UTILISATION OF HIV PREVENTIVE SERVICES BY STUDENTS AT KAMPALA INTERNATIONAL UNIVERSITY TEACHING HOSPITAL-WESTERN CAMPUS

BY

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A RESEARCH DESERTATION SUBMITTED TO THE FACULTY OF CLINICAL MEDECINE AND DENTISTRY IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF BACHELOR OF MEDICINE AND BACHELOR SURGERY OF KAMPALA INTERNATIONAL UNIVERSITY

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Declaration:

I ACIRO HARRIET, hereby declare that this research report is my original work and has not been submitted to any university or institution of higher for any academic award.

Sign Date.....

Dedications

I hereby dedicate this work to my beloved parents, and Mr. Quirino Oloya and Mum Mrs. Florence Oloya, **my** sisters Brenda Acayo,Lawino Mercy and Linda Peace Akello and my Brothers Loum Emmy,Tony Ojera and Ivan Opiyo,the Regional Ambassodor Madam Jolly Okot of Invisible Children and Mentors(Mr. Kizito, Ms Khristy Ms Grace Ocwee),Jibi James, Aunties and Uncles God bless you all.

Approval

This is to certify that this research report has been prepared under my supervision and has never been presented anywhere for other purpose and is now ready for submission to Faculty of clinical medicine and dentistry of Kampala International University

Sign..... Date

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List of Acronyms

AIDS	Acquired Immune Deficiency Syndrome
AIS	AIDS Indicator Survey
HIV	Human Immune deficiency Syndrome
С	circa, about
e.g.	Exempli gratia, for example
HIV	Human Immune Deficiency Virus
ibid.	ididem-in the same book
ITN	Insecticide Treated Net
KIUTH	Kampala International University Teaching Hospital
KM	Kilometres
LC	Local Council
LC n.d	Local Council No Date
LC n.d n.edit	Local Council No Date No Edition
LC n.d n.edit n.n	Local Council No Date No Edition No Name
LC n.d n.edit n.n n.p	Local Council No Date No Edition No Name No Publisher
LC n.d n.edit n.n n.p MDG	Local Council No Date No Edition No Name No Publisher Millennium Development Goals
LC n.d n.edit n.n n.p MDG MoH	Local Council No Date No Edition No Name No Publisher Millennium Development Goals Ministry of Health
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LC n.d n.edit n.n n.p MDG MoH op cit SMC	Local Council No Date No Edition No Name No Publisher Millennium Development Goals Ministry of Health opere citao- in the work already quoted Safe Male Circumcision

Abstract

A cross sectional study was conducted between January and September 2013 in Kampala international university to determine the utilisation of HIV prevention services at Kampala International University Teaching Hospital KIUTH by students of Kampala International University.

This study specifically aimed at determining the proportion of students accessing condoms from Kampala International University, describing the range and scope of HIV preventive services that students of KIU are accessing from Kampala International University Teaching Hospital and determining the factors barring students from accessing HIV care services from KIUTH.

The study found out that majority of the respondents at least knew of services available from KIUTH meant of HIV prevention. Of the services the most known, 24.7% was health education and condom 20.8%, the study also found out that majority (82.37%) of the students has accessed at least one of the HIV preventive services from KIUTH. And, it was concluded that personal preference (24.1%), inconvenience of the service, 22%, cost of the service 22% and the waiting time (18.9%) were the most common factors hindering the utilization of HIV preventive services by students of KIU.

It was concluded from this study that the proportion of students accessing HIV services from KIUTH is low compared to the general populations of the students, Health Education, Condom Distribution, HIV counseling and testing, Safe Male Circumcision, Prevention of Mother to Child Transmission of HIV Highly Active Antiretroviral Therapy and Provider Initiated Counseling were among HIV preventing services provided by KIUTH, and the most utilized service by students were Condom and Health education and that stigma was the most important factor barring students from accessing HIV preventive services from KIUTH.

And finally, this study recommended that the hospital should provide HIV preventive services in a friendly environment so that students could utilize them, the university should have a counselor specifically for the students so that the students would be encouraged to come for testing and counseling and finally that another study should look into details of the conclusions raised by this study so that there is enough evidence to improve HIV preventive services for the student at KIU.

CHAPTER ONE: INTRODUCTIONS

1.0 General Introduction

This chapter will introduce the reader to the basic information about the subject under study, the study area, the study objectives, justifications scopes, and describe briefly the concepts about the utilisations HIV preventive services among students. A conceptual framework is hereby presented at the end of the chapter.

1.1 Background information

HIV/AIDS remains a major public health problem all over the world. UNAIDS (2012), estimate that 34 million people are living with HIV/AIDS globally. Sub-Sahara accounts for two-thirds of the global HIV/AIDS burden; Uganda is one of the Sub-Saharan countries highly affected by HIV/AIDS pandemic. According to the Uganda AIDS indicator survey report, the adult prevalence of HIV infection in Uganda was estimated at 7.2% and youth 15 years and above living with HIV was estimated at 1,200,000.

The majority of young people in the age group (15–24 years) are at risk of HIV infection due to their engagement in unsafe sex, injection drug use, exposure to contaminated blood and blood products or unsterilized skin-piercing procedures [6]. The young age group is the most productive segments of the population that form the basic education sector which is vital to the creation of human capital this will affect both the demand and supply of education

1.2 Background of the Study Area

1.2.1 Historical Perspective

Bushenyi District is one of the oldest districts in Uganda created in 1974 when it was curved out of Mbarara District Administration then, In 2009, it was split into five districts (4 new districts of Buhweju, Mitooma, Sheema and Rubirizi districts) with one new Municipal Council of Bushenyi-Ishaka. This has drastically reduced the size of Bushenyi District from five counties to one of Igara that includes the municipality. The District is made of 1 County (Igara), 9 Sub-counties, 1 Municipal Council, 4 Town Boards, 3 Wards, 64 parishes and 565 villages.

1.2.2 Geographical Background

Bushenyi District lies between 0° N and 0° 46' S of the equator and 29° 41' East and 30°30' East of Greenwich. Bushenyi District headquarters is located 340 kms from Kampala in the South Western part of Uganda. Bushenyi District is neighbouring with the districts of Rubirizi in the North, Buhweju and Sheema in the North East, Sheema in the East, Mitooma in the South West and Sheema in the South. The district has a land area of 3'949 square kilometres and lying between 910 – 2,500 meters above sea level.

1.2.3 The political Background

Bushenyi has a long history of Political and Economic stability since its initiation as a district in 1974. The district has been one of the most important strongholds of the past governments including UPC government in the 1960s. This event led to the political and economic integration of Bushenyi in the Uganda's priority districts. The integration led to a rapid development in the area including establishment of agro based industries and private investments including the foundation for Kampala International University

Bushenyi has a history of close political alignment with whatever government happens to be in power. To paraphrase much of what Gina wrote to describe Bushenyi unique political position in Uganda's history, the district seems to have played the role of true politician extraordinarily well, linking closely to those in power regardless of the ethnic group, religion, or region from which the leader was drawn(Gina 2011).

Currently, the district of Bushenyi is one of the closest strongholds of the movement system of government headed by President Yoweri Kaguta Museveni.

Bushenyi is now served by only one administrative county i.e. Igara, and further subdivided into smaller administrative units: 9 sub-counties and 1 municipality of Ishaka. Under Uganda's decentralized administrative structure, Bushenyi district funded services are provided at the level of the district, which is administered by an elected Chairperson, with his cabinet forming a quasi-legislative council formally known as Local Council Five (LC V). The LC V is constituted by elected representatives from each sub-county. (SDS, 2012)

1.2.4 The physical Features

The main physical features within Bushenyi district include natural tropical forests of Karinzu and Imaramagambo covering an area of 784 km². Arable land covers 2,215 square kms; open water bodies cover 372 square kms and wetlands covering 183 square kms.

1.2.5 Health and Demographic Records

The district has several health units at various levels of administrative unit from Parishes to the district. Some of these health units are government owned while others are NGO owned and others private. Bushenyi District has 64 parishes and these are being served by 34 health facilities and on average each health facility within a parish is within 5 km radius. Based on the coverage of health facilities right from parish level it is estimated that 70 per cent of the population is within a walk able distance as recommended by the Ministry of Health to the health unit. HIV/AIDS services are offered in 15 health facilities which give coverage of 30.6 per cent of services within 5 km radius. (op cit)

In terms of teaching and research hospital, the district is served by Kampala International University, which houses the school of pharmacy in which this research is being conducted. The district has a population as projected by 2010 of 117,000 and 124,000 male and female respectively totalling to 241,500 people. The population distribution in rural and urban is projected to stand at 89 per cent rural and 11 per cent urban. Importantly though, the urban population is projected to be almost 1:1 male to female ratio. (ibid)

1.2 Statement of the Problem

Although the overall prevalence of HIV in Universities is lower than the national prevalence, the prevalence of HIV related risk factors is high, and there is a high likelihood that HIV prevalence in Universities may increase. Institutional frameworks for HIV/AIDS service delivery in most universities (including prevention, mitigation and control) have many gaps and access to HIV/AIDS services within universities inadequate.

There is inadequate information on the burden of HIV infection, and on the prevalence of the risk factors for HIV transmission among University students in Uganda. Routine sources of data such as HIV surveillance and national population-based AIDS Indicator surveys do not provide information on institutional populations such as University students. Moreover, these

subpopulations require interventions to address the risk factors that expose them to HIV infection in their unique settings and above all, there exist inadequate information related to the utilisation of these services by students at the point of care. It upon this background that this study has been designed to assess the utilization of HIV services at Kampala International University Teaching Hospital (KIUTH).

1.4 Purpose of the Study

Because there is little scientific data available on the utilisation of HIV preventive services among students, it's scientifically important to bring up relevant, accurate and up to date information so as to provide reference about the topic under investigation.

1.5 Objectives of the Study

1.5.1. The General Objectives

The general objective of the study is to the utilisation of HIV prevention services at Kampala International University Teaching Hospital KIUTH by students of Kampala International University

1.5.2 Specific Objectives

- 1. To determine the proportion of students accessing condoms from Kampala International University
- 2. To describe the range and scope HIV preventive services that students of KIU are accessing from Kampala International University Teaching Hospital
- 3. To Determine the factors barring students from accessing HIV care services from KIUTH

1.6 Research Hypothesess

Null Hypothesis: (H₀**)** The utilisation of HIV preventive care at Kampala International University Teaching Hospital is not hindered by age and gender of the students at Kampala International University

<u>Alternative Hypothesis (H1)</u>

The utilisation of HIV preventive care services is associated with other variables like the age and gender of the students at Kampala International University

1.7 Scope of the Sstudy

1.7.1 Geographical Scope

This study will concentrate in finding out common services that the students of Kampala International University are utilising from the Kampala International University Hospital.

1.7.2 Time Scope

This will be a cross sectional study. The data that will be taken into considerations to have relevance is the data that will be collected within the period of the study. The study will be conducted between Jan – September 2013.

1.7.3 Content Scope

This study will concentrate in finding utilisation of condoms, VCT and safe male circumcision services

1.8 Significance /justifications of the study

First the study results will be presented to Faculty of clinical medicine and dentistry as a preliminary requirement in partial fulfilment for the award of bachelor of medicine and surgery of Kampala International University 2013, the study will provides an opportunity to University to deepen further learning on the utilisation of HIV preventive services in KIU

1.9 diagrammatic conceptual Framework



CHAPTER TWO: LITURATURE REVIEW:

2.0 General Introductions

This chapter will explore theories relevant to the study. It basically discus Uganda situation as far as HIV prevention among the students is concerned and look more into details of HIV infection, prevention dynamics in schools and the understanding of the concept of HIV and students with particular emphasis on the functionality of the HIV prevention services in various institutions and the, planning frameworks, accountability mechanisms and participation of all the key players in the system.

2.0 Review of Previous Lliterature

Condom promotion and distribution programmes have grown significantly since the beginning of the AIDS epidemic. Global practices show that the male latex and female condoms are the most efficient and available technology to reduce the sexual transmission of HIV and other sexually transmitted infections (UNFPA, 2011).

Condom use is more likely when people can access them at no cost or at greatly subsidized prices. Effective condom promotion targets not only the general population, but also people at higher risk of HIV exposure especially young people which are the focus of this study. Condoms have encouraged safer sexual behaviour more generally. Analysis of the AIDS epidemic in Uganda has confirmed that increased condom use, in conjunction with a delay in the age of first sexual intercourse and a reduction of sexual partners, was an important factor in the decline of HIV prevalence in the 1990s(op cit)

In Uganda, All universities to a certain degree have HIV preventive activities including counselling and psychosocial support services and of a Code of Conduct for students. However, the level of access to these services by students and the enforcement of codes of conduct are inadequate. The level of HIV mainstreaming in activities of the universities was also inadequate.

According to the study meant to address vulnerability, mobility and gaps in HIV care by the Lake Victoria basin projects. The levels of involvement of university lecturers in HIV/AIDS prevention

among students was low, except for some focal staff appointed by the universities to provide counselling services. However, students had many networks and associations that were involved in peer-to-peer HIV messaging and students" leaders also implemented some HIV related programmes.

In a previous study involving the KIU students, AMREF had illustrated that the mixing of male and female students at residential hostels was also cited as one factor leading to increased sexual immorality. This is brought about by the diverse living conditions of students, policies of hostel owners and the fact that many students" hostels are not accredited to the universities. Some of these issues are illustrated in the following quote: *KIU, Key Informant (KI) – "housing arrangements are not favourable... many of the students make private arrangements where they share with the opposite sex".* There are also myths and misconceptions among students about the way HIV spreads. Some of these perceptions were cited as likely to increase risky behaviours among students.

The study also showed that condom distribution, referral for ART and links for PMTCT were outstandingly not provided by the university. Voluntary counselling and testing is also an effective strategy for facilitating behaviour change for both clients, whose test result is either negative or positive [Tsegey et al, 2013].

Different studies have shown the effects of VCT including a decrease in unprotected sexual intercourse, a reduction in multiple partners, an increase in condom use, and more clients choosing abstinence. In addition, VCT is an important entry point to other HIV/AIDS prevention services, including prevention of mother to child transmission (PMTCT), prevention and management of HIV related illnesses, and social support (ibid)

It is estimated that at least more than half of all HIV infections (almost 7,000 daily) worldwide occur among young people aged between 15 and 24 years3. The situation is especially serious in developing countries where young people form a significant proportion and where the HIV epidemic has been most severe. With young people at the centre of the epidemic, it is important to understand the extent to which they are willing (Omary, 2008)

This study shows that majority of the secondary school and university students know that VCT is necessary with the major reason of getting HIV/AIDS education. The willingness towards VCT use was found to have been influenced by age of the students where younger students were more willing to use VCT services than older students. Furthermore, it was shown that willingness to use VCT services increases with increase in the level of education. (Omary 2008)

Worries about contracting HIV and self-perceived risk can serve as a motivation for adolescents especially school going and young adults to change behaviours that place them at risk to HIV. In Uganda, the majority of adolescents - especially the females -across all age groups are very worried about the possibility of getting infected with HIV. On average, among the 15–19-year-olds, about 72% of the females compared to 55% of the males expressed this opinion and among the 12–14-year-olds, the corresponding percentages were 65% compared to 47% respectively (Kikombo, 2010).

In one study, Nikita Pant et al, showed that Stigma, discrimination, lack of privacy, and long waiting times partly explain why six out of ten individuals living with HIV do not access facilitybased testing. By circumventing these barriers, self-testing offers potential for more people to know their sero-status. Recent approval of an in-home HIV self test in the US has sparked self-testing initiatives, yet data on acceptability, feasibility, and linkages to care are limited. (Nikita et al, 2013)

The study that reviewed seven databases (Medline [via PubMed], Biosis, PsycINFO, Cinahl, African Medicus, LILACS, and EMBASE) and conference abstracts of six major HIV/sexually transmitted infections conferences were searched from 1st January 2000–30th October 2012. 1,221 citations were identified and 21 studies included for review. (ibid)

Multiple sexual partners and genital sores were identified as factors that are significantly associated with HIV infection. This finding is in agreement with previous studies among adults (Konde-Lule, Berkley and Downing 1989; Kengeya-Kayondo et al. 1989), and indicates the need for a program aimed at controlling sexually transmitted diseases.

The high rates of HIV infection in trading centres and trading villages compared to rural areas is probably a reflection of higher rates of sexual activity and sexual partner change in these areas. The true risk of HIV infection among the sexually active adolescents could not be determined because the adolescents who had never been sexually active were not known and could not be excluded from the denominator. The absence of this information has resulted in an underestimation of the risk of HIV infection among the sexually active adolescents (Konde, 1997)

Although VCT is becoming increasingly available in the developing and middle income countries, there is still great reluctance for many people to be tested. There are several possible contributing factors that must be addressed if VCT is to have an important role in HIV prevention and care. In this regard studies showed that HIV testing might have far reaching implications and consequences for the person being tested. Although there are important benefits to knowing one's HIV status, HIV infection, in many communities, is a stigmatizing condition and this can lead to negative outcomes for people following testing. People with HIV may experience social rejection and discrimination (Karim Q, Karim S, Soldan K, Zondi M 1995).

As the result stigma may actively prevent people accessing care, gaining support, and preventing onward transmission. Many people are afraid to seek HIV service and decline Service because they fear stigma and discrimination from their families and communities. Societal attitude towards HIV can have a strong impact on individual choices, and if people known to have HIV face discrimination and stigma, VCT is unlikely to be a popular intervention (UNAIDS, 2000).

CHAPTER THREE: METHODOLOGY

3.1 Study Population

The target population were the students enrolled in Kampala International University who have completed at least one semester of studies within KIU. These were enrolled from all the faculties.

3.2 Study Design

The study design employed a cross sectional design, with data collected mainly from KIU respondents. Other staff and lectures of the university were involved as key informants in the study.

3.3 Inclusion and Exclusion Criteria.

3.3.1. Inclusion Criteria

Students who have at least had one HIV test in the last six months but were enrolled as students in KIU and were considered in the study. All tests, condom distributions and referrals were considered as important indicators for enrolment in the study

3.3.2 Exclusion Criteria

Students who have taken less than a semester of study Students who have not done any HIV test, not used a condom or other HIV preventive services in the last one year.

3.4 Sample Size

Samples size was determined using a statistical formula adapted from Pennstate cooperative extension, program evaluation worksheet (appendix 1). With the confidence interval (CI) of 95%, level of significance 5%, variance of 0.5, at an estimate response rate of 61.5%, the numbers of human research participants were 100.

3.5 Data Analysis

Data was analysed electronically using SPSS (V16). Reports presented in the forms of tables, graphs and charts. The major independent variables were age, gender, faculty, nationality and the program of study, against dependent variables; numbers of times an HIV test was done in the last one year, the consistency of condom use, other preventive services utilized and the referral links utilised. Chi square test was used to reject the null hypothesis.

3.6 Ethical Considerations

The proposal was submitted to the supervisor for approval of its scientific and ethical validity. The researcher was formally introduced to the research area through a letter from the training Institution, was guided for ethical clearance from the medical superintendent who granted permission for the study.

This study involved access to participant's information and thus written informed consent was then sought from the individual participants where possible before they were involved in the study. Informed consent forms were explained in the simplest language to the participants to allow the researchers access the confidential individual medical records and voluntary participations. Study participants had the right to withdraw from the study at any time during the study without affecting the health care that they deserve. Confidentially matters were observed by use of codes not names in the questionnaire, and responses kept under lock and key and only to be used for the research purpose

3.7 Anticipated Challenges

The following challenges were met during the study, low levels of corporations from the hospital staff; the researcher mitigated this through personal dialogue with staff to raise awareness and promoted cooperation during the study.

4.0 General Introductions

4.1 Demographic data



Source: Primary Data

The figure above shows that majority of the respondents were 28-37 years old (37.89%). Followed by the 18-27 years old age groups (31.58%), the least was 48-57 years age group with 9.47%



Figure 2: Distribution of respondents by gender

Source: Primary Data

Figure 2 above shows that majority of the respondents involved in this study were in the female category of gender 53.19%, and the males were 46.81%.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ugandan	34	35.8	35.8	35.8
	Kenyan	16	16.8	16.8	52.6
	Tanzanian	18	18.9	18.9	71.6
	Somalis	12	12.6	12.6	84.2
	Rwandese	11	11.6	11.6	95.8
	Others	4	4.2	4.2	100.0
	Total	95	100.0	100.0	

 Table 1: Distribution of respondents by Nationality

Source: Primary Data

Table 1 above shows that majority of the respondents involved in the study were Ugandans, followed by the Tanzanians 18.9%, and the least were in the category of other(4%), of which they included 1 Egyptians, 2 Sudanese and 1 Zambian.

Figure 3: Distribution of respondents by marital status







Source: Primary Data

Figure 4 above shows that the majority of the respondents had studied in KIU for 10-24 and 25-30 months (20). While those who have been in KIU for over 43 months (7) were the least followed by those who have stayed for 37-42 months 8

4.2 Proportion of Students Utilizing Services from KIUTH



Figure 5: Distribution of respondents by awareness about the current HIV status

Source: Primary Data

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In figure 5 above, 69.4% of the respondents mentioned that they were aware of their current HIV status, 30.53% mentioned that they were not aware of their current HIV status.



Figure 6: Distribution of respondents Access of HIV services from KIUTH

Source: Primary Data

The figure above shows that majority(82.37%) of the respondents have accessed at least one of the HIV preventive services from KIUTH, while 37.63% have not accessed any HIV preventive services from KIUTH.

 Table 2: Distribution of respondents by test types and results

		comment about ho	ow you felt about the	e results of the test	
		Scared	Comfortable	No Comments	Total
If yes, please comment if it was voluntary or routine:	Voluntary	25	17	3	45
	Routine	10	11	5	26
Total		35	28	8	71

Source: Primary Data

Of those who have at least accessed HIV testing from KIUTH, the majority of them said the test was voluntary (45), 25% of the 45 were scared of the result while 17 were comfortable with the results and 3 did not mention what they felt about the results.

While the minority of the respondents said they were tested under routine testing. Of which, 10 of them were scared of the results and 11 were comfortable. 5 of them did not mention whether they were comfortable or scared.

*			0	
		Comment if you hav colleague to access HIV	e taught of sending a / preventive service from	
				4
		Yes	No	Total
If yes, please comment if it was	s Voluntary	35	10	45
voluntary or routine?	Routine	13	13	26
Total		48	23	71

Table 3: Distribution of respondents by type of test and taught to send a colleague

Source: Primary Data

From the above categories, table show that majority of those who had voluntary test actually wanted to invite a friend for the test(35), while for those who went through routine test, 13 wished to invite their friends while 13 did not wish to invite their friends.

1.3 Range and Scope of Services

Table 4: Distribution of respondents by range of HIV services available from KIUTH

		Responses		
		N	Percent	Percent of Cases
Services	health education	71	24.7%	77.2%
available	Condom	60	20.8%	65.2%
	SMC	52	18.1%	56.5%
	HAART	56	19.4%	60.9%
	RCT	36	12.5%	39.1%
	PICT	13	4.5%	14.1%
Total		288	100.0%	313.0%

		Responses		
		N	Percent	Percent of Cases
Services	health education	71	24.7%	77.2%
available	Condom	60	20.8%	65.2%
	SMC	52	18.1%	56.5%
	HAART	56	19.4%	60.9%
	RCT	36	12.5%	39.1%
	PICT	13	4.5%	14.1%
Total		288	100.0%	313.0%

a. Dichotomy group tabulated at value 1.

Source: Primary Data

The table above shows that majority of the respondents at least knew of services available from KIUTH meant of HIV prevention. Of the services most known, 24.7% knew health education, 20.8% knew that condoms are distributed and the least known HIV preventive services in KIUTH is Provider Initiated HIV counseling and Testing(PICT), 4.5%. Table 5: Distribution of respondents by range of HIV preventive services utilized from KIUTH

	Resp	onses	
	Ν	Percent	Percent of Cases
Utilized			
Health Education	77	26.6%	85.6%
		u da	
Condom distribution	43	14.9%	47.8%
SMC	40	13.8%	44.4%
HAART	32	11.1%	35.6%
PMTCT Services	49	17.0%	54.4%
RCT	40	13.8%	44.4%
PICT	8	2.8%	8.9%
Total	289	100.0%	321.1%

a. Dichotomy group tabulated at value 1.

Source: Primary Data

And of all the HIV preventive services available in KIUTH, health education (26.6%) was the most utilized HIV preventive services followed by the condom distribution and the least utilized service was the PICT which was at 2.8% only.

1.4 Factors hindering Students for utilizing HIV preventive Services from KIUTH Figure 7: Distribution of respondents by their opinions about stigma and access to HIV services



Source: Primary Data

When accessed about the factors barring students from accessing HIV preventive services from KIUTH, majority of respondents(68) mentioned that stigma is barring access to HIV preventive service, while a few of them (26) said stigma dose not bar students accessing HIV preventive services

from KIUTH.

	Responses		
	Ν	Percent	Percent of Cases
lack of privacy	49	12.9%	51.6%
cost of services	84	22.0%	88.4%
waiting time was long	72	18.9%	75.8%
The service were inconvenient	84	22.0%	88.4%
I did not wish to attend that service	92	24.1%	96.8%
Total	381	100.0%	401.1%

Table 6: Distribution of respondents by factors barring students from utilizing HIV preventive	ve services from
KIUTH	

		Responses		
		Ν	Percent	Percent of Cases
lack of privacy		49	12.9%	51.6%
cost of services		84	22.0%	88.4%
waiting time was	slong	72	18.9%	75.8%
The service wer	e inconvenient	84	22.0%	88.4%
I did not wish to	attend that service	92	24.1%	96.8%
Total		381	100.0%	401.1%

a. Dichotomy group tabulated at value 2.

Source: Primary Data

Table 6 above shows that personal preference (24.1%), inconvenience of the service, 22%, cost of the service 22% and the waiting time (18.9%) were among the most common factors barring students from accessing HIV preventing services from KIUTH. While lack of privacy was the least common factor hindering utilsation to the respondents

4.5 Hypothesis Testing

4.5.1 Hypothesis testing:

The chi-square test was done to test the null hypothesis and the results are recorded as below.

1. To establish the relationship between gender and access to HIV preventive services

 $\label{eq:constraint} \textbf{Utilization of } \textbf{HIV preventive services from KIUTH and } \textbf{Gender Crosstabulation}$

Tabulation

			Ger		
			Male	Female	Total
Comment if you have ever utilized any HIV preventive services from KIUTH	Yes	Count	29	28	57
		% within Gender	69.0%	56.0%	62.0%
	No	Count	13	22	35
		% within Gender	31.0%	44.0%	38.0%
Total		Count	42	50	92
		% within Gender	100.0%	100.0%	100.0%

	Value	Df	Asymp. Sig. (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	1.649ª	1	.199		
Continuity Correction ^b	1.142	1	.285		
Likelihood Ratio	1.662	1	.197		
Fisher's Exact Test				.281	.143
Linear-by-Linear Association	1.631	1	.202		
N of Valid Cases ^b	92				

Chi-Square Tests

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.98.

b. Computed only for a 2x2 table

A chi-square test was performed and a relationship was found between gender and utilisation of HIV preventive service among students of Kampala International University, $X_2(1, N = 92) = 1.649$, p = .199. According to the findings, being male was associated with 69% access to HIV preventive services among students of Kampala International University

To establish the relationship between age and utilization of HIV preventive services

				Age				
			18-27	28-37	38-47	48-57	Total	
Comment if you have ever	Yes	Count	21	23	5	9	58	
utilized any HIV preventive		% within Age	70.0%	65.7%	26.3%	100.0%	62.4%	
services from KIUTH	No	Count	9	12	14	0	35	
		% within Age	30.0%	34.3%	73.7%	.0%	37.6%	
Total		Count	30	35	19	9	93	
		% within Age	100.0%	100.0%	100.0%	100.0%	100.0%	

Utilization any HIV preventive services from KIUTH and Age crosstabulation

	Value	df	Asymp. Sig. (2-sided)			
Pearson Chi-Square	16.864ª	3	.001			
Likelihood Ratio	19.621	3	.000			
Linear-by-Linear Association	.279	1	.597			
N of Valid Cases	93					

Chi-Square Tests

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 3.39.

A second chi-square test was performed and a relationship was found between age and the utilization of HIV preventive service among students of Kampala International University, X_2 (3, N = 93) = 16.86, p = .001

According to the findings, being between the age group of 48-57 was associated with 100% utilisation of o HIV preventive services among students of Kampala International University

Basing on the above findings, the Null Hypothesis was rejected since there were relationships between HIV preventive service utilization and age and also HIV preventive service utilisation and gender

CHAPTER FIVE: DISCUSSIONS

5.0 General Introductions

In this chapter, the reader is introduced to the discussions and arguments behind the research findings. The discussions are basically focused on the study objectives. However some other findings are also highlighted in the discussions.

5.1 Discussions

5.1.1 Demographic variables

The study attracted a total of 100 respondents of which only 95 returned the filled questionnaires. Of those who returned the questionnaires, majority were in the age groups of 28-37 years old (37.89%), followed by the 18-27 years old age groups (31.58%), the least was 48-57 years age group with 9.47%.

In terms of their nationality, majority were Ugandans, followed by the Tanzanians 18.9%, and the least were in the category of other(4%), of which they included 1 Egyptians, 2 Sudanese and 1 Zambian.

5.1.2 Specific Objectives 1

The study found out that 69.4% of the respondents were aware of their current HIV status, and 30.53% were not aware of their current HIV status.

These study findings were similar to the findings expressed by the Lake Victoria basin projects about the availability, access and awareness about HIV by the university students in Ugandan universities in which they mentioned that there was a high awareness level among students in Uganda about HIV.

And in another study that assessed the knowledge of students in Ghana University and showed that the HIV knowledge was very good, yet HIV testing were low. Health education and HIV intervention programmes must not only provide accurate information, but must be made to help to equip private university students, especially females to test for HIV consistently.

Probably the awareness is because of the various programs that are run in the university and its surrounding environment.

the study also found out that majority (82.37%) of the respondents had accessed at least one of the HIV preventive services from KIUTH, while 37.63% have not accessed any HIV preventive services from KIUTH.

The study results were similar to one of the previous study by Kwanko Asnate who studied the uptake of HIV counseling and testing among undergraduate students in Ghana. Kwanko explored the factors that affect the uptake of services and concluded that being female and married were significantly associated with the willingness to test and plan to test again in new future.

This study however, did not reveal the details of the factors that were influencing student's decision to take up HIV preventive services from KIUTH as this was well beyond the scope of this study.

The study found that majority of those who had voluntary test actually wanted to invite a friend for the test (35), while for those who went through routine test, 13 wished to invite their friends while 13 did not wish to invite their friends.

5.1.3 Specific Objectives 2

The study showed that majority of the respondents at least knew of services available from KIUTH meant of HIV prevention. Of the services most known, 24.7% knew health education, 20.8% knew that condoms are distributed and the least known HIV preventive services in KIUTH is Provider Initiated HIV counseling and Testing(PICT), 4.5%.

This result can be partly explained by the fact that most of the students have engaged in clinical practice previously or are currently in clinical trainings that provides an opportunity to understand the scope of services available at a hospital level.

And of all the HIV preventive services available in KIUTH, health education (26.6%) was the most utilized HIV preventive services followed by the condom distribution and the least utilized service was the PICT which was at 2.8% only.

Why PICT is still the least utilized service is because most of the students are rarely admitted to KIUTH or at least seek health care from alternative sources. Many of the previous study had shown that there were

The findings were similar to those of Tsegey in 2013 who identified that besides the high incidences of risky behaviour among the students of KIU, HIV preventive services including condom distribution, referral for ART and links for PMTCT were outstandingly not provided by the university.

Previous report from the MoH indicated that, concerns are being raised on how an already crumbling health system characterized by a shortage of medical supplies, understaffing, poor remuneration among others to meet the scale up of HCT to absorb the increasing numbers.

5.1.4 Specific Objectives 3

When accessed about the factors barring students from accessing HIV preventive services from KIUTH,majority of respondents(68) mentioned that stigma is barring access to HIV preventive service, while a few of them (26) said stigma dose not barr students accessing HIV preventive services from KIUTH.

The findings were that stigma is the chief factor barring the students from accessing the HIV preventive services from KIUTH. The findings were close to those of Nikita Pant et al, who showed that Stigma, discrimination, lack of privacy, and long waiting times partly explain why six out of ten individuals living with HIV do not access facility-based testing.

In his study Nikita explained that by circumventing these barriers through self-testing, self-testing would offer potential for more people to know their sero-status, but expressed the fears that much as self-test in the US has sparked self-testing initiatives, data on acceptability, feasibility, and linkages to care were limited.

This study finding however, did not define the complexity of stigma among KIU students in its social and structural dynamics as the quantification of stigma was well beyond the scope of this study.

The results further showed that personal preference (24.1%), inconvenience of the service, 22%, cost of the service 22% and the waiting time(18.9%) were among the most common factors barring students from accessing HIV preventing services from KIUTH. While lack of privacy was the least common factor hindering utilsation to the respondents

Carla et al, 2007 had demonstrated that social factors have a considerable impact on testing, and further shows that the services linked to testing are key determinants of utilization, and consider the implications of these findings for HIV testing programs. According to this study, it was shown that there is always a higher personal preference when it comes to HIV testing as shown by this result also.

The Carla study further demonstrated that globally there is a very low level of utilisation of HIV testing and that most people prefer to test when they are in advance form of the disease. This he explained that because some people prefer to test only as a way of accessing treatment.

5.2 Conclusions

Basing on the results of these findings, it was concluded from it that

- The proportion of students accessing HIV services from KIUTH is low compared to the general populations of the students
- Health Education, Condom Distribution, HIV counseling and testing, Safe Male Circumcision, Prevention of Mother to Child Transmission of HIV Highly Active Antiretroviral Theraphy and Provider Initiated Counseling were among HIV preventing services provided by KIUTH, and the most utilized service by students were Condom and Health education
- Stigma was the most important factor barring students from accessing HIV preventive services from KIUTH

5.3 Recommendations

The study recommended that

• The hospital should provide HIV preventive services in a friendly environment so that students could utilize them

- The university should have a counselor specifically for the students so that the students would be encouraged to come for testing and counseling
- Another study should look into details of the conclusions raised by this study so that there is enough evidence to improve HIV preventive study for the study at KIU.

Appendices

Appendix 1: Pen state Cooperative agreement evaluation formula 2004

n =
$$\frac{\frac{p(1-p)}{\frac{A^2}{Z^2} + \frac{p(1-p)}{N}\frac{\delta y}{\delta x}}}{\mathsf{R}}$$

Where:

n = sample size required

N = number of people in the population

P = estimated variance in population, as a decimal: (0.5 for50-50, 0.3 for 70-30)

A = Precision desired, expressed as a decimal (i.e., 0.03, 0.05, 0.1 for 3%, 5%, 10%)

Z = based on confidence level: 1.96 for 95% confidence, 1.6449 for 90% and 2.5758 for 99%

R = Estimated Response rate, as a decimal

Appendix 2: questionnaire

RESEARCH QUESTIONNAIRE SHEET

RESEARCH TOPIC: THE UTILISATION OF HIV PREVENTIVE SERVICES BY STUDENTS OF KAMPALA INTERNATIONAL UNIVERSITY, –ISHAKA BUSHENYI, WESTERN UGANDA

SELF ADMNISTERED QUESTIONAIRE

Date:..... Place of Interview.....

Introduction

Name of Researcher: Aciro Harriet:

Purpose of the questionnaire: This questionnaire is developed as a data collection tool to be filed in by selected respondents. The data obtained from which shall be used only for research purposes in partial fulfilment of the award of Bachelor of Medicine and Bachelor of Surgery of Kampala International University Teaching Hospital. The investigator requests your participation in the capacity of a resource person basing on your qualification, job description and experience in the subject of study.

This data will be treated with the utmost confidentiality it deserves and will not be released to anyone/organisation except for an academic purpose.

Section A: B	io data	
1. Age		
a) 18-2	7	
b) 28-3	7	
c) 38-4	7	
d) 47 ar	nd above	
2. Gend	er	
a) Male		
b) Fema	ale	
3. Natior	ality	
a) Ugan	dan	
b) Keny	an	
c) Tanz	anian	
d) Soma	alis	
e) Rwai	ıdese	
f) Othe	rs	

4.	Marital status	
	a) Single	
	b) Married	
	c) Divorced	
	d) Widowed	
5.	Duration of study in KIU	

- a) 6-12 Months
- b) 13-18 months
- c) 19-24 month
- d) 25-30 months
- e) 31-36 Months
- f) 37-42 Months
- g) 43 months and above

Section B: Proportion of Students utilising HIV services in KIUTH

- 1. Comment if you have ever accessed any HIV preventive services from KIUTH
 - a) Yes
 - b) No
- 2. If yes, please mention the last time you accessed any HIV preventive service from KIUTH
 - a) Less than 6 months
 - b) Within 6-12 months
 - c) 12 months and above

Section C: The range and scope of HIV preventive services that the students are assessing from KIUTH

- 1. Mention any of these HIV preventive services that are available at KIUTH (please tick as many as applicable)
 - a) Health Education
 - b) Condom Distribution
 - c) Safe Male Circumcision
 - d) Anti-Retroviral Therapy
 - e) Prevention of Mother to Child services
 - f) Routine Counselling and Testing
 - g) Provider Initiated Counselling and Testing



- h) Others (specify).....
- 2. Mention any of these that you have accessed so far from KIUTH (choose as many as applicable)

a) Health Education	
b) Condom Distribution]
c) Safe Male Circumcision]
d) Anti-Retroviral Therapy	
e) Prevention of Mother to Child services	
f) Routine Counselling and Testing	
g) Provider Initiated Counselling and Testing	
Others (specify)	

Section D: Factors barring students from accessing HIV care services from KIUTH

- 1. Comment on any of these factors that might have hindered you from accessing any of these HIV preventive services
 - a) Lack of privacy
 - b) The Cost of the services
 - c) The waiting time was long
 - d) The services were inconvenient
 - e) I did not wish to attend that services
 - f) Others (specify).....

Thanks for your time and participation

Appendix 3: References

- 1. Anish P. Mahajan, et al, Stigma in the HIV/AIDS epidemic: A review of the literature and recommendations for the way forward
- Assessment of voluntary counselling and testing service utilization and associated factors among Debre Markos University Students, North West Ethiopia: a cross-sectional survey in 2011 Girmay Tsegay1*, Melkie Edris2 and Solomon Meseret.
- 3. Barriers and attitudes towards HIV voluntary counselling and Testing (VCT) among Secondary School Pupils of Sengerema in Mwanza by Omary Sukari MD5 2007/08
- 4. HIV/AIDS knowledge and uptake of HIV counselling and testing among undergraduate private university students in Accra, Ghana, Kwaku Oppong Asante
- 5. HIV sero-behavioural study in six universities in Uganda, addressing mobility vulnerability and Gaps, Lake Victoria basins programUganda AIDS indicator Survey report, MoH, 2011. Available from <u>www.moh,go,ug/ais.pdf</u>
- Kwaku Oppong Asante, HIV/AIDS knowledge and uptake of HIV counseling and testing among undergraduate private university students in Accra, Ghana, accessed from <u>http://www.reproductive-health-journal.com/content/10/1/17</u>, date accesed 21/07/2013.
- 7. Supervised and Unsupervised Self-Testing for HIV in High- and Low-Risk Populations: A Systematic Review of lituratre, available from plos, <u>http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.10014</u> <u>14</u>

Appendix 4: Work plan

Time \rightarrow	Feb 2013	Mar 2013	Apr 2013	May 2013	June 2013	July 2013	Aug 2013
Activity ↓							
Proposal Writing	Х	Х					
Approval		Х	Х				
Data Collection				Х			
Analysis and Discussion					X	X	
Draft Report						Х	Х
Revision of 1st Draft						Х	Х
Submission of Final Report							Х

Appendix 5: Budget

Item	Quantity needed	Cost per unit	Total cost in UGX
Flash disks	3	25,000	25,000
Airtime	2 people	5,000	10,000
Meals for research assistant	2 people for7 days	5000	70,000
Photocopying report	3 copies	100	18,000
Typing and printings	39 pages	1000	39,000
Binding	6 copies	1500	9,000
Refreshment /day	3 people	3000	15,000
Inconveniences for mothers	50,000 per group	50,000	50,000
Indemnity	-	-	50,000
Miscellaneous	10%	-	51,400
Total			593,400/=

Appendix 5: Informed Consent Form

I, the undersigned, confirm that (please tick box as appropriate):

1.	I have read and understood the information about the project, as explained to me and I have been given the opportunity to ask questions	
2.	I voluntarily agree to participate in the project.	
3.	I understand I can withdraw at any time without giving reasons and that I will not be penalised for withdrawing nor will I be questioned on why I have withdrawn.	
4.	The procedures regarding confidentiality have been clearly explained (e.g. use of names, pseudonyms, anonymisation of data, etc.) to me.	
5.	If applicable, separate terms of consent for interviews, audio, video or other forms of data collection have been explained and provided to me.	
6.	The use of the data in research, publications, sharing and archiving has been explained to me.	
7.	I understand that other researchers will have access to this data only if they agree to preserve the confidentiality of the data and if they agree to the terms I have specified in this form.	
8.	 Select only one of the following: I would like my name used and understand what I have said or written as part of this study will be used in reports, publications and other research outputs so that anything I have contributed to this project can be recognized. 	
	 I do not want my name used in this project. Instead I recommend the use of CODES 	
10.	I, along with the Researcher, agree to sign and date this informed consent form.	

Participant:

Name of Participant	Signature	Date	
Researcher:			
Name of Researcher	Signature	Date	



Map of Ishaka Bushenyi

