DETERMINANTS OF SELF ASSESSED HIV RISK AND SEXUAL BEHAVIOUR: A CASE STUDY OF YOUTHS AT THE UNIVERSITY OF ZAMBIA AND EVELYN HONE COLLEGE

By

Audrey Mwape Kalindi

A Dissertation Submitted to the University of Zambia in Partial Fulfillment

Of the Requirements of the degree of Master of Arts in Population Studies

THE UNIVERISTY OF ZAMBIA

LUSAKA

2013

I, AUDREY MWAPE KALINDI, hereby declare that this dissertation:

(a) Represents my work;

(b) Has not previously been submitted for a degree at this or any other University; and

(c) Does not incorporate any published work or material from another dissertation.

Signed.....

Date.....

APPROVAL

The dissertation of **AUDREY MWAPE KALINDI** has been approved as partial fulfillment of the requirements for the award of **Master of Arts in Population Studies** by the University of Zambia.

Signed: **Date:**

1. ....

2. ....

3. ....

ABSTRACT

This study aimed at examining the determinants of self assessed HIV risks and sexual behaviour among UNZA and Evelyn Hone College students. A cross-sectional analytical study was conducted. Both quantitative and qualitative data was collected. Stratified random sampling (method of stratification being institution and sex) was used to collect data from 500 students who were interviewed using a semi structured questionnaire. Data processing and analysis, MS-ACCESS was used to process data which was then exported to SPSS for data analysis. Statistical tests were performed on certain variables. Contingency tables were used to facilitate presentation of findings, cross tabs and Bivarriate analysis was used to ascertain existence of relationships between variables.

The findings show that knowledge levels on HIV are high amongst all students (77%). It is observed that nearly three-quarters of the students (70.6%) have had sex before and 36.4% are currently sexually active. Most students have first sexual intercourse at an early age between 16 and 20 years. Inter generational sex was high among female students 67.6% than male students 26.9%. About (59%) of the students use condoms every time they have sex as compared to 48.9% who used condoms the first time they had sex. Knowledge of the protective function of condoms was not found to be a good predictor of condom use. Twenty-one percent of the students reported having multiple concurrent sexual partnerships and only 23% of the students considered themselves to be at risk of HIV contraction. It has also been noted that campaigns to promote safer sexual relationships among youths have not been effective in persuading most students to take up safer sexual practices as there are still high levels of risky sexual behaviour.

Findings indicate that generally students' assessments of HIV risk are very low and they have high risky behaviours despite the education that the institutions of learning provide and other HIV programs around the country. The determinants of self assessed HIV risk among students vary with factors like sex, institution, knowledge of HIV and sexual behaviour. There is need to provide the youths particularly students, with comprehensive and accurate knowledge of HIV infection, transmission and prevention measures in order to strengthen risk perception and increasing safe-sex techniques.

To my brothers and sisters

ACKNOWLEDGMENTS

I owe the successful completion of my project to a number of people. First and foremost I would like to thank Dr M Lemba my Supervisor for his dedication and guidance throughout the entire project. My sincere gratitude goes to UNFPA and University of Zambia for the financial support and resources. I would like to thank the University of Zambia and Evelyn Hone managements for allowing me to conduct my study with their students. I am also thanking Mr Patrick Kalen'ga and Mr Milimo Haninga for their assistance in data collection. Many thanks go to the students of the University of Zambia and Evelyn Hone College for accepting to be interviewed, without them this study would not have been possible.

For inspiration and fellowship that enabled me to complete my work, I owe a special word of gratitude to my family especially my brothers and sisters who have supported and encouraged me in my entire study.

Most of all, I really thank God Almighty for seeing me through to this point and for enabling me to carry out this research smoothly.

TABLE OF CONTENTS

LIST OF TABLES

ACRONYMS

AIDS----------ACQUIRED IMMUNE DEFICIENCY SYNDROME

ARVs----------ANTI-RETROVIRAL

CMPs----------CONCURRENT MULTI SEXUAL PARTNERSHIPS

IEC----------INFORMATION, EDUCATION AND COMMUNICATION

HIV----------HUMAN IMMUNODIFIENCY VIRUS

NGOs----------NON GOVERNMENTAL ORGANISATIONS

SBS----------SEXUAL BEHAVIOUR SURVEY

SPSS----------STATISTICAL PACKAGE FOR SOCIAL SCIENCES

STDs----------SEXUALLY TRANSMITTED DISEASES

STIs ----------SEXUALLY TRANSIMTED INFECTIONS

TB----------TUBERCULOSIS

UNAIDS----------JOINT UNITED NATIONS PROGRAM ON HIV/AIDS

UNDP----------UNITED NATIONS DEVELOPMENT PROGRAM

UNZA----------UNIVERSITY OF ZAMBIA

WHO----------WORLD HEALTH ORGANISATION

ZDHS----------ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY

CHAPTER ONE

1.0 Introduction and Background

The Acquired Immune Deficiency Virus (AIDS) epidemic is one of the most destructive health crises of modern times, ravaging families and communities throughout the world. By 2005, more than 25 million people had died and an estimated 39 million were living with HIV. An estimated 4 million people were newly infected with HIV in 2005-95 percent of them in sub-Saharan Africa, Eastern Europe and Asia. The number of people living with HIV worldwide continued to grow in 2008, reaching an estimated 33.4 million. In 2008, an estimated 2.7 million [2.4 million–3.0 million] new HIV infections and 2 million [1.7 million–2.4 million] deaths due to AIDS-related illnesses occurred worldwide. The latest epidemiological data indicate that globally the spread of HIV appears to have peaked in 1996, when 3.5 million [3.2 million–3.8 million] new HIV infections occurred. The total number of people living with the virus in 2008 was more than 20% higher than the number in 2000, and the prevalence was roughly threefold higher than in 1990 (UNAIDS 2006).

These kinds of statistics call for change in people's life styles starting from the health policies that are put for countries to people's reproductive health choices and sexual behaviours at household level. Among the many health adjustments people make, sexual behaviour should not be left out because depending on people's sexual behaviours, transmission of HIV can be reduced or increased. Thus, decisions about self assessed HIV risk which determine sexual behaviour by individuals, communities, and policymakers should involve balancing the relative need to prevent both unplanned pregnancies and Sexually Transmitted Diseases STD/HIV (UNAIDS 2006). Perceived HIV risk determines the sexual behaviour of individuals which helps in protection against Sexually Transmitted Diseases (STDs), including HIV. Abstinence from sexual intercourse provides nearly absolute protection against STDs (ibid).

Sub-Saharan Africa remains the most heavily affected region, accounting for 71% of all new HIV infections in 2008. An estimated 1.9 million people living in sub-Saharan Africa became newly infected with HIV, bringing the total number of people living with HIV to 22.4 million. While the rate of new HIV infections in sub-Saharan Africa has slowly declined with the number of new infections in 2008 approximately 25% lower than at the epidemic's peak in the region in 1995, the number of people living with HIV in sub-Saharan Africa slightly increased in 2008, in part due to increased longevity stemming from improved access to HIV treatment and also due to risky sexual behaviours. Adult (15–49) HIV prevalence declined from 5.8% in 2001 to 5.2% in 2008. In 2008, an estimated 1.4 million AIDS-related deaths occurred in sub-Saharan Africa (UNDP 2008).

The epidemic continues to have an enormous impact on households, communities, businesses, public services and national economies in the region. In Swaziland, average life expectancy fell by half between 1990 and 2007, to 37 years (United Nations Development Program, 2008; Whiteside et al., 2006). In 2008, more than 14.1 million children in sub-Saharan Africa were estimated to have lost one or both parents due to AIDS (UNDP 2008).

Women and girls continue to be affected disproportionately by HIV in sub-Saharan Africa. For example, in Côte d'Ivoire, home to the most serious epidemic in West Africa, HIV prevalence among females (6.4%) was more than twice as high as among males (2.9%) in 2005 (Institut National de la Statistique et al., 2006). In sub-Saharan Africa as a whole, women account for approximately 60% of estimated HIV infections (UNAIDS, 2008; Garcia-Calleja, Gouws, Ghys, 2006). Women's vulnerability to HIV in sub-Saharan Africa stems not only from their severe social, legal and economic disadvantages they often confront but also from their greater risky sexual behaviour. In the nine countries in southern Africa most affected by HIV, prevalence among young women aged 15–24 years was on average about three times higher than among men of the same age (Gouws et al., 2008).

In Zambia, the HIV prevalence rate was estimated at 14.3% in 2007 (ZDHS 2007). Women account for more than half (57%) of adults estimated to be living with HIV/AIDS in Zambia, and HIV prevalence rates are estimated to be significantly higher among women

compared to men in Zambia. Young women are especially hard hit by HIV and AIDS in Zambia. Among young people aged 15-24, the estimated number of young women living with HIV and AIDS in Zambia was more than twice that of young men (UNAIDS 2002). The HIV prevalence rate among young women aged 14-19 was twice that of young men in the same age group. In 2003, 85,000 children in Zambia were estimated to be living with HIV and AIDS and there were an estimated 630,000 AIDS orphans. There are significant variations in the epidemic's impact, with much higher HIV prevalence rates occurring in urban, compared to rural areas, among young people as compared to adults and more among females than among male youths (WHO 2005).

Given the above scenario, it is vital to investigate the determinants of self assessed risk of HIV infection and their sexual behaviour among young people. Evidence on the impact of self assessed HIV risk on sexual behaviour among students in Zambia is an area that requires further research. It was therefore the aim of this study to give insights on the determinants of self assessed HIV risk and sexual behaviour among students as they are the ones mostly affected by the HIV scourge.

1.1 Statement of the Problem

It is often said that HIV and AIDS in Zambia has spared no individual, household, community, and institutions of higher learning such as the University of Zambia and Evelyn Hone College are no exception. According to the Zambia Demographic and Health Survey (ZDHS, 2007), Zambia's HIV prevalence rate is at 14.3 percent which is a relatively high figure as compared to other countries such as Uganda with 7.3 percent (WHO 2012). This is attributed highly to people's sexual behaviours which are determined by the HIV risk they perceive on themselves which also in turn determines their prevention methods.

According to UNAIDS (2004), many people especially youths are involved in indecent sexual behaviours such as concurrent multi sexual partnerships (CMSPs) and non use or inconsistent use of condoms. It is estimated that about 32.5 percent of men and 17.1 percent of women have CMPs. This is due to various reasons which could include: finding various sources of income as one source may not be enough especially for females, peer pressure from friends especially for youths, prestige and others could see nothing wrong with indulging in these risky sexual relationships as they may perceive their risk of HIV contraction to be minimal. This is one factor that will be established as it is perceived that people who think of themselves to have less risk of contracting the HIV virus engage themselves in risky sexual networks and those that assess their risk to be lower engage in perceived "safer sexual relationships". Additionally, Reid et al (2003) show that there has been increasing evidence in many countries that people who perceive themselves to be at lower risk of contracting the HIV virus engage in risky behaviour compared to those that perceive themselves to be at higher risks.

Despite the effect that self assessed HIV and AIDS risk may have on sexual behaviour and eventually on the HIV contraction and transmission rates, previous studies have only investigated sexual behaviour and HIV risk and not how self assessed HIV risk can influence sexual behaviour. This has raised concern that these kinds of perceptions might trigger the HIV transmission rates to go up as people may engage themselves in risky

sexual relationships which may increase their HIV transmission rates because of their perceived risk of HIV and AIDS. This is particularly vital because there is lack of such studies among youths in higher institutions of learning in Zambia. In addition, the extent to which self assessed HIV risk influences sexual behaviour has not been thoroughly investigated. Several studies have been done on sexual behaviour but they did not fully investigate how self assessed HIV risk influences sexual behaviour which is key in HIV prevention strategies. For example, Gollub 2000 found out that men who had two or more sexual partners were less likely to use a female condom than those who had one sexual partner.

Due to this discrepancy, there was need to conduct a research to investigate how self assessed HIV risk influences sexual behaviour thus identifying to what extent self assessed HIV risk influences sexual behaviour which has a big influence on the HIV transmission rates. Therefore, this study aimed at investigating the determinants of self assessed HIV risk and sexual behaviour among students at the University of Zambia and Evelyn Hone College.

1.2 RESEARCH OBJECTIVES

1.2.1 General Objective

The main objective of this study was to investigate the determinants of self assessed HIV risk and Sexual Behaviour among students at the University of Zambia and Evelyn Hone College.

1.2.2 Specific Objectives

1. To determine students' self assessed HIV risks

2. To examine the social, economic and demographic factors that influence students' self assessed HIV risk.

3. To examine the relationship between students' self assessed HIV risk and multiple sexual partnerships.

4. To investigate the relationship between students' self assessed HIV risk and consistent condom use.

5. To establish the relationship between students' self assessed HIV risk and age of sexual partner.

1.2.3 Research Questions

1. What different types of HIV risks do students have?

2. What social, economic and demographic factors influence students' self assessment of HIV risk?

3. What is the relationship between students' self assessed HIV risk and multiple sexual partnerships?

4. What is the relationship between students' self assessed HIV risk and consistent condom use?

5. What is the relationship between students' self assessed HIV risk and age of sexual partner?

1.3 Study Rationale

Looking at the ill effects of the HIV scourge and how much money is spent on HIV and its prevention strategies in Zambia despite its limited resources, the identification of the determinants of self assessed HIV risk and sexual behaviour is of paramount importance as understanding the relationship between individuals' self assessment of risk of acquiring HIV and sexual behaviour is crucial to the development of effective strategies to fight HIV and AIDS in Zambia. The findings of this study will be beneficial to the Ministry of Health, National AIDS/TB/STI Council and other stake holders involved in HIV prevention.

As this study aims at showing the determinants of youths' assessment of their HIV risk and sexual behaviour, this information will be important to the University and College

managements and policy makers and other stake holders in coming up with ways that will help to teach people about self assessed HIV risk and sexual behaviour. It will also help the HIV and AIDS programmers and policy makers to identify relevant interrelationships of self assessed HIV risk and sexual behaviour that youths make and develop effective programmes and Information Communication and Education (IEC) materials to help youths that are ignorant in this area and those that are convinced that they have low risk of contracting the HIV virus.

The results of this study will be used to encourage people who are sexually active to have decent sexual networks and reduce risky sexual behaviour. This study is thus of significant importance to the University of Zambia and Evelyn Hone managements and their HIV and AIDS committees at respective institutions in that it provides a baseline of information about students' assessment of their risk of HIV contraction and their sexual behaviour. This will enable them to recognize and identify the underlying determinants of students' assessment of HIV risk and sexual behaviour and understand how these relationships manifest themselves as barriers to the success and measures put in place to reduce the HIV and AIDS spread. Furthermore, this will enable the respective managements to come up with strategies that will educate the students about HIV risk and sexual behaviour and also the importance of sticking to one sexual partner as well as using protection.

This information is also vital to the HIV and AIDS prevention programme implementers, managers, the government and other stake holders in the evaluation of the success of the programs put in place to encourage people on good sexual behaviours and avoid concurrent multi sexual partnerships at UNZA and Evelyn Hone. This could be in terms of effectiveness of the strategies and methods used to inform students on the ill effects of risky sexual behaviour. The findings will therefore be used by UNZA and Evelyn Hone managements, MOH and other stake holders to come up with strategies that will encourage students not to under estimate their chances of HIV contraction and to have good sexual behaviours.

Finally, this research is also relevant to fulfill the gap that exists on how self assessed HIV risk influences sexual behaviour which is key in HIV prevention strategies.

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Observational Studies

A review of quantitative and qualitative studies show that individuals are more likely to underestimate than to overestimate their risk of HIV infection regardless of the nature of their sexual behaviour (Nzioka, 2001; Aggleton *et al.*, 1994; Ingham & van Zessen, 1997; Becker & Joseph, 1988). People often rationalize risk-taking behaviour using a range of socially constructed criteria that could explain the apparent mismatch between objective risk and perceived risk (Abrams *et al.*, 1990). Using in-depth interviews to examine lay perceptions of risk of HIV infection in one community in Kenya, Nzioka (1996) found that people constructed risk in ways 'which were socially meaningful but which neither limit the spread of the virus nor offer security to the individual from the virus'. Another qualitative study in Kenya found that although AIDS was perceived as a great threat in focus group discussions, individuals did not necessarily perceive themselves to be at risk (Idele, 2002).

The relationship between perception of risk and sexual behaviour is complex and poorly understood. Studies conducted in different cultures have associated HIV risk perception with a wide range of variables: number of sexual partners, knowledge of sexual partners' past sexual behaviour, fear of AIDS, shame associated with having AIDS, community perception of AIDS risk, knowing someone with AIDS, discussing AIDS at home, closeness of parent-child relationships and religious affiliation (Macintyre et al 1990). In Sub-Saharan Africa, it has been found that socio cultural norms and practices are major determinants of sexual risk taking behaviour and this also influences the choice of contraceptives used and not the risk people perceive of acquiring a sexually transmitted disease (Caldwell 1999).

Sex Influence

There are a lot of reasons as to why people engage in risky HIV behaviour such as concurrent multiple sexual partnerships and none or inconsistent use of condoms. In a study done in Nigeria on sexual behaviour, eight hundred and ninety six adolescents aged 11-25 years were recruited in this study using a multi-stage random sampling method. Overall, about 33% of them had already had first sexual experience but more males than females reported having experienced first sexual encounter. Only 3.6% of the respondents were married. One half of the sexually experienced adolescents had more than one sexual partner at the time of the study. Majority of the respondents (91.9%) had heard about HIV and AIDS and at least' a STD. A wide disparity was found in knowledge and use of the contraceptive methods studied, ranging from 41.9% to 63.8% for knowledge and from 0.7% to 12.5% for use. Knowledge and use of condom was not consistent. For prevention of HIV and AIDS, more males than females thought condom was useful (Gwari and Hausa 2003). More respondents claimed that they did not use any condoms during their first sexual relationship because of low self perceived HIV risk ([Afr Reprod Health 2003; 7[1]: 37-48). This shows that people with low self assessed HIV risk engage in risky sexual behaviour such as non condom use.

Peer Influence

VanLandinham and Trujilo (1998) used data from interviews with young Thai men from varied backgrounds to examine recent changes in the sexual attitudes and behaviour of their peers, and the shifts in the social context that brought about those changes. In-depth interviews were done with the young men to explore recent changes in the social context of male heterosexual relations. Changes in ideas about the appropriateness and availability of commercial and non commercial sexual relationships are examined as well as changes in ideas regarding the importance of condom use during various types of sexual encounters. The results of the study show that men are changing their early sexual behaviour because of the fear of risk of HIV and other sexually transmitted disease contraction. They are increasingly rejecting the tradition of sexual initiation in brothels, and those who do patronize sex workers tend to use condoms. The bad news is that young men are

increasingly having non commercial sexual relationships with their female peers thinking they are much safer and a few are using condoms in those relationships. This calls questions as to whether HIV incidence which Thailand has struggled successfully to lower, rebound as a result of behavioural changes. It is important to understand the context of self risk perception in relation to sexual behaviour because it is the first stage towards behavioural change from risk-taking to safer sex. Although health behaviour models acknowledge the centrality of perceived risk in behavioural change (Becker & Joseph, 1988; Becker, 1974), it is unclear how people's personal risk assessments relate to their sexual behaviour.

Background Variables

Ethnicity

Self perceived HIV risks are influenced by a number of factors such as ethnicity which may influence sexual behaviour through cultural beliefs and practices. For example, the practice of levirate marriage, where a dead man's widow is remarried to one of his brothers, is still being practiced in some areas of sub-Saharan Africa, despite the high prevalence of HIV (Ocholla-Ayayo, 1976, 1997; Standing & Kisekka, 1989; Degrees du Lou, 1999). Among the Luo and Luhya of Western Kenya, widows sometimes have sexual intercourse with a male relative of the deceased as ritual 'cleansing' (Kenya *et al.*, 1998; Ocholla-Ayayo & Schwarz, 1991). Another risky sexual practice is that of 'wife-sharing', which has been reported among the Maasai of Kenya (Lesthaeghe, 1989). The pressure to conform to cultural beliefs and practices may override concerns about HIV infection.

A nationwide partner relations survey conducted in 1990 in Thailand among young people found that culture has a huge impact on determining self assessment risk among people. This survey used audio computer-assisted self-interviewing method to assess social and cultural characteristics, substance use and sexual behaviour and knowledge of HIV and STIs among 1,725 vocational school students aged 15-21 living in Northern Thailand. Multivariate survival analysis using Cox proportional hazards models assessed associations

between these variables and sexual initiation for each gender. It was found that initiated sexual intercourse at an early age was more among males and females. It was highly associated with low perceived risk for HIV and STIs knowledge as a result of culture and society which viewed men promiscuity as normal. This shows that self perceived HIV risk has a lot to do with people' sexual behaviour and condom usage and youths in particular are also affected (International Family Planning Perspectives 2006).

Religion

Religion can influence sexual behaviour through intermediate factors such as the age at first sex, marital status, and access to information and services. It can also influence attitudes to HIV and perception of risk. Nzioka (1996), using in-depth interviews among people living with HIV/AIDS and opinion leaders, noted that religious people considered AIDS to be a disease that affected those who transgressed against God. Consequently, those who were religious perceived their risk of HIV infection to be low (*Akwara, Madise and Hinde 2008)*. Religion can also work to influence community practices and national policies. The Kenyan national AIDS programs faced opposition from religious leaders at the onset, particularly on the issue of introducing sex education in schools and on condom use, which were thought to encourage promiscuity (Forsythe *et al*., 1996).

Sex

In Zimbabwe where the prevalence of HIV infection is high and male promiscuity is common, there has been a considerable interest in the female condom. Because women can initiate use of the female condom, the method is believed to make it easier for women to protect themselves against sexually transmitted Infections (STI), including HIV infection. In this study a sample of 1740 sexually active consumers visiting retail outlets in Urban Zimbabwe that sell female condoms were surveyed in 1998. Logistic regression analysis was conducted to assess factors associated with ever use of the female condom and consistent use (always or often) with marital and regular non marital partners. It was found out that perceived ease of use and affordability of the product and prior use to male

condom were associated with men's or women's ever use of condoms. Consistent use with regular non marital partners was associated with numerous variables, including perceived ease of use and effectiveness for STI prevention, low HIV risk perception and use for pregnancy prevention. It was concluded that perceived affordability and ease of use may encourage couples to try the female condom but may not lead to consistent use. The findings regarding risk perceptions and behaviours were unexpected. Male respondents who had had two or more sexual partners in the past year were significantly less likely than other men to have tried the female condom. Likewise men with a low perceived risk of HIV infection were significantly more likely than others to have tried the female condom (Gollub 2000).

Marital Status

Marital status influences perception of the risk of HIV infection and sexual behaviour. Whereas non-married women may have some ability to negotiate safer sex, married women face extra challenges because of the fear of being suspected of promiscuity by their spouses, which may lead to unwanted consequences such as separation or even divorce. Often, married women acquiesce in unsafe sexual practices, even if they suspect or know of their partner's extramarital relations (Blanc *et al.*, 1996). Unfortunately, the men underestimate their risk of contracting the HIV virus and also the possibility of spreading it to their wives. Although HIV cannot be spread through sexual intercourse in stable monogamous relationships between uninfected partners, among married women the presence and the nature of their partners' casual or extramarital sexual practices largely determines the risk of HIV transmission (Ahlburg *et al.*, 1997).

Another study among South African couples found that women who considered themselves at risk of HIV infection because of their husbands were four times as likely to use condoms as women who did not (Maharaj and Cleland 2005). In a study of university students in Zimbabwe and Nigeria, those who used condoms were more likely than nonusers to have an accurate perception of their HIV risk (Akande 1994). Personal risk

perception was also associated with increased condom use among urban youths in Cameroon (Meekers and Klein 2002).

Education

The level of formal schooling may influence perception of HIV risk and sexual behaviour but the evidence is rather conflicting. Caraël (1995) found increased casual sexual activity among those with higher schooling but Meekers (1994) found that the association disappears when age is controlled for. Knowledge of AIDS has increased remarkably over the years and is almost universal in most sub-Saharan African countries but the association between such knowledge and sexual behaviour is rather ambiguous. Cleland (1995), using the World Health Organization/Global Program on AIDS (WHO/GPA) data, did not find significant associations between levels of AIDS awareness and the number of partners and self-perceived risk.

Fatalism

Findings by Fapohunda & Rutenberg (1999) and Idele (2002) may provide a possible explanation for the weak link between knowledge, perceived risk and behaviour. In their studies, respondents had a fatalistic attitude towards AIDS. The expression 'after all you have to die of something' was cited to justify high-risk behaviour. This fatalism has been noted in other studies where participants are aware of modes of transmission and prevention and yet continue to engage in risky sexual practices (Obbo, 1993). Exposure to AIDS information through mass media may lead to high levels of awareness, which can in turn influence self-assessed risk of HIV sexual behaviour and condom usage. It has been argued that people's assessment of risk may depend upon how much they trust the accuracy of the information (Stallings, 1990). However Prohaska *et al.* (1990) found that neither increased exposure to the media and greater belief in the accuracy of the media as a source of information about AIDS nor knowledge of the facts about HIV/AIDS transmission affected people's perception of risk.

Knowledge

UNAIDS (2000) notes that general awareness of AIDS is no longer important in AIDS prevention but accurate knowledge of how HIV is transmitted is important. For example, if people believe that mosquitoes transmit the HIV virus, they may see the use of condoms as futile. Some researchers report that asymptomatic transmission of HIV is not common in local concepts of disease (Irwin *et al*., 1991; Hogsborg & Aaby, 1992). A study of AIDS knowledge in Zimbabwe revealed that while all men and women had heard of AIDS, 15% of men and 26% of women did not believe that a healthy-looking person can carry the AIDS virus (Central Statistical Office, Zimbabwe & Macro International, 1995). This belief can lead to exposure to HIV infection since people are unlikely to take precautions when having sexual intercourse with healthy-looking partners as they perceive their risk of HIV infection to be low.

The belief that AIDS is a disease for 'high-risk' groups can influence people's perceptions and behaviour. For a long time in Kenya, AIDS was associated with homosexuals, drug users, prostitutes, truck drivers and tourists. As a result, some people discounted their own risk because they did not identify with these high-risk groups (Kenya *et al.*, 1998; Okeyo *et al.*, 1998). Another belief that may influence the perception of HIV is the way that illness is viewed (Williams, 1986). Some see AIDS as punishment for immoral behaviour so that those who see their lifestyle as being morally upright may perceive their chance of being infected by HIV to be low (Konde-Lule, 1993; Nzioka, 1996).

Perceived risk and Sexual behaviour

In Kwa Zulu-Natal, South Africa, a study was done to determine risk perception and condom use among cohabiting or married couples. This is because most HIV prevention efforts and programs focus on premarital and extra marital sexual behaviour but in areas with high HIV prevalence, the protective needs of married and cohabiting couples are just as great and often go unmet. Condom use by these couples is generally low with resistance from men and cultural norms which make these people to underestimate their HIV risk and these are commonly cited as barriers to increased use of condoms. In this study, matched partners in 238 marital or cohabiting relationships were independently interviewed about

condom use and attitudes towards knowledge of AIDS and HIV risk, and self efficacy in preventing HIV infection. Logistic regression analysis was used to assess relationships between condom use and selected demographic and HIV prevention characteristics. The results show that although couples' knowledge of condoms and where to obtain them was very high, only 15% of men and 18% of women reported consistent or occasional use. A woman's perceived risk of HIV infection from her partner was the most powerful predictor of condom use. This shows that common belief that men's resistance to condom use within stable relationships cannot be overcome can be exaggerated (IFPP 2005). A higher proportion of women than of men felt at risk of HIV infection from their partner (47% vs. 29%). Not surprisingly, perceived risk of HIV infection was strongly and positively associated with the woman's belief that her partner was unfaithful.

In Ethiopia, a cohort study of factory workers with a high prevalence of HIV reported high-risk sexual behaviour and low condom use, even though the majority mentioned condom use as the best way to prevent HIV transmission (Sahlu et al 1999). A study using 1998 Kenyan DHS data reported that the odds of having risky sexual behaviour were more than tripled among men and women who perceived their risk of HIV and AIDS infection as low, and found no association between knowledge of HIV transmission and sexual behaviour. These people were also discovered to have low condom usage (Akwara 2003). This shows that much as people would know about HIV transmission and the contraceptive that prevents transmission, they did not actually use the contraceptive (condom) as they perceived themselves to have low risk of acquiring it.

As STD infections including HIV increase in the United States, it has become increasingly important to policy makers to ascertain the extent to which knowledge and perceptions of AIDS risk affect an individual's probability of altering their sexual or contraceptive behaviour to avoid infection. A study aimed at examining the extent to which women's perceptions of their own and their partners' risk of HIV infection affects the probability of using a condom for protection against sexually transmitted diseases in the U.S.A was carried out. It also examined the extent to which HIV testing may affect motivation for condom use. Cross tabulations reveal that prophylactic condom use is more prevalent

among women who have been tested for HIV and increase as perceptions of their chance (and their partner's chance) of being positive increases. The multivariate results from this study indicate that having an HIV test significantly predicts the likelihood of using a condom for STD prevention for US women. Furthermore, women who perceive themselves to be at least somewhat likely to be HIV positive have a higher probability of using a condom to prevent sexually transmitted disease, and women who perceive their partners to be HIV positive are twice as likely as other women to use a condom for STD prevention. However, women who consider themselves likely to be HIV positive are no more likely to use a condom than those who consider themselves not at risk.

Another study was conducted in Mozambique among young adults. The goal of this study was to examine whether correct assessment of HIV risk is associated with condom use at last sex among young adults in Mozambique. Youth assessments in this study are described as youths' attitudes toward HIV and AIDS, and determine whether they have correct information on how the virus is transmitted. They also analysed whether individuals' self-assessment of risk is accurate in light of their sexual behaviour. This study used a national population-based household sample, representative of all Mozambican youths aged 15–24, (Gasper et al 1997).

It was found that there is a tendency for young adults, especially young men, to underestimate their risk of contracting HIV: Some 27% of women and 80% of men who considered themselves at low or no risk were actually at moderate or high risk of HIV infection. Furthermore, even though men and women overall had accurate knowledge of HIV transmission modes, 17% and 46%, respectively, did not know how to assess their risk and hence their careless sexual behaviour such that even condom usage among them was very low as a means of protecting themselves from sexually transmitted infections including HIV. This shows that self assessment HIV risk has a huge impact on sexual behaviour and condom usage (Gaspar et al 1997).

In rural and urban high schools in Oyo state of Nigeria, it is also observed that self assessed HIV risk has a big impact on sexual behaviour and condom usage. It was found

out that the mean age at first sexual intercourse was 13.5 years among the 19.9% who had ever had sex. Having had sex before was associated with increasing age and self perceived HIV risk. Only 26.2% of sexually experienced youth had used condom. Perceived self-efficacy was the only factor associated with condom use. This also shows that people that perceive themselves to have low risk of HIV contraction mostly engage in risky sexual behaviour. (Afr J Reprod Health 2000).

Sexual behaviour

In a survey conducted in 1980-1984 on contraceptive use, 56% of contraceptive users in Africa reported employing traditional methods. Subsequently, however, the proportion declined to 31%. Traditional methods represented a much smaller proportion of the method mix in Asia and in Latin America and the Caribbean, where it decreased from 13% to 9% and from 18% to 12%, respectively. Eleven of the 12 countries with high HIV prevalence among adults are in Sub-Saharan Africa (Aboud , Msamanga 1998). Not more than 8% of married women in any country reported using condoms at the latest survey. Moreover, the proportion using condoms increased substantially in only two countries: In Cameroon, it rose from 2% in 1998 to 8% in 2004 (an average annual change of 0.9%), and in Namibia, it rose from 0.3% in 1992 to 5% in 2000 (an average annual change of 0.6%). Even though HIV prevalence among adults in the other countries ranged from 5% to 25%, the level of condom use in these countries remained below 4%.This may be because people do not perceive themselves to be at high risk of acquiring HIV and hence the non use of condoms as a contraceptive method which provide a dual protection against HIV infection and getting pregnant.

In another study conducted among developing countries, condom use as a proportion of method mix has remained almost unchanged, despite the global AIDS epidemic and efforts to promote the ABC approach (abstinence, being faithful, and condom use). The proportion of married female contraceptive users reporting condom use remained constant and low in all regions over the study period. Of the 12 countries with a 2003 HIV prevalence of at

least 5%, only Cameroon and Namibia have shown rising condom use among married women. Worldwide, 80% of HIV infections are transmitted sexually, and another 10% during pregnancy, birth or breast-feeding. Although a joint position statement by the World Health Organization, the Joint United Nations Program on HIV and AIDS and the United Nations Population Fund promoted the male latex condom as the most effective means of preventing sexual transmission, this study found little evidence that condoms are a popular method among married couples. This is because married couples perceive their risk of HIV contraction as low. Low levels of condom use are calls for concern, particularly in the context of generalized epidemics such as those found in Sub-Saharan Africa (Baeten 2007).

Among married couples, despite a growing number of studies showing that an increased proportion of HIV infections are transmitted through sex within marriage or with a committed partner, individuals in committed relationships tend to resist condom use, because it is often considered a sign of infidelity. However, evidence from national surveys has shown that condom use is much more prevalent outside of marriage, among both married and unmarried men and women. Data may not accurately reflect total condom usage among men, since men's use of condoms with extramarital sexual partners would not be picked up by surveys conducted among married women. Furthermore, the questions used in the surveys from which the data came did not ask whether condoms were being used for pregnancy or disease prevention, or both. The results obtained demonstrate continued low levels of condom use within marriage and this highlights the need for greater programmatic efforts to procure, promote and distribute condoms. They also point up the need to develop female controlled methods that can protect women against unplanned pregnancy, HIV and other STIs. This shows that generally married couples or people in more stable relationships tend to have low condom usage because they perceive their HIV risk to be low in marital unions (Baeten 2007).

In another study in Mozambique, a behaviour risk survey was carried out to determine the relationship between individuals' perception of risk of acquiring HIV and their use of condoms. Data from the Mozambique 2001 Adolescent and Young Adult Reproductive

Health and Behaviour Risk Survey are used to compare 15–24-year-olds' assessments of their HIV risk with assessments based on current and past sexual behaviour. In bivariate and probit regression analyses, the relationship between correct risk assessment and the likelihood of condom use at last intercourse is examined. The results show that twenty-seven percent of women and 80% of men who considered themselves to have no risk or a small risk of contracting HIV were actually at moderate or high risk. For both men and women, the prevalence of condom use at last sex was more than twice as high among those who assessed their risk correctly (30% and 16%, respectively) as among those who did not (14% and 6%). Multivariate analysis showed that correct assessment was positively associated with condom use; the association was driven by use among never-married individuals. Never-married males who assessed their risk correctly were 18% more likely than other males to report condom use; never-married females, 17% more likely than other females. This shows that correct assessment of risk is associated with condom usage but unfortunately instead of correctly assessing their HIV risk , most people underestimate their risk which is a worry because they will mostly not use condoms and they are likely to engage in risky sexual behaviour (International Family Planning Perspectives, 2006, 32(4):192–200).

In 2000, an estimated 12% of adults aged 15–49 in Mozambique were infected with HIV. Most estimates show an increasing prevalence of infection, and about one-half of new infections occur among 15–24-year-olds. Nevertheless, according to the 1997 Mozambique Demographic and Health Survey (DHS), young adults had an extremely low rate of condom use. Individuals' knowledge of HIV transmission and accurate assessment of their own risk seem to be among the key factors in adoption of safer sexual practices. Policymakers must understand these factors to design effective policies in the fight against HIV and AIDS. Adolescent and young adult behaviour is of special interest for several reasons. First, the number of life-years saved is greatest when infections are averted in relatively young individuals. Second, preventing HIV infection in women of childbearing age prevents transmission from mother to child. Finally, it may be easier to change sexual attitudes, practices and risky behaviours among the young than among older people. In Mozambique, the response to HIV and AIDS has included educational programs, media

campaigns, social marketing of condoms and voluntary counseling and testing services. All of these programs aim to provide individuals with information about HIV transmission, thereby allowing them to make informed choices which are assumed to have low risk in terms of HIV infection and high condom use.

Another cross sectional study was conducted in Kabale regional hospital, HIV and counseling centre from January to August 2009. During the eight months study period, 400 individuals were recruited into the study from among participants that came to receive medical care and counseling services at the centre. The results show that the condom and the injectable methods were the commonest methods of contraception used. Of the respondents who gave reasons as to why condoms should be consistently used among HIV positive or sero-discorndant couples were to avoid transmitting HIV infection. The study shows that factors independently associated with contraceptive use were level of education and whether respondent has changed partners since HIV diagnosis which determines their levels of HIV self perceived risk (Michelle and Stevens, 2004).

From the above studies, it is seen that self assessed HIV risk has a big impact on peoples' sexual behaviour where those that think they have less risk tend to have risky sexual networks as compared to those who think they are more at risk. Unfortunately, self assessed HIV risk is hard to determine in most people as the sexual networks that they are engaged in are hard to determine because some partners cheat on others. So in most cases, the assessd risk is assumed to be lower and yet it is high and this tends to increase the HIV contraction rate as the sexual behaviours of most people are mostly risky and there is also a likelihood of none or inconsistent condom use.

2.1 Conceptual Framework and Hypothesis

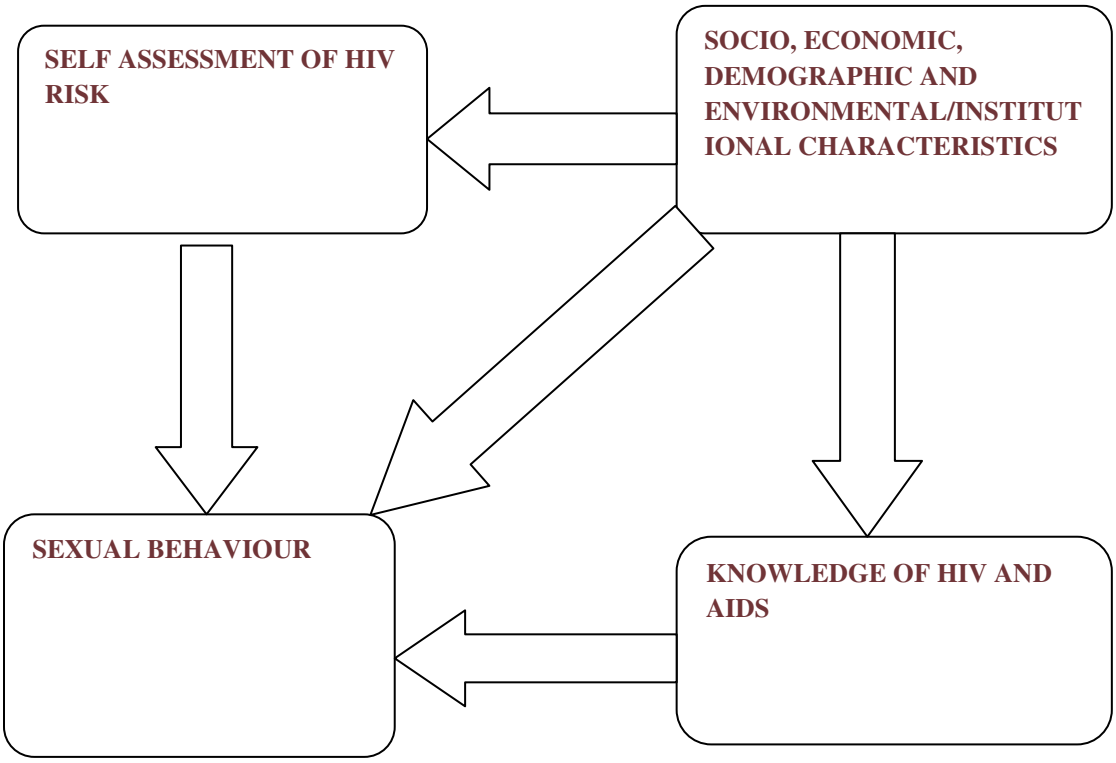
2.1.1Conceptual Framework

The conceptual framework depicted below attempts to demonstrate the interrelationships between the major variable of interest, sexual behaviour, self assessment of HIV risk, knowledge of HIV

and AIDS, and other relevant social, economic, demographic characteristics. The arrows suggest the direction of the postulated relationships.

In this framework, sexual behaviour is the main dependent variable which is influenced by self – assessed risk, knowledge or awareness of HIV and AIDS, and an array of socio, economic, demographic, cultural, and environmental variables. The latter variables are assumed to influence one's assessment of risk to HIV/AIDS, knowledge of HIV and AIDS, and sexual behaviour both directly and indirectly.

Self Assessed HIV risk was measured by asking the respondent whether they thought they were at risk of HIV contraction and whether they rated this as great, moderate, small, no risk at all or they did not know their level of risk at all. The dependent variable, **sexual behaviour, was** measured by asking the respondents the age of their sexual partner, how many sexual partners they have and how consistently they use condoms.



2.1.2 Hypotheses

Based on this conceptual framework, the following was the main proposed hypothesis derived from it:

Students who assess themselves to have a low risk of HIV contraction are more likely to engage in risky sexual behaviours

Other than this hypothesis, there are other sub-hypotheses postulated on the basis of the same conceptual framework. Broadly classified under the broad categories of environmental/institutional, demographic, and social factors which are described below:

ENVIRONMENTAL OR INSTITUTIONAL

Type of institution

Type of Institution whether University of Zambia or Evelyn Hone might affect students' HIV assessment of risk and sexual behaviour

Sponsorship mode

Depending on the sponsorship mode, students who are self sponsored may have low risk of HIV assessment and may engage in risky sexual behaviour in search for money unlike students who are sponsored.

DEMOGRAPHIC

Age

Age may have an effect on students' HIV risk assessment and sexual behaviour depending on whether one is older or younger.

Sex

Sex of a student may contribute to self assessed HIV risk and sexual behaviours that students tend to have when a student is male or female

Marital status

Depending on whether one is married or single, students may have varied self assessed HIV risks and sexual behaviours

SOCIAL

Religion

Religion of a student can determine his or her self assessed HIV risk and sexual behaviour as some religions have strong emphasis on these variables.

Peer pressure

Some students may assess their risk of HIV contraction to be high or low and have varied risky sexual behaviours due to peer influence.

Ethnicity

Depending on a student's ethic origin, he or she may assess his or her HIV risk as high or low and ethnicity may also play a part in his or her sexual behaviour.

Knowledge of HIV: Some students may assess their risk of HIV infection as high or low depending on knowledge of HIV and this can also influence their sexual behaviours.

CHAPTER THREE

Research Methodology

3.1 Research Design

This study involved the use of a cross sectional analytical study. It aimed at analysing the determinants of self assessed HIV risk and sexual behaviour among college and university students. As indicated in the conceptual framework and hypotheses, an attempt was made to look at the influence of ethnicity, religion, marital status, to mention but a few on self assessed HIV risk and sexual behaviour; and the relationship between knowledge and misconceptions about HIV and assessed risk on sexual behaviour.

3.2 Study area

Target Population

The study population was drawn from all resident college and university students at Evelyn Hone College of Arts and The University of Zambia of both sexes. These two institutions were purposively selected because they have high concentration of young people who are not only sexually active but are also susceptible to risky sexual behaviour and thus very vulnerable to HIV infection. Furthermore, students from these institutions not only come from different schools and departments with different socializing experiences but also come from different parts of the country and therefore represent a cross-section of the country's youth population. Only accommodated students were targeted as they were easily accessible.

3.3 Sampling Strategy

Sample Size

A selected sample size of 500 students was selected. In simple random sampling, a sample of this size is expected to have a margin of error of 4 percent and thus fairly good and accurate estimates of population values.

Sample design

Stratified sampling was used in the selection of students, sex and institution as the criteria of selection. A total of 600 students were selected, 300 each from Evelyn Hone college and the University of Zambia. To achieve this, sampling frames or yearbooks comprising only accommodated students were obtained from both institutions. The sampling frames were stratified by sex. From the male and female strata, the required numbers of students were randomly selected using EXCEL spreadsheet.

3.4 Data Collection

Both quantitative and qualitative data were collected by using interview method of data collection. Data were collected by conducting semi structured interview questionnaires with the respondents. These questionnaires had both closed and open ended questions. Closed questions were preferred on the questionnaire because they permit collection of data in a standardized way on variables that are quantifiable. Open ended questions allowed for collection of divergent views and opinions from the respondents.

The questionnaire was pre-tested on 10 randomly selected students from the two institutions, 5 from each institution. Two data collection assistants were trained to help in data collection.

3.5 Data Processing and Analysis

The data that were collected using the questionnaire were checked for consistency, uniformity and accuracy, coded and then entered into a computer. MS ACCESS was used to create a data entry screen because it has the capability to capture both qualitative and quantitative information. This software has a number of advantages over others in that it is possible to design the entire questionnaire onto the computer. This makes the user to see all the questions on the template, thus minimizing the chances of entering wrong responses. Furthermore, the program allows for automation and skip instructions. This enhanced the quality of data that was entered for data analysis. The entered data was then exported to SPSS (12.0) via a data entry query or syntax for analysis. Frequency tables and cross

tabulations were produced. Bivarriate analysis was performed on certain variables to establish existence of relationships. Contingency tables were used to facilitate presentation of findings. Qualitative data from open ended questions were manually analysed using themes.

3.6 Study Limitations

Due to the sensitivity of the topic and the cultural beliefs on sex vis-à-vis sexuality, there was likelihood that some respondents concealed certain information relevant to this research. In addition, assessment of sexual behaviours in relation to self assessment risk of HIV contraction by respondents based on self reports most likely left out some elements due to the sensitivity of the topic.

3.7 Ethical Issues

The research ensured the right to privacy and confidentiality of the respondents. Anonymity of the respondents was taken into consideration in the sense that names of the respondents were not recorded so as to give confidence to the respondents. There was respect for persons, justice and beneficence and the data was treated with utmost confidentiality and was used solely for the stated purpose in consistency with sound research designs.

CHAPTER FOUR

GENERAL FINDINGS

This chapter presents the background characteristics of the youths who were interviewed in this study. This information is vital as it gives a base or reference point of the analysis of the youth population. This is done because these characteristics have been deemed to have an influence on the perception of students towards self assessed HIV risk and sexual behaviour. The background characteristics being analysed are age, sex, marital status, school, year of study, residence, tribe, and sponsorship.

4.1 SOCIAL, ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS

Age

It is assumed that there are differentials with regard to the perception of students towards self assessed HIV risk and sexual behaviour among different age groups. Table 4.1 presents the respondents' age groups. Majority of respondents interviewed were in the age group 16-24 years (74.2 percent) and these account for three quarters of the students at both UNZA and Evelyn Hone. About 83 percent of the respondents at UNZA and 65 percent at Evelyn Hone were below 25 years. Those in the age group 25 years and above accounted for 16.8 percent and 34.8 percent at UNZA and Evelyn Hone respectively. The median age was 23.03 years old. The oldest respondent was aged 35 years and the youngest, 16 years.

Sex

Sex is an important variable in the discussion of sexual behaviour in relation to HIV and AIDS as males and females behave differently sexually. Table 4.1 also shows that the number of male and female respondents is equal, hence an equal representation among males and females in terms of self assessment of HIV contraction risk and sexual behaviour between both sexes. In line with our sampling strategy, equal numbers of male and female students were obtained from the two institutions of learning.

Table 4.1: Percentage distribution of respondents by background characteristics

Characteristics	Institution		
	UNZA (%)	Evelyn Hone (%)	Total (%)
Age			
Below 25	83.2	65.2	74.2
25 and above	16.8	34.8	25.8
Sex			
Male	50.0	50.0	50.0
Female	50.0	50.0	50.0
Marital Status			
Single	95.0	87.0	91.0
Married	4.8	13.0	9.0
Year of Study			
First	23.3	33.1	28.2
Second	17.7	40.3	29.0
Third	26.9	26.6	26.8
Fourth	21.7	0.0	10.9
Fifth	7.2	0.0	3.6
Sixth	2.0	0.0	1.0
Seventh	1.2	0.0	0.6
Sponsorship			
GRZ	87.6	6.9	47.4
Self	11.2	90.0	50.2
NGOs	0.4	2.8	1.6
Others	0.8	0.8	0.8
Residential Area			
Low Density	33.3	20.3	26.9
Medium Density	55.1	59.9	57.5
High Density	11.5	19.8	15.6
Religious denomination			
Catholic	29.6	26.7	28.1
SDA	18.6	16.6	17.6
Jehovah 's Witness	4.9	12.6	8.7
U.C.Z	12.6	20.6	16.6
Pentecostal	23.5	11.3	17.4
Other	10.9	12.1	11.5
Ethnic Group			
Bemba	30.8	27.7	29.3
Kaonde	2.8	7.2	5.0
Lozi	12.0	17.7	14.8
Lunda	4.4	8.0	6.2
Luvale	5.6	3.6	4.6
Nyanja	25.2	19.3	22.2
Tonga	18.0	15.7	16.8
Other	1.2	0.8	1.0
Number	**250**	**250**	**500**
Total	**100**	**100**	**100**

Marital Status

Marital status plays an important role in influencing an individual's sexual behaviour. It may also shape the self perception that students have towards HIV and AIDS as many married people perceive themselves to be in relatively safer sexual unions. Table 4.1 shows that the vast majority of the respondents (91%) are single. Only 9% of the respondents are married. Evelyn Hone (13 percent) has relatively more married students than UNZA (4.8 percent).

Year of Study and Sponsorship

The majority of the students at UNZA are in the third year (26.9 percent) while majority of the students at Evelyn Hone are in the second year (40.3 percent). Those in their first year are 28.2 percent followed by those in third year with 26.8 percent. Fourth years are 10.9 percent, fifth years 3.6 percent and lastly sixth and seventh years with 1 percent and 0.6 percent respectively.

With respect to sponsorship, Table 4.1 shows that half of the students are on self-sponsorship; forty seven percent are on government sponsorship; less than two percent are NGO sponsored; and less than one percent are sponsored by other organizations. Most of the students at Evelyn Hone are self sponsored (90 percent) while those at UNZA are government sponsored (87.6 percent).

Ethnicity

Tribal affiliation in identity plays a key socializing function in societies. In some Zambian tribes, both girls and boys undergo initiation ceremonies like chisungu and mukanda. Tribe was also used to analyse self assessment of students towards HIV risk and sexual behaviour with respect to it. According to Table 4.1, most of the students at both institutions of learning are Bemba speaking (29.3 percent), Nyanja/Chewa with 22.2 percent, Tonga students are 16.8 percent, Lozi (14.8) percent, Lunda 6.2 percent and the lowest being Kaonde and Luvale with 5 percent and 4.6 respectively.

Residence and Income

In this research, residence and income of students' families were used as proxy variables for social economic status. Social economic status has in some studies been found to play a role in influencing sexual behaviour. The residential area and income level variables may also have a lot of implications on the attitudes of students with respect to self assessed HIV risk and sexual behaviour. This is so because many students may perceive their HIV risk to be low depending on their social economic status. Therefore, the study got information on the residential areas of the respondents and income levels to assess the economic status of the students' parents or guardians.

Residence was classified as low, medium and high density. According to Table 4.1, slightly over half of the students come from the medium density areas 57.5 percent, low density 26.9 percent and high density 15.6 percent.

Religion

Like ethnic identity, religious institutions play an important role in shaping one's sexual beliefs, practices, and attitudes. Some religions, for example, are more conservative while others are more liberal on their sexual teachings. These variables were also analysed to ascertain the influence they may have towards self assessed HIV risk and sexual behaviour.

Table 4.1 shows that most of the students are Christians (98.8 percent) followed by Hindus and Atheists with 0.4 percent each. Among the Christians, the most dominant group are the Catholics (28.1 percent). Seventh Day Adventists and Pentecostals each account for 18 percent and 17 percent respectively. 16.6 percent for UCZ, and 11.5 percent for other denominations such as Lutheran, Apostolic, Baptists, Church of God, Ebenezer, Dutch and Methodists. Jehovah's witnesses account for only 8.7 percent.

4.2 AWARENESS OF HIV AND AIDS

Knowledge of HIV and AIDS

Awareness of HIV and AIDS and its relationship to self assessed HIV risk and in sexual behaviour is very important, especially, among youths as the period between first sexual experience and marriage is one of the high sexual experimentation which may involve high risk behaviours. Knowledge of HIV and AIDS is important because this can help in the prevention of the spread of the HIV virus. Table 4.2 shows responses from students on their knowledge of HIV and AIDS. Table 4.2 reveals that knowledge of HIV and AIDS is high with the majority of students (98.5 percent) having heard about HIV and AIDS. The awareness is slightly higher (99.2 percent) at the University of Zambia than Evelyn Hone College (97.6 percent). More than two thirds of the students said they have a relative or friend with HIV (73.2 percent) and more than three quarters (80.2 percent) know that something can be done to avoid HIV. Relatively, more UNZA students (84 percent) than Evelyn Hone students (62.4 percent) have been affected by HIV and AIDS. The younger students (below 25 years) have been more affected (73.9 percent) than the older students (71.3 percent).

Table 4.2: Count and percent distribution of respondents' awareness of HIV and AIDS by selected background characteristics

	Awareness of HIV and AIDS		
Background Characteristic	**Heard of HIV and AIDS**	**Has a relative/friend with HIV and AIDS**	**Knows Something can be done to avoid HIV**
Institution			
UNZA	248(99.2)	210(84.0)	211(85.8)
Evelyn Hone	244(97.6)	156(62.4)	187(74.8)
	X^2=2.033, df=1, p>0.05	**X^2=30.088, df=2, p<0.05**	**X^2=15.373, df=5, p<0.05**
Age			
Below 25	365(98.4)	274(73.9)	128(34.5)
25 and above	127(98.4)	92(71.3)	56(43.4)
	X^2=0.003, df=1, p>0.05	**X^2=0.715, df=2, p>0.05**	**X^2=2.409, df=5, p>0.05**
Sex			
Male	247(98.8)	167(66.8)	203(81.9)
Female	245(98)	199(79.6)	195(78.6)
	X^2=0.508, df=1, p>0.05	**X^2=11.023, df=2, p<0.05**	**X^2=7.564, df=5, p>0.05**
Marital status			
Single	448(98.5)	331(72.7)	364(80.4)
Married	44(97.8)	35(77.8)	34(79.1)
Total	**448(98.5)**	**366(73.2)**	**398(80.2)**
	X^2=0.122, df=1, p>0.05	**X^2=0.597, df=2, p>0.05**	**X^2=1.0742, df=5, p>0.05**

Students were asked to rate their knowledge of HIV and AIDS and the results were as follows:

Table 4.3: Count and percent distribution of respondents' knowledge of HIV by selected background and demographic characteristics

	Knowledge of HIV and AIDS			
Background Characteristic	**High**	**Medium**	**Low**	**Total**
Institution				
UNZA	217(86.8)	33(13.2)	0(0.0)	250(100)
Evelyn Hone	166(66.4)	56(22.4)	28 (11)	250(100)
X^2=42.992 df=3 p<0.05				
Age				
Below 25	291(78.4)	63(17.0)	17(4.6)	379(100)
25 and older	92(71.3)	26(20.2)	11(8.5)	129(100)
X^2=6.042 df=3 p>0.05				
Sex				
Male	193(77.2)	36(14.4)	21(8.4)	250(100)
Female	190(76.0)	53(21.2)	7(2.8)	250(100)
X^2=10.337 df=3 p<0.05				
Marital status				
Single	350(76.9)	78(17.1)	27(5.9)	455(100)
Married	33(73.3)	11(24.4)	1(2.2)	45(100)
X^2=0.344 df=3 p<0.05				
Religious Denomination				
Catholic	111 (79.9)	20 (14.4)	8(5.8)	139(100)
S.D.A	64 (73.6)	18 (20.7)	5(5.7)	87(100)
Jehovah's witness	31(72.1)	7 (16.3)	5 (12)	43(100)
U.C.Z	56(68.3)	21 (25.6)	5 (6.1)	82(100)
Pentecostal	76 (88.4)	9 (10.5)	1 (1.2)	86(100)
Others	41 (71.9)	13 (22.8)	3 (5.3)	57(100)
Total	**379(76.7)**	**88(17.8)**	**27(5.5)**	**494(100)**
X^2=21.088 df=15 p>0.05				

The study shows that more than three quarters (76.7 percent) of the students feel that their knowledge of HIV is high. Further, 17.8 percent (88) and 5.5 percent (27) feel that their knowledge of HIV and AIDS is medium and low respectively. Though not statistically significant, analysis of knowledge of HIV by age reveals an unexpected finding:

relatively more younger students below 25 years rate their knowledge of HIV as high (78.4 percent) compared to those 25 years and above (71.3 percent). For institutions, Table 4.3 indicates that UNZA students reported high level of knowledge of HIV and AIDS (86.8 percent) than Evelyn Hone (66.4 percent), ($p<0.05$). Relatively more UNZA students (86.8 percent) rate their knowledge to be higher than Evelyn Hone students (66.4 percent), ($P<0.05$). Slightly more males (77.2 percent) rate their HIV knowledge as high compared to female students (76 percent), ($P<0.05$). The relationship between marital status, and religious denominations to knowledge of HIV and AIDS are not significant, ($P>0.05$).

4.4 Knowledge about Prevention

To further gauge knowledge of HIV and AIDS, students were asked on the preventive measures associated with it. The responses of the students are given in table 4.4.

Table 4.4: Count and percent distribution of respondents' view on the most effective way of preventing HIV by background characteristics			
	Most effective way of preventing HIV		
Background Characteristic	**Use of condoms**	**Abstinence**	**Other Methods**
Institution			
UNZA	17(6.9)	211(85.8)	18(7.3)
Evelyn Hone	42(17.0)	187(74.8)	21(8.4)
X^2=80.922 df=13 p<0.05			
Age			
Below 25	5(8.1)	51(82.3)	30(8.1)
25 years and older	50(12.0)	327(80.1)	9(7.0)
X^2=18.265 df=13 p>0.05			
Sex			
Male	42(11.4)	296(80.4)	20(8.1)
Female	17(13.3)	102(79.7)	17(7.7)
X^2=16.055 df=13 p>0.05			
Marital status			
Single	54(12.0)	364(80.0)	35(7.7)
Married	5(12.0)	34(79.0)	4(9.3)
X^2=28.856 df=13 p>0.05			
Religious Denomination			
Catholic	19(14.0)	104(76)	14(10.3)
S.D.A	6(6.9)	75(86.2)	6(6.8)
Jehovah's Witness	8(19.0)	30(71.4)	4(9.6)
U.C.Z	10(12.0)	65(79.3)	7(8.5)
Pentecostal	10(12.0)	70(81.4)	6(7)
Others	5(8.8)	50(87.7)	2(3.5)
Total	**59(12.0)**	**394(80.0)**	**39(7.9)**
X^2=48.539 df=65 p<0.05			

The results review that abstinence is cited among the students (80 percent) to be the most effective way of HIV prevention. This is followed by use of condoms at 12 percent and other methods (7.9 percent). More UNZA students (85.8 percent) are more knowledgeable than Evelyn Hone students (74.8 percent) about abstinence as the most effective method of HIV prevention. In contrast, relatively more Evelyn Hone students (17 percent) than UNZA (6.9 percent) identified condom use as the most effective way of HIV prevention. Older students aged 25 years and above (12 percent) attach more

effectiveness to condoms than younger students below 25 years (8.1 percent). On religious denomination, other smaller denominations like Baptists and Methodists have more knowledge (87.7 percent) and the lowest are the Jehovah's Witnesses (71.4 percent). Differences observed for religious denomination and institution of learning were significant (P<0.05).

Table 4.5: Count and percent distribution of respondents' knowledge of condom as an effective HIV prevention measure by selected background characteristics

	Knowledge of condom as an effective HIV prevention measure		
Background Characteristic	**Yes**	**No**	**Total**
Institution			
UNZA	90(36.0)	160(64.0)	250(50)
Evelyn Hone	120(48.2)	129(51.8)	250(50)
X^2=8.280 df=3 p<0.05			
Age			
Below 25	145(39.1)	226(60.9)	371(74.2)
25 years and older	65(50.8)	63(49.2)	129(25.8)
X^2=3.877 df=3 p>0.05			
Sex			
Male	123(49.2)	127(50.8)	250(50)
Female	87(34.9)	162(65.1)	250(50)
X^2=4.836 df=3 p<0.05			
Marital status			
Single	187(41.1)	268(58.9)	455(91)
Married	23(52.3)	21(47.7)	45(90)
X^2=2.566 df=3 p>0.05			
Denomination			
Catholic	69(49.6)	70(50.4)	139(28.1)
S.D.A	34(39.1)	53(60.9)	87(17.6)
Jehovah's witness	11(25.6)	32(74.4)	43(8.7)
U.C.Z	34(42.0)	47(58.0)	82(16.7)
Pentecostals	33(38.4)	53(61.6)	86(17.4)
Others	27(47.4)	30(52.6)	57(11.5)
Total	**208(42.2)**	**285(57.8)**	**494(1000**
X^2=18.240 df=15 p>0.05			

In spite of the vast literature showing that consistent condom use is an effective HIV prevention measure, a substantial number of students (57.8 percent) displayed ignorance of this important fact. Only 42.2 percent knew that HIV can be prevented through consistent condom use. More students at Evelyn Hone (48.2 percent) than UNZA (36 percent) and more males (49.2 percent) than females (34.9 percent) indicated that consistent condom use is an effective HIV prevention measure ($P<0.05$). Students aged 25 years and above (50.8 percent), married students (52.3 percent), and Catholics (49.6 percent) also know that consistent condom use is an effective HIV prevention measure more than the students in other age groups, single students, and students in other denominations. Institution of learning and sex are significant, $P<0.05$.

4.5 Sources of Information about HIV and AIDS

Responses to the question on the source of information about HIV and AIDS are presented in Table 4.6. According to the table, school was cited as the most common source of information on HIV and AIDS (54 percent). This was followed by Newspapers and magazines (11.4 percent), television (9 percent), friends (8.1 percent), radio (6.9 percent), posters/pamphlets (4.7 percent), home (4.3 percent) and the least identified as source of information on HIV and AIDS were the churches/mosques/temples with 1.6 percent.

Table 4.6: Percent distribution of respondents by source of information on HIV by background characteristics									
	Source of information on HIV								
Background Variable	**Television**	**Radio**	**Newspapers**	**Posters**	**Church**	**Friends**	**Home**	**School**	**Total**
Institution									
UNZA	9.7	2.8	9.3	5.3	0.8	4.9	2.8	64.4	247
Evelyn hone	8.4	11.2	13.6	4	2.4	11.6	5.6	43.2	250
X^2=36.421 df=7 p<0.05									
Age									
Below 25	84.4	60	73.7	60.9	87.5	70.7	76.2	75.3	74
25 years and older	15.6	40	26.3	39.1	12.5	29.3	23.8	24.7.	26
X^2=9.456 df=7 p>0.05									
Sex									
Male	8	4.4	10.4	3.2	1.2	7.2	3.2	62.4	250
Female	10.1	9.7	12.6	6.1	2	9.3	5.3	44.9	247
X^2=17.820 df=7 p>0.05									
Marital status									
Single	9.7	6.9	11.7	4.4	1.8	8.6	3.8	53.1	452
Married	2.2	8.9	8.9	6.7	0	4.4	8.9	60	45
X^2=8.097 df=1 p.>0.05									
Denomination									
Catholic	5	8.6	13.7	2.9	2.2	9.4	4.3	54	139
S.D.A	4.7	1.2	16.3	7	0	7	5.8	58.1	86
Jehovah's witness	17.1	14.6	4.9	4.9	4.9	12.2	7.3	34.1	41
U.C.Z	12.2	4.9	13.4	4.9	2.4	6.1	2.4	53.7	82
Pentecostal	10.5	7	5.8	5.8	1.2	7	4.7	58.1	86
Others	12.3	8.8	8.8	3.5	0	8.8	1.8	56.1	57
Total	**9**	**6.9**	**11.4**	**4.7**	**1.6**	**8.1**	**4.3**	**54**	**491**
X^2=41.308 df=35 p>0.05									

4.6. SEXUAL BEHAVIOUR

Sexual behaviour is one component that is cardinal in the fight against HIV and AIDS. This is because sexual intercourse is the most common mode of transmission of the HIV virus among other modes of transmission.

Findings of this study (Table 4.7) show that approximately 71 percent of the students in the study have previous sexual experience .Males (80 percent) were more likely to have had sexual intercourse than females (61.2 percent) (P<0.05). As expected, older students (25 years and older) (86.0 percent) had sex before compared to 65.2 percent of the students below age 25. This is most likely because the former are more likely to be married than the latter. Evelyn Hone have proportionately more students (84.4 percent) with previous sexual experience compared to UNZA (56.8 percent), (p<0.05).

Table 4.7: Count and percent distribution of respondents who have had sex before by selected background and demographic characteristics

	Students who have had sex before		
Background Characteristic	**Number**	**Percentage**	**Total**
Institution			
UNZA	142	56.8	250
Evelyn Hone	211	84.4	250
X^2=45.875 df=1 p<0.05			
Age			
Below 25	242	65.2	379
25 years and older	111	86	129
X^2=19.985 df=5 p>0.05			
Sex			
Male	200	80	250
Female	153	61.2	250
X^2=21.285 df=1 p<0.05			
Denomination			
Catholic	105	75.5	139
S.D.A	61	70.1	87
Jehovah's witness	27	62.8	43
U.C.Z	59	72	82
Pentecostal	55	64	86
Others	42	73.7	57
Total	**349**	**70.6**	**494**
X^2=5.075 df=5 p>0.05			

4.7 Students' age at first Sex

Age at first sexual intercourse is very important to determine because it puts students at an increased risk of contracting HIV as the length of exposure to HIV contraction is

higher. This is also partly because there is a higher likelihood of inconsistent condom use or not using condoms at all.

According to this research, on average, students' age at first sexual experience is 18.5 years meaning that each student is expected to have sexual experience by age 18.5 years. Most students start having sex at the age of 20 years, and by age 19, half of the students have had their first sexual experience. According to Table 4.8, most students at UNZA start having sexual intercourse at a much earlier age (11.1 percent) than the students at Evelyn Hone (9.3 percent). The difference in age at first sex for UNZA and Evelyn Hone is however, not statistically significant. Males on average have first sex below the mean age at first sex. Male students (13.8 percent) are also more likely to start having sexual intercourse at an earlier age than female students (5.0 percent) ($P<0.05$).

Table 4.8: Count and percent distribution of students' age when they first had sex by selected background characteristics

	Age at first Sex				
Background Characteristic	**Below 15**	**15-19**	**20-24**	**25 and above**	**Total**
Institution					
UNZA	14(11.1)	65(51.6)	41(32.5)	6(4.8)	126(100.0)
Evelyn Hone	15(9.3)	80(49.7)	53(32.9)	13(8.1)	161(100.0)
X^2=36.729 df=23 p>0.05					
Sex					
Male	23(13.8)	82(49.1)	55(32.9)	7(4.2)	167(100.0)
Female	6(5.0)	63(52.5)	39(32.5)	12(10.0)	120(100.0)
Total	**29(10.1)**	**145(50.5)**	**94(32.8)**	**19(6.6)**	**287(100.0)**
X^2=29.041 df=23 p<0.05					

4.8 Distribution of Students by age of the person they first had sexual intercourse with

One of the things we wanted to investigate was the prevalence of intergenerational sexual relationships involving young female students and older men as latter have a high

likelihood of HIV and other STI infection because of longer exposure to sexual activity. Since young female students might have less power to negotiate for safer sex, such relationships may contribute to wider spread of HIV and other STIs (International Family Planning Perspectives, 2006).

Table 4.9 shows that there is more intergenerational sexual activity at the University of Zambia than at Evelyn Hone: more students at UNZA (46.6 percent) have sex with people who are older than those at Evelyn Hone (42 percent). Female students (67.7 percent) are more likely than male students (26.9 percent) to have first sexual intercourse with people who are older than them. Table 4.9 further shows that 44.1 percent of the students first had sexual intercourse with people who are older. About one third (32.3 percent) of the students first had sex with a partner of the same age compared to those who had sex with a younger partner (23.7 percent), $p<0.05$

Table 4.9: Count and percent distribution of students by age of the persons they first had sex with by selected background characteristics

Background Characteristic	Students age by age of the person they first had sex with			
	Younger	Same age	Older	Total
Institution				
UNZA	35(26.3)	36(27.1)	62(46.6)	123(100.0)
Evelyn Hone	35(21.6)	59(36.4)	68(42.0)	162(100.0
X^2=67.899 df=4 p<0.05				
Sex				
Male	64(37.4)	61(35.7)	46(26.9)	171(100.0)
Female	6(4.8)	34(27.4)	84(67.7)	124(100.0)
Total	**70(23.7)**	**95(32.2)**	**130(44.1)**	**295(100.0)**
X^2=82.636 df4 p<0.05				

4.9 Reasons for engaging in first sexual Intercourse

There are many reasons why students engage in sexual intercourse. Table 4.10 gives a breakdown of reasons for having first sexual intercourse. This reveals that majority of the

students do so for pleasure (71.9 percent) followed by peer pressure (13 percent). Others do so because of the desire for marriage (5.2 percent) or out of fear of losing one's partner (4.8 percent). A few do so for monetary gains (2.2 percent) or because of drunkenness (1.9 percent). A tiny proportion had their first sexual experience forcibly, through rape (1.5 percent).

Table 4.10: Percent distribution of respondents by reason of having sex the first time by selected background characteristics

	Students reasons of having sex for the first time							
Background Characteristic	**Pleasure**	**Peer Pressure**	**Drunk**	**Fear of losing him**	**Raped**	**Marriage**	**Wanted money from him/her**	**Total**
Institution								
UNZA	71.8	14.5	1.6	3.2	2.4	2.4	4	124
Evelyn Hone	71.6	10.8	2	6.1	0.7	8.1	0.7	148
X^2=10.75 Df=6 P<0.05								
Age								
Below 25	67.2	76.5	100	62	75	0	33.3	64.3
25 years and older	32.8	23.5	0	39	25	100	66.7	**35.7**
X^2=35.45 Df=6 P<0.05								
Sex								
Male	77.4	15	2.5	1.3	0	3.1	0.6	159
Female	63.7	8.8	0.9	9.7	3.5	8.8	4.4	113
X^2=28.50 df=6, P<0.05								
Denomination								
Catholic	70.6	14	3.5	4.7	0	3.5	3.5	85
S.D.A	73.5	14	0	2	0	10	0	49
Jehovah's Witness	68.8	6.3	0	19	6.3	0	0	16
U.C.Z	73.9	4.3	2.2	6.5	2.2	8.7	2.2	46
Pentecostal	65.1	21	0	4.7	2.3	2.3	4.7	43
Others	80.6	9.7	3.2	0	3.2	3.2	0	31
Total	71.9	13	1.9	4.8	1.5	5.2	2.2	270
X^2=34.20 df=30 p>0.05								

4.10 Condom use

According to (UNAIDS 2004) condoms reduce the risk of acquiring HIV by at least ninety percent. Condom use is therefore considered a good measure of safe or unsafe sexual behaviour as this shows how much risk one has in contracting HIV.

Condom use at first sex

Table 4.11 reveals that nearly half (46.5 percent) of the students at UNZA did not use condoms the first time they had sex as compared to 54.5 percent at Evelyn Hone. In terms of age, older students 25 and above (55.4 percent) showed more inclination to use condoms than younger students below aged 25 years (48.4 percent). Females were also more likely to prefer condoms at first sexual encounter than male students (53.4 percent versus 49.1 percent). Catholics have the lowest number of students who did not use condoms (42.5 percent), followed by Seventh Day Adventists (47.1 percent), Pentecostals (51.1 percent), others (57.1 percent), and UCZ (58.7 percent). Jehovah's Witnesses (64.7 percent) reported the highest proportion of non-condom users; however, the differences observed are not statistically significant ($p>0.05$).

Condom use at every sexual encounter

With so much information and education stressing the importance of condom use, people are expected to adopt a positive attitude towards the use of condoms at every sexual encounter. The results in Table 4.11 show that only slightly over half of students (59.1 percent) from the two institutions use condoms at every sexual encounter. According to the findings, students at UNZA (59.7 percent) and Evelyn Hone (57.9 percent) use condoms to about the same extent. Differences with respect to the use of condoms by sex, denomination and tribe are not statistically significant either ($P>0.05$).

Differences by age of the student are, however, statistically significant, ($p<0.01$). Younger students are more inclined to use condoms than older students. Male students (68 percent) are also more likely than female students (44.1 percent) to use condoms every time they have sex ($P<0.05$). Furthermore, single students (63.5 percent) are

significantly more likely than married students (29.2 percent) to use condoms every time they have sex ($P<0.05$)

Changing patterns of condom use

Overall, condom use increased though slightly from the first time students had sex to every time they have sex from 48.9 percent to 59.1 percent except for females and married students who experienced a slight decline from 46.6 percent to 44.9 percent and from 41 percent to 29.2 percent respectively.

Table 4.11: Count and percent distribution of students who used condoms at their first sexual encounter and every time they have sex by selected background characteristics

	Students' use of condoms	
Background Characteristic	**The first time they had sex**	**Every time they have sex**
Institution		
UNZA	69(53.5)	46(59.7)
Evelyn Hone	71(45.5)	55(57.9)
	X^2=1.797, df=1, p>0.05	**X^2=0.060, df=1, p>0.05**
Age		
Below 25	95(51.6)	74(64.3)
25 and above	45(44.6.)	27(47.4)
	X^2=1.306, df=1, p>0.05	**X^2=4.533, df=1, p<0.05**
Sex		
Male	85(50.9)	70(68.0)
Female	55(46.6)	31(44.9)
	X^2=0.509, df=1, p>0.05	**X^2=09.044, df=1, p<0.05**
Marital Status		
Single	124(50.4)	94(63.5)
Married	16(41.0)	7(29.2)
	X^2=1.185, df=1, p>0.05	**X^2=10.051, df=1, p<0.05**
Denomination		
Catholic	50(57.0)	39(63.9)
S.D.A	27(52.9)	15(55.6)
Jehovah's Witness	6(35.3)	4(40.0)
U.C.Z	19(41.3)	16(66.7)
Pentecostal	23(48.9)	13(52.0)
Others	15(42.0)	14(63.6)
	X^2=5.685, df=5, p>0.05	**X^2=3.504, df=5, p>0.05**
Ethnic group		
Bemba	42(56.8)	28(66.7)
Kaonde	8(44.4)	7(70.0)
Lozi	16(39.0)	15(53.6)
Lunda	7(53.8)	5(71.4)
Luvale	4(25.0)	5(45.5)
Nyanja/Chewa	39(53.4)	23(53.5)
Tonga	22(45.8)	18(60.0)
Total	**139(48.9)**	**101(59.1)**
	X^2=9.179, df=7, p>0.05	**X^2=5.119, df=7, p>0.05**

Multiple Concurrent Sexual Partnerships

Involvement in multiple concurrent sexual partnerships is another form of unsafe sexual behaviour that increases the risk of contracting HIV. To investigate the extent to which they were involved in this type of relationships, students who were sexually active were asked if they only had one sexual partner or not. According to Table 4.12, about a quarter (26 percent) of the students were involved in such relationships. Further investigations also revealed that none of the major variables was significantly associated with whether a respondent had more than one sexual partner or not. It is worth noting however that male students (24.3 percent) were more likely to report having more than one sexual partner than females (17.6 percent). Relatively, more Jehovah's Witnesses also reported having more than one sexual partner.

Among the major ethnic groups, Kaonde students (38 percent) show the greatest inclination to report multiple concurrent sexual partnerships, followed by the Chewa, Lozi, Bemba in that order. The Luvale and Tonga showed the least inclination to report having towards multiple and concurrent partnerships.

Table 4.12: Count and Percent distribution of students who have multiple sexual partnerships by selected socio-economic and demographic characteristics

	Students who have multiple sexual partnerships		
Background Characteristic	**Multi sexual partnerships**	**No multi sexual partnerships**	**Total**
Institution			
UNZA	20(28.6)	50(71.4)	70(45.5)
Evelyn Hone	19(22.6)	65(77.4)	84(54.6)
X^2=0.715 df=1 p>0.05			
Age			
Below 25	27(25.5)	79(74.5)	106(68.8)
25 and above	12(46.6)	36(53.4)	48(31.2)
Sex			
Male	26(28.0)	67(72.0)	93(60.4)
Female	13(21.3)	48(78.7)	61(39.6)
X^2=0.860 df=1 p>0.05			
Marital Status			
Single	34(26.0)	97(74.0)	131(85.1)
Married	5(21.7)	18(78.3)	23(14.9)
X^2=0.184 df=1 p>0.05			
Denomination			
Catholic	10(18.5)	44(81.5)	54(35.3)
S.D.A	7(28.0)	18(72)	25(16.3)
Jehovah's Witness	4(40.0)	6(60.0)	10(6.5)
U.C.Z	4(16.7)	20(83.3)	24(15.7)
Pentecostal	7(33.3)	14(66.7)	21(13.7)
Others	6(31.6)	13(68.4)	19(12.4)
X^2=4.653 df=5 p>0.05			
Ethnic Group			
Bemba	12(28.6)	30(71.4)	42(27.5)
Kaonde	0(0.0)	8(100.0)	8(5.2)
Lozi	6(25.0)	18(75.0)	24(15.7)
Lunda	1(16.7)	5(83.3)	6(3.9)
Luvale	3(37.5)	5(62.5)	8(5.2)
Nyanja/Chewa	7(20.0)	28(80.0)	35(22.8)
Tonga	10(33.3)	20(66.7)	30(19.6)
Total	**39(25.5)**	**114(74.5)**	**153(100)**
X^2=5.330 df=p>0.05			

CHAPTER FIVE

FACTORS INFLUENCING ASSESSMENT OF RISK

In the sections that follow, we look at the influence of a number of factors on self-assessed HIV risk and sexual behaviour. These factors include institution of learning, sponsorship, knowledge and sources of information about HIV and AIDS, socioeconomic status variables like residence, peer pressure, religiosity, demographic factors and tribe as depicted in the literature review and conceptual framework.

5.1 Assessment of Risk

As indicated in the first chapter, self assessed HIV risk was inferred from responses from students on whether they considered themselves to be at risk or not and how they rated their chances of contracting HIV and AIDS. The responses were yes and no and small, moderate, great, no risk at all and I do not know.

Overall, most students consider themselves to be at no risk of HIV contraction (60.1 percent) and only 23 percent consider themselves to be at risk of HIV contraction. According to Table 5.1, the relationships between institution, age, religious denomination, and assessment of risk are statistically significant ($p<0.05$).

To be specific, more students at Evelyn Hone (67.2 percent) feel they are not at risk of HIV contraction as compared to 53.2 percent of UNZA students. There is no difference in perception of risk between those below age 25 years (65 percent) and those above age 25 years (64.7 percent). Females are more likely to consider themselves at less risk than males (67.6 percent versus 52.8 percent). Relatively more Pentecostal students (75.4 percent) assess their risk to be non-existent compared to all other religious denominations.

Table 5.1: Count and Percent distribution of students assessment of their HIV risk by selected socio-economic and demographic characteristics

	Students' assessment f their HIV risk			
Background Characteristic	**At Risk**	**Not at Risk**	**May be**	**Total**
Institution				
UNZA	57(22.8)	133(53.2)	60(24.0)	250(100)
Evelyn Hone	58(23.2)	168(67.2)	24(9.6)	250(100)
X^2=19.5 df=2 p<0.05				
Age				
Below 25	77(20.8)	241(65)	53(14.3)	371(100)
25 and older	38(94.3)	60(64.7)	31(41.1)	129(100)
X^2=13.9 df=2 p<0.05				
Sex				
Male	72(28.8)	132(52.8)	46(18.4)	250(100)
Female	43(17.2)	169(67.6)	38(15.2)	250(100)
X^2=12.6 df=2 p>0.05				
Religious Denomination				
Catholic	41(29.5)	72(51.8)	26(18.7)	139(100)
S.D.A	27(31.0)	51(58.6)	9(10.3)	87(100)
Jehovah's witness	6(14.0)	28(65.1)	9(20.9)	43(100)
U.C.Z	16(19.5)	45(54.9)	21(25.6)	82(100)
Pentecostal	16(18.6)	58(67.4)	12(13.9)	86(100)
Others	7(12.3)	43(75.44)	7(12.3))	57(100)
Total	**113(22.9)**	**297(60.1)**	**84(17.0)**	**494(100)**
X^2=23.4 df=10 p<0.05				

5.2 Iinstitution and sponsorship status and self assessed risk

Risk assessment of HIV infection among people varies and this includes college and university students as well. Overall, both in terms of institution of learning and sponsorship, the majority of the students (41 percent) consider their risk of HIV infection as small; twenty three percent believe they are not at risk of HIV contraction. The relationships between intuition of learning and self assessed HIV risk are statistically significant ($p<0.05$). More specifically, about 46.6 percent of the students at UNZA

assess their risk to be small compared to 35.5 percent of the students at Evelyn Hone. The findings show that 10.4 percent of the students at UNZA as compared to 27 percent of the students at Evelyn Hone do not know how to assess their HIV risk, 22.8 percent of the students at UNZA and 23 percent at Evelyn Hone assess themselves to have no risk. About one quarter (25 percent) of the students who are NGO sponsored and sponsored by others rate their risk to be small while 10.2 percent of GRZ and 25 percent other sponsored students do not know how to assess their HIV risk.

Table 5.2: Count and percent distribution of respondents' Self Assessed HIV Risk and Institutional effects:

Background Variables	Self assessed HIV risk					
	Small	Moderate	Great	No risk at all	I do not know	Total
Institution of learning						
UNZA	117(46.8)	41(16.4)	9(3.6)	57(22.87)	26(10.4)	250(100)
EVELYN HONE	88(35.5)	28(11.3)	8(3.2)	57(23.0)	67(27.0)	248(100)
Total	**205(41.2)**	**69(13.9)**	**17(3.4)**	**114(22 .9)**	**93(18.7)**	**498(100)**
X^2 = 24.7 df = 4 P< 0.05						
Sponsorship						
GRZ	109(46.2)	36(15.3)	12(5.1)	55(23.3)	24(10.2)	236(100)
Self	92(37.1)	30(12.1)	4(1.6)	59(23.8)	63(25.4)	248(100)
NGOs	2(25.0)	2(25.0)	0(0.0)	0(0.0)	4(50.0)	8(100)
Others	1(25.0)	1(25.0)	1(25)	0(0.0)	1(25).0	4(100)
Total	**204(41.1)**	**69(13.9)**	**17(3.4)**	**114(23)**	**92(18.5)**	**496(100)**
X^2 37.6 df = 4 P< 0.05						

5.3 Socio-economic status on self assessed risk

Socio-economic status was measured in terms of two questions: one was based on classification of their residential area; the other, on self rating in terms of whether they saw themselves as better off or not better off. According to Table 5.3, there is no statistically significant relationship between residence and self assessed HIV risk ($p>0.05$). There is, however, a statistically significant relationship between one's socio

economic status and self assessed risk. More specifically, students who are economically better off (25.4 percent) are more likely to assess themselves to be at no risk compared to those who are not economically well off (11.4 percent).

Table 5.3: Count and percent distribution of respondents' Self Assessed HIV Risk and Social Economic Status

Background variables	Self Assessed HIV risk					
Classification of parents/guardian's residential area	**Small**	**Moderate**	**Great**	**No risk at all**	**I do not know**	**Total**
Low Density	53(41.4)	20(15.6)	6(4.7)	29(22.7)	20(15.6)	128(100)
Medium Density	114(41.8)	38(13.9)	9(3.3)	60(22)	52(19)	273(100)
High Density	29(39.7)	10(13.7)	1(1.4)	19(26)	14(19.2)	73(100)
Total	**196(41.4)**	**68(14.3)**	**16(3.4)**	**108(22.8)**	**86(18.1)**	**474(100)**
X^2=2.8 df=8 p>0.05						
Social Economic Status						
Better off	170(41.5)	54(13.2)	12(2.9)	104(25.4)	70(17.1)	410(100)
Not better off	35(39.8)	15(17)	5(5.7)	10(11.4)	23(26.1)	88(100)
Total	**205(41.2)**	**96(13.9)**	**17(3.4)**	**114(22.9)**	**93(18.7)**	**498(100)**
X^2=11.8 df=4 P<0.05						

5.4 Ethnicity and self assessed risk

Ethnicity, acting through different cultural beliefs and practices, may influence self-assessed risk and, in turn, sexual behaviour. According to Table 5.4, however, ethnicity is not related to self assessed HIV risk (p>0.05). It is worth noting though, that Lunda students (41.9 percent) are more likely than any other ethnic group to consider themselves as being at no risk at all. In contrast, more Lozi students (48.9 percent) regard their risk of HIV contraction to be small as compared to Lundas (19.4 percent)

Table 5.4: Count and percent distribution of respondents' Self Assessed HIV Risk and Ethnic Effect

Background Variables	Self Assessed HIV risk					
Ethnicity	**Small**	**Moderate**	**Great**	**No risk at all**	**I do not know**	**Total**
Bemba	65(44.5)	18(12.3)	3(2.1)	29(19.9)	31(21.2)	146(100)
Kaonde	10(40.0)	4(16.0)	1(4.0)	5(20.0)	5(20.0)	25(100)
Lozi	36(48.6)	5(6.8)	5(6.8)	19(25.7)	9(12.2)	74(100)
Lunda	6(19.4)	4(12.9)	0.0	13(41.9)	8(25.8)	31(100)
Luvale	10(43.5)	6(26.1)	2(8.7)	3(13.0)	2(8.7)	23(100)
Nyanja/Chewa	43(38.7)	21(18.9)	2(1.8)	23(20.7)	22(19.8)	111(100)
Tonga	33(39.8)	10(12.0)	4(4.8)	20(24.1)	16(19.3)	83(100)
Others	2(40.0)	1(20.0)	0(0.0)	2(40.0)	0(0.0)	5(100)
Total	**205(41.2)**	**69(13.9)**	**17(3.4)**	**114(22.9)**	**93(18.7)**	**498(100)**
$X^2 = 33.9$ df = 28 P> .05						

5.5 Demographic factors and self assessed risk

Although age and marital status are not significantly related to self assessed HIV risk ($p>0.05$), examination of Table 5.5 reveals interesting patterns: younger students below age 25 and those who are single consider their risk as small compared to those who are older and married.

Sex is, however, significantly related to self assessed HIV risk ($p<0.05$). Interestingly, while males (49 percent) are more likely to consider their risk as small compared to females (33 percent), females (31 percent) are twice as likely as males (15 percent) to consider themselves as being completely free from risk.

These results are different from the study conducted in Mozambique that show that there was a tendency for more males to underestimate their HIV risk than females (Gasper MC et al 1997)

Table 5.5: Count and percent distribution of respondents' Self Assessed HIV Risk and Demographic Effect

Background Variables	Self Assessed HIV risk					
Demographic factors	**Small**	**Moderate**	**Great**	**No risk at all**	**I do not know**	**Total**
Below 25	157(42.4)	49(13.2)	14(3.8)	84(22.7)	66(17.8)	370(100)
25 years and older	48(37.5)	20(15.6)	3(2.3)	30(23.4)	27(21.1)	128((00)
Total	**205(41.2)**	**69(13.9)**	**17(3.4)**	**114(22.9)**	**93(18.7)**	**498(100)**
X^2=2.1 df=4 p>0.05						
Sex						
Male	122(49)	35(14.1)	8(3.2)	37(14.9)	47(18.9)	249(100)
Female	83(33.3)	34(13.7)	9(3.6)	77(30.9)	46(18.5)	249(100)
Total	**205(41.2)**	**69(13.9)**	**17(3.4)**	**114(22.9)**	**93(18.7)**	**498(100)**
X^2 = 21.5 df = 4 P<0 .05						
Marital status						
Single	192(42.4)	60(13.2)	16(3.5)	102(22.5)	83(18.3)	453(100)
Married	13(28.9)	9(20.0)	1(2.2)	12(26.7)	10(22.2)	45(100)
Total	**205(41.2)**	**69(13.9)**	**17(3.4)**	**114(22.9)**	**93(18.7)**	**498(100)**
		X^2 = 4.0	**df = 4**	**P> 0.05**		

5.6 Peer Influence and self assessed risk

Peer influence may have an effect on how students assess their HIV risk. Students may perceive their HIV risk to be small or great due to peer influence. Table 5.6 reveals a relationship between peer pressure and self assessed risk ($p<0.05$). More specifically, almost half of the students who regard their friends' opinion to be extremely important (48.1 percent) tend to assess their HIV risk to be small as compared to those who regard their friends' opinion as somewhat important (39.8 percent).

However, the relationship between friends influence on concurrent multiple sexual partnerships (CMSP) and self assessed risk is not significant ($p>0.05$). Those students whose friends' ideas on CMSP matter only at a medium level (44.9 percent) assess their risk to be small as compared to those students whose friends' ideas are considered unimportant (34.9 percent).

Table 5.6: Count and percent distribution of students' Self Assessed HIV Risk and Peer Influence

Background Variables	Self Assessed HIV risk					
Peer Influence	**Small**	**Moderate**	**Great**	**No risk at all**	**I do not know**	**Total**
How important are your friends' opinions in your daily living						
Extremely important	25(48.1)	6(11.5)	2(3.8)	9(17.3)	10(19.2)	52(100)
Very important	79(41.6)	17(8.9)	10(5.3)	48(25.3)	36(18.9)	190(100)
Somewhat important	80(39.8)	40(19.9)	3(1.5)	41(20.4)	37(18.4)	201(100)
Not important	20(42.6)	5(10.6)	1(2.1)	15(31.9)	6(12.8)	47(100)
Total	**204(41.6)**	**68(13.9)**	**16(3.3)**	**113(23.1)**	**89(18.2)**	**490(100)**
X^2 = 26.6 df=16 P< 0.05						
To what extent do your friends ideas influence your knowledge and attitude towards CMSP						
To a larger extent	25(40.3)	11(17.7)	4(6.5)	15(24.2)	7(11.3)	62(100)
Medium	93(44.9)	30(14.5)	6(2.9)	37(17.9)	41(19.8)	207(100)
Minimum	50(38.8)	20(15.5)	4(3.1)	28(21.7)	27(20.9)	129(100)
Not important	30(34.9)	7(8.1)	3(3.5)	31(36)	15(17.4)	86(100)
Total	**198(40.9)**	**68(14)**	**17(3.5)**	**111(22.9)**	**90(18.6)**	**484(100)**
X^2 = 19.2 df = 16 P>0 .05						

5.7 Religiosity and self assessed risk

Religiosity has been shown to have an influence on assessment of HIV risk. According to literature, some religious denominations have an influence on people's assessment of HIV risk (Nzioka 1996). Table 5.7 shows that religiosity has an influence on students' assessment of HIV risk. Thus the relationships between being born-again, religious commitment, religious influence, and self-assessed risk are statistically significant (P<0.05). For example, the born again students are more likely to underestimate their HIV risk (42.3 percent) than those who are not born again (29.8 percent). Similarly, students who are strongly influenced in their decisions by religious beliefs (45 percent) are more likely to assess their risk as small compared to those with less pronounced religious influence.

Even though not statistically significant, denomination and how often someone goes to church have an influence on students' assessment of HIV risk. For example, more Catholics (5.1 percent) assess their risk to be great and only (1.2) Pentecostals assess their risk to be great. Students who go to church every Sunday assess their risk to be smaller (26.4 percent) than those who go to church whenever they are free (17.1 percent).

Table 5.7: Count and percent distribution of students' Self Assessed HIV Risk and Religiosity

Background Variables	Self Assessed HIV risk					
Religiosity	**Small**	**Moderate**	**Great**	**No risk at all**	**I do not know**	**Total**
Denomination						
Catholic	57(41.3)	21(15.2)	7(5.1)	23(16.7)	30(21.7)	138(100)
S.D.A	41(47.7)	11(12.8)	2(2.3)	17(19.8)	15(17.4)	86(100)
Jehovah's witness	15(34.9)	4(9.3)	2(4.7)	9(20.9)	13(30.2)	43(100)
U.C.Z	27(32.9)	13(15.9)	2(2.4)	19(23.2)	21(25.6)	82(100)
Pentecostal	38(44.2)	12(14)	1(1.2)	25(29.1)	10(11.6)	86(100)
Others	26(45.6)	7(12.3)	3(5.3)	17(29.8)	4(7)	57(100)
Total	**204(41.5)**	**68(13.8)**	**17(3.5)**	**110(22.4)**	**93(18.9)**	**492(100)**
X^2 = 25.6 df = 20 P>0 .05						
How often do you go to church						
Every Saturday	31(48.4)	5(7.8)	1(1.6)	14(21.9)	14(20.3)	64(100)
Every Sunday	94(40.7)	23(10)	6(2.6)	61(26.4)	61(20.3)	231(100)
Whenever there is a meeting	35(40.2)	20(23)	2(2.3)	18(20.7)	12(13.8)	87(100)
When I am free	43(38.7)	20(18)	8(7.2)	19(17.1)	21(18.9)	111(100)
Total	**203(41.2)**	**68(14)**	**17(3.5)**	**112(22.7)**	**93(18.9)**	**493(100)**
X^2 = 25.6 df = 20 P>0 .05						
Do you consider yourself born again	**Small**	**Moderate**	**Great**	**No risk at all**	**I do not know**	**Total**
Yes	182(42.6)	58(13.6)	11(2.6)	99(23.2)	77(18)	427(100)
No	17(29.8)	10(17.5)	6(10.5)	10(17.5)	14(24.6)	57(100)
Total	**199(41.1)**	**68(14)**	**17(3.5)**	**109(22.5)**	**91(18.8)**	**484(100)**
X^2 = 21.5 df = 12 P< 0.05						
How religiously committed are you	**Small**	**Moderate**	**Great**	**No risk at all**	**I do not know**	**Total**
Very committed	60(42.3)	17(12)	5(3.5)	47(33.1)	13(9.2)	142(100)
Committed	97(39.4)	12(17.5)	6(2.4)	48(19.5)	52(21.1)	246(100)
Somewhat committed	45(44.6)	9(8.9)	6(5.9)	16(15.8)	25(24.8)	101(100)
Not committed	1(20)	0(0.0)	0(0.0)	1(20.0)	3(60.0)	5(100)
Total	**203(41.1)**	**69(14)**	**17(3.4)**	**112(22.7)**	**93(18.8)**	**494(100)**
X^2 = 35.9 df = 16 P<0 .05						
How influential is your religion towards your personal decisions	**Small**	**Moderate**	**Great**	**No risk at all**	**I do not know**	**Total**
Very influential	91(45)	31(15.3)	9(4.5)	50(24.8)	21(10.4)	202((00)
Influential	80(41.9)	27(14.1)	5(2.6)	41(21.5)	38(19.9)	191(100)
Not very influential	28(34.6)	9(11.1)	1(1.2)	18(22.2)	25(30.9)	81(100)
Not at all	3(23.1)	1(7.7)	1(7.7)	3(23.1)	5(38.5)	13(100)
Total	**202(41.5)**	**68(14)**	**16(3.3)**	**112(23)**	**89(18.3)**	**487(100)**
X^2 = 27.5 df = 16 P<0 .05						

5.8 Knowledge of HIV and AIDS and self assessed risk

Students who consider themselves to have more knowledge of HIV and AIDS are assumed not only to have a better and more accurate assessment of HIV risk. Such knowledge is, in turn, expected to positively influence their sexual behaviour. According to Table 5.8, the relationship between knowledge of HIV and AIDS and self-assessed risk is not statistically significant ($p>0.05$). Interestingly however, students who claim to have more knowledge in terms of HIV and AIDS (41.9 percent) are more likely to underestimate their HIV risk as small, compared to those students whose HIV knowledge is medium (39.8 percent) and those whose knowledge of HIV is low (35.7 percent).

Table 5.8: Count and percent distribution of students' Self Assessed HIV Risk and Knowledge of HIV and AIDS

	Self assessed HIV risk					
How would you rate your knowledge of HIV and AIDS	**Small**	**Moderate**	**Great**	**No risk at all**	**I don't know**	**Total**
High	160(41.9)	53(13.9)	11(2.9)	93(24.3)	65(17.0)	382(100)
Medium	35(39.8)	13(14.8)	5(5.7)	17(19.3)	18(20.5)	88(100)
Low	10(35.7)	3(10.7)	1(3.6)	4(14.3)	10(35.7)	28(100)
Total	**205(41.2)**	**69(13.9)**	**17(3.4)**	**114(22.9)**	**93(18.7)**	**498(100)**
$X^2 = 9$ df=8 p>.05						

5.9 Information Source and self assessed risk

Since sources of information on HIV and AIDS are perceived differently in terms of their reliability and credibility, the source may also have an influence on people's assessment of HIV risk. Although the relationship between source and self assessed risk is statistically insignificant ($p>.05$), Table 5.9 reveals that students who get HIV information from friends are the most likely to assess their risk of HIV to be small compared to all other sources. At the opposite end, those who get HIV information from posters (43.5 percent) are more likely to consider themselves risk free from HIV infection.

Table 5.9: Count and percent distribution of students' Self Assessed HIV Risk and HIV Information Source

	Self Assessed HIV risk					
INFORMATION SOURCE	**Small**	**Moderate**	**Great**	**No risk at all**	**I do not know**	**Total**
Television	18(40.0)	11(24.4)	2(4.4)	7(15.6)	7(15.6)	45(100)
Radio	15(42.9)	2(5.7)	3(8.6)	8(22.9)	7(20.0)	35(100)
Newspapers	19(33.3)	5(8.8)	2(3.5)	15(26.3)	16(28.1)	57(100)
Posters	9(39.1)	2(8.7)	0(0.0)	10(43.5)	2(8.7)	23(100)
Church	3(37.5)	2(25)	0(0.0)	1(12.5)	2(25.0)	8(100)
Friends	20(48.8)	3(7.3)	1(2.4)	12(29.3)	5(12.2)	41(100)
Home	7(33.3)	2(9.5)	0(0.0)	3(14.3)	9(42.9)	21(100)
School	112(42.3)	41(15.5)	9(3.4)	58(21.9)	45(17.0)	265(100)
Total	**203(41.0)**	**68(13.7)**	**17(3.4)**	**114(23)**	**93(18.8)**	**495(100)**
$X^2 = 35.6$ df=28 P> .05						

5.10: ASSESSMENT OF HIV RISK AND SEXUAL BEHAVIOUR

A student's assessment of their risk to HIV and AIDS infection is expected to influence their sexual behaviour. Sexual behaviour was operationalized through questions on the number of sexual partners a student has, the age of the sexual partners, and consistent condom use. Our main hypothesis in this regard is that that those students who consider themselves at risk are more likely to adopt more responsible sexual behaviour than those who do not consider themselves at risk by, having fewer sexual partners, avoiding older sexual partners, and using condoms more consistently.

The results in Table 5.10 seem to confirm this hypothesis. This reveals that the students who rate themselves to have no risk of HIV contraction are more likely to engage in risky sexual behaviour than those who rate themselves to be at risk of HIV contraction.

Table 5.10 Count and Percent Distribution of Students' Self Assessed HIV risk and Sexual Behaviour				
	If respondent considers themselves at risk of HIV and AIDS infection			
Type of sexual behaviour				
More than one sexual Partner	**Yes**	**No**	**Maybe**	**Total**
Multiple sexual partnerships	59(39.9)	66(44.6)	23(15.5)	115(74.7)
No multiple sexual partnerships	9(22.0)	28(68.3)	4(9.8)	39(25.3)
Total	**68(36.0)**	**94(49.7)**	**27(14.3)**	**154(100)**
X^2=2.084 df=2 P>0.005				
Age of sexual partners				
Younger	20(43.5)	20(43.5)	6(13)	46(30.7)
Same	18(37.5)	20(41.7)	10(20.8)	48(32.0)
Older	19(33.9)	30(53.6)	7(12.5)	56(37.3)
Total	**57(38.0)**	**70(46.7)**	**23(15.3)**	150(100)
X^2=2.938 df=4 p<0.05				
Consistent Condom Use				
Yes	35(50.0)	50(65.8)	16(61.51)	101(58.7)
No	35(50.0)	26(34.2)	10(38.5)	71(41.3)
Total	**70(40.7)**	**76(44.2)**	**26(15.1)**	**172(100)**
X^2=3.848 df=2 p>0.5				

5.11 Self Assessed HIV risk and Concurrent Multiple Sexual Partnerships

Although the relationship between self assessed risk and involvement in concurrent multiple sexual partnerships is statistically insignificant (p>.05), evidence in Table 5.10 reveals that students with perceived risk of HIV contraction are less likely to have more than one sexual partner (39.9 percent) than students with no perceived risk (44.6 percent).

5.12 Self Assessed HIV risk and Age of Sexual Partners

Looking at the age of partners, it is evident that students with a perceived risk of HIV contraction are less likely to have an older partner (33.9 percent) whereas those with no perceived risk are more likely to have an older partner (53.6 percent). The relationship between self assessed risk is significant, p<0.05

5.13 Self Assessed HIV risk and Consistent Condom Use

Table 5.10 further reveals that students with a perceived risk (50.0 percent) are less likely to use condoms. Students with no perceived risk, (65.8 percent), are more likely to use a condom every time they have sex, ($p<0.05$)

5.14 The students' perceived degree of risk and sexual behaviour.

Apart from merely asking whether they perceived themselves at risk, the students were also asked to rate the degree of risk they believed they had. The degree of risk was rated as small, moderate, great, no risk at all, and I don't know. The relationship between the perceived degree of risk and sexual behaviour given in Table 5.11 indicates a statistically significant relationship.

Table 5.11: Count and percent distribution of students' HIV risk Assessment and Sexual Behaviour

	Sexual Behaviour		
How would you rate your risk of HIV contraction	**Safe sexual behaviour**	**Risky sexual behaviour**	**Total**
Small	91(45.7)	108(54.3)	199(100)
Moderate	23(34.8)	43(65.2)	66(100)
Great	3(17.6)	14(82.4)	17(100)
No risk at all	61(55.5)	49(44.5)	110(100)
I do not know	44(47.8)	48(52.2)	92(100)
Total	**222(45.9)**	**262(54.1)**	**484(100)**
$X^2 = 12.9$ df = 4 P < .05			

Table 5.11 reveals that the students that rate themselves to have a small risk and no risk of HIV contraction are more likely to engage in risky sexual behaviour (54.3 percent) and (44.5) than those students that rate themselves to have a great risk (82.4 percent). This difference is significant ($p< 0.05$).

Sexual behaviour (multiple concurrent sexual relationships, consistent condom use and age of sexual partner) were separately analysed with the different self assessed HIV risks

that students have in order to establish the different degrees of relationships. According to Table 5.12, 36.4 percent of the students who assessed themselves to have no risk of HIV contraction and 24.7 percent of the students who assessed themselves to have a small risk of HIV contraction have multiple sexual partnerships as compared to 10 percent of the students who assess themselves to have a great risk of HIV contraction. This result shows that most students who rate themselves to have less risk of HIV contraction have multiple sexual partnerships. This result is significant (P<0.05)

Table 5.12: Count and Percent distribution of students' assessment of HIV risk and Sexual Behaviour

	Rating of one's risk to HIV infection					
Background Characteristic	**Small**	**Moderate**	**Great**	**No Risk**	**I do not know**	**Total**
More than one sexual partner						
Yes	19(24.7)	5(14.7)	1(10.0)	12(36.4)	3(8.8)	148(78.7)
No	58(75.3)	29(85.3)	9(90.0)	21(63.6)	31(91.2)	40(21.2)
Total	**77(100)**	**34(100)**	**10(100)**	**33(100)**	**34(100)**	**188(100)**
X^2=5.262 df=4 p<0.05						
Age of Sexual Partner						
Younger	21(36.2)	11(39.3)	2(25.0)	2(9.1)	9(28.1)	45(30.4)
Same Age	26(44.8)	5(17.9)	1(12.5)	5(22.7)	11(34.4)	48(32.4)
Older	11(19.0)	12(42.9)	5(62.5)	15(68.2)	12(37.5)	55(37.2)
Total	**58(100)**	**28(100)**	**8(100)**	**22(100)**	**32(100)**	**148(100)**
X^2=3.021 df=4 p<0.05						
Consistent Condom Use						
Yes	41(66.1)	18(50.0)	5(50.0)	16(55.2)	21(60.0)	101(58.7)
No	21(33.9)	18(50.0)	5(50.0)	13(44.8)	14(40.0)	71(41.3)
Total	**62(100)**	**36(100)**	**10(100)**	**29(100)**	**35(100)**	**172(100)**
X^2=23.516 df=8 p<0.05						

For age of sexual partners, Table 5.12 reveals that 68.2 percent of students who assessed themselves to have no risk of HIV contraction and 19.0 percent of the students who assessed themselves to have a small risk of HIV contraction have sexual relationships

with partners who are usually older than them as compared to 62.5 percent of students who assess themselves to have a great risk of HIV contraction.

Table 5.12 further indicates that 44.8 percent of the students who assess themselves to have no risk of HIV contraction and 33.9 percent of the students who assess themselves to have a small risk of HIV contraction have inconsistent condom use as compared to 50 percent of the students who assess themselves to have a great risk of HIV contraction. All the indicators of sexual behaviour used in this study: having concurrent multiple sexual partnerships, age of sexual partners and consistent condom use indicate that most students engage in risky sexual behaviour and they are all statistically significant ($P<0.05$). It is also observed that students who rate themselves to have a small risk and no risk of HIV contraction have concurrent multiple sexual partnerships and have sexual partners who are older than them. These results are also confirmed by the results of the study conducted in Kwa Zulu Natal which shows that low assessment of HIV risk makes people to engage in risky sexual behaviours (Akwara 2003) and appear to confirm our hypothesis that states that the lower the assessment of HIV risk among students, the more likely they are to engage in risky sexual behaviours

CHAPTER SIX

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

6.1 Discussion

The primary objective of this thesis was to examine the determinants of self assessed HIV risk and sexual behaviour among the University of Zambia and Evelyn Hone college students. The results show that fairly high proportions of students engage in risky sexual behaviour and significantly higher proportions of male students are engaged in high risky sexual behaviour compared to females. Significantly higher proportions of males perceived themselves to be at great HIV risk compared to the females. This situation is, however, unique to The University of Zambia and Evelyn Hone College as many studies conducted particularly in countries where HIV is prevalent have shown that higher proportions of women than men perceive themselves as being at a high HIV risk (Gaspar MC et al 1997).

While HIV risk perceptions among males are strongly associated to sexual behaviour, the linkage was not strong among the females. Although both sexes have a perceived risk of HIV and AIDS, it was much more pronounced among the male students. These gender differences in perceived HIV risks are perhaps due to male students' high engagement in risky sexual behaviour. The study further reveals that age, marital status and institution (particularly among males) are strongly associated with engaging in risky sexual behaviour among students.

Knowledge of HIV and AIDS

Knowledge of HIV and AIDS is nearly universal; nearly all students (98.5 percent) have heard about HIV and AIDS. School is cited as the most common source of information on HIV and AIDS cited by 54 percent of the students; church is the least likely source of this information. More than three quarters of students (76.7 percent) rate their knowledge of HIV and AIDS highly, a finding that is in line with other findings by other researchers

(Akwara PA 2003). This can be attributable to the intensified campaign on HIV and AIDS by government and non-governmental organisations and schools.

Despite the high levels of awareness of the existence of HIV and AIDS, misconceptions relating to causes, treatment, effectiveness of condom use, modes of transmission, and cure are widespread. These findings are similar to findings of other researches in parts of Zimbabwe and elsewhere (Central Statistical Office, Zimbabwe & Macro International, 1995, Irwin *et al*., 1991; Hogsborg & Aaby, 1992).

Self Assessed HIV risk

The study showed that the respondents had very low levels and poor perception of their own risk of HIV contraction as approximately two thirds of them perceived the risk of their ever contracting HIV infection to be small and non-existent. While 18.9 percent males and 18.5 females could not gauge their vulnerability of HIV infection, only 3.4 percent of the respondents in this study considered themselves to have a high risk of HIV contraction. Over all, more than half of the students assessed themselves to have a small risk (41.2 percent) and no risk (22.9 percent) of HIV contraction. More females (30.9 percent) are more likely to under estimate their risk of HIV contraction than males (14.9 percent). Unlike this finding, most studies have been reported elsewhere by other researchers where the majority of the male students perceived their risk of HIV infection to be nil or low than females (Gaspar MC et al 1997, Sahlu T et al 1999, Shabbir and Larson, 1995, Olayinka and Osho, 1997).

Overall, most students consider their risk to HIV contraction as small (41.2 percent) followed by those who consider themselves as not being at risk at all (22.9 percent). About 19 percent do not know if they are at risk while 13.9 percent consider their risk as moderate. Only 3.4 percent consider themselves to be at great risk

Our findings reveal that a number of factors have a bearing on the students' self assessed risk to HIV, one of these is contextual, the learning institution where the student is located apparently matters. For example, UNZA students (46.8 percent) are more likely to under estimate their HIV risk than Evelyn Hone students (35.5 percent); similarly,

government sponsored students are also more likely to rate their risk of HIV contraction as small (46.2, percent) than self sponsored students (37.1 percent).

Peer pressure has also been found to have an influence in one's perception of risk among students as those students that succumb to peer pressure (60 percent) are more likely to underestimate their risk of HIV contraction than those who do not succumb to peer pressure (23 percent). It was also observed that students who have sexual partners that are usually older than them (68.2 percent) assess themselves to have no risk of HIV contraction as compared to 22.7 percent of the students who have sexual partners that are of the same age.

Religiosity also has an influence on how students perceive their HIV risk. Students who are born again (42.6 percent) and those whose religion is influential towards their personal activities (45 percent) are more likely to under estimate their HIV risk than those who are not born again (29.8 percent) and the students whose religion does not have an effect on their personal activities (23.1 percent). These results are similar to the study done in Kenya that found that religious people considered their risk of HIV contraction to be low because they believe that HIV is a disease that comes as a punishment from God to sinners (P. A. Akwara, N. J. Madise and A. Hinde 2008*).*

Sexual Behaviour

Nearly three quarters of the students (71 percent) have had sex before and 1 out of every five sexually active students had a multiple concurrent partnership (21.3%). Almost half of those with prior sexual experience (44.1%) reported that their first sex was with someone older than them; this was more predominant among females, with two thirds of them (67.7%) reporting having had their first sexual intercourse with an older man.

The results further reveal that students at Evelyn Hone College (64.5 percent) are more likely to engage in risky sexual partnerships than students at UNZA (43.7 percent). Self sponsored students (63.4 percent) are also more likely to engage in risky sexual behaviour than those sponsored by the government (45.4percent) and this may be

attributed to the fact that they have to look for school fees and they may end up engaging in risky sexual behaviour. These results are similar to the study conducted in Cameroun that found that students that do not have financial support and come from poor families engage in risky sexual behaviours due to poverty and they do that in trying to look for survival measures (Akwara et al 2003).

Other critical variables that that have a strong bearing on risky sexual behaviour are sex, marital status, ethnicity, age, religiosity, and peer pressure. More specifically, the likelihood of engaging in high risk sexual behaviour is higher for students who are older (above 25 years), male, married, not born again, and those susceptible to peer pressure. Students who have sexual partners who are usually older than them and students that rate their risk of HIV contraction to be small are also more likely to engage in risky sexual behaviour. This is similar to the study conducted in Kenya that found that people that perceive their HIV risk to be low are more likely to engage in risky sexual behaviour (Akwara PA 2003).

Our conceptual framework postulated a flow model in which social economic, demographic and ethnic factors influence self assessment of HIV risk, knowledge, sexual behaviour, both directly and indirectly. To a large extent, most of our findings tend to reinforce this model as the hypothesis derived from this model which states that students who assess themselves to have a lower risk of HIV contraction have a risky sexual behaviour has been confirmed by the findings.

6.2 Conclusions

Our research has demonstrated the critical pathways to sexual behaviour that are influenced by social, economic and demographic factors, knowledge, and self assessed HIV risk among students in institutions of high learning. It has also corroborated and in many cases reinforced the findings of many other researchers in the area of sexual behaviour. In this regard, this study will, in a small way, contribute to a better understanding of the critical factors that underlie self assessed HIV risk.

Despite the widespread awareness on HIV and AIDS, youths continue to be at high risk of HIV contraction because of their false feeling of invulnerability to HIV contraction. This can be due to inaccurate knowledge among others on HIV and AIDS that students have. Students claim that they have adequate knowledge but they are highly engaged in risky sexual behaviour and this could be exacerbated by some of their sources of knowledge on HIV and AIDS such as friends. The result of this has been failure not only to delay sexual activity but also to adopt preventive behaviour which can protect them from HIV and AIDS. This fact has been substantiated by low age at first sex, number of multiple sexual partnerships among students, inconsistent and low level of condom use and the age of the people students especially girls first have sex with.

The findings of this study show that the assumptions that once awareness of HIV and AIDS has been created, people will adopt safer sexual relationships does not hold among students at the University of Zambia and Evelyn Hone College. In addition, it has been established in this study that knowledge does not necessarily translate to behavioural change as there is high awareness of HIV and AIDS but the risky sexual behaviour among students is also very high. This means that this strategy should be re visited and more emphasis should be put on specific issues that inhibit behavioural change. The fight against HIV cannot be won without putting emphasis on the youth because most of them are sexually active.

Methodologically, our research suffers from the limitation of being a case study that was limited to only a group of privileged youths who are residents at the two institutions of learning. The findings therefore cannot be generalized to all the students who include those who are not residents, let alone youths outside the precincts of the two institutions.

Future research should ideally be broken in the scope of coverage to encompass all youths and not only those in colleges and universities, but even those outside academia.

6.3 Recommendations

Based on the findings of the study, the following recommendations are made in the hope that, if implemented, they can go a long way in reducing the proportion of young people

that under estimate their HIV contraction risk and stop risky sexual behaviours and ultimately reduce the rate of HIV infection among the young people in institutions of learning and countrywide.

- There is need to find ways of involving schools, parents and communities at large in communicating factual information about HIV and AIDS and its benefits to the students by University and College managements. This can done by incorporation of relevant information on HIV and AIDS and sexual behaviour in school curriculum, promotion of drama focusing on the same issues can go a long way in communicating factual and relevant information to reach the students.
- Sexual risk reduction strategies in institutions of learning should in addition to the promotion of behavioural change, place strong emphasis on comprehensive knowledge of HIV infection transmission and preventive measures. This is for the aim of increasing accurate knowledge of HIV and AIDS, strengthening risk perception and increasing safe-sex techniques. The gap that exists between knowledge of HIV and safer sexual behaviour should be addressed in HIV and AIDS prevention programs by College and University managements.
- Youth organizations can play a key role through use of peer education campaigns to disseminate information regarding benefits of good sexual practices such as delayed sexual debut and use of condoms whenever the students have sex and hence reduce their false invulnerability to HIV contraction.
- There is need for more collaboration among stakeholders such as the University and College managements, youths themselves, the Government and Non-Governmental Organisations to address the inhibitors of delayed age at first sex and adoption of safe sex practices such as consistent condom use which may have an effect on the self assessed HIV vulnerability among students. When this is identified, contextual educational programs that are practicable to the youths can be made by all stakeholders and Institution managements can implement them

REFERENCES

Aboud S, Msamanga G, Read JS, et al. Genital tract infections among HIV-infected pregnant women in Malawi, Tanzania and Zambia. Int J STD AIDS 2008.

Adih WK and Alexander CS, Determinants of condom use to prevent HIV infection among youth in Ghana, *Journal of Adolescent Health*, 1999, 24(1):63–72.

Akande A, AIDS-related beliefs and behaviours of students: evidence from two countries (Zimbabwe and Nigeria), Internatio*nal Journal of Adolescence and Youth*, 1994, 4(3–4):285–303.

Akwara PA, Madise NJ and Hinde A, Perception of risk of HIV/AIDS and sexual behaviour in Kenya, *Journal of Biosocial Science*, 2003, 35(3):385–411

Baeten JM, Nyange PM, Richardson BA, et al. Hormonal contraception and risk of sexually transmitted disease acquisition: results from a prospective study. *Am JObstet Gynecol.* 2001;185:380-5

Baeten JM, Benki S, Chohan V, et al. Hormonal contraceptive use, herpes simplex virus infection, and risk of HIV-1 acquisition among African women. AIDS 2007; 21:1771–7. [PubMed: 17690576]

Caldwell JC, Orubuloye IO and Caldwell P, Obstacles to behavioural change to lessen the risk of HIV infection in the African AIDS epidemic: Nigerian research, in: Caldwell J et al., eds., *Resistances to Behavioural Change to Reduce HIV/AIDS Infection in Predominantly Heterosexual Epidemics in Third World Countries*, Canberra, Australia: Health Transition Centre, Australian National University, 1999, pp. 113–124.

Census, 1999. II Recenseamento Geral da Populacao e Habitacao, 1997. Resultados Definitivos.Mocambique. [Second General Census of Population and Housing, 1997. Final Results.Mozambique] Maputo, Mozambique:N ational Institute of Statistics

Chamratrithirong A, The measures of 100% condom promotion Program inputs and their relation to the condom use among sex workers in Thailand, paper presented at the annual meeting of the Population Association of America, Los Angels,CA,USA,Mar.25-27,1999.

CPIRC & DSS (2003) China/UNFPA RH/FP End of Project Women Survey Report: Key Findings, China Population Information and Research Centre, Beijing & Division of Social Statistics, University of Southampton, UK, September 2003.

Crepaz N, Marks G (2003). Serostatus disclosure, sexual communication and safer sex in HIV-postive men. AIDS Care, 15:379-387.

Davis K, Welker S (2000). The effectiveness of condoms in reducing heterosexual transmission of HIV. Fam. Plann. Perspect., 31: 272-279

Fisher, J. D., & Fisher, W. A. (2000). Theoretical approaches to individual level change in HIV-risk behaviour. In J. Peterson & R. J. DiClemente (Eds.), *HIV prevention handbook* (pp. 3–55). New York: Kluwer Academic/ Plenum Press.

Fisher, W. A., & Fisher, J. D. (1993). A general social psychological model for changing AIDS risk behaviour. In J. Pryor & G. Reeder (Eds.), *The social psychology of HIV infection* (pp. 127–153). Hillsdale, NJ: Erlbaum.

Fisher, W. A., Williams, S. S., Fisher, J. D., & Malloy, T. E. (1999). Understanding AIDS risk behaviour among sexually active urban adolescents: An empirical test of the information-motivation-behavioural skills model. *AIDS and Behaviour, 3,* 13–23.

Friedman R, et al. Pregnancy predictors in an urban HIV infected women cohort in Rio de Janeiro-Brazil . Poster Exhibition: The 3rd IAS Conference on HIV Pathogenesis and Treatment: Abstract no. 2005 TuPe5.5P11

Gaspar MC et al., Mozambique Demographic and Health Survey, 1997*,* Calverton, MD, USA: INE and Macro International, 1998

Gollub E, The female condom: tool for women's empowerment, American Journal of Public health, 2000(90):1381-1381

Homsy J et al. Incidence and determinants of pregnancy among women receiving ART in rural Uganda. Fifteenth Conference on Retroviruses and Opportunistic Infections, Boston, abstract 74. 2008.

Joint United Nations Programme on AIDS (UNAIDS), *HIV Prevention Needs and Successes: A Tale of Three Countries. An Update on HIV Prevention Success in Senegal, Thailand and Uganda*, Geneva: UNAIDS, 2001.

Lindan C et al., Knowledge, attitudes, and perceived risk of AIDS among urban Rwandan women: relationship to HIV infection and behaviour change, *AIDS*, 1991, 5(8):993–1002.

Macintyre K et al., Understanding perceptions of HIV risk among adolescents in KwaZulu-Natal, *AIDS and Behaviour*, 2004, 8(3):237–250; and Prohaska TR et al., Determinants of self-perceived risk for AIDS, *Journal of Health and Social Behaviour*, 1990, 31(4):384–394.

Maharaj P and Cleland J, Risk perception and condom use among married or cohabiting couples in KwaZulu-Natal, South Africa, *International Family Planning Perspectives*, 2005, 31(1):24–29.

Maswanya ES et al., Knowledge, risk perception of AIDS and reported sexual behaviour among students in secondary schools and colleges in Tanzania, *Health Education Resources*, 1999, 14(2):185–196.

Meekers D and Klein M, Determinants of condom use among young people in urban Cameroon, *Studies in Family Planning*, 2002, 33(4): 335–346.

Mitchelle HS, Stevens E. Contraceptive choice for HIV positive women. Sex. Transm. Infec.2004,80: 167- 173

Nunn AS, et al. AIDS treatment in Brazil: impacts and challenges. Health Affairs (Millwood), 2009; 28: 1103-13.

Panel members at the 'National Conference on China/UNFPA RH/FP Project Review on CP4 and Orientation for CP5' held during April 8-10, 2003 in Nanjing, China. Seen from left to right; Li Bohua, Eve Lee, Siri Tellier, Zoë Matthews & Sabu Padmadas

Sahlu T et al., Sexual behaviours, perception of risk of HIV infection, and factors associated with attending HIV post-test counseling in Ethiopia, *AIDS*, 1999, 13(10):1263–1272.

UNAIDS, *2006 Report on the Global AIDS Epidemic* (Geneva: UNAIDS, 2006). New estimates of HIV prevalence are derived from Demographic and Health Surveys (DHS), which take a representative sample of the total population ages 15-49. In countries without a DHS, HIV estimates are calculated from antenatal care facilities and other sources not representative of the total population.

WHO (2005), Zambia: Summary Country Profile for HIV/AIDS Treatment Scale-Up, June 2005.

APPENDIX: Questionnaire

THE UNIVERSITY OF ZAMBIA

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF POPULATION STUDIES

DETERMINANTS OF SELF ASSESSED HIV RISK AND SEXUAL BEHAVIOUR, A CASE STUDY OF YOUTHS AT THE UNIVERSITY OF ZAMBIA AND EVELYN HONE COLLEGE

Dear Respondent,

I am a post graduate student at the University of Zambia great east road Campus in the school of Humanities and Social Sciences. I am carrying out a research in POP 5052 to determine the self assessed HIV risk, sexual behaviour and contraceptive choices, a case study of youths at University of Zambia and Evelyn Hone College

You have been randomly selected as a respondent in my research. I will greatly appreciate your responding to this questionnaire and in so doing you will be helping to create a better community and indeed a better Zambia. I also want to assure you that the information provided will be strictly confidential.

THANK YOU FOR YOUR COOPERATION.

INSTRUCTION: Tick (√) or put an X in the spaces provided or against the question.

QUESTIONNAIRE NUMBER	

SECTION A: DEMOGRAPHIC AND INSTITUTIONAL CHARACTERISTICS

NO.	QUESTION DESCRIPTION	CODING RESPONSE	OFFICIAL USE ONLY
1.	Sex	1.Male 2.Female	
2.	Age at last Birthday		
3.	What is your date of birth?		
4.	Marital Status	1.Single (Never Married) 2.Married 3.Divorced 4.Widowed	
5.	Institution		
6.	What school or department are you in?		
7.	Year of Study	1.First 2.Second 3.Third 4.Fourth 5.Fifth 6.Sixth	
8.	What is your programme of study?		
9.	Sponsorship	1.GRZ 2.Self 3. Others (Specify).....	

SECTION B: FAMILY AND HOUSEHOLD CHARACTERISTICS

In this section, you can tick more than one answer if it is applicable to you

10.	What tribe are you?	1.Bemba 2.Kaonde 3.Lozi 4.Lunda 5.Luvale 6.Nyanja/Chewa 7.Tonga 8. Others (Specify).....	
11.	Father's education	None | Primary | Secondary | Tertiary	

12.	Mother's education						
13.	Other guardian's education						
14.	Father's occupation						
15.	Mother's occupation						
16.	Other guardian's occupation						
17.	Does your family possess any of the following:	**Asset** / **Yes** / **No** Car DSTV Radio Television Livestock Land Own House					
18.	Can you estimate your family's average monthly income?	Yes No (If No, skip to Q20)					
19.	What is your Family's average monthly income?						
20.	Classification of your parents/guardian Residential Area	1.Low Density (Kabulonga) 2.Medium Density (Chelston) 3.High Density (Kanyama)					
21	Is parent's house Own house or Rented?	1.Own house 2.Rented					
22.	Does the house have any of the following:	**Facility** / **Yes** / **No** Electricity Piped Water Refrigerator Mobile Telephone Geyser					
23.	What is your religion?	1.Christian 2.Moslem 3.Hindu 4. Others (specify)……					
24.	If Christian, what is your denomination?	1.Catholic 2.S.D.A 3.Jehova's witness 4.U.C.Z 5. Others (Specify)……					

25.	How often do you go to church?	Every Saturday Every Sunday Whenever there is a meeting When I am free Never	
26.	Do you consider yourself born-again?	Yes No	

SECTION C: KNOWLEDGE, ATTITUDE AND PERCEPTIONS TOWARDS HIV AND AIDS

NO.	QUESTION DESCRIPTION	CODING RESPONSE	OFFICIAL USE ONLY
27.	Have you ever heard of HIV and AIDS?	1.Yes 2.No	
28.	How would you rate your knowledge of HIV and AIDS?	2. High 2. Medium 3. Low	
29.	Do you know of someone who has HIV and AIDS?	1.Yes 2.No	
30.	What is your relationship with this person?	1.Sibling 2.Friend 3.School mate	
31.	How close are you to this person?	1.Very close 2.Close 3.Not very close 4.Not close at all	

32.	What are your main sources of information on HIV and AIDS from?	1.Media 2. Posters 3. Church 4. Home 5.School	
33.	What, in your view, is the most effective way of preventing HIV/AIDS?	Use of condoms Abstinence Circumcision Use of herbal medicine Sticking to only one sexual partner	
34.	Do you think consistent condom use is an effective HIV prevention measure?	Yes No I do not know	
35.	Do you think that Multiple Concurrent Sexual Partnerships can increase the HIV/AIDS transmission rate?	1. Yes 2. No 3. I do not Know	
36.	If yes, give a reason	…… …… …… …… ……	
37.	If no, give a reason	…… …… …… …… ……	

SECTION D: BELIEFS AND SEXUAL BEHAVIOUR

38.	Have you ever had sex before?	1. Yes 2.No_Go to Question 50	
39.	How old were you when you first had you first sexual intercourse?		
40.	How old was the person you first had sexual intercourse with?	Younger Same age Older	
41.	Did you use a condom at your first sexual intercourse?	Yes No	
42.	Why did you engage in sexual intercourse?	....	
43.	Are you currently sexually active?	Yes No_ Go to Question 50	
44.	Do you have a regular sexual partner?	Yes No	
45.	Is this the only partner you have?	Yes No	
46.	If no, how many partners do you have?		
47.	How old are your sexual partners usually?	Younger Same age Older	

48.	Do you use condoms every time you have sex?	Yes No	
49.	How important are you friends' opinions on your daily living?	Extremely Important Very important Somewhat important Not important	
50.	To what extent, do your friends ideas, values and opinions influence your knowledge and attitude towards Concurrent Multi Sexual partnerships	To a larger extent Medium Minimum Not at all	
51.	Can your friends influence you on decisions regarding your risk of HIV contraction?	Yes No	
52.	Many people regard their self risk of HIV contraction as low as compared to high	Agree Strongly agree Disagree Strongly Disagree	
	Religiosity		
53.	How religiously committed are you?	Very committed Committed Somewhat Committed Not committed	
54.	Does your denomination teach you anything about HIV and AIDS?	1. Yes 2. No	
55.	How influential is your church towards your personal decisions?	1. very influential 2. Influential 3. Not very influential 4. Not at all	
56.	Can you be healed from HIV and AIDS if you have enough faith in God?	1. Yes 2. No 3.Maybe 4.I do not know	
57.	When you have enough faith in God, your risk of HIV contraction is low	1. Agree 2. Strongly agree 3. No opinion 4.Disagree 5. Strongly Disagree	
	Misconceptions		
58.	Can ARVs cure HIV and AIDS?	1. Yes 2. No 3. I do not know	
59.	Does a person with a Sexually Transmitted Disease (STI) have higher chances of contracting HIV and AIDS?	1. Yes 2.No 3.I do not know	
60.	Do you think HIV can be transmitted through oral sex?	1. Yes 2. No 3. I do not know	
61.	The HIV virus survives for only a short period of time outside the body	1. True 2. Not true 3. I do not know	

62.	Do you know one very effective preventive measure that can help prevent HIV contraction?	Yes No_ Go to Question 65	
63.	Which measure is this?		

SECTION E: SELF ASSESSED VULNERABILITY TO HIV AND AIDS

64.	Do you think you are at risk of HIV contraction?	Yes No I do not know	
65.	If yes, why do you think you are at risk?	1.Because in the past I had more than one sexual partner 2.Because I still indulge in unprotected sex 3.Because I don't enjoy sex with condoms 4.Because I occasionally go for prostitutes	
66.	If no, why don't you think you are at risk?	1.Because I avoid prostitutes 2.I always avoid unprotected sex 3.Because I abstain 4.Because I am circumcised 5.Because I follow my church's teaching	

		on safe sex	
67.	How would you rate your risk of HIV contraction?	High Medium Low I do not know	

THANK YOU FOR YOUR COOPERATION.