agreed while 3.0% disagreed. Fear of loss of sexual partner was not as strong as the above two reasons with 15.2% strongly agreed, 69.7% agreed, 6.1% disagreed while 9.1% strongly disagreed.

During FGDs, the respondents mentioned that, fear of knowing their positive status was the main barrier against going for VCT. All claimed to be too scared to have an HIV-test because of the risks they might have taken in the past. Majority expressed that it was better to be unaware of your HIV status, so that you just go on with your life and do not have to face the fact that you will die young. Minority were just afraid of the test alone because they might not cope with the HIV positive result. For this reason, majority of participants mentioned that life was easier when they ignored the disease and the risks they were running into. Participants also frequently mentioned that they would only go for VCT when they would feel very sick. As long as there were no symptoms of HIV, there was no reason to go for VCT. One male student in 3rd year expressed very clearly the fear of knowing his/her status as follows;

> Fear of knowing that you are positive like I hear my friends say that I would rather live without knowing my status than knowing that I am positive. So it is better I don't test myself and see the results that I am positive but rather leave it, because when you go to the VCT they always ask you whether you have been tested and counseled and how to read the results and it is me not the service provider to interpret the results and that is very tricky. (Male student)

The findings of this study concur with several studies. According to a study by Addis et al, (2013), among students in North West Ethiopia found that the majority had never had VCT, their main reason was fear of HIV positive results. Similarly, Ginwala et al, (2002), also identified the fear of a positive result as a major barrier to HIV testing among mine workers in Welkom, South Africa. This was also experienced by Day et al. (2003) among mine workers in East Cape, South Africa.

The respondents also felt that those who tested positive would lose their social status with 24.2% strongly agreed, 60.6% agreed, 12.1% disagreed while 3% strongly disagreed. An in-depth discussion with a key informant confirmed that the students liked to belong to a certain peer group and identify with them, hence they feared the psychological consequences of testing HIV positive because it would lead to loss of friends, discrimination and stigma as discussed above. Students value their social status. This is also mentioned by Hutchinson and Mahlalela (2006) that many people fear testing positive for HIV and AIDS particularly when it may lead to loss of social status.

6.8. Geographical location and Name of the Site

Geographical location and the name of the site were discussed intensively in chapter 4 of this thesis. However, the name of VCT in Maseno University acts as another barrier against uptake of the services. The students argued that the name was discriminating, i.e. 'AIDS Control Unit' it looks like when a student visit the unit he/she is HIV positive and has gone to know more about positive living. Students felt that Maseno university administration had neglected one side of the campus. Instead, it was located near health Centre in Siriba where most students only went there occasionally. Students felt that College Campus was sidelined while majority of the students stay in College Campus and seeking the services at Siriba was a bit tiresome and to them the distance was long.

> Let me say what I know about it. Number one because of its position, it's not centrally placed; it is located at the extreme ends of Maseno University fence. I wish it were placed somewhere like in the Millenniums and then most people that normally go there are people that are coming from these hostels, don't expect somebody to come from main campus to cross all the way to come up to this place. (3rd year female student)

The VCT is located near the health Centre in Siriba Campus. Students only go to Siriba occasionally especially when going for treatment. This is far from hostels and classes.

This study found that there were also other factors which influenced the students from utilizing VCT. From their discussions, unreliability and waste of time was expressed as the major reason because this would make them go to VCT several time. Being seen there several times means that you are immoral and may have HIV and AIDS.

This will eventually cause stigma and discrimination thus losing social esteem. Confidentiality was also of great concern and especially the closeness of the clients' counseling rooms.

The student also indicated that they would prefer other health services to be incorporated within ACU such as STI screening to avoid monotony of VCT alone this will avoid stigma. They noted that VCT needs to be decentralized to serve students equally. It is interesting that other students would only attend VCT when they see it necessary, only when they experience HIV symptoms. Such students do not understand or know that VCT is a preventive mechanism in HIV and AIDS control.

When the students were asked whether the current location of the VCT site was suitable, about 60.9% of them felt that the current location of the VCT was suitable because it was located next to the health centre and was at an accessible location. Others (40.1%) argued that the location was not suitable and felt that it was not accessible to many students being on one side of the campus. According to Sherr *et al.*, (2007), factors such as location of VCT, are significant influences in VCT uptake. This concurs with the study conducted at Mount Kenya University by Museve et al (2012), who found that the key programmatic factors that influence VCT uptake were quality of services, location and appearance of VCT center. Similarly, Ajzen & Fishbein,(1980; Ajzen, 1991; Ajzen, 2006), in TRA and TPB theory assert that other factors which contribute to explain the likelihood of performing a behaviour are demographic and environmental factors. The students furthermore explain that, in most cases, classes were held far, especially in college campus. Sometimes, the classes run until very late. So, when you ran to the hostels which are equally located in far places like "IDPs", you feel very tired to walk another long distance. During Focus Group Discussion a male student had this to say:

> Going to VCT is very difficult because it's very far from where classes are held. Sometimes we finish late and you have to go in your hostels which is equally far for example those that are IDPs you feel tired and going to VCT is a last thing I will think of. It is better if they are many even two, on both Siriba and college campus. (Male student 3rd year).

This shows that distance to the VCT centre is a factor that determines utilization by students in the university. In as much as there are moonlight VCT services, they may not favour all students since they have different class hours and programmes.

The chapter therefore shows that the, stigma and uptake, opening and closing time, gender, marital status and academic level, mobile and moonlight VCT geographical location and name of the site, confidentiality, fear of the unknown and peer influence are among the determinants of VCT utilization by students in Maseno university.

CHAPTER SEVEN
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.0 Introduction

This chapter presents a summary of findings, conclusions, recommendations and recommended areas for further research, based on the results of this study.

7.1. Summary

This study has shown that the students are knowledgeable and aware of VCT services which are provided within the university. The students obtained knowledge through different sources such as media, first year orientations, from peer educators, especially ICL and partly through lectures (PHT course). In case of media, students acknowledged that apart from the information they received from university media, they heard about VCT services from media while still in high school. The students indicated that VCT services help in knowing one's HIV status, but most of them did not know that voluntary testing and counseling was equally important in preventing STIs including HIV. This is because they did not consider themselves as being at risk especially if they had not involved themselves in risky behaviour.

In terms of their perception towards (VCT), the study revealed that the students had different views. Students perceived VCT services as unreliable, a waste of time, because of frequent meetings and long queues, a place where the university gets the list of students who are HIV positive, due to the names being recorded in Lab book, a place for immoral people and mature students, because they perceived that young students (1st and 2rd years) had not passed through risky behaviour. Students suggested that ACU should incorporate other health services/information such as STI screening, cervical cancer screening, BMI level, and offering soft drinks to those found HIV positive.

The study further showed other factors that influenced students' uptake of voluntary counseling and testing services. These included stigma, confidentiality, peer influence, time, fear of the unknown, geographical location, and name of the site. The main factor barring students from attending VCT services were stigma, confidentiality

and fear of the unknown. Fear of getting an HIV positive result was widely evident because of stigma associated with being HIV positive. Some students therefore, opted to seek services in other VCTs which they considered private and confidential.

7.2. Conclusion

Majority of the students in this study area had heard of VCT. The sources of information included media, enhanced by the ACU radio talk show on HIV and AIDS show on HIV and AIDS and importance of VCT on Equator FM (university media), ICL and peer educators, internet and the compulsory PHT course. Despite the fact that they have knowledge, these did not translate into high levels of VCT uptake or utilization.

Perception is considered to be a main barrier towards VCT utilization. Students in this study area have various ways in which they perceive VCT. These include VCT as unreliable and a waste of time, a monster, a place for recording HIV positive student names, a place for immoral people and only for mature students as well as those who feel at risk of HIV and AIDS. Despite the fact that students did not use VCT because of their perceptions, a number of them knew that it is important for one to know his/her HIV status. They perceive it negatively which leads to low uptake of VCT.

Other factors which influence VCT utilization include, time, stigma and discrimination, confidentiality, fear of the unknown and, peer influence/role model. Geographical location and name of the site may however cause low uptake of VCT services. Those that did not use VCT were due to the fact that they were not feeling at risk and that the location was not suitable. Most of these factors were beyond their control.

7. 3. Recommendations

It is important for the university to create and promote more HIV and AIDS activities on the utilization of VCT among the university students to increase their knowledge. During these activities, students need to be informed on the importance of VCT services as a preventive mechanism in STI issues. This will ensure that students' fear of HIV positive results and stigma is addressed appropriately thereby addressing negative perception.

On promoting privacy and confidentiality, the university should reinforce privacy of VCT rooms and provide refresher courses of VCT counselors with proper supervision from Ministry of Health, this will enhance confidentiality.

The services need to be decentralized to other parts of the university to save on time and motivate students to go for VCT services.

The ACU should take this as a challenge and explore other effective strategies for increasing uptake of VCT services.

7.4 Areas of Further Research

It is also necessary to find out why more male students use VCT services than female counterparts.

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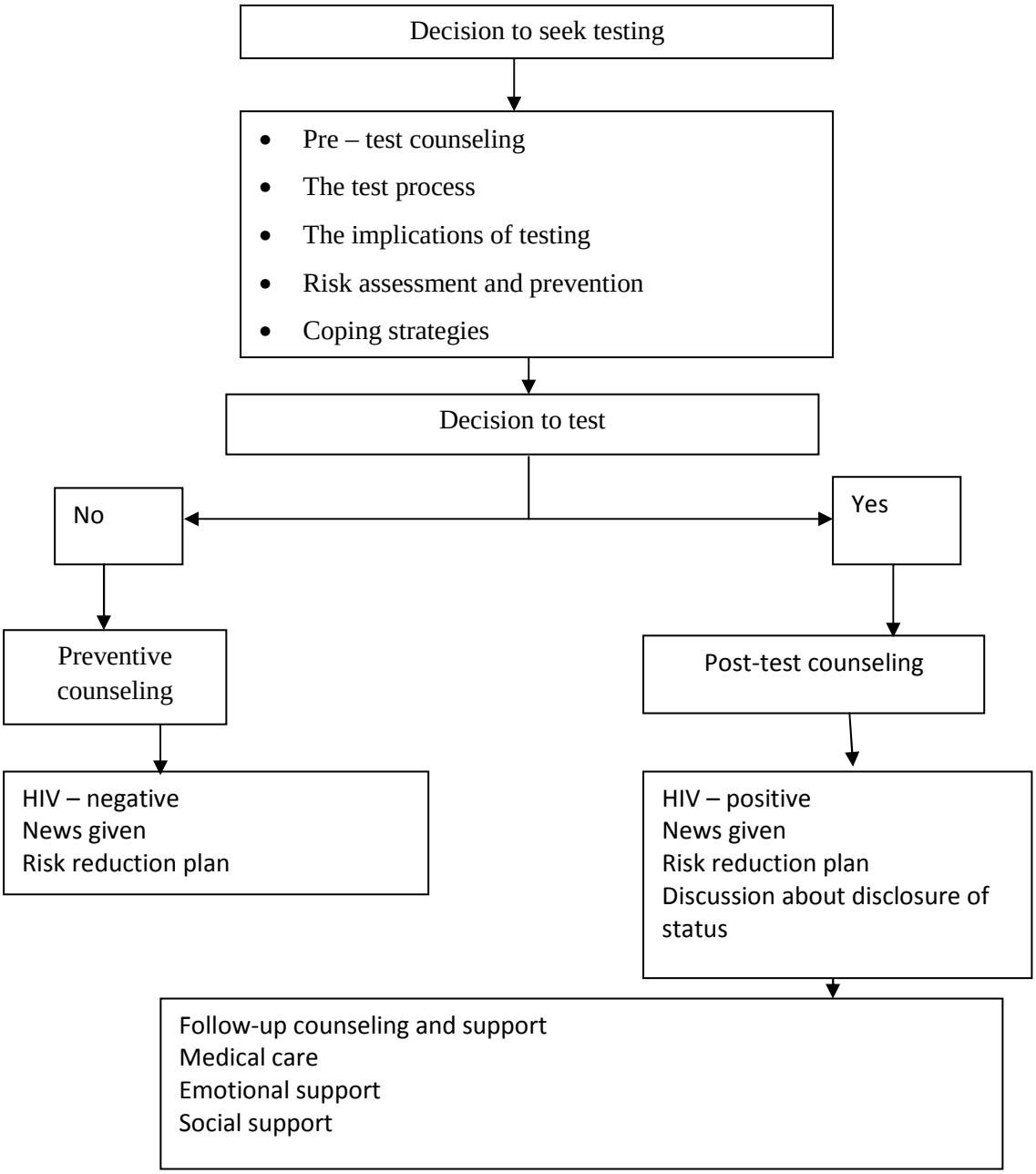
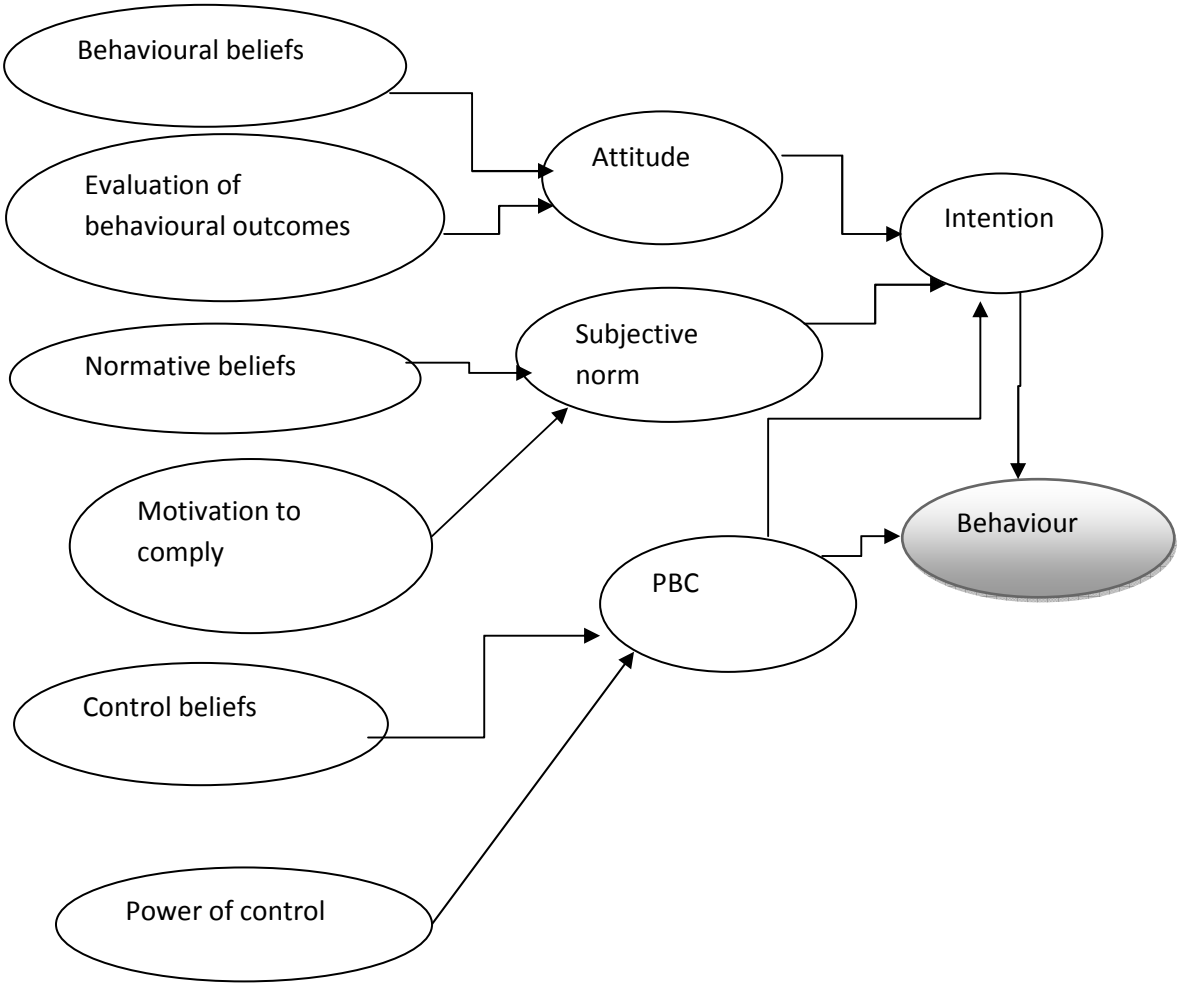
APPENDICES

APPENDIX 1: THE VCT MODEL (Horizons, 2001)

During VCT, confidentiality of counseling sessions, test results and voluntary choice to test are emphasized.



APPENDIX 2: THEORY OF PLANNED BEHAVIOUR



External Variables:

Demographic Variables: (Age, occupation, SES, religion, education)

Personality Traits: (Extraversion, agreeableness, conscientiousness, neuroticism, openness)

APPENDIX 3: QUESTIONNAIRE FOR STUDENT RESPONDENTS

A questionnaire on the utilization of voluntary counseling and testing services by Maseno University students in Kisumu County, Kenya

The purpose of this questionnaire is to collect data on the utilization of VCT services by Maseno University students for my MA Thesis at Maseno University, Department of Sociology and Anthropology. The data obtained will therefore be used for academic purpose only and will be treated with utmost confidentiality. In this regard, kindly ensure that your name does not appear on the questionnaire.

You are therefore requested to answer this questionnaire honestly and accurately.

Section A: Socio demographic Data (Tick as applicable)

(1)Age [ ] Gender: Male [ ] Female [ ] (2).Marital status: Single [ ] Married [ ]

(3).Year of Study: First Year [ ] Second Year [ ] Third Year [ ] Fourth Year [ ]

(4). Religion: Christian [ ] Muslim [ ] Traditional [ ]

Academic Programme_____

Section B: Knowledge of Students (Tick as applicable)

Have you heard of VCT? Yes [ ] No [ ]

Where did you learn about VCT? Media [ ] Orientation day [ ]

Fellow students [ ]Lectures [ ] other [ ]

Does Maseno University have a VCT site? Yes [ ]No [ ] IF NO Go to Q.10

If yes how many are they? One [ ] Two [ ] Three [ ] more than three [ ]

In your opinion, is the number adequate to serve the students satisfactorily? Yes [ ] No [ ]

If No, how many would you suggest to be put in place _____

Where is it (are they) located? _____ _____

In your opinion, is it (are they) located in the best place? Yes [ ] No [ ]

Explain your answer above _____

_____

_____

_____

If no, Where do you think is the best location for the VCT site _____

What is the importance of VCT to you? (*Tick as applicable if you agree or disagree*)

		Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
A	To know one's HIV status				
B	To help an individual who tested positive to seek medical attention as they would be offered direction				
C	To protect one from HIV infection				
D	To prevent infection of others if one is HIV positive				

Section C: Perceptions towards VCT (Tick as applicable)

Would you like to undergo VCT for HIV? Yes [ ] No [ ]

Would you choose to take the HIV test within the University? Yes [ ] No [ ]

Why do you say so? _____

_____

_____

_____

Do you believe the HIV test kits in VCT are accurate? Disagree [ ] Not sure [ ] Agree [ ]

Whom do you think should undergo VCT? Everyone [ ] Anyone who is sexually active [ ]

Married people [ ] Sex workers [ ]

Explain your answer above _____

_____

_____

Whom would you prefer to disclose your HIV status to? Family member [ ]

Sexual partner [ ] Close friend [ ] Nobody [ ]

Explain your answer above _____

_____

Below are some reason(s) for low students' turnout for VCT. Tick as applicable if you strongly disagree, disagree, agree or strongly agree

		Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
A	Fear of stigmatization & discrimination				
B	Fear of own ability to accept positive status				
C	Fear of loss of sexual partners				
D	Fear of loss of social status				
E	Fear of neglect by family members				
F	Physical abuse by sexual partners				
G	Fear of the unknown				

Would you trust the VCT counselors to keep your information confidential? Yes [ ] No [ ]

If Yes, why? _____

_____

If No, why? _____

_____

Would you be comfortable talking to VCT counselors about personal behaviours that place you at risk for HIV infections? Yes [ ] No [ ]

What is your view about the time of opening and closing of the VCT site at the University? Short [ ] Adequate [ ] Long [ ]

How long would you suggest it be opened? 8am – 5pm [ ] 7am – 6pm [ ] 6pm -10 pm [ ]

How Many days would you suggest the VCT site should be opened? Monday - Friday [ ] Monday - Saturday [ ] Monday - Sunday [ ]

What is your view about the staff within the VCT site? _____

_____

What is your view regarding the VCT services provided at the University? Very poor [ ] Poor [ ] Satisfactory [ ]

Good [ ] Very good [ ]

Are there any other related services you want to be included in the VCT site? _____

Would you recommend the VCT service within Maseno University to your fellow students? Yes [ ] No [ ]

Section D: Utilization of VCT services

Have you ever undertaken a VCT? Yes [ ] No [ ] IF NO End interview.

If yes, where were you tested? _____

When was it? _____

Have you visited Maseno University VCT site? Yes [ ] No [ ] IF NO END Interview.

If yes, how did you learn about the site? Media [ ] IEC Material [ ] During orientation [ ] Friend [ ]

How many times have you visited the site? Once [ ] Twice [ ] Thrice [ ] More than thrice [ ]

When did you last visit the VCT site? Between 0 – 6 months ago [ ] 6 – 12 months [ ] Over 12 months [ ]

Were you tested for HIV/AIDS? Yes [ ] No [ ]

Did you receive your test result on the same day? Yes [ ] No [ ]

If yes, how was your VCT result communicated to you? Face to face [ ] Secretive letter [ ] email [ ] SMS [ ] Phone call [ ] others (specify) _____

Were you happy with the way the result was communicated to you? Yes [ ] No [ ]

If no, how would you prefer the result to be communicated to you? Face to face [ ] Secretive letter [ ] email [ ] SMS [ ] Phone call [ ] others (specify) _____

Thank you for your cooperation

APPENDIX 4: KEY INFORMANT INTERVIEW GUIDE

VCT counsellors, Students leaders, Peer counsellors and Peer educators. The study recognizes that there are different categories of students that are involved in the utilization of VCT services in the University. This interview seeks to get detailed information on knowledge, Perceptions and influence of Maseno University Aids Control Unit towards utilization of VCT services, factors impending effective utilization of VCT and how it can be improved in the University. The information you will provide will be used for academic purpose only and will be treated with maximum confidentiality.

General Questions

Knowledge on utilization of voluntary counselling and testing services

Where do most students go for their HIV testing and counselling? Why?

Where do you think the VCT should be located? Why?

Are the students aware of HIV and AIDS infection? Yes/No

Are the students aware that they are at high risk of HIV and AIDS infection? Yes/No

Are the students aware of the ways of HIV and AIDS transmission? Yes/No

Are the students aware of the methods of HIV and AIDS preventions? Which ones? Yes/No

Perceptions towards utilization of voluntary counselling and testing services

What are the opinions of the students on VCT?

How do the students respond to information on VCT?

Have partners been going for VCT together?

Are there students who have openly declared their positive status?

If yes, what is the response of the other students to their status?

If no, why have they not declared their status?

What should be done to influence the opinion of the students on VCT?

Influence of Maseno University Aids Control unit on its utilization

What are some of the qualities you expect from a VCT staff?

Do the VCT staffs of Maseno University have these qualities?

How do you rate the services offered by Maseno University Aids Control Unit (ACU)?

What would you suggest to be done to better the services being offered by the ACU?

APPENDIX 5: FOCUS GROUP DISCUSSION GUIDE

For representatives from students fraternity and VCT staff

This discussion seeks to get more information on opinions, feelings, values and ideas on the utilization of VCT services within the university by the students and quality of services offered by the facility. It will also high light on what can be done to improve the utilization of VCT services by Maseno University students.

How do you rate students' attendance at the VCT site?

What are some of the factors that contribute to the rate of attendance above?

In what ways would the attendance rate be improved?

How do you rate the services offered by Maseno University Aids Control Unit (ACU) staff?

What is the opinion of the students on these services?

In what ways would the services be improved and made more attractive?

APPENDIX 6: GROUPS INVOLVED IN FOCUS GROUP DISCUSSION

NAME OF GROUP	NATURE OF THE GROUP
First and second year students (2groups)	Male and Female
Third and Fourth year students (2groups)	Male and Female

APPENDIX 7: IN-DEPTH INTERVIEW CHECKLISTS FOR INDIVIDUAL STUDENTS

With Experience of Maseno University VCT

Do you like Maseno University VCT site?

How many times do you go for VCT in a semester?

What exactly do you like about the VCT site?

What don't you like about the VCT site?

Would you recommend the VCT site to your fellow students?

What do you think your colleagues would like about the VCT site?

What do you think your colleagues would not like about the VCT site?

What do you hear the students say about the VCT site?

Give your general comments about the facility as a whole.

APPENDIX 8: PARTICIPANT'S CONSENT FORM

A research on the utilization of voluntary counselling and testing services by Maseno University students in Kisumu County, Kenya Researcher: Catherine Magero

The purpose of this research is to collect data on the utilization of VCT services by Maseno University students for my MA Thesis at Maseno University, Department of Sociology and Anthropology. The data obtained will therefore be used for academic purpose only and will be treated with utmost confidentiality.

What you will be asked to do in the research: Complete a confidential questionnaire/ participate in group discussion and interview which will take approximately 40 minutes and 60 minutes respectively.

Risks and discomforts: I do not foresee any risks or discomforts from your participation in the research.

Benefits of the research and benefits to you: The data collected will be used to improve the quality of services offered at VCT site and give feedback on current operations.

Voluntary participation: Your participation in the study is completely voluntary and you may choose to stop participating at any time. Your decision not to participate will not influence the nature of your relationship with the researcher.

Anonymity: All responses you provide in the questionnaire will not be linked to your name. Please make sure that you do not include your name anywhere on the questionnaire and ONLY on the consent form. These two forms will never be linked. Your answers will be used strictly for the research and nothing else.

Questions about the research: If you have any questions about the research in general or about your role in the study, please feel free to contact Catherine Magero (mobile: 0700 481 471, email: katemwamu@gmail.com)

Legal Rights and Signature:

I have understood the nature of this research and that my name will not be linked to my responses which will be treated as confidential.

I_____, therefore consent to participate in the above mentioned study to be conducted by Catherine Magero.

Signature _____ Date_____

APPENDIX 9: LETTER FROM ETHICS REVIEW COMMITTEE

MASENO UNIVERSITY ETHICS REVIEW COMMITTEE

Tel: +254 057 351 622 Ext: 3050
Fax: +254 057 351 221

Private Bag – 40105, Maseno, Kenya
Email: muerc-secretariate@maseno.ac.ke

FROM: Secretary - MUERC

DATE: 3rd February, 2015

TO: Catherine Awuor Magero
PG/MA/00009/2011
Department of Sociology and Anthropology
School of Arts and Social Sciences, Maseno University
P. O. Box, Private Bag, Maseno, Kenya

REF: MSU/DRPC/MUERC/00116/14

RE: Assessment of Utilization of Voluntary Counseling and Testing Services by Maseno University Students, Kenya: Proposal Reference No. MSU/DRPC/MUERC/00116/14

This is to inform you that the Maseno University Ethics Review Committee (MUERC) determined that ethics issues were adequately addressed in the proposal presented for review. Consequently, the study is granted approval for implementation effective this 3rd day of February, 2015 for a period of one (1) year.

Please note that authorization to conduct this study will automatically expire on 2nd February, 2016. If you plan to continue with the study beyond this date, please submit an application for continuation approval to MUERC Secretariat by 30th January, 2016.

Approval for continuation of the study will be subject to successful submission of an annual progress report that is to reach MUERC Secretariat by 30th January, 2016.

Please note that any unanticipated problems resulting from the conduct of this study must be reported to MUERC. You are required to submit any proposed changes to this study to MUERC for review and approval prior to initiation. Please advice MUERC when the study is completed or discontinued.

DIRECTORATE OF RESEARCH PUBLICATION & CONSULTANCIES 03 FEB 2015 MASENO UNIVERSITY

Thank you.

Yours faithfully,

Dr. Bonuke Anyona,
Secretary,
Maseno University Ethics Review Committee.

Cc: Chairman,
Maseno University Ethics Review Committee.