FACTORS INFLUENCING HUMAN IMMUNE VIRUS (HIV) TESTING AMONGST STUDENTS AT MAKERERE UNIVERSITY

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DECLARATION

I, Monica Nyankumare Tumwine, declare that this dissertation entitled “Factors influencing Human Immune Virus (HIV) testing amongst students at Makerere University” is my original work and has not been presented to any other institution or university for the award of a degree or any other qualification.

Signature

Date----------

APPROVAL

This dissertation has been submitted for examination with the approval of my supervisors.

Signature: _____

Mr.John Kittobbe

Date: _____

DEDICATION

This work is dedicated to my parents, Mr. and Mrs. Emmanuel Tumwine Bijegye, my husband, kids, brothers, sisters and friends.

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ACRONYMS AND ABBREVIATIONS

AIDS Acquired Immuno Deficiency Syndrome.

ACT AIDS Committee of Toronto

AIC AIDS Information Centre

CDC Centre for Disease Control

HCT HIV Counseling and Testing

HBM Health Belief Model

HIV Human Immune Virus.

HIPPA Health Insurance Portability and Privacy Act

MU Makerere University

MOH Ministry Of Health

NGO Non Governmental Organization

PLHAs People Living with HIV/AIDS

PPC Positive Prevention Counseling

SCT Social Cognitive Theory.

UNAIDS United Joint AIDS Program On AIDS

UNICEF United Nations International Children's Emergency Fund.

UMI Uganda Management Institute

UAC Uganda AIDS Commission.

VCT Voluntary Counseling and Testing

ABSTRACT

This research assessed the factors influencing HIV testing among students at Makerere University. The objectives of the study included stigma, confidentiality and beliefs as independent variables and HIV testing as a dependent variable. A cross sectional design was chosen for this study so as to determine the factors influencing HIV testing among students at Makerere University. Using simple random sampling and purposive sampling respondents were chosen to represent the entire population. Data were collected from Lumumba and Mary Stuart Halls of residence where a combination of quantitative and qualitative data collection methods were used. Self administered questionnaires were used to collect quantitative data; Focus Group Discussions (FGDs), Key Informant Interview were also used to collect qualitative data. Data were analyzed using STATA and was entered using ACCESS. It was found out that 125 (40%) of the students admitted never to have taken an HIV test before and therefore, they did not know their status. Of the 182 (60%) who tested, 9% did not receive their results. It was found out that stigma positively affects students to test for HIV; with only 141 (45%) of the students willing to disclose their results to other people. Confidentiality positively influences students to test with 53% agreed that health workers keep confidentiality of their information. With beliefs, 10% believed that HIV is for immoral people. In addition, Logistic regression was used for statistical analysis where for stigma a P-value of 0.04 was got, confidentiality a P-value of 0.02 and beliefs a P-value of 0.04 was got where by P-value of less than 0.05 shows that the dependent variable is significantly affected by the independent variables. The findings from the study were expected to help decision makers especially NGO's, policy makers, to understand the factors influencing students to test for HIV and further help them design HIV policies to help students test for HIV.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

A survey conducted in 2007 in 9 universities including Makerere, Kyambogo, Mbarara, Gulu, Busitema, Ndejje, Mukono, Uganda Martyrs University and Islamic University showed that 70% of 1889 students do not make use of the available HIV testing services. They therefore do not know their HIV status. It further showed that 11% of the female university students who were interviewed engaged in sex with older men, a practice associated with the risk of contracting HIV/AIDS. Since the young girls were more likely to have boyfriends who were fellow students at the university, this further fueled the spread of HIV thus a need for testing so that those who were negative practiced safe behavior and stayed negative and those that are positive got care at an early stage (MOH, 2004).

In this study, the dependent variable was HIV testing which includes 'ever tested' and 'never tested'. The independent variables under study included stigma which means students fear being devalued, discounted, discredited and discriminated against in case they tested and found they have the HIV virus in their bodies. Confidentiality as an independent variable meant students feared to test because they believed that information about their HIV status would be made accessible to their friends and relatives. Beliefs meant students' attitudes and thinking associated with HIV which influences HIV testing amongst students. Lastly, sensitization (moderating variable) has a strong contingent effect on the relationship between stigma, confidentiality,

beliefs and the dependent variable relationship. This depicts that students were not told about the dangers of HIV; some thought they could not get the disease, others did not know the importance of testing and others thought HIV is not for them which therefore hindered HIV testing amongst students.

This study assessed the factors influencing HIV testing amongst students at Makerere University (MU). HIV testing amongst students had not been embraced due to fear of stigma, lack of confidentiality and the social and religious beliefs that have been attached to the disease (Myers & Jackson, 1991). HIV testing consists of pre-test and post-test counseling which involve an interaction between a counselor and a student aimed at enabling the student to make an informed decision concerning whether or not to take an HIV test and also helping prepare a person for a positive or negative result and how to cope thereafter. This chapter has been broken into the following sub headings, the background to the study, the statement of the problem, the purpose and the objectives of the study, the research questions, the hypotheses, the scope of the study, the significance, justification and operational definition of terms and concepts.

1.1 Background to the Study

The total number of adults and children estimated to be living with HIV globally by 2006 were 40 million with North America estimated to be 1.4million, Western and Central Europe 740.000, Eastern Europe and Asia 1.7 million with East Asia 750.000, South and S.E Asia 7.8 million, Caribbean 250.000, middle East and North Africa 460.000, Latin America 1.7 million, Oceania 8000 and sub Saharan Africa leading with 24.7 million which is due to the absence of massive expanded prevention strategies like encouraging people to know their status and sensitization about the disease (CDC & UNAIDS, 2006).

In Sub-Saharan Africa, large scale national and regional efforts must take place in order to ensure that 90% of 15 to 30 year olds are sensitized with knowledge and skills to protect themselves from HIV. Such education plays a critical role in HIV/AIDS prevention; sensitization ranks among the most effective and cost-effective means of preventing HIV. Schools, universities in this case, Makerere University should provide students with the knowledge, values, and skills with which to make healthy decisions, bring about healthy behavior, and give the desire, if not the opportunity, to achieve economic independence. They should also offer ready-made infrastructure and free access to screening since they are a high risk group. This facilitates the design and implementation of effective prevention strategies and AIDS education Programs which will help encourage students to test and be aware of their HIV status (UNAIDS & UNICEF 2001).

As part of HIV Counseling and Testing, students are also briefed about healthy and positive living. Being HIV positive requires making some lifestyle changes to lead a healthy and productive life. Students are encouraged to learn how to keep the immune system healthy by lowering stress levels through eating, exercising sensibly and building up a good support system and an assessment by an HIV clinician who evaluates the immune status through an examination and further blood tests (MOH, 2001).

There are many benefits to knowing ones' HIV status, but there can be disadvantages as well. It is not always easy to disclose the status as stigma and social discrimination is still associated with HIV/AIDS. It is advisable to discuss stigma issues with the counselor before taking the test this has made many people not to test which has made them to continue catching the disease world wide (CDC & UNAIDS, 2006).

HIV rates among youth continue to rise because many don't know they carry HIV, therefore the ones who have HIV continue to spread it. It is very important for everybody to know his or her HIV status because it helps in making informed decisions. Deciding to go for an HIV test is sometimes a very difficult and personal decision. Testing is effective in slowing HIV spread since those who are negative are counseled on how to stay negative and those positive are counseled on positive living but however, testing knowledge and acceptability among youth is still low. By the end of the year 2005, research was conducted on Makerere University students and out of 989 who went for treatment at the University Hospital in a semester, only 157 accepted to take an HIV test. With the knowledge of ones status students can take control of their future. A negative result means that one is not infected with HIV, (unless one is currently still in the window period). Even if the test is negative it is still crucial to discuss sexual and reproductive health in general, ways of protecting oneself and partner(s) from infections, and whether it is necessary to be retested if one is still in the window period. If testing is done with ones partner, which is encouraged, it's possible that one can test negative and the partner tests positive. A positive test result means that one has been infected with HIV. The counselor helps work through some of the feelings of shock, fear and may be anger. Students usually get the opportunity to discuss how to tell their families and sexual partner(s) and are also encouraged to join a support group which helps one to accept the results. It is also vital to test because it helps protect those who are positive and their partners from further infections (MOH, 2001).

When interpreting HIV and AIDS statistics, it is important to remember that a person infected with HIV will probably not develop AIDS for several years; The average delay in Uganda is around five to ten years without treatment; this means that the disease is even acquired at a later age when people are still youths. Also, new diagnoses of HIV do not necessarily represent new

infections, because people may live with the virus for a number of years before being tested therefore efforts geared toward curbing HIV should target everyone (UNAIDS, 2008).

Uganda has a generalized HIV epidemic with a prevalence of 6.4% in adults and 0.7% in children. Therefore approximately 1.1m people in Uganda are HIV infected. The incidence rate by far out strips AIDS related mortality and the numbers of clients enrolling into chronic AIDS care. The wave of new as well as old infection has shifted to ages of 18 and above. But this means also that HIV is acquired at 5 years less than that because it's been noted that most Ugandans usually test when they have stayed longer with the disease 5-10 years down the road. Sexual transibution contributes 76% of new HIV infections, 100,000 new infections occur annually, during 2008 an estimated 110,694 new HIV infections occurred country wide and 61,036 people died from AIDS (UNGASS, 2008).

Routine Counseling and Testing is not well documented but the current reach of Voluntary Counseling and Testing services remains poor. It was indicated that less than 1m people had tested for HIV during the AIC's 14 years of existence due to fear of stigma associated with the disease. It was further indicated that 100,000 people are newly infected each year, it's estimated that 80% of the people living with HIV in Uganda do not know their status which leads to further spread because the ones positive are not aware of protecting those who don't have from catching the disease (AIC, 2004). An estimated 11m young people aged 18-30 years are living with AIDS. Each day nearly 6,000 young people between ages of 18-30 become infected with HIV (UNAIDS & UNICEF, 2001).

Little progress can be made until it becomes unacceptable to discriminate against those living with or affected with HIV/AIDS. Communities and governments must understand the factors that increase young people's vulnerability to HIV. Support for young people with sensitization through public information campaigns both in and out of schools, to raise awareness to combat HIV and to also change people's beliefs (WHO,UNAIDS, UNICEF, 2001).

Barriers to Voluntary Counselling and Testing among people is also due to worries about confidentiality and fears that results would be shared with parents, relatives or partners without their consent. Students therefore prefer the use of free mobile Voluntary Counselling and Testing and youth friendly services in an attempt to access students and those that fear to be seen are the ones whose results could be disclosed to unauthorized individuals (Deborah & Rachael, 2002).

The issues surrounding HIV/AIDS, VCT are deeply embedded in religious and social beliefs and practices, many of them intimate, personal and private. These should therefore be eroded to create an environment in which AIDS is not discussed in secrecy and shame but openly and with compassion and where people are encouraged. According to the findings factors influencing HIV testing among students at MU have been complicated by a moderating variable sensitization. Sensitizing young people about HIV and teaching them skills in negotiation, conflict resolution, decision making and communication improves their self confidence and ability to make informed choices such as taking a decision to test for HIV. HIV testing should be confidential to allow young people to determine their HIV status and to choose safe behavior, whether they are infected or uninfected (WHO et al., 2001).

The key features of student friendly health services is confidentiality, health workers should be trained in student friendly approaches and the services for the youth should be free and mobile because they fear to be seen for fear of disclosure of their results. Uptake for testing is low as many young people do not favor services within hospitals due to service provider attitudes, access issues such as parental consent for services and judgmental approaches. The introduction of name reporting to aid surveillance causes some individuals to avoid testing. Students should be allowed to provide consent (without parental consent) for VCT. Disclosure too should still be discussed during counseling and encouraged where young people have supportive relationships with parents therefore service providers should be able to provide VCT to young people who request it without fear of retribution and national policy frame works should support access to VCT for young people without parental consent (Deborah & Baggaley, 2002).

1.2 Problem Statement

HIV/AIDS continues to be a major threat to the world with an increase in the number of people infected with HIV. i.e. 100,000 people are newly infected each year with HIV. It's estimated that 80% of the people living with HIV in Uganda are unaware of their status. Although treatments for AIDS and HIV can slow the course of the disease, there is currently no vaccine or cure and yet people are still reluctant to test so that they can either be careful with their lives if negative or be enrolled on treatment early if positive and be counseled on positive living in order to reduce on the spread of the epidemic which has become a worldwide threat (RTI, MJAP et.al, 2007).

According to Myers and Jackson, (1991) many people who have HIV do not actually know their status because they have never been tested, therefore, getting a test for HIV is the only way to really know if someone is infected or not. With only (125) 40% of the students admitting to have

ever taken an HIV test, is a reconfirmation of the poor attitude of students towards seeking for HIV testing services. Despite the availability of free testing services, students do not test for HIV, those who are negative and are living a risky sexual behavior live in uncertainty and are not confident of their status which makes them to end up contracting the disease, those who are positive continue to spread the disease because of the ignorance of their status. Testing is effective in slowing HIV spread but testing knowledge and acceptability among the youth is still low. Most students do not know their status if the trend continues like this the country will lose out on the future of tomorrow since many of them would die when they are still young therefore the need for testing so that students take precaution hence live longer and healthier. Students do not test for HIV and yet it's the fourth leading cause of death in adults world wide. In Uganda, AIDS strikes mainly the youth who are the pillars of the family and society and the very heart of the work force a category where students belong. The factors which influence HIV testing amongst students at Makerere University have been envisaged to include stigma, confidentiality, various social beliefs like HIV is for immoral people, prostitutes and that its not for them because they are still young (MU, 2000). The study shows that there are no scholarly works to determine the extent to which stigma, beliefs, confidentiality influence HIV testing. Most of the studies concern the ABC strategy which is Abstinence, Be faithful and Condom use. This study therefore fills the knowledge gap.

1.3 Purpose of the Study

The purpose of the study was to assess the factors that influence HIV testing amongst students at Makerere University.

1.4 Objectives of the Study

1. To assess the effect of stigma on HIV testing amongst students at Makerere University.

2. To examine the effect of confidentiality of information on HIV testing amongst students at Makerere University.

3. To assess the effect of beliefs on HIV testing amongst students at Makerere University.

1.5 Research Questions

1. What is the effect of stigma on HIV testing amongst students at Makerere University?
2. What is the effect of confidentiality on HIV testing amongst students at Makerere University?
3. What is the effect of beliefs on HIV testing amongst students at Makerere University?

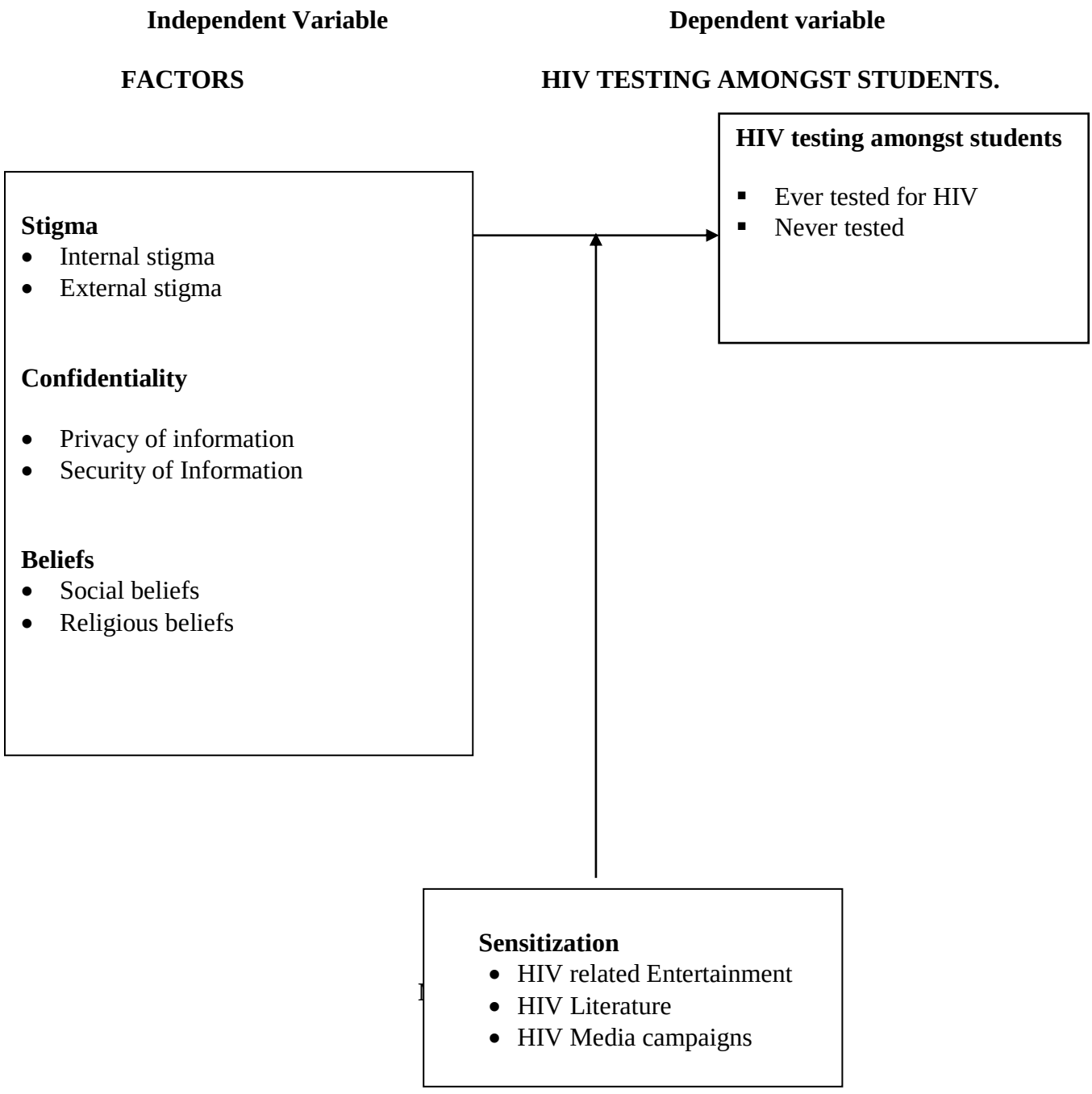
1.6 Hypotheses

1. Stigma significantly affects HIV testing amongst students at Makerere University.

2. There is a strong positive effect between confidentiality and influencing HIV testing amongst students at Makerere University.

3. Beliefs significantly affect HIV testing amongst students at Makerere University.

1.7 Conceptual Framework



Source: Adopted from: Myers & Jackson (1991).

Figure 1: Factors influencing HIV testing amongst students at Makerere University.

According to Amin (2005), the researcher conceptualizes the study variables and shows their relationship in the study. In this study "factors" and HIV testing amongst students" were examined to determine their degree and extent of relationship at Makerere University in the two Halls of residence of Mary Stuart and Lumumba. The types of variables in this research included the dependent variable (also known as the criterion variable), which was the variable of primary interest to the researcher which was HIV testing amongst students. Other variables were the independent variable which influences the dependent variable in either a positive or negative way and in this case the independent affected it in a negative way. The independent variables included stigma, confidentiality and beliefs. When Stigma, Confidentiality and Beliefs are present, HIV testing is also influenced and with each unit of increase in Stigma, Confidentiality and Beliefs then HIV testing also reduces.

1.8 Significance of the Study

The study has significant usefulness to academicians researching on a similar subject to obtain literature review to guide them on the research design to use in order to reduce on duplication of work. The benefits of the study would help students to know the importance of HIV testing and are to also be aware of the disadvantages of stigmatizing those who are HIV positive. It's further to help students to know the importance of attending sensitization seminars about HIV. The findings, conclusions and recommendations from the study were expected to help decision makers especially NGO's, policy makers, institutional managers to understand the underlying factors influencing HIV testing amongst students and further help them design HIV policies, implement sensitization seminars and enable the public and students to go for HIV testing and

know their sero-status so that those who are negative are counseled on how to stay negative and the ones who are positive were advised not to spread the disease and to get timely care thus help in prevention of the epidemic that leads to the loss of many people.

1.9 Justification of the study

Research was widely done and this study had not been investigated on before and it was to help students not only at Makerere University but country wide and world over to perceive measures of living healthy lives and ensure an HIV free generation. The study was meant to enforce the importance of HIV testing as an HIV prevention measure. Voluntary Counseling and Testing services are available around Makerere University and students do not go for testing services.

HIV/AIDS has no cure therefore prevention remains the main strategy in control efforts. The results of the study would help curb HIV since prevention efforts aim at reducing risky sexual behavior, testing for HIV, disclosure to sexual partners, reducing of stigmatization of those infected and affected by AIDS, and for this to take place, one needed to understand the risky behavior he/she is involved in and be supported to change. This support and re-enforcement can be provided by counselors, health workers, peers, friends and opinion leaders to sensitize on HIV and encourage people to test for HIV and reduce on risky behavior (SCOT & CDC, 2007).

Therefore the findings of the study availed students with lots of information on the benefits of testing which changed their lives positively.

1.10 The Scope of the Study

Geographically, the study covered Makerere University which is one of the biggest universities found in Uganda located in Kampala district (Capital city of Uganda). Kampala is one of the districts in the central part of Uganda and is bordered by Wakiso, Mukono, Mpigi, Mityana and

Luwero districts. Makerere University was chosen because it's located in Kampala city which is most affected by HIV and since it's the biggest university, the findings can be easily applied to other universities. According to the UHBS (2004-2005), HIV prevalence is high mainly in urban areas as compared to the rural areas therefore, this justifies why the research was carried out in an urban area to help students take caution since they are a highly risky group in a highly affected area.

Out of 5 halls the study covered students residing in Mary Stuart and Lumumba Halls of at Makerere University.

In terms of Content scope, the study focused on factors influencing HIV testing amongst students at Makerere University and it was conceptualized as stigma, confidentiality, beliefs as independent variables. According to Meyer (1991), students do not want to test for HIV because of stigma, confidentiality and beliefs. Sensitization as a moderating variable and HIV testing as a dependent variable, with HIV testing it can either be ever tested or never tested.

1.11 Operational definition of terms and concepts.

External stigma: Patterns of prejudice, which include devaluing, discounting, discrediting, and discriminating against people who are infected and affected with HIV/AIDS.

Internal stigma: Self perception, shame and fear caused by having HIV in the body.

Confidentiality: Students fear to test because they believe that information about their HIV status may be accessible to their friends and relatives.

Social beliefs: Myths associated with HIV for instance its known as the illness of immorality; it's a result of moral fault, a disease associated with bad behavior.

Religious beliefs: Thinking associated with HIV among the religious community for instance people believe that it's a curse from God, a disease for sinners etc.

Sensitization: Delivering knowledge, having the ability to perceive and be conscious about HIV to students.

Human Immune Virus: The virus that leads to AIDS when it enters the human body. There are two types of HIV: HIV-1 and HIV -2. The difference between the two is HIV-1 is more aggressive and has a short incubation period and is common in East, central and Southern Africa. HIV-2 is less aggressive has a long incubation period and is predominant in W. Africa.

Acquired Immune Deficiency Syndrome: A syndrome caused by the HIV virus which is a collection of diseases or signs and symptoms that may occur singly or together. These signs and symptoms are caused by opportunistic infection.

Opportunistic Infections: Infections that occur because of low immunity. i.e. they take advantage of the individuals, weakened immune system.

Routine Counseling and Testing: A service offered by HIV agencies where counseling sessions and health talks are held with all patients and their care takers who visit the hospitals encouraging them to test for HIV. This is meant to increase on the number of people in the country who know their sero-status.

Entertainment: Activities which permit students to amuse themselves in their leisure time on movies, games that make students aware of HIV at the Makerere University.

Media: The various channels of communication that were used in educating students about HIV testing.

Screening: Performing an HIV test for all persons in a defined population.

Targeted testing: Performing an HIV test for sub populations of persons at higher risk typically defined on the basis of behavior.

Information security: Protecting information and information systems from unauthorized access, use, disclosure, disruption, modification or destruction.

CHAPTER TWO

REVIEW OF LITERATURE

2.0 Introduction

This chapter concentrates on the review of related literature and it identifies gaps. It is presented according to the objectives of the study which were to assess how external and internal stigma, how religious beliefs, confidentiality, sensitization influence students to test for HIV. The theoretical review concentrated on the Health Belief Model, Social Cognitive Theory (SCT), the facilitation theory, Empowering Theory and the AIDS Reduction Model.

2.1 Theoretical Review

The Health Belief Model was developed in the 1950's as part of an effort by social psychologists in the United States Public Health Service to explain the lack of public participation in health screening programs which leads to escalation in the spread of the disease. The HBM has been adopted to explore a variety of long- and short-term health behaviors, including sexual risk behaviors, the transmission of HIV/AIDS and why people do not test for HIV. The key components of the HBM are as follows; perceived severity, perceived benefits, perceived barriers. This model was used because it clearly explains that people are motivated to change their sexual behavior when they believe they are susceptible to HIV. Students have a high susceptibility because HIV is rarely talked about in their social circle. There is also a component of perceived benefits which explains that students are motivated to change behavior when they

believe that HIV testing will help modify their way of conduct, and also help the students know their status, if found negative they will be encouraged to stop living a risky sexual behavior and hence reduce their chances of catching the disease. Perceived barriers explains that students' fear of testing because they fear their results being told to their peers and parents, and also they fear that they will associate it with carelessness and promiscuity hence making them to be stigmatized. Therefore, the benefit of HIV testing is outweighed by the need to please fellow peers. Engaging the students in individual counseling and testing and HIV awareness in which the educators strive to reduce stigma, negative social beliefs can increase the students' perception of their own risk and susceptibility, this can help to avert HIV/AIDS (Rosenstock, Strecher and Becker, 1994).

Evaluation research of HIV intervention programs based on the HBM generally supports its usefulness as a behavior change model. By using the HBM, a service provider can separately target the beliefs necessary for behavior change (e.g., personal susceptibility, benefits and barriers to prevention which in this study include stigma, sensitization and beliefs). The HBM can be used to design interventions to help students test for HIV and change behavior regardless of the target population's demographic characteristics so long as the intervention components are culturally appropriate (Abraham & Sheeran, 1994).

There is the Social Cognitive Theory (SCT) which states that for individuals to institute behavior change, they must believe they are capable of initiating and sustaining the actions necessary to implement the desired changes (self-efficacy). Self-efficacy is malleable, and skills training in risk reduction behaviors can change perceived self-efficacy and enhance the adoption of risk-reduction strategies (Bandura, 1994).

The SCT concept of expectancies is very similar to the HBM's focus on one's perception of disease susceptibility, threat, and severity. Our expectancies are what we believe will happen in a given situation or what the relationship is between two events, based on personal experiences, the information we have, and other factors such as cultural norms and beliefs. Whereas expectancies are individual beliefs and internal factors, incentives are reactions from the external world regarding behavior and behavior change. The SCT suggests that incentives, as external reactions that reinforce healthy behaviors, reflect the community values behind health beliefs and actions. For example, a community that positively values health because it promotes longevity and well-being is more likely to positively re-enforce health-promoting and health maintenance behaviors. Through a holistic approach from organizations, university administrators and other partners, HIV testing can be emphasized as a health maintenance strategy in the university community. This can be encouraged through communal reduction of stigma and increased HIV awareness and testing (Rosenstock et al, 1988).

Within literature, there is the facilitation theory (the humanist approach), within which the theory of facilitative learning was developed. The basic premise of this theory is the awareness done by a facilitator who will establish an atmosphere in which learners feel comfortable to consider new ideas. Here a facilitator will provide students with information concerning HIV/AIDS counseling and testing, on how HIV/AIDS is spread, and all its effects so that they able to make informed decisions. Information about HIV can help to reduce on myths, beliefs attached to HIV (Liard, 1985).

Re-enforcement theory is another theory which was developed by the behaviorist school of psychology notably by Skinner (as cited in Laird, 1985) who believed that behavior is a function of its consequences. The learner will repeat the desired behavior if positive re-enforcement (a pleasant consequence) follows the behavior. Positive re-enforcement can include verbal re-enforcement and in the case of this study it can include encouraging students to test for HIV, educating students on facts concerning HIV and its effects. In this study if one tests for HIV and she finds her self negative it can change someone's behavior especially if one has been living a risky life. Negative re-enforcement also strengthens a behavior and refers to a situation when a negative condition is stopped or avoided. For instance students stop living risky lives and stigmatizing HIV patients after getting to know about the facts of HIV and those who have been killed by the disease. Re-enforcement through sensitization seminars can help change the attitude of students towards HIV testing (Liard, 1985). Empowering Theory is based on Paulo Freire's ideas of Popular Education. According to Freire, bringing groups of people together to sensitize them about problems and jointly propose solutions can engender a sense of empowerment on the individual, community, and population levels. (Bernstein & Wallerstein, 1988).

The program planner facilitates this process by assisting community members to develop their own curriculum on HIV testing, providing direction and awareness regarding HIV testing as necessary while remaining non-judgmental and non-dictatorial. This for instance can be part of the students' coarse work. The program planners' primary responsibilities to the community are to listen, participate in dialogue regarding HIV information, and provide support for realizing the community's goals and objectives as far as HIV testing is concerned to help in increasing the number of students who are willing to test.

The AIDS Risk Reduction Model (ARRM), introduced in 1990, provides a framework for explaining and predicting the prevention efforts of individuals specifically in relation to the sexual transmission of HIV/AIDS.

It consists of 3 variables; recognition and labeling of one's behavior as high risk, making a commitment to reduce high-risk sexual contacts, test for HIV and reduce the risky activities, taking action which it self broken down into three phases; information seeking, through sensitization, obtaining remedies like testing for HIV regularly and enacting solutions like remaining negative for those that test negative and getting early treatment for those that are found positive. In relation to this study it would help students in acquiring knowledge about HIV and like curbing stigma, cultural influences, getting tested for HIV and in the end reducing risky behaviors amongst the students.

2.2 Factors influencing HIV testing amongst students at MUK

According to Myers & Jackson, (1991) HIV testing is usually hampered by stigma, lack of confidentiality of health workers and the beliefs that are held by people. Many people who have HIV do not actually know their status because they have never been tested, therefore undertaking a test for HIV is the only way to really know if someone is infected or not.

For over 20 years, client-initiated HIV testing and counseling, also known as Voluntary Counselling and Testing (VCT), has helped millions of people learn their HIV status. Nevertheless, global coverage of HIV testing and counseling programmes remains low. Efforts are urgently needed to increase the provision of HIV testing through a wider range of effective and safe options (WHO, 2010).

In 2007, WHO and UNAIDS issued guidance on provider-initiated HIV testing and counseling (PITC) in health facilities to increase uptake of HIV testing and improve access to HIV health services. HIV testing is a critical entry point to life-sustaining care for people living with HIV, and service delivery models need to be expanded to testing in antenatal care, sexually transmitted infection clinics, in-patient wards as well as free-standing, client-initiated testing centres. People who test HIV negative should receive counseling on how to reduce exposure to HIV and stay negative.

For many people, HIV testing is important because they want to know their HIV status (whether they are infected or not infected with HIV). If they find out that they have HIV they can take steps to remain healthy. To make the decision to be tested, you need a clear understanding of what the test is and what the results mean. No matter what you decide, having safer sex and safer drug use will reduce the chances for putting yourself or someone else at risk for HIV infection. The test is usually referred to as an "HIV test" or an "AIDS test" but in fact it is a test for HIV antibodies. Antibodies are made by the body as a result of infection with HIV. There are two types of HIV tests available in Toronto the "standard test" involves taking a blood sample, which is then sent to the lab to be tested for the presence of HIV antibodies. It usually takes about two weeks for the test results to come back. "Rapid" HIV tests are also available. This involves pricking your finger and testing your blood while you wait. The entire process, including counseling, takes about 20 minutes (ACT, 2009). HIV testing should be voluntary; this means that getting tested for HIV/AIDS is any ones choice. One decides if and when to get an HIV test and those who test undergo counseling before and after the test. Pre-test counseling includes a private session with a counselor who explains the testing procedure and how the results will be given (MJAP, 2006). One gets the chance to ask

questions about the test, and share any fears or worries and then decides if they are ready for the test. In post-test counseling, the counselor gives support and lets those testing know the result of test. The counselor makes sure people understand the result and allows them to express how they feel. They will help those with positive results make immediate plans and provide referrals for medical care, ongoing counseling and opportunities to talk to people who can help in making others understand more about HIV and AIDS, as needed (AIC, 2000).

The most common way of testing for HIV uses a blood sample, but there are oral-swabs and urine tests available in some places. Samples are tested in a laboratory to see whether there are antibodies in the blood. Antibodies are chemicals produced by our white blood cells to fight specifically against HIV (WHO, 2001).

If the test detects antibodies for HIV, then HIV has entered the body. When antibodies are found, the blood is HIV-positive, or sero-positive. Blood tests are 99% accurate in most places. This means there is a 1% chance the test will not be accurate, and may show a “false positive.” For this reason, most positive or indeterminate results are confirmed with a second test while a “negative” result means that antibodies were not found, indicating either that the person has not been infected with HIV, or, it may be too early to tell. In the 2-3 month period after infection, it is too early for antibodies to have formed. This period is called the “window period”. To be absolutely accurate, the test should be taken twice in three months giving HIV antibodies time to appear in the bloodstream after the time of infection (Youthnet, 2000).

2.3 Stigma and HIV testing amongst students

Stigma is still the most important issue that hinders HIV prevention. Fear of being identified with HIV often keeps people from seeking to know their HIV status, discussing prevention, changing unsafe behavior, and supporting care for PLHAs. Stigmatization thus threatens the utilization and effectiveness of HIV/AIDS prevention and care efforts (TASO, 2006). Stigma and discrimination also increases the pain and suffering of People Living With HIV AIDS and their families. AIDS is a transmissible and to date, a lethal disease; personal reactions to it inevitably are influenced by concerns about individuals' own well-being and that of their loved ones. AIDS also is a highly stigmatized illness. Many persons perceived to be infected with HIV have been fired from their jobs, driven from their homes and socially isolated .This stigma results both from the physical characteristics of AIDS (e.g., its negative effect on physical appearance and ability for social interaction; its communicability; its perceived lethality and its psychosocial characteristics (Herek, 1999). It was found out that 217 (70%) of the students did not test because of fear of being discriminated against; there this further confirms that stigma is rampant in restraining HIV testing.

Goffman (1963) is widely credited for conceptualizing and creating a frame work for the study of stigma. His work was seminal in creating an environment for ongoing academic research on the topic. In his land mark book “Stigma: Notes on the management of Spoiled identity” (1963), his explanation of stigma focuses on the public’s attitude toward a person who possesses an attribute that falls short of societal expectations. The person with the attribute is “reduced in our minds from a whole and usual person to a tainted, discounted one” (p.3). Goffman (1963), further explained that stigma falls into three categories: abominations of the body- various

physical deformities, blemishes of individual character, domineering or unnatural passions, treacherous and rigid beliefs, or dishonesty. Blemishes of character are inferred from, for example, mental disorder, imprisonment, addiction, alcoholism, homosexuality, unemployment, suicidal attempts or radical political imprisonment.

According to Goffman (1963), and other researchers, diseases associated with the highest degree of stigma share common attributes. The person with the disease is seen as responsible for having the illness. The disease is progressive and incurable, it is not well understood among the public and the symptoms cannot be concealed. HIV infection fits the profile of a condition that carries a high level of stigmatization. Firstly people infected with HIV are often blamed for their condition and many people believe HIV could have been avoided if individuals made better moral decisions. Secondly, although HIV is treatable, it is nevertheless a progressive, incurable disease (Herek, 2002). Thirdly, HIV transmission is poorly understood by some people in the general population, causing them to feel threatened by the mere presence of the disease. Finally, HIV infection is asymptomatic and its infection although asymptomatic can often be concealed, the symptoms of HIV related illnesses cannot. HIV – related symptoms may be considered repulsive, ugly and disruptive to social interaction (Herek, 2002). People living with HIV often are discriminated against by others (Lau & Tsui, 2003). Such discrimination toward PLWHA would compromise the effectiveness of HIV prevention and care programs. Experiencing discrimination or stigma also adversely affects the quality of life of these patients. Few studies have however, compared the degree of discrimination toward these two groups of patients (Walkup et al, 2004). Cultural interpretation of contagion of infectious diseases involves guiding principles that are related to social organization, supernatural powers etc. and in some societies, there are “diseases of guilt” and illness that expresses breach of a social rule. (e.g. Malaria)

which are interpreted as having a supernatural cause. With regard to HIV/AIDS, some people may regard PLWHA as personally responsible for contracting the disease or being punished by the gods. Discriminatory attitudes toward PLWHA have therefore to be understood in a social cultural context (Walkup et al 2004).

The discrimination and devaluation of identity associated with HIV – related stigma do not occur naturally. Rather, they are created by individuals and communities who, for the most part, generate the stigma as a response to their own fears. HIV related stigma manifests itself in various ways. HIV positive individuals, their loved ones and even their care givers are often subjected to rejection by their social circles and communities when they need support the most. They may be forced out of their homes, lose their jobs or be subjected to violent assault. For these reasons, HIV related stigma must be recognized and addressed as a life-altering phenomenon (TASO, 2006).

Although many Ugandan adults exhibit tolerance toward HIV positive individuals, stigma is still a problem that affects the every day lives of PLHA's and making those who have not tested fear to test for HIV. Students need to know the sources and forms of stigma and in turn incorporate them into HIV/AIDS prevention and this will help prevent further infections and slow down the global HIV and AIDS epidemic if people get to know their status and take preventive measures (MOH, 2004).

Many people with HIV experience problems in their everyday lives purely because of the virus. People fear to face rejection from friends and family and difficulties at work. They may get worse treatment from health and social care services. Sometimes their own communities appear to turn their backs on them. As a result, many people do not test for HIV for fear of the possible

consequences. This can result in other problems, increased anxiety, and difficulty in making relationships and lack of access to information or services. Some people choose not to get tested at all because they fear the difficulties a positive diagnosis could bring, thus risking long term damage to their health and possibly even death (Allan & Whiteside, 2007). From the findings 132 (42%) students indicated that knowing their HIV sero status would make them feel like they would die fast.

"As we work to scale up testing and counseling suitable to the regional context, we must safeguard the rights of those who test positive while securing resources for training in the health care system to further reduce stigma and discrimination. We need a greater commitment to change beliefs and attitudes about the virus and strengthen political will to make anti-discrimination policies a reality. No strategy to reduce the spread of HIV/AIDS can be effective unless the rights of children and young people are protected and strongly defended. No progress can be made until it becomes unacceptable to discriminate against those living with or affected with HIV/AIDS so that those have not tested have no fears of being discriminated against even if they are found positive (WHO & UNAIDS, 2002). Communities and governments must understand the factors that raise awareness in young people with public sensitization campaigns both in and out of schools, this will help combat stigma. They must enact legislation against violence, coercion, sexual exploitation amongst students and teachers (UNAIDS, 2002).

Studies provide evidence that stigma is associated with delays in HIV testing among individuals who are at high risk of being infected with HIV (Stall et al., 1996). In a study of gay and bisexual men who are unaware of their HIV status, two thirds of the participants expressed a fear of discrimination against people with HIV and said it was a reason for not getting tested (Stall et al.,

1996). Earlier in the epidemic, HIV stigmatization was shown to influence the way in which at risk populations approached HIV testing. People at risk for HIV infection were more likely to seek testing that was offered anonymously than testing that was offered confidentially (Johnson et al., 1998).

2.3.1 Internal Stigma and HIV testing amongst students

These are individual manifestations of feelings, emotions and reactions can vary gently from person to person. Internal stigma is where one is affected by one's sense of self, as well as external and physical influences. It comes from within us. It happens if people let themselves believe in or accept the stigma and believe that what they are facing is our fault. Refusal to test for HIV is associated to fear of shame and guilt, fear of dying, fear of being discovered, fear of causing pain, disappointment or suffering to family members, fear of lifetime treatment. Therefore improving support services for people living with HIV, increasing visibility of people living with HIV as productive members of society, providing more positive role models, strengthening self support groups, increasing self esteem and a sense of self worth can help to reduce this kind of stigma (Ogden & Nyblade, 2005).

People fear that persons with HIV/AIDS may have trouble forgiving them selves and accepting their HIV status because they accept or also believe the stigma. To let go of internal stigma one needs to accept oneself, gain confidence to test and disclose ones status so as to gain support from friends, family and community. Internal stigma is brought about by the fact that the disease is associated with bad behavior and with people like prostitutes. Religious or moral beliefs may also that lead some people to believe that having HIV/AIDS is a result of moral fault (promiscuity), rejection by family members, blaming PLWA and finding excuses of not caring

for them leading to their untimely death. From the findings 67% of the students feared to test because of fear of being judged while 78% could not test because of the people's negative attitudes towards HIV.

2.3.2 External stigma and HIV testing amongst students

External stigma includes patterns of prejudice, devaluing and discrediting people who are HIV positive. Labeling or marking people living with or affected by HIV, avoidance, isolation or segregation and differential treatment or prohibiting actions and institutionally sanctioned actions are often part of external stigma. It brings about discrimination and also moves beyond perceptions and attitudes into actions where people identify those infected, create a distance between oneself and them and restrict or exclude them. The recurring aspects of stigma include:- the illness of immorality which derives from the fact that AIDS is considered dirty and is equated with promiscuity and death (Parker & Aggleton 2003).

People fear to test because they fear that they will be treated differently and they also fear losing support. It causes people not to know their status and this causes stress which lowers the immune system and makes PLWA including students to be more at risk of getting more sickly. It lowers the uptake of VCT; makes people slow to seek care in early stages of illness, causes lack of support, loss of hope and rapid disease regression. Students must believe that they deserve the love and support of their family, partner, friends, neighbors, community even when they test and find that are HIV positive. HIV related external stigma is due to lack of understanding, myths about how HIV is transmitted, prejudice, lack of cure for AIDS, fears relating to illness and death, illiteracy and scare of contracting HIV (SCOT & MOH 2008).

The effects of external and internal stigma include isolation, exclusion, denying infected and affected people opportunities for employment, housing and promotion, depression and loss of self esteem, lack of capacity of communities to respond constructively to the devastation caused by the epidemic, marginalization, withdrawal, denial, feelings of helplessness and blame and silence which drain the strength of weakened individuals, prevent openness and impacts negatively on the national fight against HIV testing (SCOT & MOH, 2008).

Both internal and external stigma can be reduced through disclosure by role models or valued members of the community that have been tested is important in reducing stigma and increasing the uptake of HIV testing for instance when athlete Magic Johnson announced that he had tested for HIV and was sero-positive, there was a substantial increase in requests for VCT in the United States. There must also be perceived benefit to testing if people are to be tested. For those who test positive there must be a package of services to offer otherwise there is no point in testing. In a qualitative evaluation of young people in Rwanda some participants referred to an HIV positive result as 'a red card that is designed with a hoe and pick axe" and believed that death is near and in Eritrea some health service providers refer to counselors as angels of death. These sentiments illustrate the negative impact of fear tactics rather the necessary message of hope. The most successful VCT and care support initiatives have marketed hope in their names, logos and value added services e.g. Hope House (VCT centre), Fountain of Hope HIV project in Lusaka. Hope must also be promoted by health providers who can help or hinder VCT and other care and support services (Deborah & Baggaley, 2002). More to that 198 students fear testing because of fear of causing pain to their parents when found HIV positive, 104 (33%) are not willing to tell

friends about their intentions to test for HIV, 144 (46%) do not prefer from testing from places where do not record names and 154 (49%) prefer testing from far away places.

2.4 Confidentiality and HIV testing amongst students

This is where students fear up taking an HIV test because they believe that information about their HIV status may be accessible to their friends. Confidentiality is an important principle in health and social care because it functions to impose a boundary on the amount of personal information and data that can be disclosed without consent (Wikipedia, the free encyclopedia). Ethics and laws regarding confidentiality evolved long before the information high way was envisioned. The old laws and ethical precepts do not always fit neatly with today's computerized systems, given the difficulties with compliance to protecting patient's confidentiality. The law will gradually catch up with the new system and seek to protect confidential patient information. Physicians should inform patients of the limits of confidentiality protection and allow the patients to decide whether treatment outweighs the risk of disclosure of sensitive information. A patient expects to have his or her privacy respected by the physician and should therefore be protected. If a record must be released the patient should sign an appropriate release authorizing the disclosure of sensitive information to unauthorized people. A patient expects to have his or her privacy respected by the physician and should not be disappointed. If a record must be released the patient should sign an appropriate release authorizing the disclosure of information in the medical record. General records concerning other diagnosis will not suffice for records containing HIV or other sensitive material. Physicians should become familiar with laws involving the duty to maintain confidentiality. Any breach in confidentiality even one that seems minor can result and possibly a law suit or disciplinary action (HIPPA, 2005). Breaches of

confidentiality reduces people's chances of testing for HIV since they are not sure if the records will be kept confidentially. *30% of the students are not sure if the health workers keep their results in a confidential manner and there fore attributes it to their failure to test for HIV.*

The key feature of youth friendly health services is being able to keep patients results confidential, health workers should be trained how to treat the youth and their services should be free and mobile because youth fear to be seen for fear of disclosure of their results. Uptake for testing is low as many young people do not favor services within hospitals due to service provider attitudes, access issues such as obtaining parental consent for services should be stopped. The introduction of name reporting to aid surveillance causes some individuals to avoid testing. From the findings it was found out that *A m*ean *of 3.5 prefer testing from places where they do not record names*. Young people who are allowed to test for HIV in big numbers. Disclosure is to be discussed during counseling; therefore service providers are able to provide VCT to young people who request it without fear (Deborah & Baggaley, 2002).

HIV-related confidential information that is acquired while rendering HIV services is to be safeguarded against disclosure. This includes verbal or written disclosure, maintenance of records, or recording of an activity without appropriate consent of information release. Professional ethics or personal commitment to the preservation of trust may impose even stricter confidentiality guidelines than those reflected in the law (Lowa, 2006).

HIV providers are to develop and implement methods by which client confidentiality

Protections and rights are communicated and consent for services is obtained. Such methods should be appropriate to the intervention provided. Different types of interventions present

different requirements for how confidentiality should be handled. For instance, during group sessions participants and facilitators can set ground rules that address issues for disclosure of personal information. In all cases, legal requirements must be followed (Lowa, 2006).

2.4.1 Privacy of HIV Patients' information and HIV testing amongst students

As with all personal health information, patients' HIV test results should be available to health care providers only on a "need to know" basis. Usually this means that only providers directly involved in the patient's health care should seek information about HIV status. Exceptions exist for certain regulatory, quality improvement, research, and public health activities. Questions about access to personal health information can be addressed to local Privacy Officers (Ethan, 2005).

In addition to privacy requirements under the Health Insurance Portability and Privacy Act, information about HIV infection and certain other conditions are specially protected in Federal law. Release of information related to testing or treatment for HIV can only be released with the written permission of the patient. The permission for release of information must specifically state that HIV-related information will be released, and must identify the party to whom it will be released. Significant penalties exist for individuals who violate these requirements. Exceptions exist for certain regulatory, law enforcement, research and public health functions. Specific questions about release of HIV information can be addressed to local Privacy Officers or Regional Counsel.

Violations of these protections often occur inadvertently when health care professionals discuss HIV test results, HIV-related diagnoses or HIV treatment with patients in the presence of relatives or others who accompany patients to clinic visits or who visit them in the hospital.

Health care providers should make no assumptions that patients have informed or want to inform others of their HIV status (HIPPA, 2005).

State laws addressing the confidentiality of HIV-related information are a direct result of the social environment that surrounded the early stages of the AIDS epidemic. As the disease gained widespread attention in the late 1980s and early 1990s, most cases of AIDS involved homosexual men and IV drug users, historically groups subjected to discrimination. In addition, there was widespread public fear of what was perceived as an untreatable, universally fatal illness. The result was discrimination against HIV-positive patients, but at the same time public health officials and HIV patients-rights advocates voiced concern that easy access to HIV-status information would discourage those at risk from being tested. The need to protect information was crystallized in an opinion rendered by the New Jersey Superior Court in 1991.

Individuals infected with HIV are concerned with maintaining the confidentiality of their health status. HIV infection is associated with sexual practice and drug use, universally regarded as personal and sensitive activities. In addition, the majority of people infected with HIV in the United States are members of groups that are traditionally disfavored. Even before the AIDS epidemic, gays and intravenous drug users were subject to persistent prejudice and discrimination. AIDS brings with it a special stigma. Attitude surveys show that even though most Americans understand the modes through which HIV is spread, a significant minority still would exclude those who are HIV positive from schools, public accommodations and the work place. Unauthorized disclosure of a person's serologic status can lead to social opprobrium among family and friends, as well as loss of employment, housing and insurance (WHO, 2001).

Laws enacted to protect the privacy of HIV-related information vary widely from nation to nation. Typically, these laws require informed consent for HIV testing and provide for strict confidentiality of test results. Provisions are usually made for gaining access to HIV-related information in limited circumstances, usually involving threats to the public health (WHO, 2002).

“The courts have played a crucial role in the interpretation of these laws and the applicability of physician confidentiality concepts in the setting of HIV-AIDS. An example of a court holding a medical facility liable for breaching patient-physician confidentiality regarding HIV status even before any state legislation was enacted is the case of a New Jersey otolaryngologist. After being ill for several weeks, the otolaryngologist was admitted to a local hospital at which he held staff privileges. Bronchoscopy established a diagnosis of Pneumocystis carinii pneumonia, and the result of a blood test was positive for HIV, findings previously unsuspected by the patient or his treating physician. Despite actions taken by the treating physician to maintain confidentiality, the otolaryngologist patient returned home to a series of telephone calls from fellow physicians, none involved in his care, all indicating knowledge of his condition. Soon thereafter, a number of individuals in the broader community also indicated that they knew of the otolaryngologist's HIV status, and in a short period of time, the otolaryngologist became socially ostracized and his medical practice substantially contracted (HIPPA, 2005).

The otolaryngologist sued the medical center and his treating physicians for breaching their duty of confidentiality. Although unable to positively identify the exact source of HIV-status disclosure, the otolaryngologist alleged that dissemination of his health information showed that the defendants had failed to take reasonable action to restrict access to test results. The

defendants countered that they should not be liable for any disclosure by employees or other individuals outside of their control".

The resident strenuously argues that to allow future disclosures will be counter-productive and will discourage health professionals from seeking voluntary HIV testing. Certainly, it is unfortunate that [the resident] will be made to suffer personally and/or professionally as a result of his illness and this case. At the same time, however, we must consider societal implications. Secrecy in its purest form exacerbates fear and aggravates misconceptions. Case law acknowledges that individual privacy interests in medical information and records are not absolute. At times, the societal interest in disclosure outweighs the individual's interest in privacy. To avoid a constitutional violation, the state must show a compelling interest for breaching the privacy right. Here, the risk of transmission of a fatal disease and the prevention of the spread of AIDS are both appropriate state interests.

With cases of newly diagnosed HIV infection continuing and improvement in treatment allowing longer life for those living with the disease, HIV-positive patients are increasingly commonplace in all aspects of medical practice, including radiology. Although the near hysteria that HIV-positive patients faced at the outset of the epidemic has largely subsided, HIV is still perceived differently than other illnesses, and attention to confidentiality is still ethically and legally required. Disclosure of HIV-related information by a health care professional may subject that professional to a malpractice lawsuit or other civil litigation. Many courts have found that unauthorized disclosure of medical information by a physician may violate the physician's duty of confidentiality or the implied contract of confidentiality between the physician and the patient This has made many people fear to test for HIV due to lack of privacy of the results there fore if

worked upon many people will test for HIV and those who are HIV positive will be referred into care and those who a negative will stop living risky lives (HIPPA, 2005).

2.4.2 Security of Patient's Information and influencing HIV testing amongst students

Security refers to structures and processes that provide or improve security as a condition. A form of protection where separation is created between the assets and the threat. This includes but is not limited to the elimination of either the asset or the threat. In order to be secure either the asset is physically removed from the threat or the threat is physically removed from the asset, information security, computer security and information assurance fields are interrelated often and share the common goals of protecting the confidentiality, integrity and availability of information. Computer security focuses on ensuring the availability and correct operation of a computer system without concern for the information stored or processed by the computer (Lisanne & Trujillo, 2000).

Governments, military, corporations, financial institutions, hospitals, and NGO's amass a great deal of confidential information about their employees, customers (clients) health, products, research, and financial status. Most of this information is now collected, processed and stored on electronic computers and transmitted across networks to other computers. Should confidential information about a customers or finances or new product line fall into the hands of a competitor, such a breach of security could lead to lost business, law suits or even bankruptcy of the business. Protecting confidential information is a business requirement, and in many cases also an ethical and legal requirement. For the individual, information security has a significant effect

on privacy, which is viewed very differently in different cultures. For the health sector, protecting patients' health history against unauthorized individuals can help reduce stigma.

For protecting patients' data, three interrelated concepts have an impact on the development and implementation of protections for sensitive data. These are privacy, confidentiality, and security. Privacy is both a legal and an ethical concept. The legal concept refers to the legal protection that has been accorded to an individual to control both access to and use of personal information and provides the overall framework within which both confidentiality and security are implemented. Confidentiality relates to the right of individuals to protection of their data during storage, transfer, and use, in order to prevent unauthorized disclosure of that information to third parties (Annemarie et.al, 2007).

Security is a collection of technical approaches that address issues covering physical, electronic, and procedural aspects of protecting information collected as part of the scale-up of HIV services. The public health goal is to safeguard the health of communities through the collection, analysis, dissemination, and use of health data, which must be carefully balanced with the individual's right to privacy and confidentiality. Guidelines must allow for consideration of relevant cultural norms, which may influence these policies, while ethical principles should guide decision-making regarding the appropriate use and dissemination of data. Overall, guiding principles should be based on human rights principles. Security is a collection of technical approaches that address issues covering physical, electronic, and procedural aspects of protecting information collected as part of the scale-up of HIV services. While there are many common requirements to ensure the confidentiality and security at the various levels of healthcare provision, different levels may have specific security requirements. At each level, security

discussions should include identification of potential threats to the systems and data, the likelihood of harm from any of these threats to security, development of strategies to manage each of the identified threats, and a cost and risk trade-off analysis which attempts to practically balance the risks to security and resulting harm with the resources needed to manage the risk. Security must address both protection of data from inadvertent or malicious inappropriate disclosure, and non-availability of data due to system failure and user errors. Physical security ensures that information in paper or electronic format, needs to be physically secured, such as by being stored in a locked cabinet, within a locked room, and within a secured building. Data transfer of paper-based information may include transport in locked briefcases, transmission by fax (within some additional procedural protections) or using mail services within the organization (internal-mail) or between organizations (external-mail). Electronic infrastructures which are too geographically dispersed to be physically protected, such as a wide area networks (WAN), need to be secured via commercially-available or public domain encryption and password schemas (Frank et .al 2009).

Access to personal computers, laptops, and servers all need to be made secure through the use of passwords, key fobs, smartcards or other means of securing access to the stored information. The data may be stored in an encrypted format and contain other access controls such as passwords and user identifications. Data stored on local or wide area networks with large numbers of computers or internet access will require the use of technologies such as firewalls and routers to limit access to those entitled to the data. Different levels of access may be created depending on different purposes for the information, which is known as “role-based” access. As part of these security requirements, a written policy of security procedures needs to be produced that covers the way the data are collected, stored, transferred and released. These policies need to be

accessible to and known by those involved with the data at all levels. The policies need to be implemented at the relevant levels, and there is a need for staff to sign that they have understood the policies and will implement them as part of their work. This will also involve training new staff and updating all staff on the relevant procedures. Data release policies should define the release of information for different purposes, ranging from the release of clinical information to health professionals, relatives or friends, to the release of information held in medical records or electronic databases for program monitoring and evaluation, for reporting or research (Frank, 2009).

2.5 Beliefs and HIV testing amongst students

The issues surrounding HIV/AIDS are deeply embedded in cultural and social beliefs and practices, many of them personal and private. This creates a need to work with young people to create an environment in which AIDS is not discussed in secrecy and shame, but openly and with compassion. Sensitization campaigns address the wrong perceptions about HIV/AIDS. Organizations adhere to and demonstrate a philosophy of cultural competence and proficiency as characterized by acceptance and respect for differences, continuing self assessment regarding beliefs and continuous expansion of knowledge on negative beliefs. This philosophy is applied in all communities. It is incumbent upon organizations providing HIV services to demonstrate competency in addressing the diverse needs of the populations they serve in terms of age, gender, social economic status, sexual orientation and geographical settings. The change of the negative beliefs will make people have a different view about HIV and this will help them to know their status and change their behavior (Lowa, 2006).

2.5.1 Social Beliefs and HIV testing amongst students

People have a belief that those with HIV have lived immoral lives and promiscuous lives which makes it hard for students to test because they know they will be associated with people who live risky behavior. Students, especially girls, are increasingly being targeted for sex by older men seeking safe partners and also by those who erroneously have wrong beliefs that a man infected with HIV/AIDS can get rid of the disease by having sex with a virgin. Young women often have less decision –making power regarding sexuality than males, especially because they tend to have older male partners. These men ,'sugar daddies', are normally better off and able to provide the women with things they can't afford such as clothes, cosmetics and even school fees for students, therefore, this risky behavior makes young women fear to know their status (UAC, 2005). Students also believe that they cannot acquire the disease since it's associated with promiscuous people, gays and they believe that they are still young therefore AIDS is not for them, this denial makes them not to test. From the findings it was found out that 75 (24%) of the students believed that HIV is not for them. They also have perceptions that they are not at risk of getting HIV. They also don't have an idea of how HIV/AIDS is transmitted, the importance of testing and how to protect themselves from contracting the disease and others do not know how to avoid the infection (UNAIDS, 2002). With sensitization beliefs that are associated with HIV will be reduced amongst the university students. 12% of the students believe that HIV is for promiscuous people. This is a big number putting in mind that MUK students are literate 24% also feel HIV is really not for them and that they are too young to get it. Sensitization there if raised is believed to do away with such kind of myths.

2.5.2 Religious Beliefs and HIV testing amongst students.

Religion shapes everyday beliefs and activities but few studies have examined its associations with attitudes about HIV. People do not test for HIV due to the belief that HIV is a punishment from God and that people with it have not followed the word of God. Beliefs about HIV can also contribute to fatalistic attitudes and passive resignation which hinders participation in testing and treatment. The religious beliefs have a stigmatizing behavior towards PLWA therefore, understanding which religious beliefs are associated with shame, HIV stigma and assessing their prevalence in different congregations and demographic groups can help focus reach out campaigns and theological discussions to reduce HIV stigma and increase HIV testing among the students (Garner, 2005).

Gaining an understanding of how church members look to their religious community for guidance and support in matters related to HIV can help to direct collaborative efforts between church leaders, HIV educators and student community through incorporating and addressing interventions to reduce such religious beliefs and perceptions about HIV (Dilger, 2007). With 30% believing that those who are HIV positive will not enter the kingdom of heaven, it calls for diversification of the curriculum so that such can be tackled. From the findings it is believed that 85 (27%) of the students believed that people with HIV are the ones that live a sinful nature while 96 (30%) believed that people with HIV will not enter the kingdom of God, this shows that there is a good number of students who still have false beliefs concerning HIV.

2.6 Summary of the Literature

According to the literature, there are various articles which show that stigma is seriously affecting PLHA's since they are discriminated against therefore; the university is to put policies

to protect those who are HIV positive so that those who fear to test can get to know their status. Joint collaboration can be enhanced between universities and institutions of higher learning, the government and organizations which fight against HIV escalation. Service providers should ensure confidentiality of the results and with students; anonymity can be encouraged since students fear their names being written down for fear of their parents, sexual partners and relatives knowing. The government is to provide all the necessary materials for health education to all people of the public including the rich and the poor, the young and the old so everyone has an equal opportunity to know their Sero-status and help in the fight to help in the prevention of HIV/AIDS, students as stake holders can be engaged in planning and execution of efforts directed toward them.

If they are properly guided and their synergies harnessed, youth groups all over the world can make the greatest impact in the struggle to stop HIV infections.

The HIV related media, as one of the most powerful tools of attitude and behavior change has a big role to play in creating awareness, especially where they are perceived to be a trusted source of accurate, helpful information. The media is to therefore help students with high levels of stigma and those who are ignorant that they can not be infected with can know about facts of HIV and also be encouraged to test for HIV. The university can also consider HIV related entertainment through movies, comic books to be geared towards encouraging HIV testing.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter describes and explains the methodology which was followed in conducting the study. It consists of the Research design, study population, sample size, sampling techniques, data collection procedures, data collection methods and instruments, validity and reliability, measurement of variables and methods of data analysis.

3.1 Research Design.

A research design is a conceptual structure with in which research is conducted and it constitutes the blue print of collection, measurement and analysis of data (Kothari, 1985).

The cross-sectional study design was chosen for this study to capture factors influencing HIV testing amongst students at one point in time. The design, methods used are the most appropriate and have never been used before on the same study and the literature review from different researchers proved that the research study is not a duplication of the previous work. The subjectivity associated with qualitative research is minimized by the objectivity of qualitative research.

3.2 Study Population

Population is the complete collection of all the elements that are of interest in a particular investigation (Amin 2005, Pg 235). Makerere University has 3 halls of residence for girls and 4 for boys. Using purposive sampling 1 hall for girls was identified and 1 hall for boys was

identified to represent a population of 30,000 and 2000 post graduates at Makerere University. The total population of the study was calculated as 1927. Makerere University was chosen because it's located near Mulago where there are over 5 HIV/AIDS projects that offer free counseling and testing and yet these services are sometimes brought closer to their halls of residence but they never test.

3.3 Sample Size Determination

Students from these two halls are of opposite sexes and have a strong solidarity between them. Also the halls are so close to each other making it easy for students from either halls to visit one another frequently at any time of the day or night hence ending up in sexual relationships and still most organizations target these halls when they are doing HIV testing and yet most of them have not tested, therefore the research is to find out the factors that make these students not to test for HIV. The sample size was determined using the Krejcie and Morgan Table as shown in Table 9; therefore the sample size selected was 327.

3.4 Sample size and selection

A sample is a sub group or subset of the population and by studying the sample, the researcher was able to draw conclusions that were generalizable to the population of interest (Sekaran, 2005). The lists of students from the hall custodians acted as the sampling frame. The sample size was important to establish the representativeness of the sample for generalisability.

The accessible population is a summation of the number of students residing in Lumumba and Mary Stewart halls; Mary Stewart and Lumumba halls have up to 1,312 and 590 students respectively and these were inclusive of 16 students who were chosen for the 2 focus group discussions using purposive sampling, 2 university leaders, 3 religious leaders and 4 counselors

were chosen using purposive sampling since it was the best way to choose respondents who were knowledgeable.

Sampling is the process of selecting a sufficient and representative number of elements from the population so that a study of the sample and understanding of its properties or characteristics would make it possible for the researcher to generalize such properties or characteristics to the population elements (Sekaran, 2005). This was determined using a table by Krejcie & Morgan, 1970 as cited in (Amin 2005, pg 454) as illustrated in Table 2.

3.4.1 Sampling methods and procedures.

A Simple random sample from the halls of residence was done using computer generated random numbers. The sampling frames were the lists of students from the halls of residence which were obtained from the hall wardens. From the table below it shows that 320 students were chosen using the simple random sampling for the self administered questionnaire, 16 students were chosen for the 2 focus group discussions using purposive sampling and 2 university leaders, 3 religious leaders and 4 counselors were all chosen using purposive sampling since it was the best way to choose respondents who were knowledgeable.

Table 1: Categories, Population, Sample size, Sampling Techniques and Data collection Methods.

	Category	Population (N)	S=Sample Size/No of respondents selected	Sampling Techniques	Data collection method
1	Students (excluding student leaders)	1,902 590 from Lumumba Hall, 1312 from Mary Stuart.	320	Simple random Sampling	Self administered Questionnaire
2	Students Leaders	16	16 students for 2 FGDs.	Purposive Sampling	2 FGD
3	University Leaders.	2	2 wardens interviewed (1 from each hall)	Purposive Sampling	Key Informant interviews
4	Religious leaders	3	3 leaders from the 3 predominant faiths at the university.	Purposive Sampling	Key informant interviews
5	Counselors	4	4 counselors	Purposive	Key informant

			from the university hospital	Sampling	interviews
	Total	**1927**	**327**		

3.5 Data Collection Methods

Data were collected using interviews, self administered questionnaire and Focus Group Discussions.

3.5.1 Interviews

These were used because they helped the researcher to follow up leads and thus obtain more data and greater clarity. Through careful motivation of the subject and maintenance of rapport the interviewer could obtain information that the subject would probably not reveal under any circumstances Amin (2005). It was conducted with religious leaders, university administrators and university hospital health workers and student leaders. Using purposive sampling technique the researcher chose informants that were thought to have the required information with respect to the objective of the study. These were interviewed in their respective offices at the time of their convenience. The answers they gave to the questions were written down. These helped to gather information to cross check the quantitative information obtained using findings.

3.5.2 Focus Group Discussion

This is where a researcher gathers people from a similar background or setting or experiences to handle and discuss an issue or topic of interest to the researcher. FGDs were used because they allow flexibility of the members to freely discuss the topic under study and helps in collection of first hand information. Two FGD's were carried out with 8 participants per group and the responses were written down by the research assistant. The participants included student leaders

including the chair persons of the halls, the health ministers, entertainment ministers, counselors and doctors.

3.5.3 Questionnaire Survey.

These are carefully designed instruments for collecting data in accordance with the specifications of the research questions and hypotheses. Students filled in their responses on the questionnaires and these were later analyzed. These were used because they have greater assurance of anonymity since HIV testing is a sensitive topic; students were able to give sensitive information without fear as their identity was not needed on the questionnaire.

3.6 Data collection instruments

3.6.1 Interview Guide

These are pre-formulated written questions which were used in Key informant interviews. These were mainly open ended questions used while conducting interviews with religious leaders, student leaders, hall wardens, health workers and university administrators. It could easily guide the researcher in asking all questions required to collect the data. They were used since they are appropriate in providing in-depth data, data required to meet specific objectives, allows clarity in questioning and quite flexible compared to questionnaires (Mugenda & Mugenda, 2003).

3.6.2 Focus Group Guide

These are pre-formulated written form of questionnaire which was used while conducting Focus Group Discussions. It is used because it helps in getting information from the students. It helped in guiding the moderator and it could easily rectify vague questions.

3.6.3 Questionnaires

They included 5 point Likert scale and other open ended questions which were pre-formulated. The researcher administered the questions to the students. These are used because they give immediate feed back, they are easy to administer and obtain within a short time from large numbers of respondents and the data obtained from questionnaires is easy to analyze.

3.7 Pre-testing of data collection instruments

3.7.1 Validity

Amin (2005:284) defines validity as the appropriateness of the instrument in measuring whatever it is intended to measure. In ensuring content validity of the instruments, questionnaires and interview items were designed according to the objectives of the study as guided by the variables and components in the conceptual frame work (Sekaran, 2003, p. 206). To ensure validity of the instruments, the supervisor and other expert colleagues in the field of HIV were requested to critique the questionnaire on content of the instruments before the actual research. They help in rectifying vague questions and other questions that were not relevant to the study; this therefore helped in ensuring that the right findings are got.

3.7.2 Reliability

According to Amin (2005:284), reliability is the consistency with which an instrument measures whatever it is intended to measure. Questionnaires were pretested in MUBS to test the reliability of the instruments. Expected answers were then weighed and reliability tested from responses. Test re-test was used to see if scores on the same test by the same individuals were consistent

over time. It provided evidence that tests at one time were close when the test was re-administered.

3.8 Procedures for data collection

The researcher obtained a letter of introduction from (Uganda Management Institute) which was presented at Makerere University to the hall wardens in order to be permitted to carry out the research.

The researcher made appointments for face to face interviews with religious leaders from the different religious denominations, health workers within the university hospital, university administrators who could provide detailed information and opinion based on expert knowledge on how stigma, beliefs, confidentiality and sensitization influence students to test for HIV. This was done by the researcher by asking open ended questions following the interview guide.

Using the Focus Group Discussions, the halls chairpersons helped in organizing the respondents. A group of 8 students were engaged in a discussion in Lumumba and 8 in Mary Stuart respectively where two FGDs were carried out in the two halls of residence. The researcher acted as a moderator for the two discussions and was helped by a student to record the outcomes of the discussion. After the discussion the facilitator and recorder met to review and complete the notes taken during the Focus Group discussion.

For Questionnaire Surveys, questionnaires were delivered personally by the researcher and the research assistants to the target population which was students from Mary Stuart and Lumumba halls of residence. The questionnaires were then hand delivered to the chairperson's rooms immediately after they had been filled.

3.9 Measurement of Variables

Variables will be measured as follows:-

Table 2: Measurement of variables

Variable	Scale
HIV testing **Factors** - **Stigma** - **Confidentiality** - **Beliefs**	Likert scales were used to allow students to rate the factors influencing HIV testing amongst students. It was mainly used to determine those who have ever tested, how stigma, confidentiality, Beliefs and sensitization influence students to test for HIV. A Likert scale statement is followed by the five category response continuum: 1. Strongly Disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly Agree. Some factors were operationalised as questions probing for categorical responses; for these the dichotomous scale was used. e.g. – 1. Yes 2. No.

3.10 Data Analysis

3.10.1 Quantitative data analysis

Descriptive statistics were generated so as to obtain a better understanding of how the data were distributed in the sample. These included mainly frequency distributions, Mean, standard

deviation. Logistic regression was used to study the relationships between the independent variables and the dependent variable (HIV testing).

Data were captured in an MS-ACCESS database and analyzed using STATA software. These packages were chosen mainly because of their wealth in analysis tools and user friendliness.

3.10.2 Qualitative data analysis

Also the qualitative findings were compiled into themes and used to validate and enrich the quantitative findings. Here data were analyzed before during and after collection. Before data collection tentative themes and categories were identified. Information of same categories was assembled together concerning the objectives.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS

4.0 Introduction

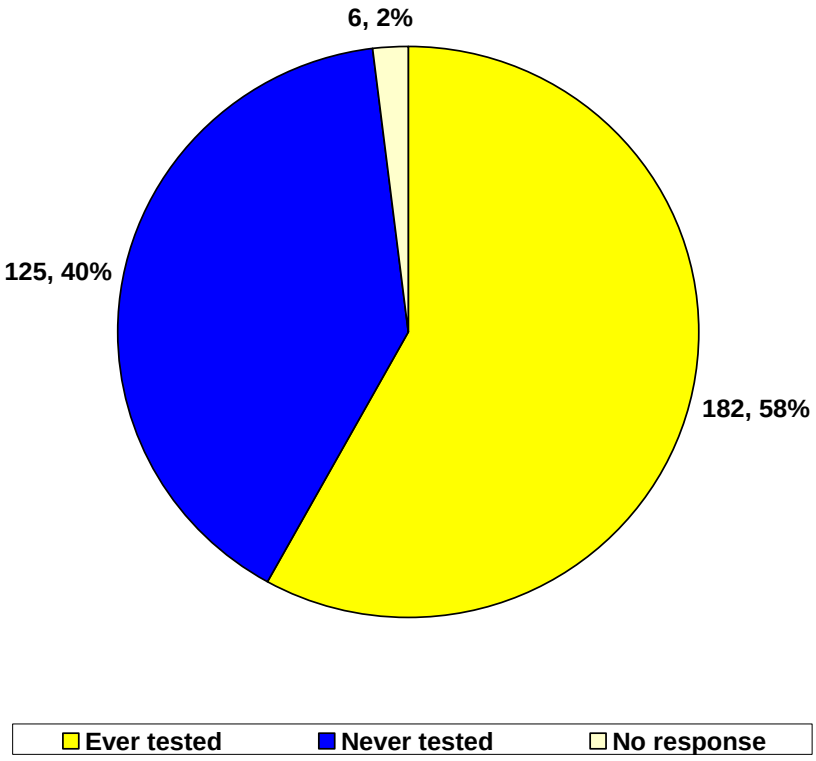
This chapter contains the presentation, analysis and interpretation of data. It shows descriptive statistics presented in form of tables, pie charts and graphs. Qualitative findings are also clearly outlined in form of text to show the individual responses from students.

4.1 Emperical findings

The section below provides general preliminary description of students HIV testing history. The data has been analyzed and summarized from 314 students of these 104 were males while 211 were females. The remaining 6 students never responded to the questionnaires. This represents 1902 students from Mary Stuart hall Lumumba.

The Pie chart below shows those who have tested and those who have never tested amongst students at Makerere.

Figure 2: Students interviewed by knowledge of Serostatus



A slight majority of 182 (58%) had tested before and much bigger majority 166 (91%) of those who were tested received their results. However, the proportion of those who had not tested is still high (42%) and cannot be underestimated. HIV positive students who do not know their sero status continue to spread the virus unknowingly where as HIV negative students continue to live a life of uncertainty and end up contracting HIV unknowingly as well. Students therefore need to know their results as an HIV prevention measure.

Table 3: HIV testing indicators

The table below shows how students at Makerere perceive HIV testing.

5 = Strongly agree, 4= Agree, 3=Not sure, 2=Disagree, 1=Strongly disagree.

Testing indicators	# Agreed	% agreed	# Disagreed	disagreed	Mean	Std. Deviation	Average response
Willingness to test for HIV.	257	82%	56	18%	4.3	1.1	Agree
Having the courage to test.	172	55%	141	45%	3.3	1.2	Not sure
Thinking it's vital for students to test.	197	63%	116	37%	4.5	1.4	Agree
Willing to tell friends about their intensions to test.	210	67%	103	33%	3.3	1.4	Not sure
Agree that HIV is not for me therefore testing is not important.	78	25%	234	75%	2.3	1.5	Disagree
Feel they are too young to catch HIV.	75	24%	238	76%	2.2	1.3	Agree

Source: Primary data

The mean represents the total score of responses divided by the total number of responses for each questionnaire item. The highest possible average per response is 5 while the lowest is 1. The standard deviation is a measure of dispersion of the responses from the mean determined by calculating the square root of the mean squared deviations from the mean responses for each question. In reference to Table 4, 257 (82%) of the students are willing to test, students expressed a positive attitude towards testing as evidenced by their mean responses for willingness (mean = 4.3). However, there was uncertainty realized regarding the courage to access HIV testing. This can be clearly explained by the mean response of 3.3 which is close the

category for uncertainty (3). The study revealed that (210) 67% of the students were willing to share intensions to test and all assessments generated a moderate average response of 3.3. This is also close the category for uncertainty (3). This is a sign of great internal and external stigma associated with HIV counseling and testing among students.

In comparison with results from figure 2, it's indicated that only 182 (58%) have ever tested and 257 (82%) are willing to test. However due to other factors like stigma, beliefs, a significant proportion of students has not accessed testing services. Therefore, sensitization needs to be stepped up to reduce stigma so that students are encouraged to test for HIV.

4.2 Stigma and its influence on HIV testing.

Table 4: Proportion for those who agreed to the stigma indicators

Perceptions about Stigma	disagree / strongly disagreed / neutral		% agree / strongly agree	
	Frequency	%	Frequency	%
Students who said positive results would rather be kept a secret	79	25	236	75%
Those that can't test because in case I'm positive I will be discriminated against	93	30	217	70%
Students that fear going for testing because people will know that I have HIV	62	20	249	80%
Students that fear testing because of people's negative attitudes towards HIV	69	22	245	78%
Students don't want to test because people who will see me going to test will judge me	102	33	207	67%
Students who are willing to test for HIV	57	18	257	82%
Students who are willing to disclose to others.	141	45	173	55%

Students who indicated that knowing their HIV sero-status would make me feel they will die fast.	182	58	132	42%
Students who expressed fear of causing pain to their parents when found HIV positive.	116	37	198	63%
Students who prefer testing from faraway places.	160	51	154	49%
Students willing to tell friends about their intensions to test.	104	33	210	67%
Students who prefer testing from places where they do not record names.	144	46	169	54%
Students who prefer testing from faraway places.	160	51	154	49%
Students who agree that HIV is a disease for promiscuous people.	276	88	38	12%

Source: Primary data

More than 70% of the students interviewed agreed to the following stigma indicators; preference to keep HIV positive results as a secret, fear of being discriminated against after testing HIV positive, fear of being suspected to be HIV positive after being seen visiting a testing center.
This shows that students are very sensitive of what their peers and other people in the community might think about them when they access testing services. Students generally fear others thinking about them as HIV positive.

However, less than 70% of the students interviewed agreed to the following indicators; willingness to disclose to others, fear of being judged by others, fear of dying early after receiving an HIV positive test result, fear of causing pain to parents after receiving HIV positive results, preference to test from far away places, sharing intensions to test with friends, preference to test where names are not recorded, preference to test from far away places and agreeing that HIV is a disease for promiscuous people.

Table 5: Means, standard deviations and Average responses for stigma indicators

Perceptions about Stigma	Mean	St. dev	Average response
Positive results would rather be kept a secret	4.5	1.2	Agree
In case I'm positive I will be discriminated against	4	1.1	Agree
People will know that I have HIV	3	1.1	Neutral
People have negative attitudes towards HIV	4.7	1.4	Strong Agree
People who will see me going to test will judge me	4.3	1.5	Agree
Willing to test for HIV.	4.3	1.1	Agree
Willing to disclose to others.	3.4	1.4	Neutral
Indicated that knowing their HIV sero-status would make me feel they will die fast.	3.0	1.5	Not sure
Expressed fear of causing pain to their parents when found HIV positive.	3.8	1.4	Agree
Prefer testing from far away places.	3.2	1.6	Not sure
Willing to tell friends about their intensions to test.	3.7	1.4	Agree
Prefer testing from places where they do not record names.	3.4	1.5	Not sure
Agree that HIV is a disease for promiscuous people.	2.1	1.2	Disagree

Source: Primary data

Stigma is still very high amongst the students as evidenced by the high tendency of key stigma indicators to 5 on the Likert scale. Students are generally strongly in agreement that positive results would rather be kept a secret (average score = 4.5) and many fear to see them attending HCT as they will be judged. (Mean = 4.3). Students also fear people knowing that they have HIV (Mean = 3). This shows that students would rather keep their results known to themselves and not any of their peers or others people in the community.

Students tended to be very unsure about their willingness to disclose to others, knowing that HIV would make them die fast and preference to test from far away places (average score = 3.4,3.0 and 3.2 respectively). This is supported by results from the FGD about stigma where students commented that *"HIV leads to slow and painful deaths so that is why students don't want to test.*

Students fear to find them selves positive because they will die faster so they would rather not test. They also fear that they will be looked at by their peers as fornicators"

This shows that students do not want to be associated with irresponsible sexual behavior. It also shows that students who access testing services are mainly those who are living reckless sexual life styles. Stigma is therefore a great hindrance to HIV testing especially amongst students as shown by the scores in the above table and responses from the Focus Group Discussions and Key Informant Interviews below.

4.2.1 Comments from the focus group discussion about stigma and its influence to test for HIV.

Stigma significantly influences students to test for HIV. This is supported by data from the FGD as below:-

"HIV leads to slow and painful deaths so that is why students don't want to test. Students fear to find them selves positive because they will die faster so they would rather not test." Majority of the students said. *"I'm still young and I have a lot of dreams ahead of me. What kind of life will I lead after being found positive? All my dreams will be shattered." Most students fear disappointing their parents who are paying for them tuition, if they are found positive they may miss out on their education. "Students fear to be inferior and how people will look at them since people who are positive are seen as promiscuous".* One of the doctors remarked*." Many fear losing their partners if they are positive". "We fear to go to places that are near the opposite sex. We would prefer the services to be brought near us in one of the rooms and probably the health worker could be there full time since we have a busy schedule. "*Most of the girls

commented; *"We are tested from an open place where we are seen by passersby. We would rather be tested in a "kafunda" or if possible testing services could be brought to us at night".*

4.2.2 Comments from the Key informants about stigma and the decision to test for HIV.

One religious leader interviewed commented that *"we have interacted with many students but; the majority fear to test because they fear to know the results because of their previous lifestyles, students know that they are still young people therefore, they don't have the passion to take the tests. They also fear to disappoint their parents in case they are found positive and being discriminated against in the society".* A health worker said that *"some students don't turn up to take their results after testing because they fear the results and repercussions that may come along with the positive results".* One of the administrators commented that *"students are in a tricky stage which when they mess up, they fear to test because they see they have many years ahead of them so to them testing would come a long with a positive result which may disrupt their lifestyles".*

The results from the students, religious leaders and hall wardens, doctors and counselors above clearly confirms the intense stigma among students that greatly influences their HIV testing amongst students. Fear for the outcome of the results and subsequent consequences of a positive outcome, is the leading hindrance to testing. While interacting with the students it portrayed that students don't mind the kind of life they live at campus most of them wanted to be serious later in life but at campus they say it's the time for enjoying life. This therefore is to call upon all the partners in HIV AIDS prevention and heads of institutions to put together resources and save the future of tomorrow through sensitization to ensure that stigma is reduced so that more students

test for HIV hence live a more cautious life. In conclusion therefore, stigma significantly influences students to test for HIV. Results from logistic regression revealed statistical significance between clients who shared the opinions that positive results would rather be kept a secret and HIV testing. (Odds ratio = 0.80, P-value = 0.04). Clients who felt results would rather be kept a secret were less likely to access HIV testing compared to those who felt results would not rather be kept a secret.

4.3 Health workers' confidentiality and its influence on HIV testing amongst students at Makerere University.

Table 6: Proportions of those who agreed to the following views about health workers' confidentiality

Perceptions about health workers confidentiality	Mean	Std.Dev	Average response
I feel free to share health problems with health workers.	4.0	1.14	Agree
Health workers keep confidentiality of results.	3.7	1.08	Agree
Prefer to test with health workers who do not know me than those who do.	4.0	1.33	Agree
Prefer testing from places where they do not record names.	3.4	1.52	Not sure
Prefer testing from centres / hospitals for only youths.	3.5	1.33	Not sure
Would take an HIV test in any place	3.3	1.50	Not sure

Source: Primary data

The findings show that students prefer to be tested by health workers who do not know them than those who do (mean = 4.0) and from places where they do not record names (Mean = 3.4). This is sign of fear of being associated or known to have HIV positive results especially by those known to them. Nevertheless, students have confidence in health workers' ability to keep their results confidential. This is evidenced by the 3.7 average score.

Students also expressed freedom to share their health issues with health workers (mean = 3.7) and desire to access testing from centers for only youths (mean = 3.5) and uncertainty in regard to testing from any place (Mean = 3.3).

However, some fears were raised in regard to the credibility and competencies of the service providers. This can be evidenced by some of the comments raised below from some of the participants in the focus group discussions;

"We don't trust the medical people they may be paid to give the wrong results," commented one student.

Another student mentioned that, *"What I don't trust about the health workers are the qualifications because they may be bringing people who are not qualified to test them and who don't know how to prick."*

4.3.1 Comments from the Key informants concerning confidentiality and its influence on HIV testing among students.

One religious leader commented, "*Where the students test from also matters a lot, they need to test from places that are youth friendly".* One of the health worker commented *"that the students even fear them when it comes to testing for HIV. They even fear to say they want to test for HIV, they say my entire blood but when they know what they want. Some even fear to open up".*

The health workers commented "*that when the students are asked why they don't want to test from the university hospital most of them say that they don't know how the results are kept since they don't see any computers to keep the information".*

From the analysis, a mean of 4.0 and a standard deviation of 1.14 shows that students feel free to share health problems with health workers and a mean 3.7, and a standard deviation of 1.08 shows that health workers keep confidentiality of results. However, most of the students agreed that they would rather be tested by health workers who do not know their names so that no one gets to know that they tested and in case they are positive, results can not be known by any other

party. Other responses however, show that students were not sure if they would take an HIV test in any place. Results from logistic regression revealed clients who were free to share health problems with health workers were more likely to access HIV testing compared to those who were not free to share their results (Odds ratio = 1.63 , P-value = 0.02).

The religious leaders insisted that where the students test from matters since it would be very vital for them to test from youth friendly centers and must have trust worthy healthy workers so that students can be influenced to test. Comments from the FGD also support the above findings where by majority of the students said that they don't trust the health workers because the university hospital doesn't even have computers where to store results, so this means that results are kept any where for anyone to view them therefore most of them said they would rather test from where they are not known. More to that HIV testing services should brought near to the every hall of residence and a full time counselor be brought near to attend to students' problems. This will solve the issue of students who do not know where to test from and also students who are so busy to be in position to test. According to table 7, confidentiality of the health workers is not significantly prevalent with in the students as evidenced by the average responses to all the items but however the few students who don't trust the health workers should also be taken into account so that the lives of these students are saved through getting to know their status.

In conclusion therefore, the university administration should improve on the security of the students results and this can be done by employing a Data Officer to capture the student results and store them on the computer and also enforce privacy of the students results by stopping unauthorized individuals from accessing this data by putting passwords. With trustworthy healthy workers, the administration of Makerere renovating the hospital and putting in modern

equipment and increased awareness about the free HIV services at the university will help influence students to be able test for HIV.

4.4 Social and religious beliefs and their influence on HIV testing

The table below shows students perceptions on the social and religious beliefs.

Table 7: Social and religious beliefs

Social perceptions	Frequency agreed	Frequency disagreed	% agreed	% disagreed
Percentage of students who agreed that PLHIV are immoral and live risky lives.	50	263	16%	84%
Percentages of students who feel HIV/AIDS is really not for them and are still young to get it.	75	238	24%	76%
I easily share my HIV status with my religious community	38	279	12%	88%
People with HIV/AIDS are the ones that live a sinful nature	85	230	27%	73%
People with HIV/AIDS will not enter the kingdom of God	96	224	30%	70%

Source: Primary data.

Table 8: Mean, standard deviation and average responses concerning social and religious beliefs.

Religious perceptions	Mean	Std. Dev.	Average response
PLHIV are immoral and live risky lives.	2.0	1.28	Disagree
HIV/AIDS is really not for me and I'm still young to get it.	2.3	1.50	Disagree
HIV/AIDS is a punishment from God.	1.9	1.24	Disagree
I easily share my HIV status with my religious community	3.0	1.36	Not sure
People with HIV/AIDS are the ones that live a sinful nature	2.2	1.23	Disagree
People with HIV/AIDS will not enter the kingdom of God	2.0	1.40	Disagree

Source: Primary data.

The tables above show the frequencies, the percentages of those who agreed, the mean, standard deviation and average responses of students as far as social and religious beliefs are concerned.

According to table 7 negative social and religious perceptions about HIV/AIDS are not predominant in the student community as evidenced by the average responses to all the above items but 16% of the students believed that PLHIV are immoral and live risky lives, 24% believed that HIV is not for them shows that the students are ignorant as far HIV is concerned. 27% believe that people with HIV are the ones that live a sinful nature and 30% believe that they will not enter the kingdom of God. Results from logistic regression revealed that clients who agreed that PLHIV are immoral and live risky lives were less likely to access HIV testing services compared to those who did not agree to this. (Odds ratio = 0.78, P-value = 0.045).

There fore these findings are meant to help institutions to devise measures to ensure that all the university students are knowledgeable about HIV so that it becomes easy for them to protect themselves from the disease. This is further supported by comments from FGDs and KII below which show students' perceptions about social and religious beliefs. *"Religious faiths teach about abstinence and yet in this era it's very difficult to abstain" Majority of the students said:- "They rarely teach about HIV testing in church" "If one is a committed church member they should be negative so I can't test. How will they perceive it if a committed Christian is found positive?" The church teaches people to discriminate others even those who are HIV positive". "People think when you are testing you are promiscuous so people will take me to be like that also" "Those who are positive are referred to as 'living dead"*

Students from Lumumba Hall remarked that "The churches only blame the sinners so they can't test because if found HIV positive they'll discriminated by the religious community."

The comments above show that the religious leaders talk mainly about abstinence and this alone

can’t curb down the spread of the HIV virus. More messages concerning HIV testing should availed to the students.

Despite social and religious beliefs not being predominantly associated with HIV testing among students, HIV/AIDS organizations and the religious community should partner with the students to ensure that they are aware of such factors that hinder them from testing and address them when there is still time so as to save the lives of these young people since 27% of them believe that HIV is for those who live a sinful is not a small number which shows that some students are still ignorant amount the spread of HIV/AIDS.

CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.0 INTRODUCTION

This chapter discussed the summary of the study, the discussion, conclusions and recommendations. This was done objective by objective.

5.1 SUMMARY OF FINDINGS

The purpose of the study was to examine factors influencing HIV testing amongst students at Makerere University. The specific objectives were to assess the effect of stigma, beliefs, confidentiality and a moderating variable sensitization on how they influence HIV testing amongst students. Factors influencing students were conceptualized as independent variables namely stigma, beliefs, confidentiality while the dependent variable was HIV testing.

Qualitative and quantitative data were collected using questionnaires, interviews and Focus Group Discussions. Descriptive statistics of frequencies, percentages, mean, and Standard deviation were computed using STATA and data were entered using ACCESS. The study focused on the accessible population of 1902 included 1312 students from Mary Stuart and 590 from Lumumba with whom questionnaires were administered. Out of the accessible population, a sample of 302 was chosen using Krejcie & Morgan, 1970 as cited in Amin (2005). The study adopted a cross-sectional study design to capture the characteristics and perceptions of the students at one point in time. The study answered the following research questions:-

i) What is the effect of stigma on influencing HIV testing amongst students at Makerere University?

ii) What is the effect of confidentiality on influencing HIV testing amongst students at Makerere University?

iii) What is the effect of beliefs on influencing HIV testing amongst students?

The study tested the following hypotheses,

1. Stigma significantly influences HIV testing amongst students at Makerere University.

2. There is a strong positive effect between confidentiality and influencing HIV testing amongst students at Makerere University.

3. Beliefs significantly influence HIV testing amongst students at Makerere University.

It was found out that stigma significantly influences HIV testing amongst students, this is because majority of the students agreed to rather keep their positive results undisclosed (mean 4.5) and a mean of 4.3 also agreed that those who see them going to test for HIV will judge them, 4.7 agreed that they have a negative attitude towards HIV testing.

With confidentiality a Mean of 4.0 prefers to test with health workers who do not know them, in general confidentiality negatively influence HIV testing amongst students due to the findings from the Focus Group Discussions and Key Informant Interviews it shows that confidentiality negatively influences HIV testing amongst students. According to the findings negative social and religious perceptions about HIV/AIDS are not significantly prevalent in the student community as evidenced by the average responses to all the items but however with 16% of the students believing that PLHIV are immoral and live risky lives, 24% believed that HIV is not for them shows that the students are ignorant as far HIV is concerned. With sensitization, the data

collected revealed that sensitization is significant in moderating the independent variables' relationship in explaining HIV testing amongst students, with a P-value of 0.035. 54% of the students believe MUK has conducted enough HIV/AIDS sensitization campaigns, 19% agreed that MUK has enough policies, 40% believed that MUK played a big role in encouraging students to test. This therefore, shows that sensitization moderates the relationship between stigma, confidentiality, beliefs and HIV testing amongst students.

5.2 DISCUSSION

5.2.1 HIV testing amongst students

Making a decision to test helps remove uncertainty and doubt of whether one is infected or not. Students need to make a decision of whether to test for HIV or not. 131 (42%) of the students who admitted never to have tested for HIV had great fear to be given positive results. This forces many to postpone HIV testing to either at the time of marriage or when symptoms emerge. For students with partners, there is great fear of what the partners will think. If they understand why they need to test, it will help them to test. It was found out that 82% were willing to test for HIV but however when asked if they had the courage to test only 55% accepted to have the courage. 25% agreed HIV is not for them so they did not see the need for testing. There is a big number of students who have not tested, this therefore puts students lives in danger because those who do not know their status and are engaged in risky sexual behavior continue living like hence this puts them at a risk of acquiring the disease.

5.2.2 Stigma and how it influences HIV testing amongst students

Stigma and discrimination relating to HIV/AIDS (AIDS stigma) undermines public health efforts to combat the epidemic (UNAIDS, 2000). AIDS stigma negatively affects preventive

behaviors such as HIV test-seeking behavior, care-seeking behavior upon diagnosis, quality of care given to HIV-positive patients, and perception and treatment of PLHA by communities, families, and partners Herek, 1988). One of the most surprising elements of AIDS stigma is its ubiquitous nature even where the epidemic is widespread and affecting so many people, such as in sub-Saharan Africa. Therefore, as many in the HIV/AIDS community note, decreasing AIDS stigma is a vital step in stemming the epidemic (Cameron, 2000). Given this situation, it is critical that interventions that effectively reduce AIDS stigma be identified and implemented.

From the findings it clearly shows that mainly students don't want to test because they fear positive results. Both internal and external stigma have shown to be significant according to the findings where by only 55% are willing to disclose their results, 49% prefer testing from far places and 54% prefer testing from where their names are not recorded. The relatively undesirable scores were recorded under disclosure to others; fear to die fast, preference to test in far away places clearly shows the high prevalence of stigma in the student community. Further more a vast majority of the students prefer the results to be kept secret, fear to be discriminated against, fear of people knowing their sero status, being afraid of the student community's negative attitude and fear of being judged make students fear to test for HIV.

This therefore shows that stigma significantly influences HIV testing amongst students. Students should therefore be educated on what HIV is and how vital it is for them to know their status despite the fear that comes along with testing because negative results help encourage one to stay negative and the positive ones will enroll into care when it's still early so that they can be able to live longer. Students should be sensitized more about HIV and be taught the advantages of testing for example they should be taught that it's advantageous to test. Important people who are

HIV positive and have lived longer should testify so that students stop the belief that HIV is lethal and when you have it you die faster. The Herek and Capitanio (1997) study was a natural intervention that looked at the effects of Earvin "Magic" Johnson's disclosure of his HIV status. Among those respondents who reported being strongly influenced by Johnson's disclosure.

According to Nepal (2009), cooperation with the NGOs United Youth and Youth Action, UNV in Nepal successfully completed an HIV/AIDS awareness raising campaign during late July 2009 where by two people living with HIV/AIDS – one male and one female – came to share their experiences with the participants. The HIV/AIDS affected woman gave an emotional talk and was very warmly welcomed by the female members of the crowd, who later ended up hugging her. Similarly, the HIV/AIDS affected man, a father of two healthy children, was asked many questions by the males in the audience and was later hailed for his bravery and willingness to come and talk to them. At the end of the training, more than 200 residents of both genders were directly reached and trained on how HIV is transmitted, importance of knowing ones status and other facts on HIV.

People affected with HIV/AIDS are not just beneficiaries of services but have also been at the fore front in the fight against the HIV epidemic for the last two decades. PLHA have very important personal experiences from living with HIV and for some of them from being on ART, which is very important in managing HIV/AIDS as a chronic disease. They put a human face to the epidemic through their courage to speak out and inspire populations for both prevention and care iniatives for the infected and affected. Their invaluable in put has been the pillar in fighting stigma and discrimination in societies and helping people to test for HIV (MJAP, 2009). According to the results it portrays that stigma significantly influences students to test for HIV,

for instance qualitative methods were used and it was found out that “girls don’t want to test where boys are seeing them and vice versa and others don’t want to be seen testing because they will know they are spoilt”.

5.2.3 Confidentiality and HIV testing amongst students

According to the findings, 27% of the students agreed that they don’t feel free to share health problems with the health workers, this means students don’t want to open up about the issue of testing with health workers and yet they are the ones to encourage them to test. Therefore the university should encourage campaigns to reduce fear in the students, because they prefer to test from far places by health workers who do not know them. More to that only 53% agreed that health workers keep confidentiality of their results. This shows that health workers are not trusted by the students. They should therefore enforce confidentiality of the students’ information and use computers to store the results too since one of the counselors said the information is only kept in file form. The students jointly agree that they feel free to share health problems with health workers, health workers keep confidentiality of results and prefer to test with health workers who do not know them than those who do. However, they are not sure if they prefer testing from places where they do not record names, prefer testing from centers / hospitals for only youth or would take an HIV test in any place. This is a clear sign of mistrust as far the confidentiality of the health workers is concerned.

Qualitative methods used in data analysis show that students think health workers don’t have the skills to draw blood off them, others think they will let their relatives and parents aware of the results. One of the key informants commented that “they don’t have up to date equipment to store the data and generally the hospital is in a bad state.’’

5.2.3.1 Privacy of patients' information and HIV testing amongst students

One health worker commented that "at the moment patients records are kept in the files and it's hard to say that they are hard to access by other people because the security is not that tight here." The university hospital needs some improvements especially changing the equipment that is being used at the moment. With only 53% of the students agreeing that health workers keep their results confidentially there is still need for improvement in the way the data so that it can also give the students enough confidence to test. When students are not sure of the privacy of their results they fear that their results may be shared with their peers or with their parents and other relatives hence shun taking HIV tests. In conclusion therefore, the findings show that confidentiality significantly influence student's HIV testing amongst students with a mean of 4.0 agreeing to be tested by health workers who do not know them.

5.2.3.2 Security of patients' information and HIV testing amongst students

The purpose of defining the health information's confidentiality and security principles is to ensure that health data are used to serve the improvement of health, as well as the reduction of harm, for all people, healthy and not healthy. Pursuing this goal involves an ongoing process of refining the balance between maximizing of benefits – benefits that can and should come from the wise and full use of data, and protection from harm – harm that can result from either malicious or inadvertent inappropriate release of individually identifiable data. These potential benefits and harms may accrue to individuals, groups, or institutions. The tremendous potential 'wealth for health' in longitudinal electronic patient health data repositories, as well as the potential for increased risk of confidentiality breach inherent in-consolidated and centrally accessible data.

5.2.4 Social beliefs and influencing HIV testing amongst students

55% believe that they will die fast, 12% believe HIV is for promiscuous people this means students would rather not test at all instead of them knowing that they will die fast. A lot of sensitization should be done to reduce on the myths surrounding HIV/AIDS. 16% of the students believe that PLHIV are immoral and live risky lives. During focus group discussions majority of the students said HIV is not for them and yet they practice risky sexual behavior. This is a wrong perception by the students if these myths are not explained to the students then there is danger.

The way in which individuals discover and disclose their HIV status to others, as well as how they cope with their HIV status, is influenced by cultural and community beliefs and values regarding causes of illness, learned patterns of response to illness, social and economic contexts, and social norms (Mechanic1995). Even when individuals suspect they are HIV-positive, they may not seek a test or treatment if it means going to a known AIDS clinic or a community doctor (Lisanne & Trujillo, 2000).

5.2.5 Religious beliefs and HIV testing amongst students

12% of the students still believe that HIV is a punishment from God and it catches those that are immoral. This shows that students are ignorant as far general knowledge about HIV is concerned. Students need to understand that HIV is a disease like any other and can attack any person whether immoral or not. And they should also know that it's not a punishment from God but can catch any one who has sexual intercourse with one who is positive. Other ways through which HIV is spread should be made known to the students. In the FGD one student said "In church people who are HIV+ are termed as the living dead". With such attitudes on the ones who are positive it's really hard for the students to test for fear of stigmatization. The FGD findings

reflect students' dissatisfaction with the role of the church in handling the HIV/AIDS issue. The church is perceived as more judgmental than constructive in encouraging students to test. Students fear accessing HIV testing centers as the religious community shall view them as promiscuous. This calls for massive sensitization amongst both the students and the university church community to reduce the level of HIV/AIDS stigma amongst the students.

5.3 CONCLUSIONS

5.3.1 HIV testing amongst students

Students need to be guided in HIV testing by their parents, elders, universities and NGO's doing HIV related work. The optimizing strategy should be chosen and best possible solution to the issue of not testing should be chosen. They should know the importance of testing, know the time available to solve it, know the availability of resources and know their values. In conclusion therefore, HIV testing is not an end in it's self but students also need to be taught that its important but not the only solution for HIV because testing while continuing to live risky lives may not stop the epidemic.

5.3.2 Stigma and HIV testing amongst students

Stigma greatly hinders students from testing for HIV. 29% of students admitted to have more than one partner and 18 % have casual partners. This clearly reflects the nature of risky sexual behavior that has manifested amongst students, this risky behavior threatens the utilization of HIV prevention services due to fear of what will come from the results. Due to the fact that HIV has no cure people think they die very fast. This study therefore helps students to know that if they test early enough they are capable of living longer. It helps students to tolerate other people who are HIV positive and also help stop them from discriminating and delineating others. This

study therefore encourages students to know more about HIV, help to reduce their risky behavior and stop stigmatizing those who are infected and are affected by HIV. 40% admitted never to have taken an HIV test and among those who tested 91% received their results while 9% did not. From qualitative data majority of the students who didn't test say they fear the results that will come from the test, others don't have the courage and others post pone till they are to get married. This is quite dangerous and calls for intervention since the young people are the future of the nation and postponing will mean they will continue to indulge in risky sexual behavior and in case one gets infected they will die fast. Further still majority of the students who were interviewed in the Focus Group Discussion said they were forced by boyfriends or girl friends, parents or during a blood donation to test for HIV, this therefore shows that students are not willing to test hence test when they have no other option.

5.3.3 Confidentiality and HIV testing amongst students

The findings show 47% agreed that they don't trust the confidentiality of the health workers therefore they should also be professional in the way they do their work in order to gain trust of students. Students need to be sensitized about opening up to the health workers so that they are advised on how to reduce their fears of HIV testing.

5.3.3.1 Privacy of students' information and HIV testing amongst students

The university hospital should be improved through renovation, replacing of all the old equipment, they should start storing the data in computers and not files so that students don't dread going there for services. One health worker commented that "the equipment that is being used is old and for long ago". And another commented that "they didn't have computers where to store the patient's results". Provision of computers where to store the patients results can help

improve on the security of the results where by the results can only be accessed by authorized persons. If students put trust in the health workers and are confident that their HIV results are kept privately they can be encouraged to test (HIPPA, 2005).

5.3.3.2 Security of students' information and HIV testing amongst students

The main aim of government should be to ensure that the best information is used to provide healthcare to the public. However, in some contexts, confidential individual health information has been used in ways harmful to the individuals concerned, and so they must be protected as well. Security against access is not an unqualified objective; legitimate access to essential data must also be secured. Appropriate policy, procedures, and technical methods must be balanced to secure both individual and public protections (UNAIDS, 2007).

The risk of harm following a breach varies with the national or local context according to levels of stigma, lack of comprehensive public health safety nets, legal traditions of respect of privacy, religious perspectives, and other local conditions. For a society to reap a greater health benefit while minimizing risk of harm, it must improve and maintain the protection of individuals and their data. Such protection is not only improved by having established principles, laws, and policies, but is based on the morals and values of each society. It is also dependent on people living with HIV being aware of the laws and policies that exist, and of the implementation of these laws and policies. In the end, it is a universally held attitude of respectful consideration for all persons, healthy or not, that would permit disclosure without ensuing harm, and thereby renders accessible, the greatest health information for public benefit. For protecting data, three interrelated concepts have an impact on the development and implementation of protections for sensitive data. These are privacy, confidentiality, and security. Privacy is both a legal and an

ethical concept. The legal concept refers to the legal protection that has been accorded to an individual to control both access to and use of personal information and provides the overall framework within which both confidentiality and security are implemented (UNHCR, WFP et...al, 2007).

The purpose of defining health information confidentiality and security principles is to ensure that health data are available and used to serve the improvement of health, as well as the reduction of harm, for all people, healthy and not healthy. Pursuing this goal involves an ongoing process of refining the balance between maximizing of benefits, which can and should come from the wise and fullest use of data, and protection from harm, which can result from either malicious or inadvertent inappropriate release of individually identifiable data. Appropriate policies, procedures, and technical methods must be balanced to protect both individual and public rights (UNAIDS, 2007).

5.3.4 Social beliefs and HIV testing amongst students.

Beliefs around HIV stop students from testing therefore sensitization will help students know about the facts of HIV and there fore get to know their status. Students after learning that HIV can catch anyone including the students will encourage them to test. They will learn that PLHA are not necessarily immoral since 16% of the students so, the facts about HIV will help them test so that those who are positive learn how to live positively and the negative ones will learn how to stop living risky lives. 16% of the students believe PLHIV are immoral and live risky lives.

5.3.5 Religious beliefs and HIV testing among students.

The findings show that students believe that HIV is a curse from God, further still 30% believe that those who have HIV will not enter the kingdom of heaven and this therefore hinder students

from testing because they don't want to associate them selves with the curse. This there fore calls upon the religious leaders to preach other messages especially in line with HIV, HIV testing to show that positive people are also acceptable in the eyes of God and also change the attitude towards them.

5.4 RECOMMENDATIONS

From the study findings the following recommendations were made;

5.4.1 Stigma and HIV testing amongst students.

The institution should emphasize educating students about HIV and inform them that actually people can leave longer even if they have the disease in their bodies so that students stop looking at people as the "living dead". The education will help to further know that it's not immoral people who suffer from the disease but it can catch any one.

5.4.2 Beliefs and HIV testing amongst students.

There is need for enough sensitization to help erode the myths that are held by people concerning HIV/AIDS. Students need to know that HIV is not a punishment from God and that it doesn't mean that those who have it will not enter the kingdom of heaven. Sensitization campaigns should be held so that students get to know HIV more and test to know their status. The religious community needs also to incorporate messages regarding HIV testing instead of the commonly sensitized ABC's.

5.4.3 Confidentiality and HIV testing amongst students.

Health workers should ensure student's information is kept in computers where they are sure that it is safe. Student's results should not be given to anyone without the students consent. More still

the old equipment at the hospital should be replaced and the hospital should be renovated to gain the trust of the students.

5.4.4 Areas for further Research

Research should be done to find out how services that are brought near the halls of residence can influence students to test for HIV and also to find out the role played by the church in helping students to test for HIV. The study recommends that research should be done on sexual behavior and its influence on HIV testing amongst students at Makerere Univerity. It was noted that some of those who had not tested said it's because they had never had sex so that was why they didn't want to test while those who tested said they didn't test because of the many sexual encounters they had had. Peer pressure plays a big role in influencing students to test for HIV while some students said they had not tested because they didn't want their friends, fellow students from the near by halls of residence to see them testing, others had tested because they had been influenced by friends, therefore all this should be researched on so that a remedy for encouraging HIV testing can be got.

REFERENCES

Abraham,C., & Sheeran,P, (1994). Theory of Reasoned Action.

http://www.answers.com/health belief model.pdf , 15-04-2009.

AIDS Information Centre (AIC), 2000. The HIV/AIDS epidemic report. *HIV/AIDS Journal*, Vol.3, No.1, July 2000, pp. 30-36.

AIDS Information Centre (AIC), 2004. The HIV/AIDS epidemic report. *HIV/AIDS Journal*, Vol.2, No.1, July 2004, pp. 17-24.

AIDS Committee of Toronto (ACT), 2009. *Global AIDS report*, Vol.6, No.5, February, 2009, pp. 30-33.

Allan and Whitefield, (2007). HIV AIDS and stigma report. *Discrimination challenges, Vol. 1 No.1, January, 2007, pp.12-18.*

Amin,M.E. (2005). Social Science Research Methods: *conception, methodology and Analysis*, Makerere university Printery, Kampala.

Annemarie, E., Arjan, E. R., Hans, E. and Herman, P. (2007). Fear of Stigmatisation as a barrier to free HIVcounseling and testing in S.Africa. *The East African Journal of Public Heath, Vol. 2, No. 2*, March, 2007, pp. 40-44.

Bandura,A. (1994). Social Cognitive Theory.

http://www.answers.com/topic/health-Social Learning theory. 15-04-2009

Wallerstein, N., & Bernstein, E. (1988). *Promoting Health through theories. Empowerment theory*.

Cameron, E (2000). Effects of HIV/AIDS stigma. *HIV/AIDS and discrimination, Seattle weekly*, 1-7 December 2004

Catania, J.A, Kegeles, S.M., & Coates, T.J. (1990). The AIDS Reduction Model.

http://www.answers.com/health belief model.pdf, 15-04-2009

Centre for Disease Control (CDC), Strengthening HIV Counselor Training in Uganda (SCOT), (2007).

A hand book for HIV/AIDS Counselling, Vol. 5, No. 2, August, 2008, pp. 49-54.

Centre for Disease Control (CDC), ACQUIRE, United States USAID, (2007). *A Positive Prevention Counseling*. *Vol.*

4, No. 3, August, 2007, pp. 25-28.

Centre for Disease Control (CDC), Joint AIDS Program on AIDS (UNAIDS), 2003. *Global AIDS epidemic*

report, Vol 1, No.3 June, pp. 26-29.

Centre for Disease Control (CDC), Joint AIDS Program on AIDS (UNAIDS), 2006. *Global AIDS epidemic*

report, Vol 2, No.4 June, 2006, pp. 27

Deborah.B & Racheal.B, (2002). Barriers to HIV Testing. *Stigma and discrimination, Vol. 1*,

No. 2, August, 2002, pp. 30

Deborah & Baggaley, (2002). Increasing HIV testing among the youth. *Vol. 5, No. 2*, August,

2002, pp. 10

Ethan, E. (2005). Keeping patients information private. *Health research* Bulletin vol.5,

University of Illanois Chicago.

Fekade, (2007). How comic books contribute to positive and healthy behaviors. *Vol. 7,*

Oxford press, London, pp. 19-24.

Goffman, E (1963)**.** Stigma Management. *Notes on the management of spoiled identity*. New

York penguin. *Vol. 5, No. 2*, August, 1963, pp. 44-54.

Garner, R. (2005). Assessing the effect of religion on reducing HIV infections *Vol. 1*

No. 2, August, 2005, pp. 41-43.

Dilger, H. (2007). Religion and its contribution to HIV Prevention. *Vol. 5, HIV/AIDS Policy Review 12(2/3)*

Herek, M. and Capitanio (1999). Aids-stigma and sexual prejudice. *International Journal of STD & AIDS, Vol. 17, No. 5*, May 1999.

Herek , M. and Capitanio (1997). Aids-stigma and disclosure. *Journal of HIV,* pp. 336-337

http://www.answers.com/topic/ theory of reasoned action

http://www.answers.com/topic/health-AIDS REDUCTION MODEL

Johnson et al. (1998). Anonymous HIV testing in young people. *Vol. 5, No. 2,* August, 2008, pp. 49-54.

Joint AIDS Program On AIDS (UNAIDS), United Nations International Childrens' Emmergency Fund (UNICEF), 2001. *Young people and AIDS. Opportunity in crisis, Vol 1, September 2001 pp 7-9.*

Joint AIDS Program on AIDS (UNAIDS), United Nations International Childrens' Emmergency Fund (UNICEF), 2002. *Young people and AIDS Opportunity in crisis, Vol 2, June 2002, pp 8-9.*

Joint AIDS Program on AIDS, (2007). Guidelines on protecting the confidentiality and security of HIV Information. *An HIV/AIDS Journal Vol 2, June 2007 pp.10.*

Kothari, C.R. (1985). Research Methodology: *methods and techniques*: *amazon.co.uk. vol.2. June,1990.*

Laird,D. (1985). Approaches of Training and development. *HIV/AIDS training Vol. 5, No. 2,* August, 1985, pp. 49-55.

Lau & Tsui (2003). Surveillance of discriminatory attitudes toward people living with HIV/AIDS among the general public in Hong Kong, *1994-2000*

Lowa, (2006). HIV interventions and priotisation. Lowa comprehensive HIV plan. *An HIV comprehensive study.*

RTI, Mulago - Mbarara University Teaching Hospitals' Joint AIDS Program(MJAP), Strengthening HIV counselor Training in Uganda (SCOT), Centre for Disease Control (CDC), Presidential Emergency Fund (PEPFAR), 2007. *Provider initiated counseling and testing in clinical settings.*

Frank, E. (2009). Maintaining security and privacy of patient information.

Goffman, E. (1963). Stigma*: Notes on the management of Spoiled Identity*. New Jersey: Prentice Hall.

Grassly NC et al. (2004). Uncertainty in estimates of HIV/AIDS*: the estimation and application of plausibility bounds.* Sexually Transmitted Infections 2004*;*

Health Insurance Portability and Privacy Act (HIPPA) 2005. Code of medical Ethics of the American Association.

Herek, (2002). AIDS and stigma. *HIV Behavioral scientist*; 42(7): 1106-16.

http://psychology. Ucdavis.edu/rainbow/html/bibas.html.

http://www.answers.com/topic/ theory of reasoned action

http://www.answers.com/topic/health-AIDS REDUCTION MODEL

Kothari, (1985). *Research Methodology: methods and techniques:* amazon.co.uk.

Krejcie, R. V. & Morgan, W. (1970*). Determining sample size for research activities, Educational and psychological measurement*, 30, 608, sage publications.

Laird, (1985). *Approaches of Training and development*.

Lisanne.B & Trujillo.L 2000. Interventions to Reduce HIV/AIDS Stigma*: What Have We Learned*? *Vol 1 pp.30-32*.

Lowa, (2006).HIV interventions and priotisation, *Lowa comprehensive HIV plan.Vol 1 pp.33-35.*

Mann,J. and Tarantola, D. (1996). Global overview*: A powerful HIV/AIDS pandemic*. *Harvard press, Vol.6.*

Mann, J (1992). AIDS in the world. *How to solve the challenge,* Cambridge M.A. Harvard University Press.

Mechanic, (1995). Coping with HIV status.

Meyer,J (2003). HIV/AIDS and Africa.

Myers, T. & Jackson, E. (1991). *International Conference on AIDS*.

Makerere University (MU), 2000. *International students Conference Report*.

Ministry of Health (MOH), 2001. Final VCT policy.

Ministry of Health (MOH), 2004. HIV/AIDS Sero-Behavioural Survey.

Mulago-Mbarara Teaching Hospitals' Joint AIDS Program (MJAP), 2009. PLHIV involvement in the Delivery of MJAP Services.

Nepal, (2005). *United Youth and Youth action*

Organ, and NYblade (2005). HIV related stigma across contexts. Washington DC.

Parker.R, & Aggleton P, (2003). HIV and AIDS related stigma and discrimination*: A conceptual*

framework and implications for action.

Rosenstock IM, Strecher VJ, & Becker MH, 1988. Health Belief Model. http://www.answers.com/health belief model.pdf, 15-04-2009.

RosenstockIM, Strecher VJ, & Becker MH, 1994. Health Belief Model. http://www.answers.com/health belief model.pdf, 15-04-2009.

Stall R et al (1996). Decisions to get HIV tested and to accept ARV therapies among gay bisexual men, implications for secondary Prevention efforts.1996,11:151-60.

Stock .J and Watson.M, (2003). Introduction to Econometrics.

Strengthening HIV counselor Training in Uganda (SCOT), Ministry of Health, (MOH), 2007. Positive Prevention Counseling.

Strengthening HIV counselor Training in Uganda (SCOT) & Centre for Disease Control (CDC), 2007. *HCT-HIV/AIDS Counseling Handbook*.

Strengthening HIV counselor Training in Uganda (SCOT), Ministry of Health (MOH), (2008). *Positive Prevention Counseling*.

Sekaran.U (2005). Research Methods for Business. *A skill building approach, John Willy and cons Inc.*

The AIDS Support Organization (TASO), 2006. Stigma & HIV/AIDS. *Reasons for Stigma.* Uganda: MK publishers.

Uganda AIDS Commission (UAC), 2005. The Young People Living with HIV.

Walkup et al (2004). How is stigmatization affected by the 'layering' of stigmatized conditions such as serious mental illness and HIV*? Psychology,* Rep 95:1 771-9

World Health Organization (WHO), Joint AIDS Program on AIDS (UNAIDS), 2002. Guidance on provider-initiated HIV testing and

counseling services. *An HIV/AIDS handbook,* Toronto

World Health Organisation (WHO), 2001. Training and Resource Manual on School Health and

HIV/AIDS Prevention.

An HIV/AIDS handbook. Toronto

WHO, (2002*).* Training and Resource Manual on School Health and HIV/AIDS Prevention.

An HIV/AIDS handbook. Toronto

WHO, (2010). HIV testing and counseling. *The Associated Press*, 22 December 2004

World Health Organization(WHO), Joint AIDS Program on AIDS (UNAIDS), United Nations International Childrens' Emmergency Fund (UNICEF), 2001. Guidance on provider-initiated

HIV testing and counseling services. Newyork: Wiley

YouthNet, (2000). "HIV Voluntary Counselling and Testing" in YouthLens on Reproductive Health and

HIV/AIDS, No 3, *http://www.ifrc.org*.

Yamane, T. 1967. Statistics, *An Introductory Analysis*, 2nd Ed., New York: Harper and Row.

APPENDIX: 1

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Your Ref:

Our Ref: G/35

21 September 2009

Ms. Monic Nyankumare Tumwine

Dear Ms. Tumwine,

FIELD RESEARCH

Following a successful defense of your proposal before a panel of Masters Defense Committee and the inclusion of suggested comments, I wish to recommend you to proceed for fieldwork.

Please note that the previous chapters 1, 2 and 3 will need to be continuously improved and updated as you progress in your research work.

Wishing you the best in the field.

Yours sincerely,

Benon C. Basheka
HEAD, HIGHER DEGREES DEPARTMENT/
PROGRAMME MANAGER MMS

APPENDIX 2

INTERVIEW GUIDE [HEALTH WORKERS AT MAKERERE UNIVERSITY HOSPITAL]

TOPIC: FACTORS INFLUENCING HIV TESTING AMONGST STUDENTS

INTRODUCTION

Dear respondent,

My name is Monica Nyankumare Tumwine, a student of Uganda Management Institute and I am pursuing a master's degree in management studies. As part of the requirements for the award of this degree, I am undertaking a study to establish the factors that influence HIV testing amongst students. The findings of this research are purely for academic purposes and all the information will be kept confidential. Please spare some time and give your most appropriate and honest responses. You don't need to indicate your name.

a) HIV testing amongst students at Makerere University.

1. How often do you receive students from Makerere University who want to test for HIV?
2. On average how many students do you receive seeking HIV testing services in a semester? How do you handle students from Makerere University who come to access HIV testing from this centre?
3. Which reasons do they normally give when they come for testing services?
4. What challenges do you face in providing HIV Counseling and testing services to students?

b) Stigma and HIV testing amongst students at MUK

1. What reasons do students give for not testing for HIV?
2. How do you handle students that fear to test for HIV?

c) Beliefs and HIV testing amongst students at MUK

1. What beliefs do students confront not to test for HIV?

3. What measures do you put in place to reduce the stigma that is associated with HIV?

3. What measures have you put in place to ensure that the myths that students know about HIV do not stop them from testing?

4. How do you ensure students get tested for HIV since they believe HIV is for promiscuous people and immoral people?

d) Confidentiality and HIV testing amongst students.

1. How do you make sure students results are kept secure?

2. How do you ensure the privacy of students' information?

3. In what circumstances do you give out information concerning student's results to other people?

4. How do students perceive the way their results are kept?

APPENDIX 3

STUDENT' FOCUS GROUP DISCUSSION GUIDE

TOPIC: Factors influencing students to test for HIV at Makerere University

INTRODUCTION.

Dear respondent,

My name is Monica Nyankumare Tumwine, a student of Uganda Management Institute and I am pursuing a master's degree in management studies. As part of the requirements for the award of this degree, I am undertaking a study to establish the factors influencing HIV testing among students at Makerere University. The findings of this research are purely for academic purposes and all the information will be kept confidential. Please spare some time and give your most appropriate and honest responses. You don't need to indicate your name.

a) HIV testing amongst students at Makerere University.

1. What do you know about HIV?
2. How is it spread?
3. What is HIV Counseling and Testing to you?
4. What do you think is the importance of HIV Counseling and Testing in general?
5. What are the available HIV testing services in Makerere University?
6. What are the factors that motivate you to go for HIV testing?
7. What do you think are the factors that hinder students at Makerere University to go for testing for HIV?
8. If you were to go for HIV testing where would you go and why?
9. How best do you think HIV Counselling and Testing services can be enhanced at Makerere University?
10. Comment about the available HIV testing services available?

b) Beliefs and HIV testing amongst students at Makerere University.

1. Comment on the student's attitude towards HIV testing?
2. What are some of the beliefs held about HIV?
3. How have these hindered you to test for HIV?
4. How are the HIV positive students treated at the University?
5. What measures can be put in place to curb HIV related beliefs?

c) Stigma and HIV testing amongst students at Makerere University.

1. How do you deal with the stigma that is associated with HIV?
2. What do you think can be done to reduce the stigma that is associated with HIV?

d) Confidentiality and HIV testing amongst students at Makerere University.

1. How are students records kept at the University Hospital?
2. Comment about the security of the HIV results at the University Hospital?
3. What do you think can be done to improve on the privacy of the results?

APPENDIX 4

INTERVIEW GUIDE [UNIVERSITY ADMINISTRATOR]

TOPIC. Factors influencing HIV testing amongst students at Makerere University.

My name is Monica Nyankumare Tumwine, a student of Uganda Management Institute and I am pursuing a master's degree in management studies. As part of the requirements for the award of this degree, I am undertaking a study to establish the factors influencing HIV testing amongst students. The findings of this research are purely for academic purposes and all the information will be kept confidential. Please spare some time and give your most appropriate and honest responses. You don't need to indicate your name.

a**) HIV testing amongst students at Makerere University.**

1. What do you understand by HIV Testing?

2. What do you think is its importance to students?

3. How has reluctance to test for HIV affected students in this community?

4. How do you think HIV Counseling Testing services can be enhanced at Makerere University?

5. What do you think hinders students from testing for HIV/AIDS?

6. What has the hospital done to reduce these hindrances?

b) Stigma and HIV testing amongst students at Makerere University.

1. How have you helped students who are afraid of knowing their HIV sero-status?

2. In what ways are students being stigmatized to test for HIV?

3. How has stigma affected HIV testing in this community?

4. How do you ensure HIV related stigma does not influence students to test for HIV?

c) Beliefs and HIV testing amongst students at Makerere University.

1. What role has the church played in reducing stigmatization of HIV patients in the church?

2. What beliefs are held by students concerning HIV/AIDS?

3. What do you have to say about the myths that are held by the religious community on HIV?

4. What measures have you put in place to ensure that negative social and religious beliefs are reduced?

d) Confidentiality and HIV testing amongst students at Makerere University.

1. How do you think student's results should be kept?

2. How best can student's results be kept confidentially?

3. What beliefs are held by students concerning HIV/AIDS?

4. What do you have to say about the myths that are held by the religious community on HIV?

5. What measures have you put in place to ensure that negative social and religious beliefs are reduced?

APPENDIX 5

INTERVIEW GUIDE [**RELIGIOUS LEADERS**]

TOPIC: Factors influencing HIV testing amongst students at Makerere University.

INTRODUCTION.

Dear respondent,

My name is Monica Nyankumare Tumwine, a student of Uganda Management Institute and I am pursuing a master's degree in management studies. As part of the requirements for the award of this degree, I am undertaking a study to establish the Factors influencing HIV testing amongst students at Makerere University.

The findings of this research are purely for academic purposes and all the information will be kept confidentially. Please spare some time and give your most appropriate and honest responses. You don't need to indicate your name.

a**) HIV testing amongst students at Makerere University**

1. What do you understand by HIV Testing?

2. What do you think is its importance to students?

3. How has reluctance to test for HIV affected students in this community?

4. What do you think hinders students from testing for HIV/AIDS?

5. What have done to reduce these hindrances?

b) Stigma and HIV Testing amongst students at Makerere University.

1. How have you helped students who are afraid of knowing their HIV sero-status?

2. In what ways are students being stigmatized to test for HIV?

3. How has stigma affected HIV testing in this community?

4. What role has the church played in reducing stigmatization of HIV patients in the church?

c) **Beliefs and HIV testing amongst students at Makerere University.**

1. What do you have to say about the myths that are held by the religious community on HIV?

2. What measures have you put in place to ensure that negative social and religious beliefs are reduced?

d) Confidentiality and HIV testing amongst students at Makerere University

1. How do you think student's results should be kept?

2. How best can student's results be kept confidentially?

3. What beliefs are held by students concerning HIV/AIDS?

APPENDIX 6

STUDENTS SURVEY QUESTIONNAIRE
ANONYMOUS (YOU DON'T HAVE TO WRITE YOUR NAMES)

Please spare some time and give your most appropriate and honest responses.

Questionnaire No: _____

TOPIC. Factors influencing HIV testing amongst students at Makerere University.

INTRODUCTION.

Dear respondent,

My name is Monica Nyankumare Tumwine, a student of Uganda Management Institute and I am pursuing a master's degree in management studies. As part of the requirements for the award of this degree, I am undertaking a study to establish the Factors influencing HIV testing amongst students at Makerere University.

The findings of this research are purely for academic purposes and all the information will be kept confidential.

SECTION A: BACKGROUND INFORMATION

In this section please circle the category that best describes you.

QN1. **Age of the respondent**: _____

QN2. **Education level being undertaken**: 1. Diploma 2. Degree 3. Masters 4. Other (Specify) ----------

QN3. **State your religious faith**

1. Catholic 2. Anglican 3. Pentecostal 4. Moslem 5. Seventh Adventist 6. Orthodox

99. Other, specify_____

QN4. **Marital status**

1. Never married /Single 2. Married 3. Divorced 4. Widowed 5. Cohabiting

QN5. **Gender**: 1. Male 2. Female

SECTION B: FACTORS

In this section please circle in the box that corresponds to your response according to a scale of,

5 = Strongly agree, 4= Agree, 3=Not sure, 2=Disagree, 1=Strongly disagree.

	PART 1: HIV TESTING	**5**	**4**	**3**	**2**	**1**
QN.1	I have heard about HIV testing.	**5**	**4**	**3**	**2**	**1**
QN.2	I have the courage to test for HIV.	**5**	**4**	**3**	**2**	**1**
QN.3	I have tested for HIV.	**5**	**4**	**3**	**2**	**1**
QN.4	I received my results after testing.	**5**	**4**	**3**	**2**	**1**
QN.5	It is important to test for HIV.	**5**	**4**	**3**	**2**	**1**
QN.6	It's ok for students to know their status.	**5**	**4**	**3**	**2**	**1**
QN.7	I don't mind the counseling sessions given before the test.	**5**	**4**	**3**	**2**	**1**
QN.8	I'm too young to catch HIV so testing is not important.	**5**	**4**	**3**	**2**	**1**
QN.9	HIV is not for me therefore testing is not that important.	**5**	**4**	**3**	**2**	**1**
	PART II: STIGMA					
QN.10	HIV positive results would rather be kept a secret.	**5**	**4**	**3**	**2**	**1**
QN.11	I can't test because in case I'm positive I will be discriminated against.	**5**	**4**	**3**	**2**	**1**
QN.12	I don't want to go for testing because people will know that I have HIV.	**5**	**4**	**3**	**2**	**1**
QN.13	I fear testing because people's negative attitudes towards HIV.	**5**	**4**	**3**	**2**	**1**
QN.14	I don't want to test because people who will see me going to test will judge me.	**5**	**4**	**3**	**2**	**1**
QN.15	I don't mind about people's perceptions towards HIV testing.	**5**	**4**	**3**	**2**	**1**
QN.16	I'm **willing to tell people** about my HIV status.	**5**	**4**	**3**	**2**	**1**
QN.17	Finding out that I'm HIV positive **would make me feel like I will die fast**	**5**	**4**	**3**	**2**	**1**
QN.18	I **fear causing pain to my parents** in case I'm found HIV positive.	**5**	**4**	**3**	**2**	**1**
QN.19	I **prefer to test from a far place** where people do not know me.	**5**	**4**	**3**	**2**	**1**
QN.20	I'm **willing to tell my friends** about my intentions to test for HIV.	**5**	**4**	**3**	**2**	**1**
	PART III : CONFIDENTIALITY					
QN.21	I feel **free to share my health problems** with **health workers** who test.	**5**	**4**	**3**	**2**	**1**
QN.22	The **health workers** who test us for HIV **keep confidentiality** of our results.	**5**	**4**	**3**	**2**	**1**
QN.23	I **prefer** to test with a **health worker** who **doesn't know me** than the one who does.	**5**	**4**	**3**	**2**	**1**
QN.24	I **prefer** testing from places where **they don't record our names**	**5**	**4**	**3**	**2**	**1**

QN.25	I **prefer** testing from **centers/hospitals** which are for only **youths**.	**5**	**4**	**3**	**2**	**1**
QN.26	I would **take an HIV test** in any **place.**	**5**	**4**	**3**	**2**	**1**
	PART IV : SOCIAL BELIEFS					
QN.27	People **living with HIV/AIDS** are **immoral** and live risky lives.	**5**	**4**	**3**	**2**	**1**
QN.28	HIV/AIDS is really **not for me**. I'm still young to get it.	**5**	**4**	**3**	**2**	**1**
	PART V : RELIGIOUS BELIEFS					
QN.29	HIV/AIDS is a **punishment from God.**	**5**	**4**	**3**	**2**	**1**
QN.30	The church is not bothered with HIV/AIDS testing.	**5**	**4**	**6**	**2**	**1**
QN.31	I can easily **share my HIV status** with my **religious community**.	**5**	**4**	**3**	**2**	**1**
QN.32	People with HIV/AIDS are the ones that live a sinful nature.	**5**	**4**	**3**	**2**	**1**
QN.33	I believe people with HIV/AIDS will not enter the kingdom of God.	**5**	**4**	**3**	**2**	**1**

PART IX HIV TESTING

In this section please circle in the box that corresponds to your response according to the categorical responses of 1.Yes 2.No and fill in the responses where necessary.

QN. 34. Have you ever tested for HIV? 1. Yes 2. No

QN. 35 If yes, where did you last test from? _____

QN. 36 If you tested, did you get your results? 1. Yes 2. No

QN. 37 How many times have you tested for HIV? _____

QN. 38 What inspired you to test?

_____

_____

QN. 39. What kind of support have you received from the university to help you test for HIV/AIDS?

QN. 40 If No, what has hindered you from making a decision to test?

_____

_____

THANK YOU SO MUCH FOR YOUR RESPONSE AND TIME

APPENDIX 7

Picture showing the researcher and the respondents after carrying out a focus group discussion in Lumumba.

APPENDIX 8

Picture showing the researcher and the respondents after an FGD in Mary Stuart hall.

APPENDIX 9

Table 9: Showing how the sample size was determined.

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size

"S" is sample size.

Krejcie, Robert V., Morgan, Daryle W., "Determining Sample Size for Research Activities", Educational and Psychological Measurement, 1970.