

UNIVERSITY OF VENDA

***SEXUAL BEHAVIOUR SURVEY OF RESIDENT STUDENTS AT THE
UNIVERSITY OF VENDA, LIMPOPO PROVINCE, SOUTH AFRICA***

By

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Submitted in fulfillment of the requirements for the degree of Masters in the subject of
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ACKNOWLEDGEMENTS

I am especially grateful to Professor T.X. Maitseke – the former Head of the Department of Public Health at the University of Venda and my supervisor - Professor H.A. Akinola for their services over my program. I am grateful also to Dr. A.M. Gerritson for her insight and the passion she has instilled in me for the value of biostatistics in research.

I thank Professor Lebese, Mabile Koboza, Khulani Gijima, Lafiso Nelwani, Fazel Muzil and the members of staff that contributed in various and unique ways over the course of my studies. I am equally grateful for the assistance of Ms. B.K. Dabhaaz, Ms. N.W.F. Mashau and Ms. A.N. Mafurisa from the University of Venda Campus Health & Wellness Centre. The years I spent working with them intervening in student health matters proved

In memory of my late brother Lyton Lazarus Miti and my late Uncle Matthew Miti whose energy and love for life inspire me even today and in remembrance of the many students that

HIV/AIDS has taken from us at the University of Venda.

I would like to thank my adoptive mother - Professor A. Sinyathuma for opening her door to me. I thank Professor R. M. Mhambwaya, Professor Gyekejo and Professor Njau all of whom gave me the unique opportunity of benefiting from their research experience whilst working as an assistant on their work. I thank my sisters - Mabile, Kochiwe and Kawetha, and my 14-year-old brother who in their effort and special way have inspired the completion of this study.

I would like to thank Professor P. Mhosi - Vice Chancellor of the University of Venda, and Professor L.R. Ebozo - HEADS Deputy Manager, Chairperson of the UNIVEN Higher Education Quality Assurance Committee (HQAC) AND Dean of Health Sciences, for the opportunity to work involved in the HEADS project which provided valuable opportunities for conducting this study.

Finally, but in no way the least I thank Mr. J. Igweber who helped me find my path towards the public health field, and the students of the University of Venda for their direct and indirect participation.

ACKNOWLEDGEMENTS

I am especially grateful to Professor T.X. Maluleke – the former Head of the Department of Public Health at the University of Venda and my supervisor - Professor H.A. Akinsola for their concern over my progress. I am grateful also to Dr. A.M. Gerritsen for her insight and the passion she has instilled in me for the value of biostatistics in research.

I thank Ramokone Lebelo, Molate Kobela, Khulani Gijima, Lufuno Nelwalani, Farai Mudzi and the numerous friends that contributed in various and unique ways over the course of my studies. I am equally grateful for the assistance of Ms. B.K. Davhana, Ms. N.W.F. Mashau and Ms. A.H. Mudzusi from the University of Venda Campus Health & Wellness Centre. The years I have spent working with them intervening in student health matters proved valuable in preparing me for this study.

I thank my natural parents – Professor L.M and Mrs. A.M. Miti who have always been an inspiration to me and my adoptive mother – Professor A. Siyachitema for opening her home to me. I thank Professor R. M. Mkandawire, Professor Gyekye and Professor Njiro all of whom gave me the unique opportunity of benefiting from their research experience whilst serving as an assistant on their work. I thank my sisters – Muluka, Kochiwe and Kawesha, and my brother James who in their silent and special way have inspired the completion of this study.

I further thank Professor P. Mbatlali - Vice Chancellor of the University of Venda, and Professor L.B. Khoza – HEAIDS Project Manager, Chairperson of the UNIVEN Higher Institutional Coordinating Committee (HICC) AND Dean of Health Sciences, for the opportunity to have worked on the HEAIDS project which provided valuable opportunities for advancing this study.

Finally, but in no way the least I thank Mr. J. Igumbor who helped me find my path towards the public health field, and the students of the University of Venda for their direct and indirect participation.

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LIST OF ABBREVIATIONS AND ACRONYMS

- ABSA***: Agglomerated Bank of South Africa
AIDS: Acquired Immunodeficiency Syndrome
AIDSCAP: AIDS Control and Prevention Project
ARRM: AIDS Risk Reduction Model
ARV: Anti-Retrovirals
BCC: Behaviour Change Communication
CDC: Centers for Disease Control
DSU: Disabled Student Unit
FHI: Family Health International
GDP: Gross Domestic Product
GCWA: Global Coalition of Women against AIDS
HBM: Health Belief Model
HDC: Higher Degree Committee
HDU's: Historically Disadvantaged Universities
HEAIDS: Higher Education HIV/AIDS Program
HIV: Human Immunodeficiency Virus
HSRC: Human Sciences Research Council
PETT: Peer Education Task Team
PLWHA: People Living With HIV/AIDS
PMTCT: Prevention of Mother-To-Child Transmission
RAU: Rand Afrikaans University
RHRU: Reproductive Health Research Unit of the University of Witwatersrand
SABC: South African Broadcasting Corporation
SAUVCA: South African Universities Vice Chancellors Association
SCT: Stages of Changer Theory
SIECUS: Sexuality Information and Education Council of the United States
SPSS: Statistical Package for Social Sciences
SRA: Student Representative Assembly
STIs: Sexually Transmitted Infections

LIST OF ABBREVIATIONS AND ACRONYMS

TRA: Theory of Reasoned Action

UN: United Nations

UNAIDS: Joint United Nations Program on HIV/AIDS

UNFPA: United Nations Population Fund

UNIVEN: University of Venda

UNICEF: United Nations International Children's Emergency Fund

USAID: United States Agency for International Development

VCT: Voluntary Counselling and Testing for HIV

WHO: World Health Organization

CHAPTER ONE INTRODUCTION

BACKGROUND OF THE STUDY

It is estimated that over 80% of those currently living with Acquired Immunodeficiency Syndrome (AIDS) worldwide are aged between 15 and 24 and that three quarters of these are in sub-Saharan Africa. In terms of sheer numbers, South Africa ranks first among countries hardest hit by the Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) with prevalence reports suggesting that 10 - 14% of youth are living with the virus: 15.5% and 4.8% of females and males in this age category respectively (Pettifor, Rees, Kleinschmidt, Steffenson, MacPhail, Hlongwa-Madikizela and Vermaak, 2005; UNAIDS, 2006).

It is well documented that within the indigenous African population in South Africa, there is a significant increase in HIV prevalence with increasing levels of education (Shisana, Rehle, Simbayi, Parker, Zuma, Bhana, Connolly, Jooste, Pillay, Mbelle, Managa, Dana, Ramlagan, Zungu-Dirwayi, Louw, van Wyk, Tamasane, Petros, Freeman, Kelly, Tshose, Letlape, Naidoo, Henda, Nqeketo, Prince, and Shean, 2005). This consequently suggests that although tertiary students have access to information and health facilities at their institutions, there remain influences that make them vulnerable to infection. Such influences may include ready accessibility to drugs and alcohol, social networking events, peer pressure, coerced sex and generally the opportunity to engage in sexual intercourse.

PROBLEM STATEMENT

HIV/AIDS and the continued spread of the epidemic among students at the University of Venda (UNIVEN) remains a grave concern for university management and the institutions' HIV/AIDS Unit (PETT, 2005). A number of initiatives, such as the Student Representative Assembly (SRA) HIV/AIDS Desk, the Agglomerated Bank of South Africa (ABSA) Peer Helpers and the Peer Education Task Team (PETT) exist to address the spread of the

epidemic within the campus. However, the programmes under these initiatives and the HIV/AIDS Unit have never been evaluated for their effectiveness or researched for appropriateness and relevance to the UNIVEN situation. The absence of previous sexual behaviour studies at the institution has resulted in intervention programmes on the campus being adopted from other institutions and agencies working in HIV/AIDS intervention rather than being developed by the institution to specifically target the risks and vulnerabilities of UNIVEN students.

There exists a need to strive for, develop and implement appropriate interventions to reverse the growing trend in infection rates among the youth and university students. Without adequate intervention programmes, based on sound baseline research, HIV/AIDS prevalence among students of historically disadvantaged universities (HDU's), including the University of Venda, will continue to rise steadily. The situation is worsened by the low level of strategies on these campuses. The results of the studies conducted on HIV/AIDS among students of tertiary institutions in South Africa (Barnes, 2000; Chetty, 2000; Chetty, 2001; Kelly, 2001; Kinghorn, 2000; Stremlau and Nkosi, 2001; Uys, Icharam, Martin and Alexander, 2001) show that the prevalence rate for HIV and AIDS is high (33% and 3.7% respectively).

RATIONALE FOR THE STUDY

It is generally accepted that in the absence of a vaccine against HIV, behavioural change provides the best opportunity for preventing the spread of the epidemic (Hargreaves, 2002). It is crucial however that prior to designing and setting up HIV-related services and interventions promoting behaviour change, investigations into sexual behaviour, attitudes towards HIV/AIDS, and the knowledge and misconceptions held on Sexually Transmitted Infections (STIs) and HIV/AIDS are carried out to inform the nature, content and context of such services (Population Council, 2007a; Population Council, 2007b).

Harrison (2006) pointed out that the study of sexual behaviour is key in developing an understanding of patterns of HIV infection and highlighted on the importance of learning

more about the details of young people's sexual networks and how these develop and change over time. Although the University of Venda established an HIV/AIDS Unit in 2002, intervention strategies employed by this unit to address the HIV epidemic among students are not informed by recent baseline research. With little knowledge about the full range of sexual behaviour of students and the vulnerabilities they face whilst enrolled with the institution, a sexual behaviour survey is crucial to enhance the effectiveness of the unit and the development of appropriate HIV prevention strategies.

SIGNIFICANCE OF THE STUDY

This study is the first extensive survey of sexual behaviour among students of the University of Venda since the inception of the HIV/AIDS Unit. It is intended to inform intervention strategies of the unit and the Peer Education Task Team (PETT).

The results of this study contribute to the knowledge needed to establish whether the common misconceptions and myths from the early phase of the epidemic are still in existence among the youth at the university. It further catalogues the pattern of sexual behaviour among the participants, their levels of awareness on HIV/AIDS, their participation in substance and drug use, and the occurrence and vulnerability of students to forced or coerced sex and other risk factors, which cannot be separated from the current HIV/AIDS threat.

PURPOSE OF THE STUDY

The primary purpose of this study was to survey and describe the sexual behaviour of resident students at the University of Venda.

OBJECTIVES OF THE STUDY

The objectives of the study were to:

- Determine the experiences of alcohol and drugs among resident students at the

University of Venda;

- Survey and describe the distribution of study participants across various sexual behaviour indicators;
- Determine the pattern and nature of respondents' contact with commercial and non commercial sex partners;
- Survey condom use patterns among study participants;
- Survey self reported history of symptoms and treatment of STIs among respondents;
- Determine the level of knowledge of the study participants on HIV/AIDS and symptoms of STIs;
- Survey the experiences with VCT and perceived threat of contracting HIV among study participants.

KEY TERMS

Resident student: For the purpose of this research, a resident student is an individual either registered or offered admission and in the process of registration for the 2008 academic year at the University of Venda; s/he had also been allocated accommodation within the campus residences and was already living in the hall of residence.

Sex: In the context of this study, 'sex' is limited in reference to only sexual intercourse (vaginal and/or anal) and excludes oral sex and masturbation practices.

Sexual behaviour: This term is used in the context of human behaviour to refer to the actions that humans take when seeking sexual or relational partners, gaining approval of possible partners, forming relationships, showing affection, and mating.

Youth: This term is used in accordance with the United Nation's (UN) definition that stipulates that it is applicable to all young people between the ages of 15 and 24 years.

CHAPTER TWO

LITERATURE REVIEW

INTRODUCTION

This section provides a review of literature in two main sections – data-based literature and theoretical based literature.

The section on data-based literature covers: HIV/AIDS as a source of public concern; the sub-Saharan epidemic; HIV/AIDS among the youth; the gendered nature of the HIV/AIDS epidemic; the South African epidemic; and sexual behaviour indicators in South Africa.

The conceptual-based literature focuses specifically on the application of the Health Belief Model (HBM) for the analysis of the issues related to sexual behaviour.

DATA BASED LITERATURE

HIV/AIDS as a source of public concern

Twenty-seven years after the first documented case of AIDS, 25 million lives have been lost to the epidemic through HIV-related causes (UNAIDS, 2008). In 2003, it was estimated that 4.8 million people had become infected with HIV and as many as 3.3 million were believed to have died through AIDS related causes within the same period (UNAIDS, 2004a). Four years later, statistics reflected a promise of a declining global epidemic with 2.7 million new infections and 2 million HIV-related deaths believed to have occurred in the year 2007 (UNAIDS, 2008). HIV/AIDS is the leading public health concern of the late and current millennium with estimates suggesting that as many as 30 - 36 million people worldwide are living with the virus, 67% of whom are in sub-Saharan Africa. With 35% of HIV infections and 38% of AIDS deaths in 2007 having occurred in sub-Saharan Africa, this subregion remains the hardest hit by the epidemic (UNAIDS, 2008).

The greatest concern of the international community about the HIV epidemic is concentrated on two sub-Saharan African states: South Africa and Swaziland. The Republic of South Africa is ranked the worst affected country in terms of the number of its people living with HIV/AIDS and was estimated in 2006 to have had 5.7 million people living with HIV (UNAIDS, 2007; UNAIDS, 2008). On the other hand the United States Agency for International Development (USAID), ranks Swaziland as the worst affected country in terms of the proportion of its population living with the virus with an estimated national prevalence of 25.9% among adults in 2007 (USAID, 2008).

UNAIDS (2003) reported that the number of people living with HIV continued to rise despite the existence of a number of effective prevention strategies across the globe. According to the most recent report (UNAIDS, 2008), while the percentage of people living with HIV has stabilized since 2000, the overall number of people living with HIV has been steadily increasing as new infections occur each year, HIV treatments extend life, and as new infections still outnumber AIDS deaths

The sub-Saharan Epidemic

According to the Henry J. Kaiser Foundation (2007) and UNAIDS (2008) sub-Saharan Africa is the hardest hit region of the world by the HIV/AIDS epidemic. Home to only 11% of the world's population, the region accounted for an alarming 65% of new infections and 72% of all AIDS-related deaths in the year 2006 (Henry J. Kaiser Foundation, 2007). UNAIDS (2008) estimates that a year later, in 2007, 67% of the people living with HIV/AIDS (PLWHA) globally lived in this region, 75% of AIDS related deaths occurred in the region and approximately 1.9 million people were newly infected. According to UNAIDS (2007), Southern Africa is the most seriously affected within sub-Saharan Africa. It accounts for 35% of all people living with HIV and 32% of all new HIV infections and AIDS deaths globally in 2007.

The impact of the epidemic in Africa is felt in every sector of the society. AIDS has begun to exacerbate the severe shortage of skilled labour in many sectors of the economy creating

bottlenecks in business and production. The gross domestic product (GDP) of many African countries continues to fall as HIV prevalence rates rise. The education sector has also been affected, with many countries having noted that as many teachers die each year as are being trained. The number of children in schools is also dropping as a consequence of drop-outs due to illness or becoming orphaned (UNAIDS, 2004a). In the year 2007 it is estimated that as many as 370 000 children under the age of 15 years globally became infected with HIV, bringing the number of children of these ages estimated to be living with HIV to 2 million – 90% of whom live in sub-Saharan Africa (UNAIDS, 2008). In the 2008 Global report on HIV (UNAIDS, 2008) UNAIDS reaffirmed the position they forwarded in the year 2006 (UNAIDS, 2006) that the recognition of heterosexual transmission as the predominant mode of HIV transmission in sub-Saharan Africa continues to fuel efforts for effective strategies addressing sexual transmission in the hope of turning the epidemic around.

HIV/AIDS among the youth

Today's youths have never known a world without AIDS and are at a greater risk of acquiring HIV than any other subpopulation (UNAIDS, 2004b). Behavioural, physiological and sociocultural factors all influence people's vulnerability. During adolescence, young people explore and take risks in many aspects of their lives, especially within their sexual relationships and thus pose a very high risk to their sexual partners (Bankole, Singh, Woog and Wulf, 2004).

In recent years, evidence has emerged suggesting that a significant proportion of young people, particularly young women, experience non-consensual sex encompassed in a range of experiences. On the one end of the spectrum, young people experience verbal sexual abuse, forced viewing of pornography and unwanted touching or fondling whilst on the other end they fall victim to attempted rape; forced penetrative vaginal, oral and anal sex and prostitution. Non-consensual sex also includes transactional sex as well as sex obtained as a result of physical force, intimidation, blackmail, deception, alcohol and drug use, and threats of abandonment or of withholding financial support (Jejeebhoy and Bott, 2004).

HIV/AIDS prevalence among young people is high in many countries around the world. According to UNAIDS (2004b), global estimates suggest that as many as 5,000 – 6,000 youth are infected with HIV every day. In the year 2007 young people aged 15-24 years accounted for 45% of new infections worldwide (UNAIDS, 2008) – a clear indication that the epidemic is heavily concentrated among those of 15-24 years of age.

According to the Sexuality Information and Education Council of the United States (SIECUS), HIV prevalence among South African youth in the year 2007 was 9.1% - 17% for females and 1.7% - 6% for males (SIECUS, 2008a). In neighbouring Botswana, where Brocato (2005) reported that over 62% of the population is under the age of 24, SIECUS (2008b) placed HIV prevalence among female youth between 10% - 20.8% and among males between 2.1% - 7.9%. SIECUS (2008c) also estimates HIV prevalence for youth in Namibia at 10.3% for females and 3.4% for males. Estimates for Mozambique indicate prevalence among the youth at 5.9% - 11.1% for females and 1.2% - 4.2% for males (SIECUS, 2008d). According to UNAIDS (2008), HIV infections among the youth in Lesotho continues to rise and for the year 2007 was estimated at 14.9% for females and at 5.9% for males. In the Kingdom of Swaziland, HIV prevalence in the year 2007 was estimated at 22.6% for female youth and 5.8% for males (UNAIDS, 2008).

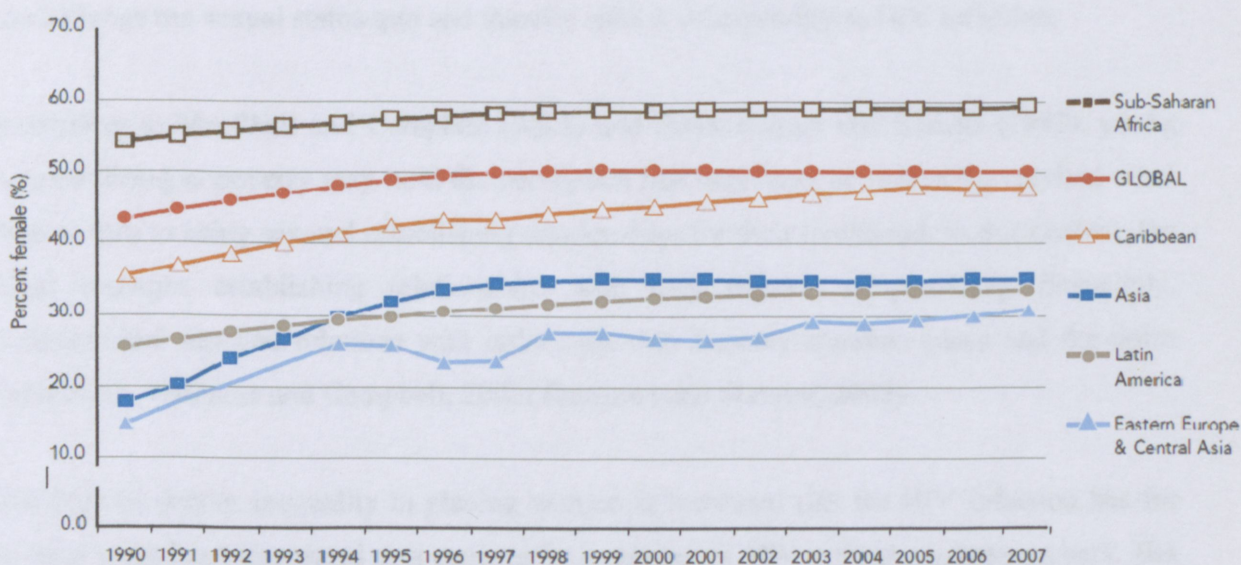
Young people continue to be at the centre of the AIDS epidemic in terms of transmission, vulnerability, impact and potential for change (UNAIDS, 2004b). The youth continue to bear the brunt of the global epidemic as a consequence of particular vulnerabilities that place them at increased risk of infection but remain, however, critical in terms of the response to the epidemic because, where transmission has been reduced, such as in Uganda (Chaya, Amen and Fox, 2002), and Zimbabwe (PEPFAR, 2007; UNAIDS, 2006; UNAIDS, 2008), the greatest of these reductions are observed among young people (UNICEF/UNAIDS/WHO, 2002; UNAIDS, 2004a; UN General Assembly, 2001).

The gendered nature of the HIV/AIDS epidemic

In the early phase of the epidemic, men vastly outnumbered women among people infected

with HIV. The proportion of HIV infected females worldwide however has steadily grown - 41% of all cases by 1997 were female and this rose to 50% by the end of 2002 (UNAIDS, 2004a). According to UNAIDS (2008), although the global proportion of women living with HIV has remained stable at 50% for several years, women's share of infections is increasing in several countries. These trends are particularly observed in regions where the dominant mode of transmission is heterosexual intercourse (UNAIDS, 2004a; UNAIDS, 2008). According to the Global Coalition of Women against AIDS (GCWA, 2006), the vulnerability of women to infection and the feminization of the AIDS epidemic is witnessed greatest in the statistics coming out of sub-Saharan Africa and the Caribbean as highlighted in Figure 1 below.

Figure 1: Percent of adults (15+) living with HIV who are female, 1990-2007



Source: UNAIDS, 2008

According to the WHO Regional Office for Africa (2003) and the Reproductive Health Research Unit and the Medical Research Council (2004) as many as 75% of infected youth in sub-Saharan Africa are women and girls. In some age groups in this region, HIV positive females outnumber their male counterparts by as much as two to one or more. In South Africa, Zambia and Zimbabwe, for example, young women aged 15-24 years have been found to be three to six times more likely to be infected than their male counterparts (Zambia

Central Statistical Office, 2003; UNAIDS/WHO, 2004). UNFPA (2003) and UNAIDS (2004a) recognize the socially defined roles of women as carers, mothers, wives and grandmothers as influencing factors in women bearing the greatest part of the AIDS-care burden and as such, recognize that women are most likely to lose their means of income and education as they turn to fulfil these roles when family members fall ill. The most recent global report on HIV/AIDS (UNAIDS, 2008) reaffirms this, suggesting that as many as half of all people living with HIV worldwide are women, and that women account for nearly 60% of HIV infections in sub-Saharan Africa.

Biological and societal differences have been identified to make women, especially young women, more vulnerable to infection than their male counterparts. According to Pettifor et al. (2004), there are a number of economic vulnerabilities that underlie young women's inability to challenge the sexual status quo and thereby reduce vulnerability to HIV infection.

According to MacPhail and Campbell (2001) and Swart-Kruger and Richter (1997), young women living in poverty may hold the perception that they have no means for survival other than to turn to using sex and establishing relationships for their livelihood. In this context, the ideal becomes establishing relationships with men capable of providing financially. Transactional sex and relations with older men thus become common place and the norm (MacPhail, Williams and Campbell, 2002; Kaufman and Stavrou, 2002).

The role of gender inequality in placing women at increased risk for HIV infection has for several years been expressed as a concern by a number of HIV activists and researchers. The former UN Secretary-General, Mr. Kofi Annan, added his voice to this concern by declaring the empowerment of women and girls a priority focus area for HIV prevention (Pettifor et al., 2004).

Most societies have differing sets of rules governing sexual relationships – one for women and another for men (UNAIDS 2004). Society generally ignores the behaviour and attitudes that underlie the infection of women. Mothers and fathers, for example, may condone sexual adventurism in their sons whilst condemning similar behaviours in their daughters. Women

may, in the same way, excuse their sexual partners for *being unfaithful* or having outside relationships either because they are afraid of losing the partner or because they simply believe that it is “normal” for males to act in this manner. Males may consequently have multiple sexual partners and be violent towards women because they fear that they would lose the respect of their peers if they behaved otherwise (UNFPA, 2003). Within this setting, men hold most of the power, in essence implying that for many women, including married women, their male partners’ sexual behaviour is the most important HIV-risk factor (UNAIDS, 2004a). According to Shisana, Rehle, Simbayi, Zuma, Jooste, Pillay-van-Wyk, Mbelle, Van Zyl, Parker, Zungu, Pezi and the SABSSM III Implementation Team (2009), girls experiencing sexual abuse are more likely to engage in riskier sexual behaviours compared to their peers, thus the need to protect young women and children from sexual abuse.

The South African epidemic

With reference to South Africa, there is general acceptance and condoning of multiple partnerships for men, while women are expected to be monogamous and unquestioning of the behaviour of their partners (Gilbert and Walker, 2002; Wood and Jewkes, 2001; Varga, 1997). Masculine norms are defined by male control over sexual decision making. In this context, coupled with that of prevalent forced and coercive sex, many women are denied the right of refusal (Wood and Jewkes, 2001; Wood, Maforah and Jewkes, 1998; Varga, 2003; Jewkes and Abrahams, 2002) and for most women, sexual refusal or negotiation carries with it a risk of suspicions of infidelity and violent outcomes (Wood et al., 1998; MacPhail and Campbell, 2001).

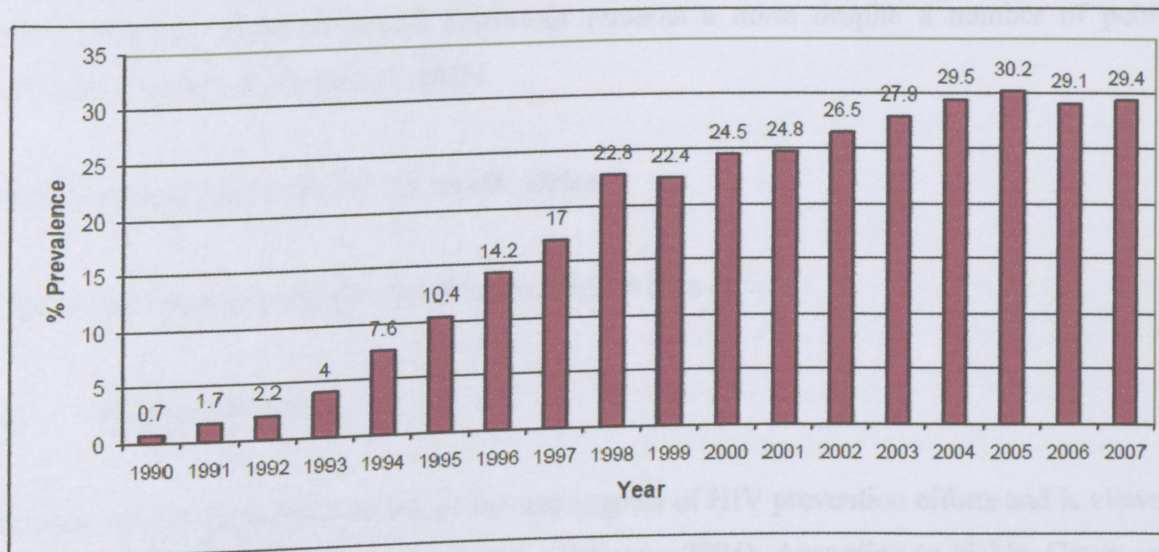
On the whole, men have more sexual partners than women, meaning that they have more occasions to contract and transmit HIV than women. This points to men’s behaviour as the driving force behind the epidemic, with women being disproportionately affected. Further more, studies have revealed that most women contract the virus from their husbands or long-term partners and yet women who are revealed to be HIV-positive often find themselves being accused of infidelity by their husbands or in-laws, and consequently suffer violence, loss of home and in some instances, loss of life (UNFPA, 2003).

There exists a clear need to challenge negative gender roles in response to the global AIDS epidemic. Recent studies suggest that African women are being infected at an earlier age than men, and the gap in HIV prevalence between them continues to grow, on the average, 13 infected women for every 10 infected men - an increase from 2002 when statistics stood at an average of 12 infected women for every 10 infected men. Incidence rates among South African youth (15-24 years of age) are especially alarming. According to Shisana et al. (2009), gender variations in HIV prevalence are noted to be established in younger age groups. Among 15-19 year olds, the study observed that female prevalence is 2.7 times higher than that of males and that in contrast to males, HIV prevalence among females increases more dramatically in subsequent age cohorts (21.1% among the 20-24-year-olds, and 32.7% among 25-29-year-olds).

The South African epidemic

Whilst Southern Africa remains the sub-region hardest hit by the AIDS epidemic, no single nation in the region and the world is worse affected than South Africa in terms of the number of its people living with the virus (UNAIDS, 2004a). Although current prevalence data show that Botswana and Swaziland have the worst prevalence rates in the world, South Africa has the worst epidemic in terms of sheer numbers of people infected (Grundling, Pillay, Bester and Sibanda, 2003). Studies, such as the *National HIV survey of women attending antenatal clinics in South Africa*, conducted annually since the year 1990, established that the national epidemic was one of the fastest growing epidemics in the world (AIDS Helpline, 2000).

Figure 2: HIV Prevalence trends among antenatal clinic attendees in South Africa, 1990-2007



Source: National Department of Health, 2008

Estimates reveal that in South Africa, there may be as many as 20 women infected for every 10 men (UNAIDS, 2004a). This concurs with the findings of Allen, Lindan, Serufulira, Van de Perre, Rundle and Nsengumuremyi, (1991) and Grosskurth, Mosha, Todd, Senkoro, Newell and Klokke, (1995) that HIV prevalence in women was higher than in men. According to the Human Sciences Research Council (HSRC) these transmission dynamics are best reflected by the HIV prevalence figures in different sub-populations of South Africa (HSRC, 2005a). A recent study by the HSRC has estimated national HIV prevalence at 10.6%, pointing out that HIV infection is high in older people, ranging from 6.2% among males aged 55-59 years and 10% among males aged 50-54 years (Shisana, Rehle, Simbayi, Zuma, Jooste, Pillay-van-Wyk, Mbelle, Van Zyl, Parker, Zungu, Pezi and the SABSSM III Implementation Team, 2009). Prevalence is higher in the provinces of KwaZulu-Natal (15.8%) and Mpumalanga (15.4%) and lowest in the Western Cape which has a prevalence of 3.8% (Shisana et al., 2009).

One in ten 15-24 year olds in South Africa are at risk for HIV infection (Pettifor et al., 2004). The HSRC estimates that the prevalence of HIV/AIDS among youth in South Africa ranges from 7.2% - 10.4%. Studies in South Africa have shown that more than half of South

Africans aged 15 and older would not mind engaging in sexual intercourse with an HIV-positive person. This finding indicates that to a large extent, for an increasing proportion of the population, high-risk sexual behaviour remains a norm despite a number of public education initiatives (Soltynski, 2005).

Sexual Behaviour Indicators in South Africa

The sexual behaviour indicators related to South Africa are:

a) Sexual experience

Delayed sexual experience is one of the major goals of HIV prevention efforts and is viewed to reduce the risk of pregnancy and STIs (Hallman, 2004). According to Noble, Cover and Yanagishita (1996), many young people in developing countries are sexually active by the age of 20 and furthermore, premarital sex is common among 15-19 year olds. Several studies have supported these findings, including the 2002 HSRC (Shisana and Simbayi, 2002) and 2003 RHRU (Pettifor et al., 2004) South African surveys. In 2003, among 15-19 year olds, 48% reported ever having sex compared to 89% of 20-24 year olds. No significant differences by gender were noted but these figures suggest that sexual experience increases with age (RHRU, 2004). This is further supported by the fact that only few 12-14 year olds reported sexual experience in the HSRC national surveys of 2002 (Shisana and Simbayi, 2002) and that of 2005 in which only the Indian race reported no sexual experience in this age group (Shisana et al., 2005).

b) Age at sexual debut and willingness to engage in sex

The study *HIV and Sexual Behavior among Young South Africans: A National Survey of 15-24 Year Olds* conducted by the Reproductive Health Research Unit (RHRU) of the University of Witwatersrand in 2003 placed the mean age of sexual debut to be 16.4 years for males and 17 years for females (Pettifor et al., 2004). The HSRC repeat survey of 2005 concluded that the median age at sexual debut for both sexes is 17 years (Shisana et al.,

2005) while the most recent report (Shisana et al., 2009) noted that the percentage of males reporting sex before the age of 15 years during the repeat surveys of 2002, 2005 and 2008 was almost twice that of females (11.3% vs. 5.9% for the 2008 survey).

The United Nations reports that between one-fifth and one-half of all girls and young women globally were forced into their first sexual experience (UNAIDS, 2004a). In a 2003 review of non-consensual sexual experiences of young people in developing countries, Jejeebhoy and Bott (2003) discovered that as much as 30 percent of first female sexual experiences occurred in a familiar setting and were often forced by someone that the girl was acquainted with. In South Africa, 98% of young men reported their first sexual intercourse experience as something they had willingly engaged in. This compared with 71% of young women (Pettifor et al., 2004). Wood and Jewkes (1997) found that 60% of young women in a South African township had had sex against their will with many viewing sexual coercion as a normal part of a relationship. According to MacPhail and Campbell (2001) young women in South Africa suffer emotional distress and are subjected to high risk of pregnancy, STIs and HIV in their relationships with males that demand sex as proof of their love.

Other studies in South Africa have suggested that in some communities as many as 25% of women have fallen victim to abuse by a current or former partner, with another 50% affected by emotional or economic abuse (Jewkes, Penn-Kekana, Levin, Ratsaka and Schrieber, 1999, quoted in Dissel and Ngubeni, 2003). This study further found that gender-based social and economic inequalities often made it difficult for women to negotiate for safer sex.

c) Engagement in exchanges of sex for money, goods, gifts or favours.

Across the African continent, there is growing evidence that young women exchange sex for money, goods, gifts or favours. A review by Luke and Kurz (2002) of studies conducted in sub-Saharan Africa showed that reports of this behaviour differ greatly by country. Various rationales have been provided for young women engaging themselves in this behaviour, with the main factor believed to be economic opportunity (Meekers and Calvès, 1997; Fugelsang, 1997; Luke, 2003).

In South Africa, a study by MacPhail et al. (2002) revealed that a positive correlation exists between the presence of commercial sex workers in disadvantaged communities characterized by high unemployment and the involvement of other young women in the exchange of sex for gifts. Gage (1998) showed that in an urban market-based environment, the need for cash could increase the likelihood for sexual exchanges.

Archavanitkul and Guest (1994), Caldwell et al. (1989) and Scoepf (1989) quoted in Gage (1998) state that in environments with few economic opportunities, young women have difficulty in separating sex from economic survival. Hallman (2004) stresses that the health concern surrounding the exchange of sex for gratification by women is that a condom is not likely to be used as the male partner is generally older and better positioned to dictate the terms of the sexual encounter.

d) **Sexual partnerships**

According to Shisana et al. (2009), males are 4 to 7 times more likely to have multiple sexual partnerships than females. In a review of psychology literature and in describing the sexual behaviours of US teenagers, Rodgers (1999) reveals that with all else being equal, females are more likely than males to equate sexual intimacy with love or emotional commitment and, as such, are less likely to have multiple sex partners. Hallman (2004) adds to this by stating that young women mainly perceive sex as a form of caring that results in the integration of intimacy and identity whereas young men are more influenced by peer pressure, parental control and other such external factors.

As alluded to earlier, in many developing countries, multiple sex partnerships among young women are largely due to economic reasons. Mann (1997) described multiple sexual partnerships as a means for economic survival for women. Studies have revealed that young women may have concurrent sexual partners – each partner meeting different social, economical and emotional needs. Young women have been depicted as social agents who have recognized the value attached to sex and may maintain multiple sexual relationships simultaneously to maximize benefits (Edet, 1997; Luke and Kurz, 2002; Wood et al., 1998;

Komba-Malekela and Liljestrom, 1994).

For men, multiple sexual partnerships are viewed to be largely due to emphasis of cultural traditions that present sexual conquest as a status marker. In a large number of settings, multiple sexual partnerships for males is accepted by both genders and at times encouraged by male peers and elders (Hallman, 2004; UNFPA, 2003).

The Nelson Mandela Foundation/HSRC national survey conducted by Shisana and Simbayi (2002) found that 9% of young females and 23% of young males had more than one sexual partner in the year before the survey. The South African study by Pettifor et al. (2004) presented a higher prevalence: 12% of females and 44% of males. Statistics from the repeat survey by Shisana et al. (2009) show that for the year 2008, 30.8% of male youth reported having had more than one sexual partner within the 12 months prior to the survey as compared to only 6% of females.

There is a high level of concern surrounding multiple partnerships. Males, especially those in the 15-19 year age category, Africans and those hailing from urban informal localities are particularly of note in this behaviour (Pettifor et al., 2004; Shisana and Simbayi, 2002; Shisana et al., 2009). There exists a need to make these groups, and others involved in having multiple sexual partners aware of the high risk for HIV infection carried with this practice (Shisana et al., 2005).

e) **Condom use**

The concept of safe sex through the promotion of condom use is one of the three pillars of HIV prevention programs. The other two pillars are advocating for delayed sexual debut and faithfulness to a single partner (Hallman, 2004). It has been documented that men may consider women who want to use condoms as promiscuous and the fact that some condom promotion materials are designed for targeting prostitutes specifically may reinforce this notion (Hallman, 2004; Bledsoe, 1991). In a long-term relationship the use of condoms is sometimes interpreted as a sign of lack of trust or an admission of infidelity more especially

if advocated by women. In South Africa, condom use negotiations are thus more often avoided by young women (Varga, 1997; Worth, 1989; Abdool-Karim, 2001).

Research has revealed that it is often difficult for young people to introduce condom use in conversation. Females in particular report fearing that it could lead to negative emotional, physical and even economic consequences (Varga and Makabulo, 1996; Wood and Jewkes, 1997). The 2002 Nelson Mandela Foundation/HSRC national survey in South Africa indicated that 46% of females and 57% of males between the ages of 15-24 years had used a condom at their last sexual encounter (Shisana and Simbayi, 2002). On an encouraging note Shisana et al. (2009) found that 87.4% of male youth and 73.1% of female youth had used a condom at last sex in the 2008 HSRC repeat survey. Hallman (2004) noted that young women residing in households with higher wealth have greater odds of condom use with a similar but smaller effect noted for young men. Hallman (2004) further noted that young men whose living fathers are not resident have lower odds of condom use at last sex while household education has a very large and significant positive effect on condom use for both genders.

f) Discussion of safe sex topics with sexual partner

Varga and Makabulo (1996); Varga (1997); and Wood and Jewkes (1997) all found that little communication or negotiation took place in most sexual relationships between young people in South Africa. Among females, fear of appearing not to trust their partner and that their partner would suspect infidelity on their part were the main reasons for this behaviour (Varga, 1997; Abdool-Karim, 2001). According to Jewkes et al. (1999), it is less likely that communication about HIV prevention takes place in relationships that include physical abuse. Women are often expected to give attention to the needs and wishes of their partners and thus often decide not to negotiate condom use because they hold concerns over the sexual pleasure of their men (Wood, 2000, quoted in Jewkes and Abrahams, 2002).

Young women are largely disadvantaged in sexual negotiations because they depend to a large extent on their partners for survival (Machel, 2001; Abdool-Karim, 2001). Frequently

age differences co-exist with female economic vulnerability and thus female bargaining power is weakened further (Luke and Kurz, 2002). According to Singh, Darroch, and Frost (2001) young women of lower socioeconomic status may be less assertive, have poorer negotiating skills, and be more accepting of traditional gender roles.

g) Pregnancy

Unsafe sexual behaviour does not only carry risk for HIV and STI infection but also pregnancy for females (Hallman, 2004). Although the total fertility rate of South Africa is estimated to be one of the lowest in sub-Saharan Africa (2.9 births per woman nationally in 1998) levels of adolescent childbearing are high: 35% of 19 year olds in the 1998 Demographic Health Survey (DHS) had already been pregnant (Hallman, 2004). Pettifor et al. (2004) reveal that 15% of 15-19 year olds and 54% of 20-24 year old women have been pregnant at some stage in their lives. Besides suggesting high rates of sexual activity among South Africa's youth and inconsistent use of contraceptives, other studies point to gender-based violence, forced sex and rape as additional influences on the high pregnancy rates (Human Rights Watch, 2001; Jewkes et al., 2001).

h) Secondary abstinence

Hallman (2004) refers to secondary abstinence as the act in which individuals that have been sexually active begin to practice abstinence for sustained periods. In the South African Nelson Mandela Foundation/HSRC national survey (Shisana and Simbayi, 2002), the prevalence of secondary abstinence was 18% for males and 14% for females. Levels for 13-19 year olds were estimated by Pettifor et al. (2004) at 13% for males and 5% for females with corresponding levels for 20-24 year olds at 15% and 13% for males and females respectively. Shisana et al. (2005) found that in the three year period, between 2002 and 2005, there was an increase in sexual abstinence in South Africa, more especially among young people, suggesting the need to promote secondary abstinence as an HIV/AIDS prevention strategy.

CONCEPTUAL BASED LITERATURE

Behaviour change and sexual behaviour models

In the late 1980's and early 1990's, there was a general lack of understanding of human sexual behaviours. Since then and in the absence of a vaccine against HIV, there has been a great focus on the subject of human sexual behaviour in the hope that its understanding could lead to strategies promoting behaviour change as a preventative measure against HIV (Hargreaves, 2002). Hargreaves further points to three broad classifications of the predominant models for behaviour change, namely social models, structural and environmental models and finally psychological models of behaviour and behaviour change.

The four commonly cited theories on behaviour change used in HIV/AIDS prevention - the health belief model (HBM), the theory of reasoned action (TRA), the stages of change theory (SCT) and the more recent AIDS risk reduction model (ARRM) all fall under psychological models (FHI/AIDSCAP, 2002). These models focus on the individual as determining their own behaviours and on the concept of risky and undesirable behaviour and further suggest that behaviour is predominantly independent of culture, environment or society (Hargreaves, 2002). In this study, the HBM has been adopted as a conceptual framework.

The Health Belief Model (HBM)

This model focuses on the attitudes and beliefs of individuals in an attempt to explain and predict their health behaviours. The model was developed in the 1950's and has over the years been modified to allow for investigation and exploration of a number of health behaviours, including sexual risk behaviours (Rosenstock, Strecher and Becker, 1994) and HIV/AIDS transmission (FHI/AIDSCAP, 2002).

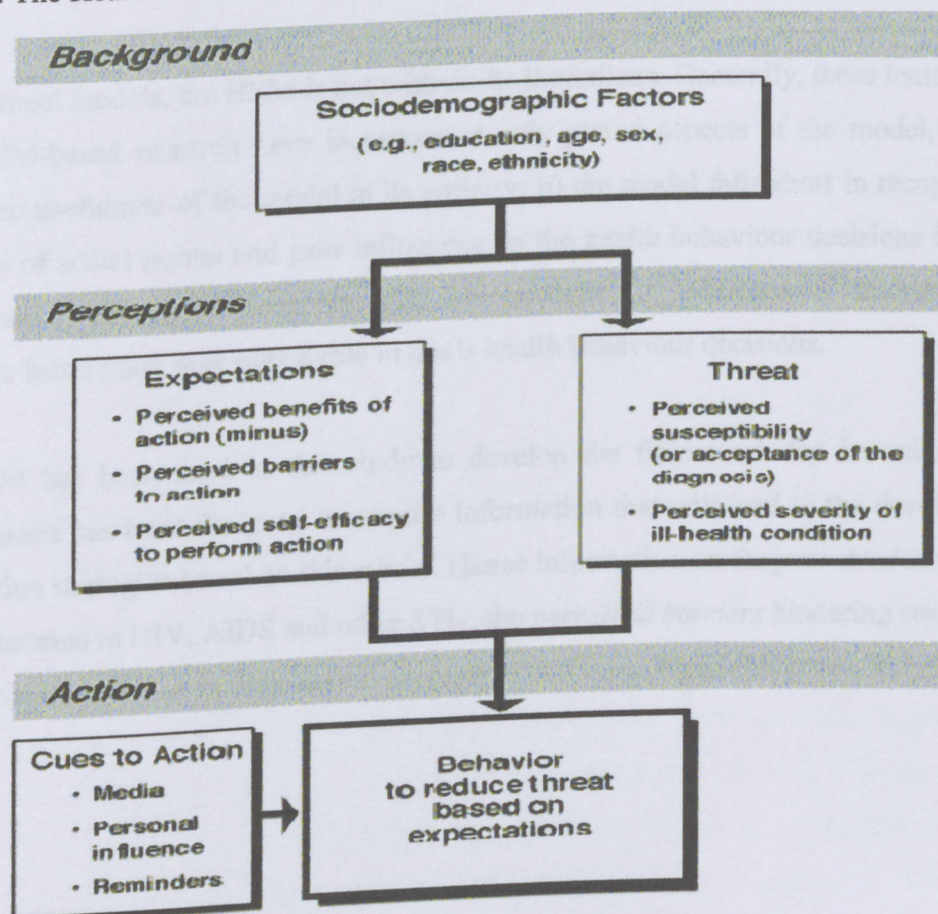
The model rests on the following variables:

- Perceived threat: This is considered in two parts- that of susceptibility and severity of

a health condition.

- Perceived susceptibility relates to one's subjective perception of the risk of contracting a health condition while perceived severity relates to an individual's feelings with regard to the seriousness of contracting an illness or of leaving it untreated. It takes into account medical, clinical and social consequences of inaction.
- Perceived benefits: This relates to one's belief in the effectiveness of strategies designed to reduce the threat of illness.
- Perceived barriers: These relate to the potential negative consequences that could arise from taking particular health actions, and include physical, psychological and financial demands.

Figure 3: The Health Belief Model: Background, Perceptions and Action



Source: Rosenstock et al., 1994.

- Cues to action relate to events, either bodily, such as physical symptoms of illness or environmental (e.g. media publicity) that motivate people to take action.
- Self efficacy as a concept of the HBM was introduced by Bandura (1977) and relates to the belief held by an individual that s/he is capable of successfully carrying out the required behaviour in order to achieve the desired outcome.
- Other variables such as demographics, sociopsychological and structural variables that may affect an individual's perceptions are considered because they have an indirect influence on health related behaviour.

The literature review of all HBM studies published between 1974 and 1984 (Janz and Becker, 1984) identified perceived barriers as the most significant variable in predicting and explaining behaviours relating to health. The least significant was identified to be perceived severity.

As with most models, the HBM is not without its limitations. Generally, these include: a) that most HBM-based research have incorporated only partial aspects of the model, hence not testing the usefulness of the model in its entirety; b) the model falls short in recognizing the influence of social norms and peer influences on the health behaviour decisions individuals adopt and; c) the model does not take into account the influence of environmental or economic factors that may play a role in one's health behaviour decisions.

The HBM has been used in this study to develop the framework for investigation. The questionnaire has been designed to acquire information that will lead to the development of intervention strategies based on this model. Hence information on the *perceived susceptibility* among students to HIV, AIDS and other STIs; the *perceived barriers* hindering students from taking protective action in their sexual encounters and adopting healthier sexual behaviour.

RESEARCH METHODOLOGY

STUDY DESIGN

This study took the form of a quantitative survey research and employed a cross-sectional descriptive design as defined by Graziano and Raulin (1997). The authors explain that survey research seeks to determine the current status of population characteristics whilst also attempting to discover relationships among variables. They further state that cross-sectional survey designs involve “one-shot” or once-off administration of the survey instrument to a sample. This achieves yielding of data on the desired variables as they exist at the time of the survey.

STUDY SETTING

The setting for this study was the University of Venda campus located in Thohoyandou, Vhembe district of the Far North region of the Limpopo province of South Africa. The institution lies in the former Venda homeland and comprises a student population of approximately 11 000 individuals, out of which an estimated 2044 are accommodated within the campus residences (Ramokgale, 2006).

The campus has several halls of residence. *Riverside*, the largest of the residential clusters comprises of 8 blocks (A through to H), four of which are exclusively female blocks and four exclusively male blocks. *Lost City* is comprised of 4 blocks laid out in two sets of double story adjoining residences (DBSA 1 and 2; and DBSA 3 & 4). The first set, DBSA 1 and 2 are male designated residences whilst DBSA 3 and 4 are designated female residences. *F3* and *F4*, are identical three story structures accommodating both male and female students. *Mango Groove* and *Carousel*, are designated female and male exclusive residences respectively. The smallest residence is *Bernard Ncube*, which is designated as a female residence whilst the prefab residences, comprised of 6 identical blocks (3 designated for females and 3 for males), are the newest residences in the campus.

SAMPLING

Population

The target population was composed of 2,044 resident students enrolled at the University of Venda for the 2008 academic year. The population was multicultural with the majority of international students coming from Botswana, Ghana, Nigeria and Zimbabwe. South African representation in the population was predominantly from the tribes of the VhaVenda, the Tsonga, the Sotho/Pedi, and the Swati.

Sampling frame

Residential log sheets from the Office of the hostel superintendent were used to develop a sample frame of all the students officially residing in the campus residences. From these logs, the sample frame size was determined to be 2,044 students as shown in Table 1 below.

Table 1: The sample frame

RESIDENCE CLUSTER	FEMALE	MALE	TOTAL
Prefabs	189	189	378 (18.5%)
F3	185	184	369 (18.1%)
F4	186	186	372 (18.2%)
Lost City	180	180	360 (17.6%)
Riverside	128	128	256 (12.5%)
Carousel	-	123	123 (6.0%)
Mango Groove	124	-	124 (6.1%)
Bernard Ncube	62	-	62 (3.0%)
TOTAL	1054 (51.6%)	990 (48.4%)	2044 (100%)

Sample and sampling plan

Individuals in the sample were required to meet the following eligibility criteria:

- Be a registered student with the University of Venda for the 2008 academic year.
- Be residing within campus residences by the time of data collection.

- Be the only student residing in the sampled room to have been included in the sample.
- Have not participated in the panel of 50 students selected for checking face validity and piloting of the instrument during the 2007/2008 academic years.

Based on the population size of 2,044 students, and seeking to acquire a sample at a confidence level of 95%, percentage picking of 50% (0.5) and a confidence interval of at most 5% (0.05) a required sample size of 342 students was determined using the sample size calculator developed by MaCorr Research (downloaded from <http://www.macorr.com> on June 5, 2007) embedded with the formula below.

$$ss = \frac{Z^2 * (p) * (1 - p)}{c^2}$$

Where:

Z = Z value (e.g. 1.96 for 95% confidence level)

p = percentage picking a choice, expressed as decimal (0.5 used for sample size needed)

c = confidence interval, expressed as decimal (0.05 = 5% used)

For convenience, the researcher felt that he could reasonably handle a final sample size of 500 students, which provided for a 35.2% non response rate. This final size was divided into mutually exclusive strata according to residence clusters and gender. Simple random sampling was used to select 259 (51.8%) female and 241 (48.2%) male students from each residence hall, with every 5th room in the residence hall being selected and only one student from each room being approached for inclusion in the study. Table 2 shows the distribution of the sample by residence halls.

Table 2: Composition of sample

RESIDENCE CLUSTER	FEMALE	MALE	TOTAL
Prefabs	46	46	92 (18.4%)
F3	45	45	90 (18.0%)
F4	45	45	90 (18.0%)
Lost City	44	44	88 (17.6%)
Riverside	31	31	62 (12.4%)
Carousel	-	30	30 (6.0%)
Mango Groove	32	-	32 (6.4%)
Bernard Ncube	16	-	16 (3.2%)
TOTAL	259 (51.8%)	241 (48.2%)	500 (100%)

The Instrument

A 71 item research questionnaire titled *UNIVEN Sexual Behaviour Survey of Resident Students 2008* was developed after reviewing a number of sexual behaviour questionnaires from previous studies conducted in South Africa and internationally.

The basic framework for the questionnaire was adopted from the youth questionnaire of Family Life International (FHI) published in Amon, Brown, Hogle, MacNeil, Magnani, Mills, Pisani, Rehle, Saidel and Sow (2000). Additional items were adapted from the *HEAIDS/CDC VCT Intake Form* in use at the UNIVEN campus HIV/AIDS Unit and the following studies:

- *HIV and Sexual Behaviour among Young South Africans: A National Survey of 15-24 Year Olds* (Pettifor et al., 2004).
- *HIV/AIDS Knowledge, Awareness and Perception of Undergraduate Students at the University of Stellenbosch* (Cornelissen, 2005)
- *Sexual Behaviour Among University of Minnesota Students* (Boynton Health Service, 2004).
- *Sexual Risk Behaviours among First Year College Students, 2000-2002* (Flannery and Ellingson, 2003).
- *South African National HIV prevalence, behavioural risks and mass media household survey 2002* (Shisana and Simbayi, 2002).

- *South African National HIV Prevalence, HIV Incidence, Behaviour and Communication Survey, 2005* (Shisana et al., 2005).
- *Zambia Sexual Behaviour Survey, 2000* (Dzekedzeke, Malungo, Chisumpa, Buckner and Bloom, 2002)

Items selected for inclusion in the questionnaire addressed the following aspects:

- Background characteristics
- Experience with alcohol and drugs
- Issues related to sexual behaviour
- Contact with commercial sex partners
- Contact with non commercial sex partners
- Use of condoms
- History of Sexually Transmitted Infections/Diseases (STIs/STDs)
- Knowledge about HIV/AIDS and level of exposure to interventions
- Attitudes towards people living with HIV/AIDS and
- Experience with Voluntary Counselling and Testing (VCT) and perceived threat to STI infection.

It has become generally acceptable in survey studies to use self administered questionnaires in cases where all respondents are literate and educated, such as with student populations (Amon et al., 2000). It is for this reason that the research instrument in this study was self administered and provided in English without translation.

Reliability of the Research Instrument

According to Reaves (1992), a measurement has high reliability if for a given property measured repeatedly in the same way it yields the same result. Reaves points out that no measurement is perfectly reliable and hence one will not get the same result every time but rather should focus on achieving results that are as similar as possible hence achieving a more reliable measurement.

Although the study instrument bears some degree of reliability as it was adapted from internationally and locally accepted studies, expert opinion from staff of the University of Venda Public Health Department and members of the Higher Degree Committee (HDC) of the School of Health Sciences were sought to further assess its reliability.

VALIDITY

The validity of an instrument is defined by Kumar (2005) as the ability of an instrument to measure what it is designed to measure. In this study, concern has been given to face validity and content validity.

Face validity

The face validity of an instrument is defined by Kumar (2005) as the judgment that an instrument is measuring what it is supposed to, based primarily on the logical link between the questions and the study objectives.

The study instrument was distributed to a panel of 25 male and 25 female students (all excluded from the final study sample) from the University of Venda Departments of Public Health, Social Work, and Political Sciences and their opinion solicited as to whether the instrument, on the 'face of it' appeared to be capable of measuring sexual behaviour of students of the University of Venda. The process also served as piloting of the instrument. Changes were consequently made to the structuring of the questionnaire and phrasing of questions identified to be vague.

Content validity

An extensive review of literature and instruments from similar studies conducted locally and internationally aided during the instrument design process to provide some assurance of content validity. In addition, the questionnaire was submitted for evaluation of its content validity to experts from the Department of Public Health at the University of Venda, and the

University of Venda HIV/AIDS Unit.

METHOD OF DATA COLLECTION

The self administered questionnaire for this study was distributed to the study group by the researcher according to list of rooms to be sampled. Study participants were each provided with an envelope in which they sealed completed questionnaires and were asked to return them either to the researchers' room or to the campus HIV/AIDS Unit.

DATA ANALYSIS

Data analysis was carried out by the researcher with assistance from members of the Peer Education Task Team (PETT), a student volunteer group at the University of Venda. Data was entered into the analysis programme Statistical Package for Social Sciences (SPSS) version 14.0 and entry discrepancies were checked for and corrected prior to analysis.

The analysis of data from this study included univariate and bivariate analysis. Univariate analysis was used in the examination of responses to single items from within the ten sections of the questionnaire for the purpose of describing the survey sample and hence the study population. Analysis covered frequency distributions and stratified marginals (univariate analysis of subgroups within the study group) and measures of central tendency (*mode, median and mean*).

Bivariate analysis was used to achieve an explanatory analysis of the data. Gender formed the primary variable with which other variables were cross tabulated. Age group was used in cross tabulation with experience of sex, and with pregnancy and abortion indicators among females.

Chi-square test was used to test for differences by gender and age in a number of variables. Unless otherwise indicated, values for significance (p-value) are presented for comparisons by gender.

ETHICAL CONSIDERATIONS

The proposal of this study was presented to the Higher Degree Committee (HDC) of the School of Health Sciences at the University of Venda, and recommended for ethical approval to the University Senate and Ethics Committee. Ethical clearance was subsequently granted by the University Research and Ethics Committee.

Informed consent was secured from each study participant prior to distribution of questionnaires. In securing consent, the researcher personally informed students of the objectives of the study, the ethics to be afforded them, what was expected of them and the amount of time their participation would entail. This personal approach allowed students to seek clarification on aspects of their participation, and, in the opinion of the researcher accounts for the high participation rate. Students who returned completed questionnaires by the end of the study were deemed to have given consent.

In order to achieve *anonymity* of study participants, the delivery register bearing room numbers to which questionnaires had been delivered was kept by the researcher. Questionnaires were delivered to students bearing only the residential block name and only numbered after they were completed and returned so that they could not be linked to any particular room and individual.

Confidentiality was assured for all participants in the study, with details of their participation being kept confidential. Although stringent methods were in place to prevent linking questionnaires to any individual, access to completed questionnaires was restricted to the researcher and PETT members assisting in the SPSS assisted analysis of data.

The *rights of vulnerable groups*, such as minors and those with disability, were respected throughout the study. Informed consent for minors was assumed granted through the Higher Degree Committee and Ethics Committee of the University as a guardian of students on behalf of parents. Consultation was held with the university Disabled Students Unit (DSU), the student counselling and guidance unit and the HIV/AIDS Unit for evaluation of the

appropriateness of items in the instrument for these populations. Over and above, minors and students with disability were afforded all the rights and considerations granted to other study participants, including the rights to privacy and voluntary participation.

LIMITATION OF THE STUDY

It is not always easy for people to provide accurate and honest responses in investigations of sexual behaviour. Young people, more especially, may find it difficult to acknowledge their engagement in stigmatized behaviour, such as anal intercourse, when confronted by individuals that they feel would disapprove of such behaviour.

The focus of the study on the University of Venda presented a limitation in that its scope for generalization of results to the rest of South Africa's tertiary students and/or institutions becomes very small, if any at all. However, the results should still be vital in establishing a basis for comparison of behaviour between the various institutions. It can also serve in producing baseline data for future studies on sexual behaviour.

The research instrument solicited data on self reported behaviour. Respondents have often been known to provide socially acceptable responses to such measures and as such, researchers have often questioned the validity of this method of collecting data. Every effort to promote honesty and accuracy in response was taken in spite of this shortcoming. This included: the recruitment of survey participants by the researcher who served as a peer educator and counsellor in the university since 2002 and reassuring respondents during recruitment that confidentiality would be maintained. Furthermore, the use of a self administered questionnaire in this study was intended to permit respondents the opportunity to select a setting that would insure adequate privacy to respond to the items presented in the questionnaire without fear of judgment by observers or third parties.

CHAPTER FOUR

THE RESULTS

INTRODUCTION

The chapter presents the findings of the study. The findings are presented under 10 sections as follows:

SECTION 1: DEMOGRAPHY

Table 3: Age and sex distribution

Age distribution	Sex distribution				Total	
	Female		Male		No.	%
	No.	%	No.	%		
15-19	24	9.9	14	6.9	38	8.5
20-24	113	46.5	99	48.8	212	47.5
25-29	90	37	76	37.4	166	37.2
30-34	16	6.6	14	6.9	30	6.7
Total	243	100	203	100	446	100

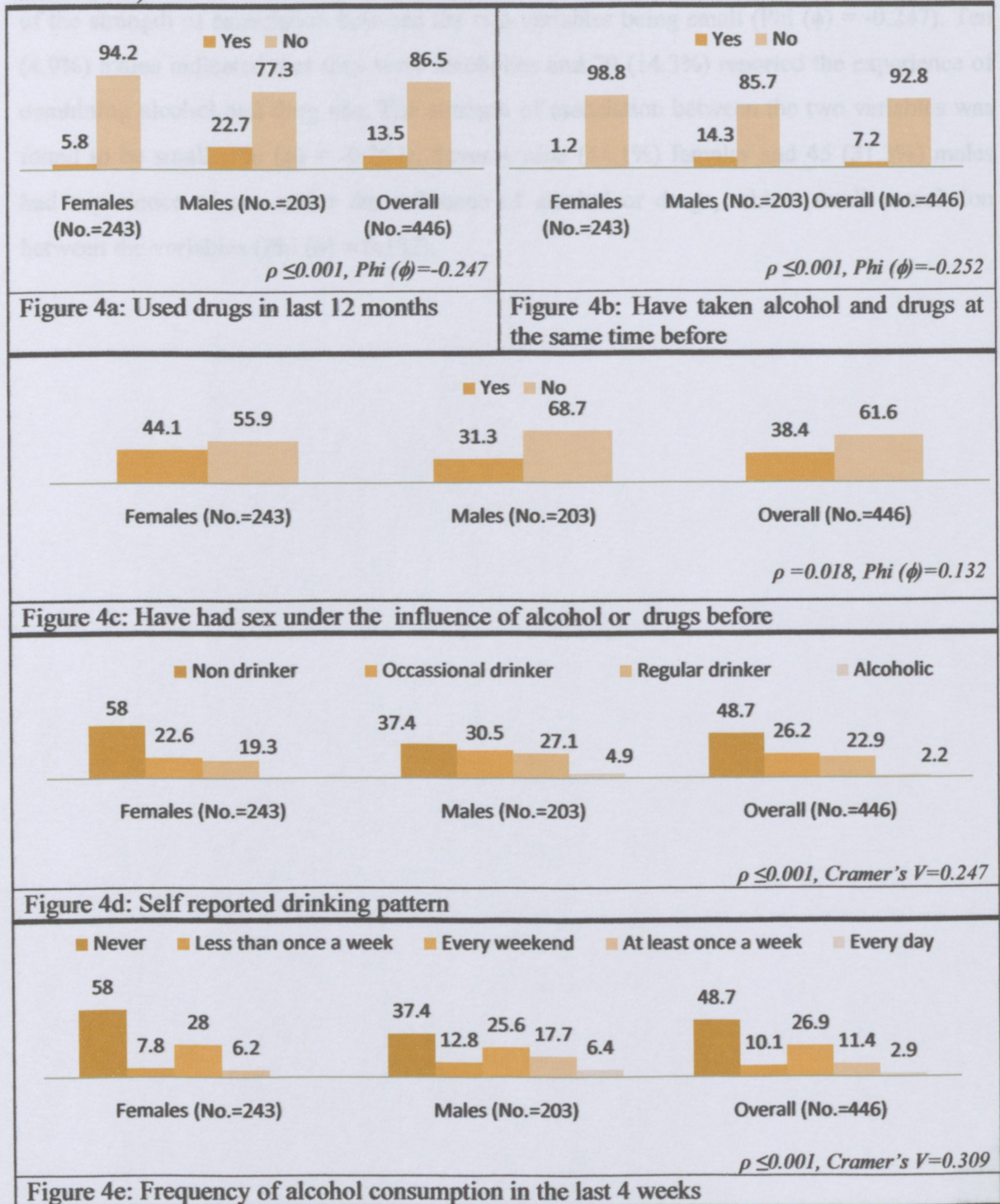
Of the 446 participants, 243 (54.5%) were females while 203 (45.5%) were males. One hundred and six (43.6%) of the females and 90 (44.3%) of the males were above 24 years of age (Table 3). Twenty-seven (6.1%) of the participants were post graduate students. The distribution according to ethnicity shows a range of 121 (27.1%) for the Tsonga and 4 (0.9%) for the Ndebele (Table 4).

Table 4: Respondents' distribution according to marital status, level of study and ethnicity

	No.	%
N=446		
Table 4a: Marital status		
Single	369	82.7
Engaged	60	13.5
Married	17	3.8
Table 4b: Level of study		
1 st year	84	18.8
2 nd year	151	33.9
3 rd year	107	24.0
4 th year/honours	77	17.3
Masters	27	6.1
Table 4c: Ethnicity		
Tsonga	121	27.1
Venda	84	18.8
Sotho	97	21.7
Swati	50	11.2
Zulu	18	4.0
Tswana	8	1.8
Xhosa	5	1.1
Ndebele	4	0.9
Others (International students)	59	13.2

SECTION 2: EXPERIENCE WITH ALCOHOL AND DRUGS

Figure 4: Experience of alcohol and drug use among the respondents (by sex and overall distribution)



As shown in Figure 4, 46 (22.7%) males and 14 (5.8%) females reported the use of drugs (marijuana) within a year prior to the study. The male were more likely than expected under the null hypothesis than the females to have used drugs in the period, with ϕ - the measure of the strength of association between the two variables being small ($\Phi(\phi) = -0.247$). Ten (4.9%) males indicated that they were alcoholics and 29 (14.3%) reported the experience of combining alcohol and drug use. The strength of association between the two variables was found to be small ($\Phi(\phi) = -0.252$). Seventy nine (44.1%) females and 45 (31.3%) males had experience of sex under the influence of alcohol or drugs, with a small association between the variables ($\Phi(\phi) = 0.132$).

SECTION 3: ISSUES RELATED TO SEXUAL BEHAVIOUR AND PRACTICES

Table 5: Experience of sexual intercourse

Table 5a: Experience of sexual intercourse (by age group and overall distribution)

	Age group						Total			
	15-19 (No.=38)		20-24 (No.=212)		25-29 (No.=166)		30-34 (No.=30)		(No.=446)	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	10	26.3	156	73.6	135	81.3	22	73.3	323	72.4
No	28	73.7	56	26.4	31	18.7	8	26.7	123	27.6

($p \leq 0.001$, Cramer's $V = 0.325$)

Table 5b: Experience of sexual intercourse (by sex and age group)

	Females						Males													
	15-19 (No.=24)		20-24 (No.=113)		25-29 (No.=90)		30-34 (No.=16)		Total (No.=243)		15-19 (No.=14)		20-24 (No.=99)		25-29 (No.=76)		30-34 (No.=14)		Total (No.=203)	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Active	7	29.2	64	56.6	53	58.9	7	43.8	131	53.9	1	7.1	57	57.6	48	63.2	10	71.4	116	84.3
Abstaining	0	0.0	24	21.2	21	23.3	3	18.8	48	19.8	2	14.3	11	11.1	13	17.1	2	14.3	76	17.0
Never had sex	17	70.8	25	22.1	16	17.8	6	37.5	64	26.3	11	78.6	31	31.3	15	19.7	2	14.3	123	27.6

According to Table 5a, 323 (72.4%) of the respondents had the experience of sex and, as shown in Table 5b among the females, 131 (53.9%) were still sexually active compared to 116 (84.3%) of the males. Pearson chi-square results indicate that the respondents differ by age groups on the experience of sex ($p \leq 0.001$). Between the ages of 15 and 29 years, older respondents are more likely than expected under the null hypothesis to have the experience of sex than the younger ones. Cramer's V, which indicates the strength of association between the two variables, is 0.325 and, thus, the effect size is considered to be medium according to De Vaus (2002).

Figure 5: Reasons for adopting secondary abstinence

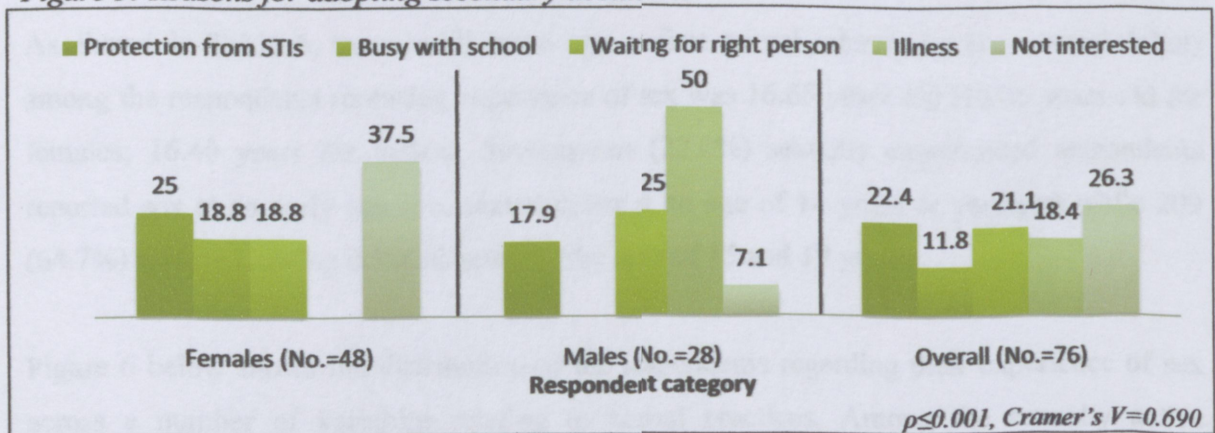


Figure 5 shows the reasons provided by the respondents for adopting secondary abstinence. Among the females 12 (25.0%) and 18 (37.5%) respondents adopted abstinence to protect themselves from STIs and as a result of having developed a lack of interest in sex respectively. Among the males, the dominant reasons provided by 7 (25.0%) and 14 (50.0%) respondents were abstaining while waiting for the right partner (or marriage) and having an illness respectively. Cramer's V indicates a large or high relationship between gender and the reason for adopting secondary abstinence.

Table 6: Age at sexual debut

Table 6a: Descriptive measures of age at sexual debut (by gender and overall)							
		Female (No.=179)		Male (No.=144)		Total (No.=323)	
Mean		16.85		16.40		16.65	
Minimum		12		10		10	
Maximum		24		24		24	

Table 6b: Age at sexual debut (by gender and overall distribution)							
		Female (No.=179)		Male (No.=144)		Total (No.=323)	
		No.	%	No.	%	No.	%
Age at debut	10-14 years	45	25.1	26	18.1	71	22.0
	15-19 years	108	60.3	101	70.1	209	64.7
	20-24 years	26	14.5	17	11.8	43	13.3

As shown in Table 6, the overall mean age at first sexual intercourse (i.e. sexual debut) among the respondents reporting experience of sex was 16.65 years old (16.85 years old for females; 16.40 years for males). Seventy-one (22.0%) sexually experienced respondents reported sex at an early age (i.e. sexual debut at an age of 14 years or younger) while 209 (64.7%) reported having debuted between the ages of 15 and 19 years.

Figure 6 below shows the distribution of the respondents regarding their experience of sex across a number of variables relating to sexual practices. Among the sexually active respondents, 86 (48.0%) females and 41 (28.4%) males stated that they were either unwilling or not certain to engage in sex at debut, with the variables holding a minor relationship (Cramer's $V=0.202$). Among the females, 95 (53.1%) reported having experienced forced or coerced sex and another 18 (10.1%) reported having forced someone to have sex. Thirty seven (25.7%) males reported experience of being coerced to have sex.

Figure 6: Practices related to experience of sex

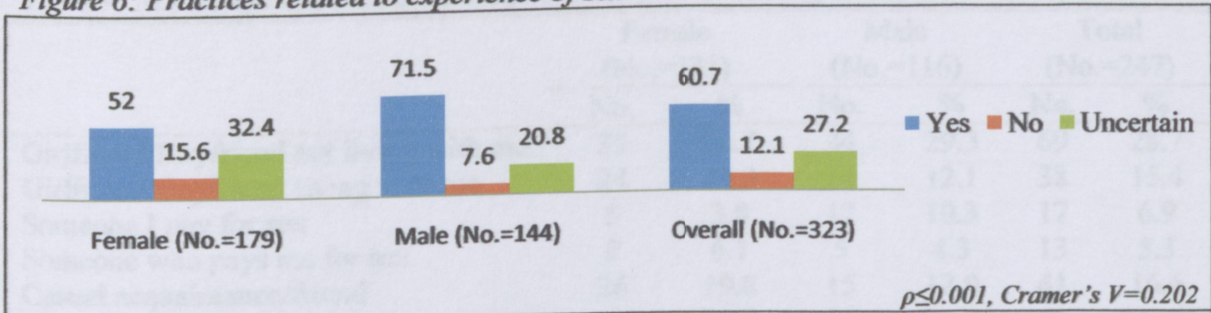


Figure 6a: Willingness to have sex at debut

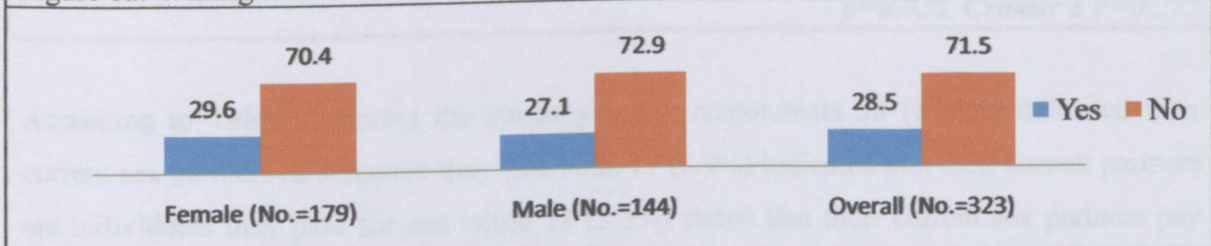


Figure 6b: Ever received favours or gratification in exchange for sex

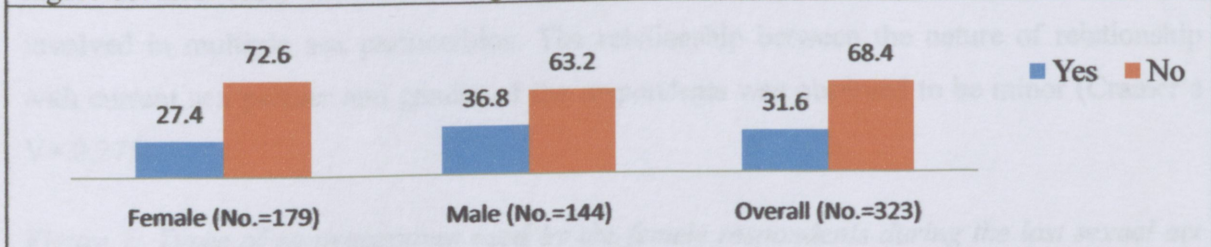


Figure 6c: Ever given favours or gratification for sex

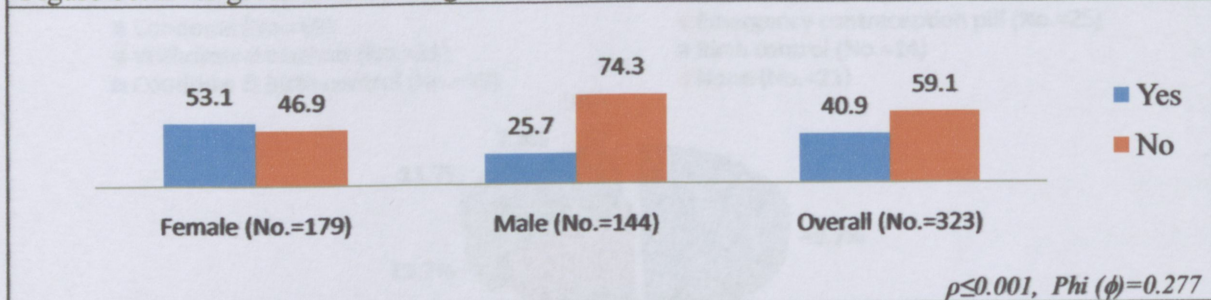


Figure 6d: Ever been forced/coerced to have sex

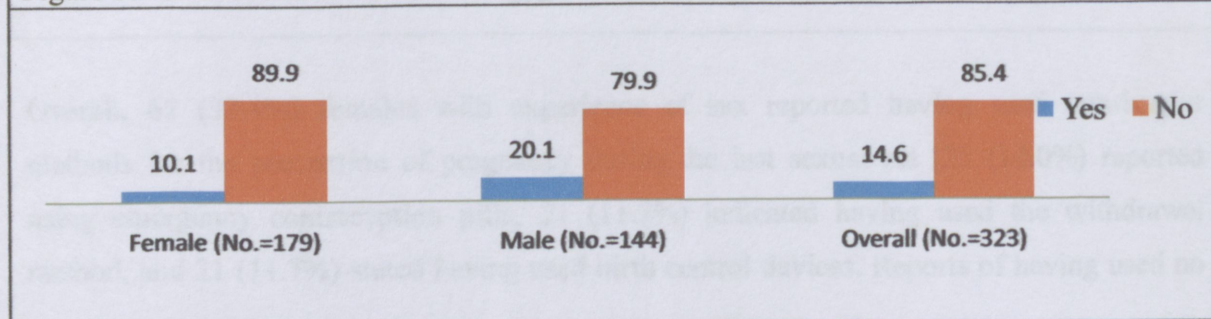


Figure 6e: Ever forced/coerced someone to have sex

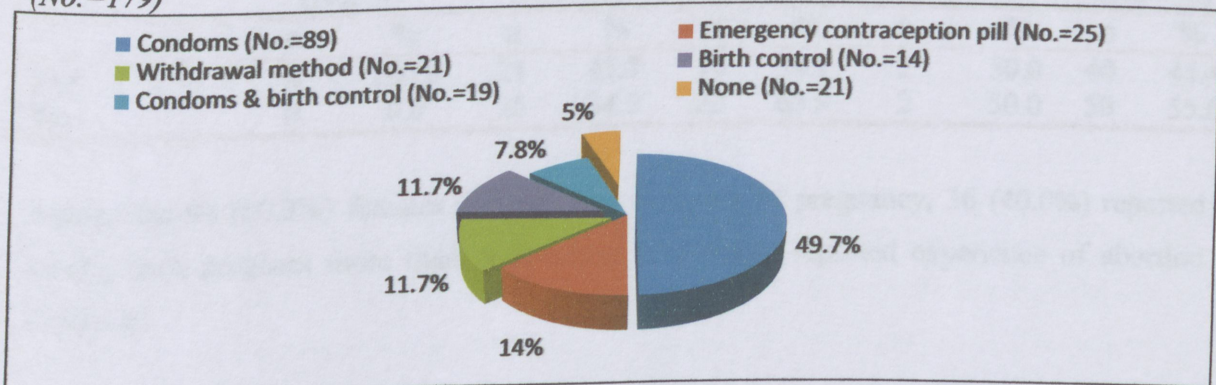
Table 7: Nature of relationship with current sex partner among sexually active respondents

	Female (No.=131)		Male (No.=116)		Total (No.=247)	
	No.	%	No.	%	No.	%
Girlfriend/Boyfriend not living with me	35	26.7	34	29.3	69	28.7
Girlfriend/Boyfriend living with me	24	18.3	14	12.1	38	15.4
Someone I pay for sex	5	3.8	12	10.3	17	6.9
Someone who pays me for sex	8	6.1	5	4.3	13	5.3
Casual acquaintance/friend	26	19.8	15	12.9	41	16.6
Multiple partners	33	25.2	36	31.0	69	28.7

$\rho=0.028$, Cramer's $V=0.275$

According to Table 7, among the sexually active respondents 38 (15.4%) indicated their current sex partners as someone they live with, 17 (6.9%) indicated that their current partners are individuals they paid for sex while 13 (5.3%) stated that their current sex partners pay them for sex. Sixty nine (28.7%) sexually active respondents indicated that they were involved in multiple sex partnerships. The relationship between the nature of relationship with current sex partner and gender of the respondents was observed to be minor (Cramer's $V=0.275$).

Figure 7: Types of contraceptives used by the female respondents during the last sexual act (No.=179)



Overall, 67 (37.4%) females with experience of sex reported having used non-barrier methods for the prevention of pregnancy during the last sexual act [25 (14.0%) reported using emergency contraception pills, 21 (11.7%) indicated having used the withdrawal method, and 21 (11.7%) stated having used birth control devices. Reports of having used no

method for the prevention of pregnancy during the last sexual act were provided by 9 (5.0%) females (Figure 7).

Table 8: Pregnancy and abortion indicators among females (by age group)

Table 8a: Ever been pregnant (among females with experience of sex)										
	Age group								Total	
	15-19 years		20-24 years		25-29 years		30-34 years		(No.=179)	
	(No.=7)		(No.=88)		(No.=74)		(No.=10)		No.	%
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	4	57.1	46	52.3	36	48.6	4	40.0	90	50.3
No	3	42.9	42	47.7	38	51.4	6	60.0	89	49.7

Table 8b: Number of pregnancies (among females with history of pregnancy)										
	Age group								Total	
	15-19 years		20-24 years		25-29 years		30-34 years		(No.=90)	
	(No.=4)		(No.=46)		(No.=36)		(No.=4)		No.	%
	No.	%	No.	%	No.	%	No.	%	No.	%
One	0	0.0	31	67.4	22	61.1	1	25.0	54	60.0
Two	1	25.0	6	13.0	10	27.8	3	75.0	20	22.2
Three	1	25.0	7	15.2	0	0.0	0	0.0	8	8.9
Four or more	2	50.0	2	4.3	4	11.1	0	0.0	8	8.9

Table 8c: Ever had an abortion (among females with history of pregnancy)										
	Age group								Total	
	15-19 years		20-24 years		25-29 years		30-34 years		(No.=90)	
	(No.=4)		(No.=46)		(No.=36)		(No.=4)		n	%
	n	%	n	%	N	%	n	%	n	%
Yes	4	100.0	21	45.7	13	36.1	2	50.0	40	44.4
No	0	0.0	25	54.3	23	63.9	2	50.0	50	55.6

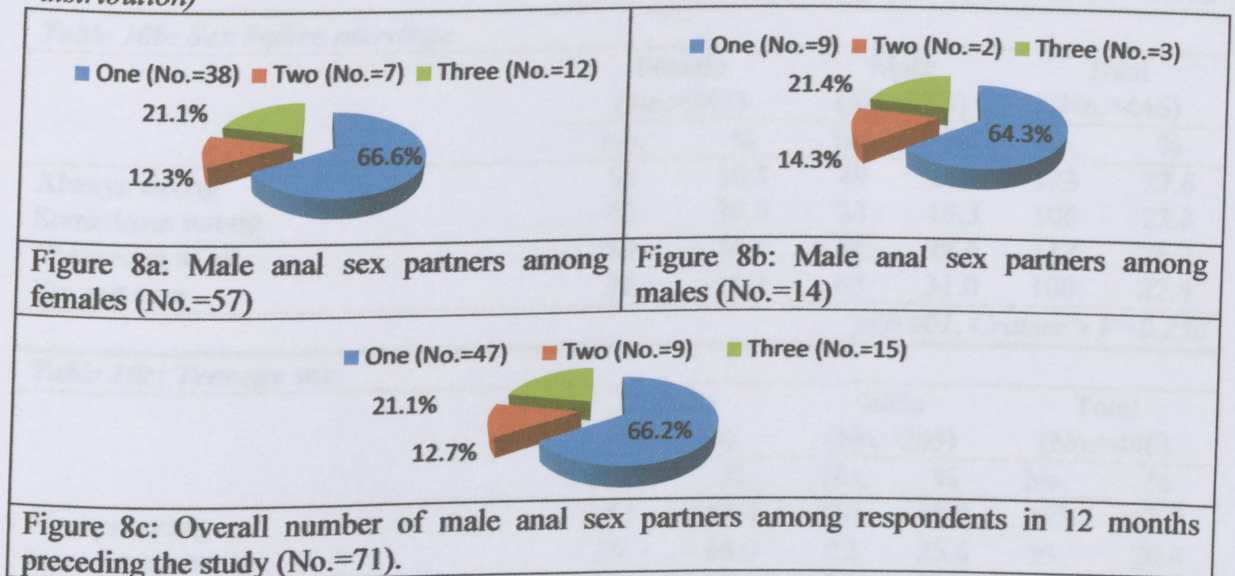
Among the 90 (50.3%) females that reported a history of pregnancy, 36 (40.0%) reported having been pregnant more than once while 40 (44.4%) reported experience of abortion (Table 8).

Table 9: Self perceived sexual orientation among sexually active respondents

	Female		Male		Total	
	(No.=131)		(No.=116)		(No.=247)	
	No.	%	No.	%	No.	%
Heterosexual	192	79.0	142	70.0	334	74.9
Homosexual	5	2.1	8	3.9	13	2.9
Bisexual	9	3.7	13	6.4	22	4.9
Don't know/Not sure	37	15.2	40	19.7	77	17.3

Three hundred and thirty four (74.9%) respondents reported that they were heterosexual. However, 5 (2.1%) females and 8 (3.9%) males reported that they were homosexual, another 9 (3.7%) females and 13 (6.4%) males reported they were bisexual and 77 (17.3%) respondents reported that they were not certain of their orientation.

Figure 8: Experience of anal sex in the 12 months preceding the study (by sex and overall distribution)



In the 12 months preceding the study, 71 (15.9%) respondents had engaged in anal sex. Among these, 12 (21.1%) females and 3 (21.4%) males reported having had 3 male anal sex partners.

As shown in Table 10 below, homosexuality was identified as being always wrong by 322 (72.2%) respondents while 119 (49%) females and 130 (64%) males felt that the use of condoms reduces sexual pleasure. Multiple sex partnerships and teenage sex were perceived as being always wrong by 315 (70.6%) and 255 (57.2%) respondents respectively. The table also shows that a minor relationship existed between the gender of a respondent and their perception on the effect of condoms on sexual pleasure (Cramer's $V= 0.169$), sex before marriage (Cramer's $V= 0.230$), teenage sex (Cramer's $V= 0.150$) and multiple sex partnerships (Cramer's $V= 0.234$).

Table 10: Perceptions about sexual orientation/practices/behaviour

Table 10a: Effect of condoms on sexual pleasure

	Female (No.=243)		Male (No.=203)		Total (No.=446)	
	No.	%	No.	%	No.	%
Increases pleasure	43	17.7	34	16.7	77	17.3
Reduces pleasure	119	49.0	130	64.0	249	55.8
Has no affect on pleasure	81	33.3	39	19.2	120	26.9

$\rho=0.002$, Cramer's $V=0.169$

Table 10b: Sex before marriage

	Female (No.=243)		Male (No.=203)		Total (No.=446)	
	No.	%	No.	%	No.	%
Always wrong	74	30.5	49	24.1	123	27.6
Sometimes wrong	73	30.0	33	16.3	106	23.8
Not wrong at all	59	24.3	58	28.6	117	26.2
I'm not sure	37	15.2	63	31.0	100	22.4

$\rho \leq 0.001$, Cramer's $V=0.230$

Table 10c: Teenage sex

	Female (No.=243)		Male (No.=203)		Total (No.=446)	
	No.	%	No.	%	No.	%
Always wrong	154	63.4	101	49.8	255	57.2
Sometimes wrong	39	16.0	52	25.6	91	20.4
Not wrong at all	25	10.3	21	10.3	46	10.3
I'm not sure	25	10.3	29	14.3	54	12.1

$\rho=0.018$, Cramer's $V=0.150$

Table 10d: Multiple sex partnerships (sexual infidelity)

	Female (No.=243)		Male (No.=203)		Total (No.=446)	
	No.	%	No.	%	No.	%
Always wrong	185	76.1	130	64.0	315	70.6
Sometimes wrong	35	14.4	59	29.1	94	21.1
Not wrong at all	3	1.2	9	4.4	12	2.7
I'm not sure	20	8.2	5	2.5	25	5.6

$\rho \leq 0.001$, Cramer's $V=0.234$

Table 10e: Homosexuality

	Female (No.=243)		Male (No.=203)		Total (No.=446)	
	No.	%	No.	%	No.	%
Always wrong	178	73.3	144	70.9	322	72.2
Sometimes wrong	15	6.2	21	10.3	36	8.1
Not wrong at all	24	9.9	21	10.3	45	10.1
I'm not sure	26	10.7	17	8.4	43	9.6

SECTION 4: CONTACT WITH COMMERCIAL AND NON COMMERCIAL SEX PARTNERS

Among the respondents with a history of sex, 57 (31.84%) females and 27 (18.75%) males reported having engaged commercial sex partners (i.e. prostitutes) within a year prior to the study (Table 11). As shown in the table, among the respondents that reported contact with commercial sex partners in the 12 months prior to the study, 47 (82.5%) females reported not using or an inconsistent pattern of use of condoms. Of the 27 males who had contact with commercial sex partners in the same period, 22 (81.5%) reported not using or inconsistent pattern of use of condoms.

Table 11: Contact with commercial sex partners in 12 months prior to study

Table 11a: Number of commercial sex partners in 12 months prior to study

Number of partners	Female (No.=57)		Male (No.=27)		Total (No.=84)	
	No.	%	No.	%	No.	%
1-4	18	31.6	12	44.4	30	35.7
5-8	39	68.4	15	55.6	54	64.3

Table 11b: Frequency of condom use with commercial sex partner over 12 months prior to study

Frequency of condom use	Female (No.=57)		Male (No.=27)		Total (No.=84)	
	No.	%	No.	%	No.	%
Every time	10	17.5	5	18.5	15	17.9
Sometimes	12	21.1	3	11.1	15	17.9
Never	35	61.4	19	70.4	54	64.3

SECTION 5: USE OF CONDOMS

Table 12 shows the findings of the study among the respondents with experience of sex regarding condom use related behaviours/practices.

Table 12: Condom use practices among respondents reporting sexual experience

Table 12a: Ever used a condom						
	Female (No.=179)		Male (No.=144)		Total (No.=323)	
	No.	%	No.	%	No.	%
Have used male condoms	126	70.4	95	66.0	221	68.4
Have used female condoms	10	5.6	8	5.6	18	5.6
Have used male and female condoms	10	5.6	4	2.8	14	4.3
Have never used condoms	33	18.4	37	25.7	70	21.7

Table 12b: Ever had unprotected sex (sex without a condom)						
	Female (No.=179)		Male (No.=144)		Total (No.=323)	
	No.	%	No.	%	No.	%
Yes	147	82.1	112	77.8	259	80.2
No	32	17.9	32	22.2	64	19.8

Table 12c: Used condoms at sexual debut						
	Female (No.=179)		Male (No.=144)		Total (No.=323)	
	No.	%	No.	%	No.	%
Condom was used	88	49.2	61	42.4	149	46.1
Condom was not used	70	39.1	83	57.6	153	47.4
I don't know	21	11.7	0	0.0	323	6.5

$p \leq 0.001$, Cramer's $V = 0.270$

Table 12d: Who initiated condom use at last sex						
	Female (No.=179)		Male (No.=144)		Total (No.=323)	
	No.	%	No.	%	No.	%
I did	27	15.1	68	47.2	95	29.4
My partner did	45	25.1	8	5.6	53	16.4
We both did	26	14.5	24	16.7	50	15.5
Condom was not used	81	45.3	44	30.6	125	38.7

$p \leq 0.001$, Cramer's $V = 0.399$

Table 12e: Condom use during anal sex among respondents reporting experience of anal sex						
	Female (No.=72)		Male (No.=54)		Total (No.=126)	
	No.	%	No.	%	No.	%
Always	25	34.7	25	46.3	50	39.7
Sometimes	32	44.4	17	31.5	49	38.9
Never	15	20.8	12	22.2	27	21.4

Thirty three (18.4%) females and 37 (25.7%) males with experience of sex have never used condoms. Overall 259 (80.2%) respondents within this category have experience of

unprotected sex. Seventy (39.1%) females and 83 (57.6%) males reported never using a condom at sexual debut and 125 (38.7%) respondents did not use condoms at last sex. Non compliance to constant condom use is also noted with respect to anal sex. Fifteen (20.8%) females and 12 (22.2%) males with experience of anal sex reported having never used condoms (Table 12). Cramer's V coefficients indicate a minor relationship between the respondents' gender and whether a condom was used at debut (0.270), and a medium relationship between a respondents' gender and who initiated condom use at last sex (0.399).

Table 13: Condom use discussions with partner

Table 13a: Ever discussed condom use with partner among respondents with experience of sex						
	Female (No.=179)		Male (No.=144)		Total (No.=323)	
	No.	%	No.	%	No.	%
Yes	74	41.3	56	38.9	130	40.2
No	105	58.7	88	61.1	193	59.8

Table 13b: Outcome of condom use discussions among respondents reporting having discussions						
	Female (No.=74)		Male (No.=56)		Total (No.=130)	
	No.	%	No.	%	No.	%
Agreed to sometimes use them	48	64.9	32	57.1	80	61.5
Agreed not to use them	14	18.9	17	30.4	31	23.8
Agreed to always use them	12	16.2	7	12.5	19	14.6

Among the respondents with experience of sex, 74 (41.3%) females and 56 (38.9%) males reported having ever discussed the use of condoms with a sex partner (Table 13a). Among those that reported having held discussions, 12 (16.2%) females and 7 (12.5%) males were able to reach agreements with their partner to always use condoms. Fourteen (18.9%) females and 17 (30.4%) males agreed with their partners not to use condoms at all (Table 13b).

The reasons forwarded for non compliance to condom use by the 259 respondents reporting experience of unprotected sex varied and are presented in Table 14.

Table 14: Reasons for not using condoms among respondents reporting experience of unprotected sex

	Female (No.=147)		Male (No.=112)		Total (No.=259)	
	No.	%	No.	%	No.	%
Know partners' HIV status	37	25.2	23	20.5	60	23.2
Condoms were not available	22	15.0	7	6.3	29	11.2
Partner does not want us to use them	14	9.5	23	20.5	37	14.3
Agreed with partner not to use them	14	9.5	17	15.2	31	12.0
Prefer contraceptive pills	13	8.8	11	9.8	24	9.3
Never considered using them	16	10.9	6	5.4	22	8.5

$\rho=0.026$, Cramer's $V=0.236$

Among the respondents with experience of sex, 37 (25.2%) females and 23 (20.5%) males stated that knowing their partners' HIV status was the reason why they did not use or consistently use condoms. Another 14 (9.5%) females and 23 (20.5%) males reported their partner did not want condoms to be used and 16 (10.9%) and 6 (5.4%) males reported having never considered using condoms (Table 14). The strength of association between a respondents' gender and the reasons for not using condoms was found to be minor (0.236).

Figure 9: Condom brand usage and preferences among sexually active respondents reporting use

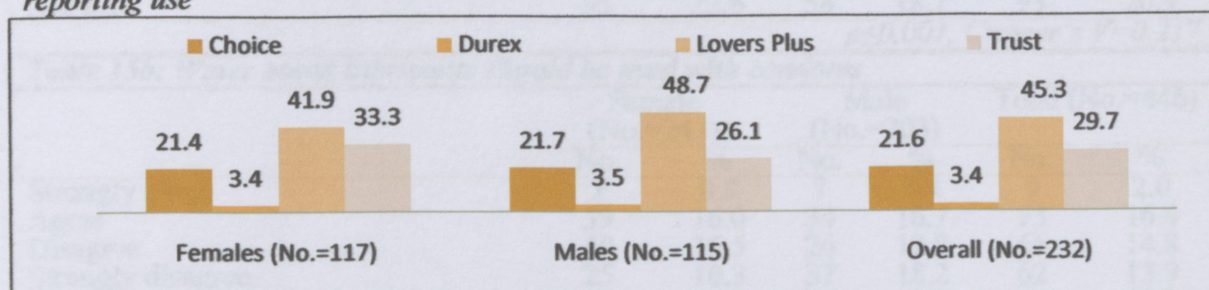


Figure 9a: Condom brand usage patterns by sex and overall distribution

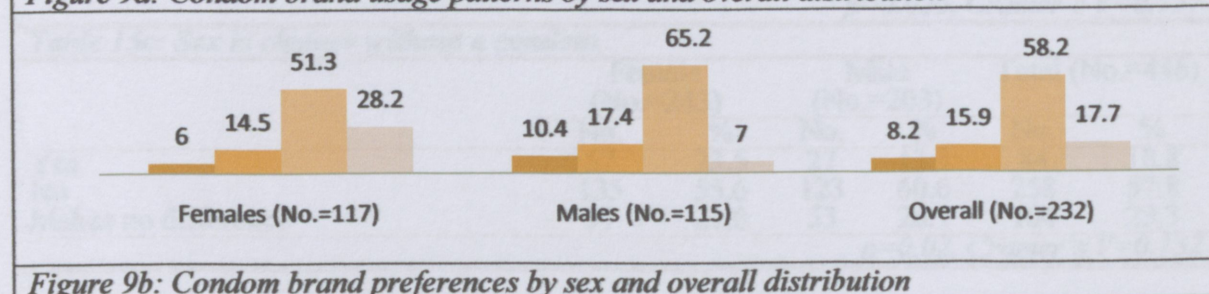


Figure 9b: Condom brand preferences by sex and overall distribution

As shown in Figure 9, four brands of condoms were in use among sexually active respondents with experience of condom use. Of the 117 sexually active females, 49 (41.9%) reported that they used Lovers Plus condoms and 39 (33.3%) reported that they used Trust. Of the 115 sexually active males, 56 (48.7%) reported that they used Lovers Plus and 30 (26.1%) reported that they used Trust. The use of Choice condoms was reported by 25 (21.4%) females and 25 (21.7%) males.

As shown in Figure 9b, 135 (58.2%) sexually active respondents indicated that Lovers Plus was their favourite brand [60 (51.3%) females and 75 (65.2%) males]. Seven (6.0%) females and 12 (10.4%) males indicated Choice as their favourite while 17 (14.5%) females and 20 (17.4%) males indicated Durex.

Table 15: Perceptions on condom use

Table 15a: Women lose their partners for forcing them to use condoms						
	Female (No.=243)		Male (No.=203)		Total (No.=446)	
	No.	%	No.	%	No.	%
Strongly agree	1	0.4	10	4.9	11	2.5
Agree	17	7.0	34	16.7	51	11.4
Disagree	69	28.4	48	23.6	117	26.2
Strongly disagree	101	41.6	73	36.0	174	39.0
Not sure	55	22.6	38	18.7	93	20.9
$\rho \leq 0.001$, Cramer's $V = 0.217$						
Table 15b: Water based lubricants should be used with condoms						
	Female (No.=243)		Male (No.=203)		Total (No.=446)	
	No.	%	No.	%	No.	%
Strongly agree	2	0.8	7	3.4	9	2.0
Agree	39	16.0	34	16.7	73	16.4
Disagree	40	16.5	26	12.8	66	14.8
Strongly disagree	25	10.3	37	18.2	62	13.9
Not sure	137	56.4	99	48.8	236	52.9
$\rho = 0.026$, Cramer's $V = 0.157$						
Table 15c: Sex is cleaner without a condom						
	Female (No.=243)		Male (No.=203)		Total (No.=446)	
	No.	%	No.	%	No.	%
Yes	57	23.5	27	13.3	84	18.8
No	135	55.6	123	60.6	258	57.8
Makes no difference	51	21.0	53	26.1	104	23.3
$\rho = 0.02$, Cramer's $V = 0.132$						

Overall, 62 (13.9%) respondents held the belief that women lose their partners for forcing them to use condoms [11 (2.5%) strongly agreed and 51 (11.4%) agreed with the statement]. Sixty-five (26.8%) females and 63 (31.0%) males believed that water based lubricants should not be used with condoms while 84 (18.8%) respondents believed that sex is cleaner when a condom is not used (Table 15). The strength of association between respondents' gender and their perception on whether women lose their partners for forcing them to use condoms, whether water based lubricants should be used with condoms, and whether sex is cleaner without a condom was found to be minor as indicated by the respective values of Cramer's V coefficient in Table 15.

SECTION 6: HISTORY OF SEXUALLY TRANSMITTED INFECTIONS/DISEASES (STIs/STDs)

Figure 10 shows that 133 (54.7%) females and 131 (64.5%) males could not provide correct responses regarding symptoms of STIs in women while 218 (89.7%) females and 185 (91.1%) males could not do so regarding symptoms in men.

Figure 10: Number of correct symptoms (e.g. excessive discharge/itching/ulceration around public region, etc) of STI mentioned by respondents (by sex and overall distribution)

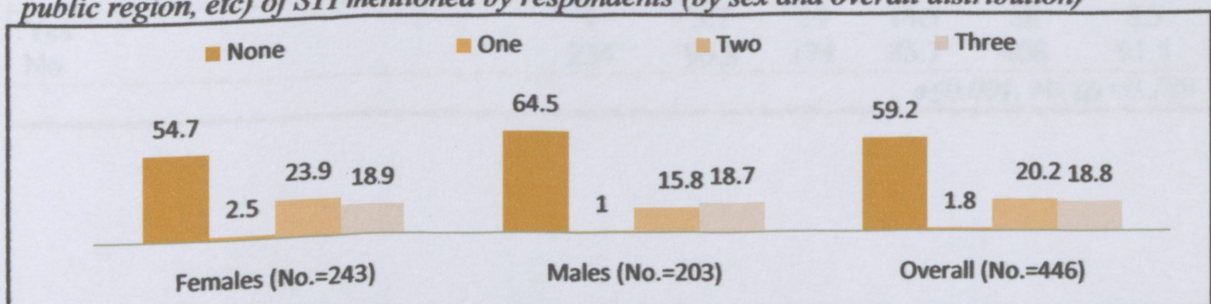


Figure 10a: Number of correct scores to the question... "What are the symptoms of STIs in women?"

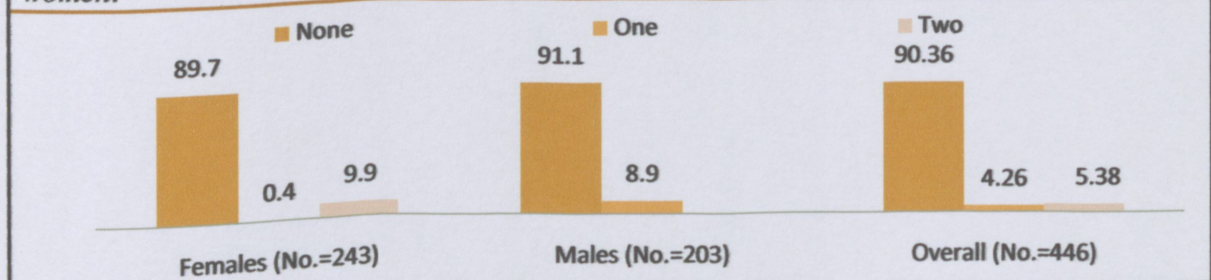


Figure 10b: Number of correct scores to the question... "What are the symptoms of STIs in men?"

According to Table 16, 21 (8.6%) females and 20 (9.9%) males with experience of sex reported that they have experienced symptoms typically associated with infection with an STD/STI (excessive discharge/itching/ulceration around pubic region) while 19 (7.8%) females and 6 (3.0%) males reported that they were uncertain as to whether they had experienced the symptoms. Nine (3.7%) females and 29 (14.3%) males reported having been diagnosed and treated for an STI in their lifetime. Phi (0.189) indicates a weak relationship between respondents' gender and history of diagnosis and treatment for an STI (Table 16b).

Table 16: Experience of symptoms and treatment of STIs among respondents with experience of sex

Table 16a: Experience of excessive discharge/itching/ulceration around pubic region						
	Female (No.=179)		Male (No.=144)		Total (No.=323)	
	No.	%	No.	%	No.	%
Yes	21	8.6	20	9.9	41	9.2
No	203	83.5	177	87.2	380	85.2
Not sure	19	7.8	6	3.0	25	5.6

Table 16b: History of diagnosis and treatment for STI						
	Female (No.=179)		Male (No.=144)		Total (No.=323)	
	No.	%	No.	%	No.	%
Yes	9	3.7	29	14.3	38	8.5
No	234	96.3	174	85.7	408	91.5

$p \leq 0.001$, Phi (ϕ) = 0.189

Figure 11: Awareness of HIV/AIDS

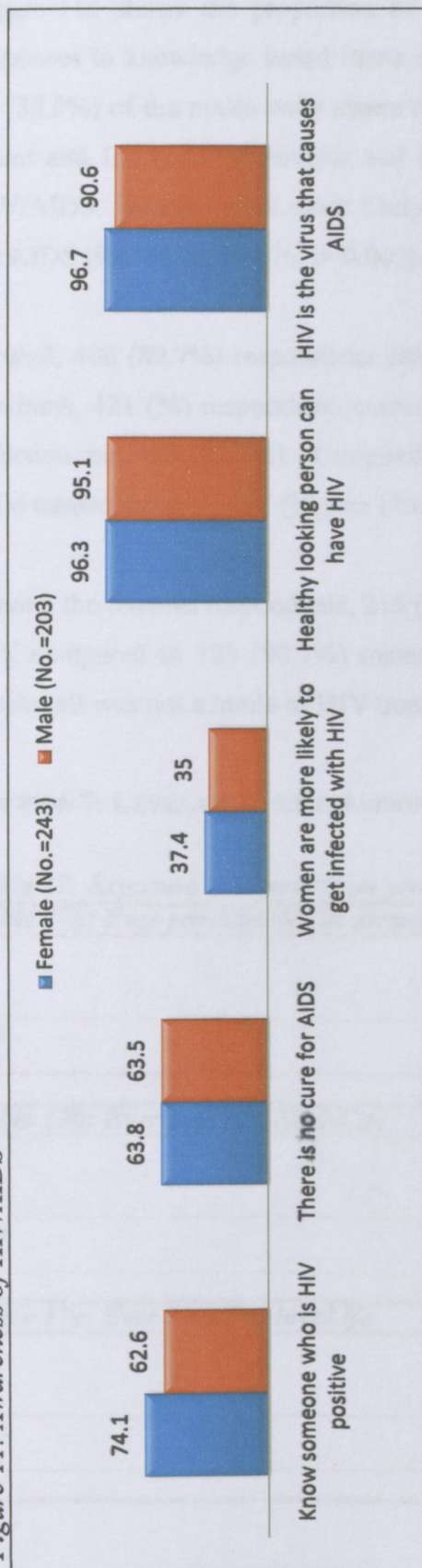


Figure 11a: Knowledge of general HIV/AIDS information

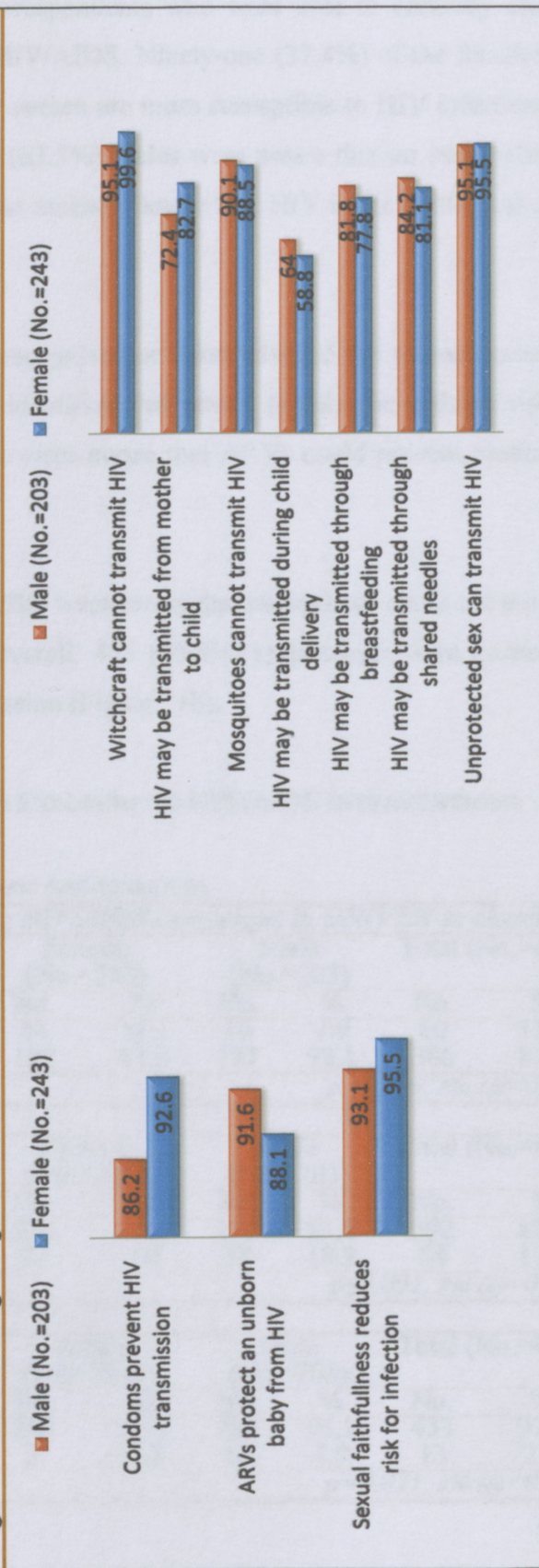


Figure 11b: Knowledge of HIV/AIDS prevention methods

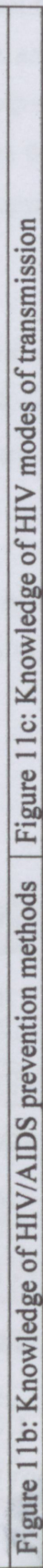


Figure 11c: Knowledge of HIV modes of transmission

Figure 11a shows the proportion of the respondents who were able to correctly identify responses to knowledge based items on HIV/AIDS. Ninety-one (37.4%) of the females and 71 (35.0%) of the males were aware that women are more susceptible to HIV infection than males and 155 (63.8%) females and 129 (63.5%) males were aware that no cure exists for HIV/AIDS. Females were more likely than males to know that HIV is the etiological agent for AIDS (96.7% vs. 90.6%; $p=0.007$).

Overall, 400 (89.7%) respondents either recognised or acknowledged the protective role of condoms, 421 (%) respondents correctly identified that sexual faithfulness reduces risk for infection and 400 (89.7%) of respondents were aware that ARVs could prevent mother-to-child transmission of HIV (Figure 11b).

Among the females respondents, 215 (88.5%) were aware that mosquitoes could not transmit HIV compared to 183 (90.1%) males. Overall, 435 (97.5%) respondents were aware that witchcraft was not a mode of HIV transmission (Figure 11b).

SECTION 7: LEVEL OF PARTICIPATION OR EXPOSURE TO HIV/AIDS INTERVENTIONS

Table 17: Exposure to intervention programs and structures

Table 17a: Ever participated in arranging HIV/AIDS campaigns in UNIVEN or elsewhere						
	Female (No.=243)		Male (No.=203)		Total (No.=446)	
	No.	%	No.	%	No.	%
Yes	44	18.1	16	7.9	60	13.5
No	199	81.9	187	92.1	386	86.5
$p=0.002, Phi (\phi)=0.149$						
Table 17b: Ever watched Soul City						
	Female (No.=243)		Male (No.=203)		Total (No.=446)	
	No.	%	No.	%	No.	%
Yes	226	93.0	166	81.8	392	87.9
No	17	7.0	37	18.2	54	12.1
$p\leq 0.001, Phi (\phi)=0.171$						
Table 17c: Ever heard of loveLife						
	Female (No.=243)		Male (No.=203)		Total (No.=446)	
	No.	%	No.	%	No.	%
Yes	240	98.8	193	95.1	433	97.1
No	3	1.2	10	4.9	13	2.9
$p=0.021, Phi (\phi)=0.109$						

As shown in Table 17 above, 44 (18.1%) females and 16 (7.9%) males reported having participated in arranging HIV/AIDS campaigns within the university or elsewhere. Forty six (11.9%) females and 34 (16.8%) males held membership of the university based HIV/AIDS activist groups during the year 2008 (SRA AIDS Desk, PETT and UPE). The phi coefficients shown in Table 17 indicate a weak relationship between the respondents' gender and participation in arranging HIV/AIDS campaigns, ever having watched Soul City, and ever having heard of loveLife.

Table 18 shows the main person with whom 302 (67.7%) respondents had held discussions on HIV/AIDS at least four weeks prior to the study. Five (2.8%) female and 7 (5.7%) male respondents indicated that their discussion was with the members of the HIV/AIDS Support Groups. Overall, 132 respondents reported holding discussions with friends [75 (41.9%) females and 57 (46.3%) males]. The strength of association between the main person with whom HIV/AIDS discussions were held and the respondents' gender was observed to be minor (Cramer's $V=0.238$).

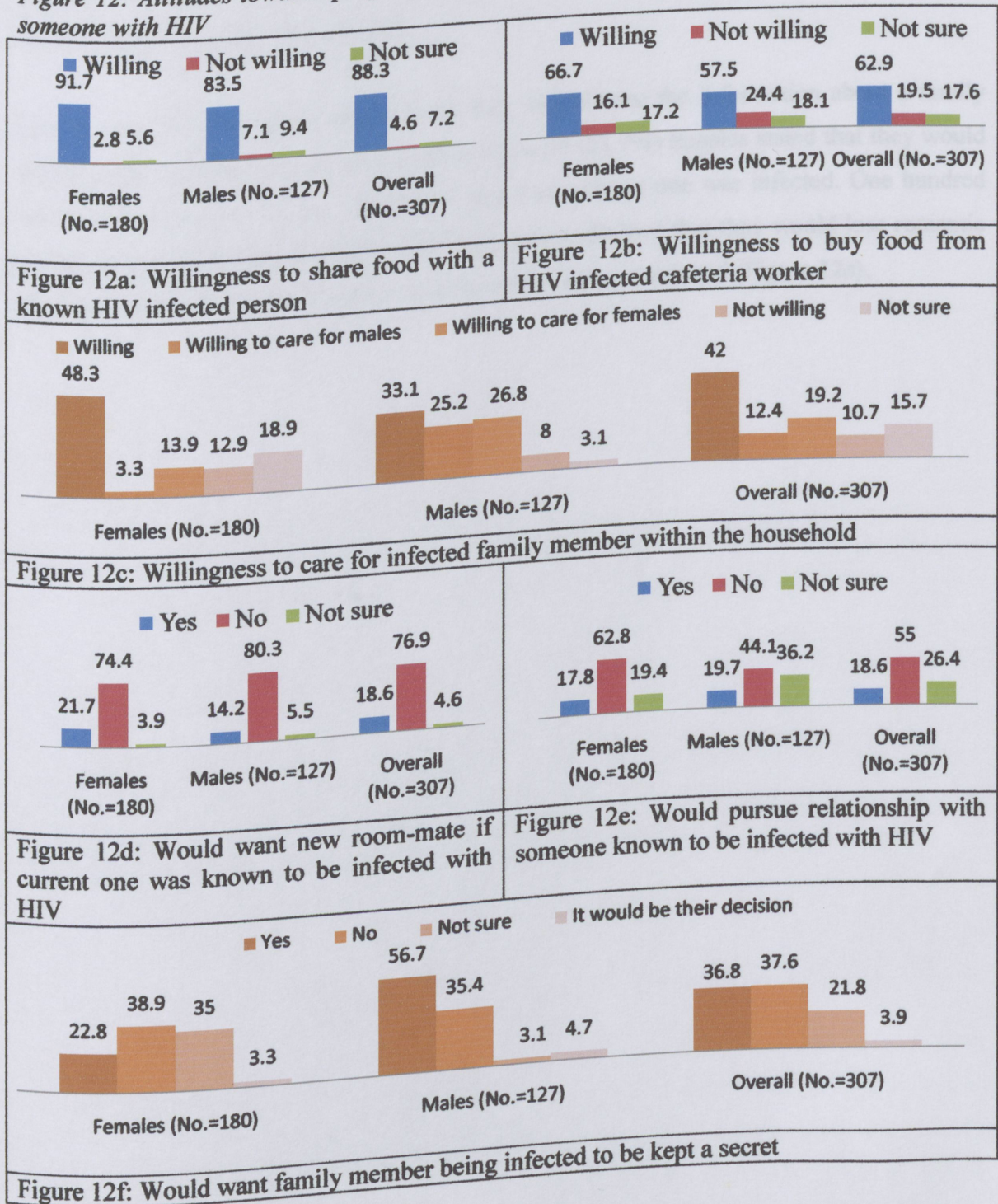
Table 18: Main person with whom HIV/AIDS discussions were held within four weeks prior to study among respondents reporting discussions

	Female (No.=179)		Male (No.=123)		Total (No.=323)	
	No.	%	No.	%	No.	%
Friend(s)	75	41.9	57	46.3	132	43.7
Sex partner(s)	31	17.3	21	17.1	52	17.2
Peer educator(s)	30	16.8	11	8.9	41	13.6
Health care worker	17	9.5	2	1.6	19	6.3
Lecturer	11	6.1	17	13.8	28	9.3
Family member	10	5.6	8	6.5	18	6.0
HIV/AIDS Support Group	5	2.8	7	5.7	12	4.0

$\rho=0.009$, Cramer's $V=0.238$

SECTION 8: ATTITUDES TOWARDS PEOPLE LIVING WITH HIV/AIDS

Figure 12: Attitudes towards people living with HIV among respondents with knowledge of someone with HIV



According to Figure 11a, 180 (74.1%) females and 127 (62.6%) males reported knowing

someone that was either infected with HIV or had died from AIDS. Of the 127 males, 32 (25.2%) stated that they would only be willing to care for male family members that became infected with HIV while 34 (26.8%) reported that they would only be willing to care for female family members (Figure 12c).

Seventy two (56.7%) males reported that they would want the information about a family member who is infected to be kept a secret while 39 (21.7%) females stated that they would want a new roommate if they discovered that their current one was infected. One hundred and thirteen (62.8%) females and 56 (44.1%) males admitted that they would lose romantic interest in someone if they found out that the individual was infected (Figure 12e).

SECTION 9: EXPERIENCE WITH VCT AND PERCEIVED THREAT OF STI INFECTION

Table 19: Self assessment of risk to HIV infection (by sex and overall distribution)

Table 19a: HIV risk assessment among sexually active respondents						
	Female (No.=131)		Males (No.=116)		Total (No.=247)	
	No.	%	No.	%	No.	%
No risk	25	19.1	28	24.1	53	21.5
Very low risk	44	33.6	46	39.7	90	36.4
Low risk	27	20.6	19	16.4	46	18.6
Medium risk	13	9.9	15	12.9	28	14.2
High risk	22	16.8	8	6.9	30	12.1

Table 19b: Self assessment of risk to HIV infection among respondents with experience of unprotected sex						
	Female (No.=147)		Males (No.=112)		Total (No.=259)	
	No.	%	No.	%	No.	%
No risk	29	19.7	36	32.1	65	25.1
Very low risk	37	25.2	40	35.7	77	29.7
Low risk	40	27.2	18	16.1	58	22.4
Medium risk	19	12.9	9	8.0	28	10.8
High risk	22	15.0	9	8.0	31	12.0

Table 19c: Self assessment among respondents reporting having never used condoms						
	Female (No.=33)		Males (No.=37)		Total (No.=70)	
	No.	%	No.	%	No.	%
No risk	11	33.3	8	21.6	19	27.1
Very low risk	5	15.2	19	51.4	24	34.3
Low risk	9	27.3	6	16.2	15	21.4
Medium risk	2	6.1	2	5.4	4	5.7
High risk	6	18.2	2	5.4	8	11.4

Table 19d: Self assessment among respondents reporting never using condoms during anal sex						
	Female (No.=15)		Males (No.=12)		Total (No.=27)	
	No.	%	No.	%	No.	%
No risk	2	13.3	5	41.7	7	25.9
Very low risk	0	0.0	3	25.0	3	11.1
Low risk	12	80.0	3	25.0	15	55.6
Medium risk	1	6.7	1	8.3	2	7.4

Table 19 shows the perceived risk profile for HIV infection among the respondents. Among sexually active respondents, 22 (16.8%) females and 8 (6.9%) males regarded themselves as being at high risk. Other categories of respondents considering themselves at high risk for infection include 22 (15%) females and 9 (8%) males with experience of unprotected sex, 6 (18.2%) females and 2 (5.4%) males who have never used condoms, 1 (6.7%) female and

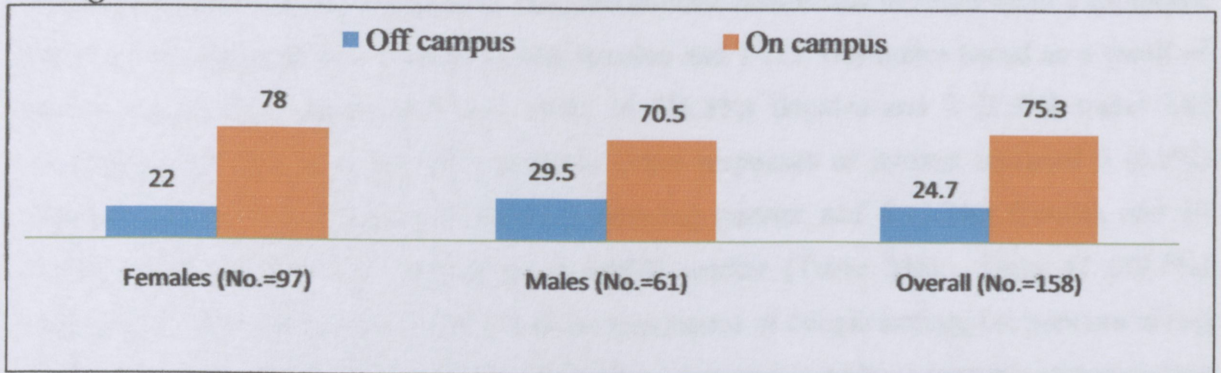
1 (8.3%) male who have never used condoms during anal sex and 1 (11.1%) female and 1 (3.4%) male with a history of diagnosis of an STI.

Table 20: Knowledge, attitude and behaviour regarding VCT among the sexually active respondents

Table 20a: Knowledge of availability of VCT services at UNIVEN						
	Female (No.=131)		Males (No.=116)		Total (No.=247)	
	No.	%	No.	%	No.	%
Services available	118	90.1	87	75.0	205	83.0
Services not available	4	3.1	9	7.8	13	5.3
Not sure	9	6.9	20	17.2	29	11.7
$\rho=0.007$, Cramer's $V=0.200$						
Table 20b: Ever taken VCT						
	Female (No.=131)		Males (No.=116)		Total (No.=247)	
	No.	%	No.	%	No.	%
Yes	87	66.4	53	45.7	140	56.7
No	44	33.6	63	54.3	107	43.3
$\rho\leq 0.001$, Phi (ϕ)=0.209						
Table 20c: Would be willing to take VCT in the future						
	Female (No.=131)		Males (No.=116)		Total (No.=247)	
	No.	%	No.	%	No.	%
Yes	121	92.4	76	65.8	197	80.0
No	1	0.8	23	19.3	24	9.4
Not sure	9	6.9	17	14.9	26	10.6
$\rho\leq 0.001$, Cramer's $V=0.361$						

According to Table 20, there was a minor association between a respondents' gender and their knowledge of the availability of VCT services at UNIVEN (Cramer's $V= 0.200$) and between a respondents' gender and their having ever taken VCT (Cramer's $V= 0.209$). A medium strength of association was noted for willingness to take VCT in the future and respondents' gender.

Figure 13: VCT site at which HIV testing was conducted among respondents reporting having been tested



Most of the respondents with experience of VCT reported having accessed the service at the HIV/AIDS Unit UNIVEN campus site [76 (78.4%)] females and 43 (70.5%) males].

Table 21: Experience concerning VCT among the respondents who were tested

Table 21a: Reasons for taking first HIV test

	Female (No.=97)		Male (No.=61)		Total (No.=158)	
	No.	%	No.	%	No.	%
Responding to a campaign	24	24.7	18	29.5	42	26.6
Had unprotected sex	20	20.6	7	11.5	27	17.1
Wanted to know status	17	17.5	11	18.0	28	17.7
Suspected partner was HIV ⁺	16	16.5	2	3.3	18	11.4
Curiosity	9	9.3	5	8.2	14	8.9
Cheating partner	6	6.2	8	13.1	14	8.9
Referred by a health worker	5	5.2	10	16.4	15	9.5

$p \leq 0.001$, Cramer's $V = 0.406$

Table 21b: Ever undergone couple testing for HIV

	Female (No.=97)		Male (No.=61)		Total (No.=158)	
	No.	%	No.	%	No.	%
Yes	32	33.0	15	24.6	47	29.7
No	65	67.0	46	75.4	111	70.3

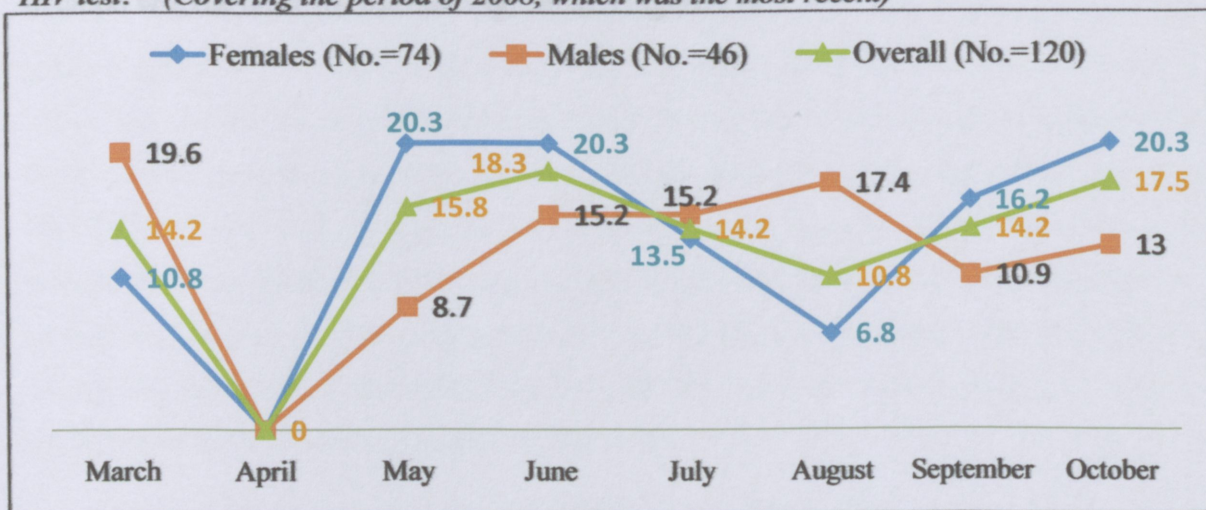
Table 21c: Received results of VCT from last test

	Female (No.=97)		Male (No.=61)		Total (No.=158)	
	No.	%	No.	%	No.	%
Yes	93	95.9	47	77.0	140	88.6
No	4	4.1	14	23.0	8	11.4

$p \leq 0.001$, Phi (ϕ) = 0.288

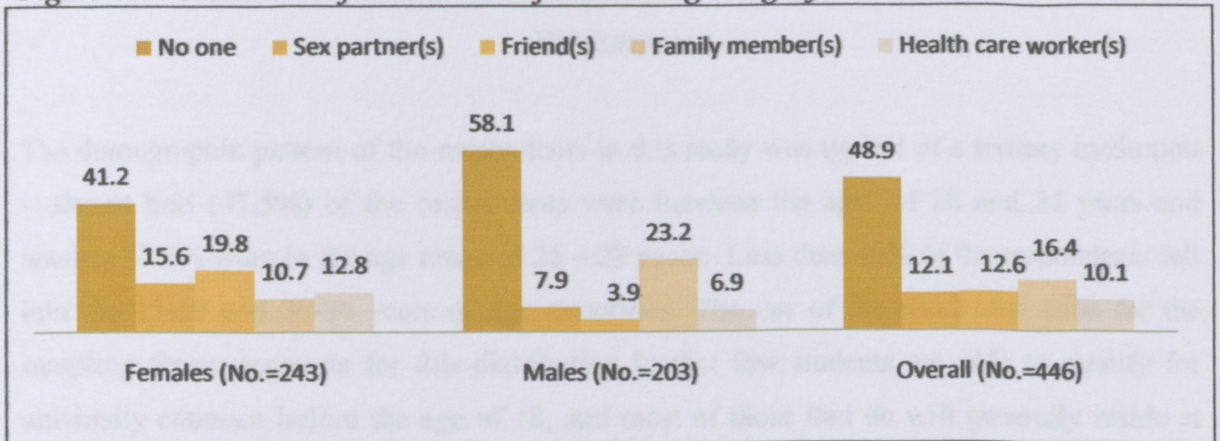
Reasons provided by respondents for taking their first VCT session were varied. Among the respondents with a history of testing, the predominant reason was in response to a campaign [42 (26.6%) respondents]. Twenty (20.6) females and 7 (11.5%) males tested as a result of having engaged in unprotected sex while 16 (16.5%) females and 2 (3.3%) males had suspected a partner of being HIV positive. Other responses of interest included 6 (6.2%) females and 8 (13.1%) males that had a cheating partner and 5 (5.2%) females and 10 (16.4%) males that were referred by a health worker (Table 21a). Only 47 (29.7%) respondents with the history of VCT had the experience of couple testing, i.e. partners taking VCT as a couple (Table 21b). The study further observed a medium strength of association between respondents' gender and the reason for taking their first HIV test (Cramer's $V=0.406$), while minor strength of association was noted for respondents' gender and their having received the results of their last VCT ($\Phi=0.288$).

Figure 14: Distribution of responses to the question... "When was the last time you took an HIV test?" (Covering the period of 2008, which was the most recent)



The study found that in 2008, among the females more tested during May, June and October while among the males more tested during the period of March, June, July and August.

Figure 15: Perceived confidant in case of discovering being infected with HIV



Respondents were asked whom they would confide in if they ever discovered that they were infected with HIV. Findings show that most respondents would still not inform anyone of their status. Friends, followed by sex partners are the preferred confidant among females that would inform someone. Among males, family members are the main confidants and the situation was the same for overall respondents (Figure 15).

CHAPTER FIVE

DISCUSSION

The demographic pattern of the respondents in this study was typical of a tertiary institution – almost half (47.5%) of the respondents were between the ages of 20 and 24 years and another 37.2% were in the age range of 25 – 29 years. Less than 10% of the respondents fell into the 15-19 and 30-34 years of age categories. The use of the residential halls for the sampling frame accounts for this distribution in that few students are able to qualify for university entrance before the age of 18, and most of those that do will generally reside at home until the parents believe that they are matured enough to be exposed to the independence of living away from home. As expected, a large majority of the respondents were of the tribes indigenous to the Limpopo province.

The experience of individuals with alcohol and drugs is an important aspect of sexual behaviour studies in that the use of either of the two, or a combination thereof may impair judgement and consequently lead to the risk of exposure to unprotected sex and/or sex in which the condom is incorrectly utilized. Karam, Kypri, and Salamoun (2007) indicated that there exists research-based evidence that alcohol continues to be abused on campuses worldwide. Young and de Klerk (2007) pointed out that there is insufficient evidence of alcohol abuse on South African campuses and indeed few universities in the country have studied alcohol consumption among students. In their Rhodes University based study (2007), Young and de Klerk found that only 11% of the respondents had never used alcohol compared to 48.7% of the respondents in this study.

Results from this study yielded very strong evidence that males were more likely than females to have used drugs (i.e. marijuana) in the 12 months leading up to the study (Figure 4a; $p \leq 0.001$), to have consumed alcohol in the four weeks prior to the study (Figure 4e; $p \leq 0.001$).

The experience of the researcher as a peer counsellor in the university over the period of the years 2002 to 2008 is filled with numerous accounts of first and second year female students

seeking emergency contraception following unprotected sex. Many of these students reported having been under the influence of alcohol during intercourse and that senior male students frequently purchased the alcohol for them. It was therefore expected and evident from the findings that females were more likely than males to have experienced sex under the influence of alcohol or drugs (Figure 4c; $\rho \leq 0.018$). In Zambia, the Central Statistical Office, Ministry of Health and MEASURE Evaluation (2002) raised concern over the use of alcohol before any sexual acts after findings showed that among respondents in sexual partnerships, 23% of the females and 20% of the males had used alcohol prior to sexual acts.

In the context of many cultures, alcohol consumption is an integral part of celebrations and relaxation. Many advertising campaigns use this very premise to promote various alcohol brands which would explain why so many young people are drawn into the habit of alcohol consumption. At the University of Venda, student street parties (referred to by students as “*bashes*”) are frequently arranged by the SRA over the weekends. An entertainment centre established near the Lost City residence hall by the SRA in 2005 trades from 18:00 to midnight during week days, and from noon to midnight over the weekends with the only identification required to purchase alcohol being a student card which does not indicate ones age (Personal experience, 2008). With alcohol so readily available, it is not surprising that over 51% of the respondents categorised themselves as either being an occasional drinker, regular drinker or an alcoholic. Findings of this study show that males were more likely than females to categorise themselves into these groups (Figure 4d; $\rho \leq 0.001$).

It is important in sexual behaviour surveys to measure delayed sexual debut (i.e. primary abstinence from sex). Hallman (2004) and Pettifor et al. (2004) indicated that declines in HIV have been attributed to delayed sexual experience and hence it remains a major objective in the fight against the HIV epidemic to promote abstinence. About 83% of the respondents reported their marital status as ‘single’ (Table 4a). Although no statistical difference was noted between females and males, 28% of the respondents expressed that they had no experience of sexual intercourse (Table 5a). The findings therefore support the arguments by Noble et al. (1996), Shisana and Simbayi (2002), and Pettifor et al. (2004) that premarital sex is commonplace among young people in developing countries (approximately 4% of the

respondents reported being married while an approximate 14% reported that they were engaged).

The South African National Survey of HIV and Sexual Behaviour among 15-24 year olds conducted by the RHRU (2004), found that overall 67% of young people aged 15-24 years reported ever been engaged in sexual intercourse (defined as vaginal and/or anal sex). Of these, 48% of those aged 15-19 years reported that they had ever had sex compared to 89% of those age 20-24 years. The current study covered individuals within the age group 15-34 years (the range that the South African government currently considers as youth). Among 15-24 year olds, the findings of this study were similar to that of the national survey (RHRU, 2004, Pettifor et al., 2004) - approximately 67% reported sexual experience. Among the 15-19 year olds in this study however, only 26% reported sexual experience. This difference is most likely due to the low representation of the group stemming from few individuals being able to qualify for university entrance before the age of 18 years. Among 20-24 year olds in this study, about 74% reported having engaged in sex. In the higher age groups about 81% of the 25-29 year olds and 73% of the 30-34 year olds reported sexual experience. There was no significant difference by gender in experience of sex from this study which is consistent with the findings of the national survey (RHRU, 2004).

These findings suggest that sexual activity increases with age among 15-29 year olds and then drops after 30 years of age (Table 5a; $p \leq 0.001$). However, this should be looked at cautiously since most of the residences at the university are reserved for senior students. Furthermore, few people enter the university before the age of 18 years hence the 15-19 year age group is under represented in the residences. Again, it is likely that 30-34 year olds are underrepresented in the residence as it can be expected that those in this age group either have work or family commitments which necessitate that they reside at home as opposed to within the campus residences.

According to YouthNet (2003) complete sexual abstinence is the most effective means of protection against both pregnancy and HIV infection. It has been observed worldwide that HIV prevention programmes focus on one or more of the three prevention pillars –

abstinence, being faithful and the proper and consistent use of condoms (typically referred to as the ABC approach). Initiatives promoting secondary abstinence have in the last decade acquired an increasingly important role in the fight against HIV/AIDS. Increased self-reported secondary abstinence in a population may therefore be used as an indicator for the success of abstinence drives.

Marindo, Pearson, and Casterline (2003) however pointed out that people may have different interpretations of the term “abstinence.” They further pointed out that faith-based groups tend to view the term as referring to refraining from sex until marriage while other interpretations include delaying sex until some future time such as when entering a committed relationship before marriage. According to RHRU (2004), 17% of 15-24 year olds with experience of sex reported secondary sexual abstinence in a period of 12 months prior to the study, noting further that females were more likely than males to report sexual abstinence. While no significant difference was observed between female and male respondents in this University of Venda based study, 17% of the respondents with experience of sex had opted for secondary abstinence – defined by Marindo et al. (2003) as the occurrence where those who have been sexually active at one time decide to abstain.

South Africa is largely a Christian nation and has a black population that holds a number of cultural beliefs that essentially place limitations on sexual relations between individuals, usually restricting acts of a sexual nature to married and/or mature individuals. Sexual health campaigns point to the importance of abstinence as a means for protection from STIs. On the basis of this, it would be expected that the main reason among individuals for adopting abstinence would point either to the need of individuals to protect themselves from STIs or to some moral foundation whether religious, cultural or otherwise. This study found that the predominant reason among females for sexual abstinence were perceptions that “*men toy with women’s emotions*”, “*sex was not worth the effort*”, “*sex is not as enjoyable as people make it seem*” and unfaithfulness of previous partner(s) that led to them losing interest in sexual intercourse. In contrast, the predominant reason for abstinence among male respondents pointed to unnamed medical conditions/illnesses (Figure 5; $p \leq 0.001$).

Shisana et al. (2005) states that the mean age at first sex can be used to measure changes in primary abstinence patterns in a subpopulation. The HSRC sexual survey by Shisana and Simbayi (2002) concluded that there was a trend among 15-24 year olds towards earlier sexual debut amongst younger respondents. Pettifor et al. (2004) placed the mean age of sexual debut for males at 16.4 years and at 17 years for females while the HSRC repeat survey of 2005 concluded that the median age for both sexes was 17 years (Shisana et al., 2005). Results from this UNIVEN based study showed consistency with these previous studies, showing the mean age of first sex among respondents to be 16.85 years for females, 16.40 years for males and 16.65 years overall while the median age was estimated at 17 years overall (17.0 years for females and 16.0 years for males).

An aspect of sexual debut that public health and sex behaviour professionals pay particular attention to is the reports of debut at an early age, defined as the experience of first sex at ages of 14 years or younger. Pettifor et al. (2004) reported that males were more likely to debut at an early age. This study found no statistical difference between males and females for sex at an early age but observed that 22% of the respondents with experience of sex (25% of the females and 18% of the males) reported debut at an early age (10 to 14 years old). In comparison, Shisana et al. (2009) found that males were twice as likely as females to report having started sex before the age of 15 years (11.3% vs. 5.9%).

In 2004, the United Nations reported that between one-fifth and one-half of all girls and young women globally were forced into their first sexual experience (UNAIDS, 2004a). Jejeebhoy and Bott (2003) discovered that as much as 30% of first female sexual experiences occurred in a familiar setting and were often forced by someone that the girl was acquainted with. With 48% of the females and approximately 29% of the males among respondents with experience of sex stating that they were either unwilling or not certain if they were willing to engage in sex at debut, data from this study suggests that males are more likely to be willing to engage in first sex than females (Figure 6a; $p \leq 0.001$). This position is consistent with that found by Pettifor et al. (2004) among 15 to 24 years olds in South Africa in which only 2% of males reported unwillingness to engage in sex at debut compared to 29% of young women.

There is growing evidence that across the African continent, young women exchange sex for money, gifts or favours (Luke and Kurz, 2002; Meekers and Calvès, 1997; Fugelsang, 1997; Luke, 2003). While the exchange of sex for favours or gratification is typically thought of as a phenomena in which women give the sex and receive gratification, this study found that it is not exclusively the case (about 27% of the male respondents with sexual experience have received gratification in exchange for sex; approximately 30% of the female respondents with experience of sex have given gratification in exchange for sex). No statistical significance was observed between the females and the males but the finding is significant for behaviour change interventions in the context that the aspect of males as receivers of gratification is usually neglected.

This study found that females were twice as likely as males to report experience of forced or coerced sex (Figure 6d; 53.1% vs. 25.7%; $p \leq 0.001$). A number of factors influence women's vulnerability to coercion. Societal influences have created the perception among females that sexual coercion is a normal part of a relationship (Wood and Jewkes, 1997). MacPhail and Campbell (2001) indicated that young women in South Africa suffer emotional distress and are subjected to high risk of pregnancy, STIs and HIV in their relationships with males that demand sex as proof of their love. Gender violence in the university among students has also been linked through peer educator sessions with the victims' refusal to engage in sex with a boyfriend. Knowledge of these acts of violence occurring in the residence further pressure and create room for females to be coerced into sexual intercourse (Researcher's Counselling Notes, 2007).

Focus group discussions with students (PETT, 2006) have shown, as did data from this study, that males experience coerced or forced sex. While a lot of research has been dedicated to understanding the sexual coercion of females by males, little investigation has gone into the study of factors that influence the sexual coercion of males by females. The experiences of the researcher with male student victims of coerced sex at UNIVEN suggest that females play on male egos, suggesting that if their boyfriends did not have sex with them they were "*weak and not real men.*" These sessions, together with sessions discussing the failure to use condoms (discussed later) have shown that some males also hold the perception that if they

fail to engage in sex with their girlfriends when they want to, then their girlfriends are likely to go out and have sexual intercourse with other men. This is rather surprising as females are typically considered to be the ones that have intercourse with their partners in fear that if they did not, then they would be cheated on.

The nature of sexual partnerships among young people remains critical in understanding sexual behaviour patterns and risk for HIV/STIs within the population, more especially because multiple and concurrent sex partnerships increase the risk for exposure to HIV and have been indicated by several authors as a concern (Fugelsang, 1997; Luke, 2003; Luke and Kurz, 2002; Meekers and Calvès, 1997; Noble et al., 1996; Pettifor et al., 2004; Shisana and Simbayi, 2002). According to Shisana et al. (2009) males in South Africa are more likely to be engaged in multiple sex partnerships than their female counterparts. Similarly, this study found that males were more likely than females to report sexual unfaithfulness (multiple partners) in response to the nature of relationships with current sex partners (Table 7, $p=0.028$). So while the second pillar of HIV prevention messaging in the ABC approach is “*Being faithful to a single partner*” and has been shown to significantly reduce the risk of exposure to HIV and other STIs, sexual faithfulness among young people remains a challenge.

According to Hallman (2004), unsafe sexual behaviour does not only carry risk for HIV and STI infection but also pregnancy for females. Pregnancy and the use of emergency contraception may be used as an indicator of engagement in unprotected sex by females and hence indirectly as an indicator for the potential risk of exposure to STIs. When used correctly condoms are able to provide dual protection (prevention of pregnancy as well as transmission of HIV/STIs) and it is for this reason that they are considered the ideal choice for prevention of pregnancy. This study found that during the last sexual encounter about 37% of the females with experience of sex reported using non barrier methods for the prevention of pregnancy.

The RHRU (2004) reveals that among females with experience of sex, 33% of 15-19 year olds and 59% of 20-24 year olds have been pregnant at some stage in their life. In

comparison, findings from this study show a higher proportion of 15-19 year olds (57.1%) reporting history of pregnancy. In the 20-24 year old, the findings were fairly similar, with 52% reporting having been pregnant. In a study on unintended pregnancy in South Africa, Latifat (2004) found that only 29% of reported pregnancies were intentional. While this study did not enquire into intention to fall pregnant, it is unlikely that respondents in the 15-24 years of age category with a history of pregnancy intended to do so, considering that they would be in the course of their first degree. Coincidentally, while there was no statistical difference by age group, this study observed that experience of abortion and pregnancy was higher in younger women than in older women. The personal observations of the researcher while resident in the campus halls during the years 2004 to 2007, and as a peer counsellor from the year 2002 to the year 2008 also support the position that younger students in the institution make up the larger part of those falling pregnant and opting for termination of pregnancy.

Experience of anal sex carries with it a high risk for STI infection. The risk is considerably higher among males engaging in homosexual sex. While institutional programs have acknowledged the incidence of anal sex among students, this acknowledgement has largely been on heterosexual anal sex. The subject of homosexual anal intercourse among students has been one of considerable debate (Personal experiences, 2004-2008). The University is situated in a community that though semi-urbanized holds strict traditional beliefs. Homosexuality remains a taboo to the vast majority of the population. This study has however shown that about 10% of the male respondents in describing their sexual orientation stated that they were either homosexual or bisexual (Table 9). About 7% of the males also mentioned having engaged in anal sex with 1 to 3 male partners in the 12 months prior to the study (Figure 8) thereby clearly establishing that homosexuality among students is a reality.

The perceptions on sexual intercourse held by individuals play a vital role in influencing their sexual behaviour. Females are more likely than males to perceive sex before marriage, teenage sex, and multiple sex partnerships as being always wrong (Table 10). While about 28% of the respondents perceived sex before marriage to be always wrong, almost twice as many (57%) perceived teenage sex as always being wrong. With most respondents having

had sexual debut during their teenage years, this suggests possible regrets among respondents over this aspect of their sexual history. These perceptions however do not appear to influence preventive behaviour among respondents as the majority remain sexually active in spite of being single and a number of respondents maintain multiple sex partnerships. Although no statistical difference was observed between the females and the males, 72% of the respondents perceived homosexuality to be always wrong. This finding is significant, though not statistically in that it explains why individuals remain uncomfortable talking about homosexual relations among students and why, with few students being able to live openly with their homosexuality, the subject remains largely a taboo and absent from the communication and intervention strategies of the institution.

Exposure to commercial sex is a risk factor in the spread of HIV and AIDS. It would be expected that females that seek out male commercial sex partners would be in a position to negotiate the use of condoms in these encounters. It is surprising therefore that this study found that as many as 82% of females that engage in sex with a commercial partner did not consistently use condoms in these sexual encounters. Counselling sessions conducted by the researcher with students and focus group discussions held by PETT between the years 2004 and 2008 indicate that a number of female students have a preference for unprotected sex. In addition, these focus groups have shown that males who support the use of condoms in their relationships would generally be uncomfortable with continuing a relationship with a female that insists on not using condoms. It is possible therefore, that some females turn to commercial partners for unprotected sex rather than risk losing their boyfriends by suggesting that they engage in unprotected sex.

Among the respondents with the experience of sex, the males were more likely than the females to have not used a condom upon sexual debut (Table 12c; $p \leq 0.001$). A number of authors including Varga (1997) and Abdool-Karim (2001) have argued that women may at times fear raising the use of condoms for fear that it could result in them losing their partner or creating the impression that they have been sexually unfaithful. This may explain why the findings in this study show that the females were less likely than the males to have initiated condom use during the last experience of sexual intercourse (Table 12d; $p \leq 0.001$). Female

condoms (i.e. *femidoms*) were introduced at the University of Venda HIV/AIDS Unit in 2006. While it has now become generally accepted in the public health circles in South Africa and the world that female condoms allow for females to play a proactive role in safe sex, this study found that among the respondents with experience of sex, only about 6% had ever used it (Table 12a).

It is encouraging to note that discussions on the use of condoms have been engaged in by about 40% of the respondents. However, the outcome of these discussions show that the risk for exposure to STIs remains high for about 24% of these respondents that agreed with their partners not to use condoms, and another 62% that agreed to not use them consistently (Table 13). No evidence was noted for differences between the male and the female respondents in this regard. It however appears that in spite of the HIV and other STI threats, young couples are still able to reach agreements on this issue that places them at risk.

Condom use remains one of the pillars in the fight against continued spread of the HIV in populations and thus forms an integral part of awareness messages. So while it is encouraging that some respondents with experience of sex reported the use of condoms with their partners (both commercial and non commercial), it is of great concern to note that non compliance to condom use or non consistent use remains evident. Among respondents with experience of sex, about 22% have never used condoms, 80% had experience of unprotected sex, 47% did not use condoms at debut and 39% did not use condoms during last sex. Even in anal sex, which carries higher risk for transmission of HIV, non compliance to condom use was noted among approximately 21% of the females and 22% of the males with the experience of anal sex.

The reasons provided for non compliance to consistent use of condoms by respondents with experience of unprotected sex covered many of the common ones, such as partners not willing to use them, condoms being unavailable at the time and agreement with the partners not to use them. However, two reasons provided in this study stand out - knowledge of a partners' HIV status and preference for contraceptive pills over condoms. The first of these reasons raises concern over the possible negative impact that couple testing campaigns may

have on the prevention efforts as one can never be completely certain of another individual's status even when the couple has undergone VCT together because the virus is undetectable for up to six weeks from infection on the rapid test kit commonly utilized in testing. Since couples cannot practically test frequently enough to compensate for the possibility of sexual unfaithfulness, there remains the risk of infection. The latter reason – preference for contraceptive pills indicates that to these respondents, the greater concern is pregnancy and hence they remain at risk of STI infection.

Peer educators in the university have argued that people are generally not comfortable with using *Choice* brand condoms because of the perception that since they are offered for free through a government dispensation, they are of low quality (PETT, 2006). Usage patterns among sexually active respondents indicate that generally the *Lovers Plus* brand is the most utilized, followed by *Trust* condoms and then *Choice* (Figure 9a).

Lovers Plus is a retail brand sold at most pharmacies, petrol service stations and supermarkets at a price of approximately R10.00 to R15.00 for a packet of 3 condoms [Price dependant on where it is purchased (Field survey, 2008)]. The disparity between usage and preference may thus be explained by this cost, with a number of students being unable to consistently afford such expenditure and hence opting at times to use the freely available *Choice* brand. *Durex* condoms are the most expensive of the 3 commercial brands (*Lovers Plus*, *Durex* and *Trust*) with a packet of 3 costing anywhere from R20.00 to R60.00 while a packet of 3 *Trust* condoms sells for approximately R6.00 to R8.00. The price differences between the commercial brands are most likely the influencing factor behind the usage and preference patterns observed among students. The high cost of *Durex* most likely results in few students having ever used the brand, while the intermediate cost of *Trust* allows the brand to gain significantly along usage patterns as it offsets the concern of quality by being commercially available and yet is more affordable for students and youth.

Males were observed to be more likely than females to hold the perceptions that *women lose their partners for forcing them to use condoms* (Table 15a; $p \leq 0.001$) and that *water based lubricants should be used with condoms* (Table 15b; $p = 0.026$). Females on the other hand

were more likely than males to hold the perception that *sex is cleaner without a condom* (Table 15c; $p=0.02$). These perceptions may further explain why some young people are non-compliant to consistent condom use. Evidently, there are males that would leave their partners for suggesting condom use while some females may refuse use due to this perception that unprotected sex is cleaner without a condom.

Knowledge of symptoms of STI infection can prove critical in the prevention of HIV/AIDS as one can know when they pose a risk to others or are at risk of infection from others through observing STI symptoms in their partner. Overall, about 59% of the respondents were not able to provide any correct symptoms. While not directly linked to this study, focus group discussions on STIs among students at the university documented male participants as perceiving the need to know symptoms in women so that “*one could avoid being infected by these women.*” Female participants expressed the need to know symptoms in men so they could avoid infection but were more concerned with being able to check for symptoms in themselves so they could seek medical treatment when and if necessary (Personal experience, 2007).

The history of STIs in an individual is an indication of experience of unprotected sex and greatly increases ones’ risk for infection with HIV. No significant difference was observed between males and females for experience of symptoms associated with STI infection (excessive discharges, itching and/or ulcerations around the pubic area) but a difference was noted for history of treatment for an STI with males being more likely to have received treatment (Table 16b; $p=0.001$). It is encouraging to observe that all the respondents that reported the experience of STI symptoms also reported having received treatment, showing that young people are proactively seeking treatment once infected.

A number of HIV/AIDS campaigns have been held in the University of Venda since the inception of the HIV/AIDS Unit in 2002. These have been aimed at raising awareness and promoting the prevention of AIDS and STIs in general. Any change in sexual behaviour of students most likely would be attributed to the combined effect of these programs with other national campaigns conducted by organisations such as loveLife and the Soul City

Foundation.

The females were more likely than the males to have participated in HIV prevention campaigns (Table 17a; $p=0.002$), be it around the university campus or elsewhere. This study found that exposure to the two national campaigns - Soul City and loveLife, among the female and the male respondents is high. There is very strong evidence that females were more likely to have watched *Soul City* – an HIV/AIDS awareness based drama series produced by the Soul City Foundation and televised on the South African Broadcasting Corporation (SABC) channel 1 (Table 17b; $p\leq 0.001$). There is also evidence from this study that females are more likely to have heard of loveLife (Table 17c; $p=0.021$).

The study found very strong evidence for differences between male and female respondents regarding the main person with whom they opted to discuss HIV/AIDS topics in the four weeks prior to the study. While friends remain the principal group with whom both males and females hold discussions, males were more likely to have done so. Males were also more likely to have held discussions with a lecturer or member of an HIV/AIDS support group. While this study did not enquire as to the HIV status of individuals, the latter observation of discussions with members of the support groups could indicate that these respondents have a positive status because membership of support groups is generally restricted in South Africa to people living with HIV. Females were more likely than males to discuss HIV/AIDS with peer educators and health care workers possibly reaffirming that women seek health care services more than the males (Table 18; $p=0.009$).

While it has been shown that knowledge alone is not sufficient for the prevention of HIV, it remains vital for interventions to ensure that knowledge on HIV is readily available to create a foundation for change behaviour communications. No difference was observed between the females and the males in this study on knowledge of the possibility of a healthy looking person having HIV. Findings however suggest strong evidence for females being more likely than males to know that HIV is the etiological agent for AIDS (Figure 11a; $p=0.007$).

There was no significant difference noted between male and female respondents regarding

perception of susceptibility to infection. The majority of the respondents were unaware of women's greater susceptibility to infection and as such it is unlikely that respondents would appreciate the need for women to take extra care in their sexual behaviour. Knowledge of there being no cure for AIDS was moderately high among the respondents. According to UNAIDS (2003), in some industrialized countries, widespread access to antiretroviral treatment has begun to establish the dangerous myth that an AIDS cure exists. In this respect it is of concern that 36% of the females and 37% of the males were under the misconception that a cure for HIV/AIDS exists.

This study also examined whether respondents were aware of HIV prevention strategies. Specifically, the role of antiretroviral drugs in the prevention of mother-to-child transmission (PMTCT) as well as condom use and sexual faithfulness to a single partner in prevention of sexual transmission of HIV were considered. It was noted that knowledge levels were high - overall about 90% of the respondents recognised the protective role of condoms, with the females being more likely to be aware of it than the males (Figure 11b; $p=0.027$). Sexual faithfulness was correctly identified to reduce risk for infection by 94% of the respondents. The role of ARVs in PMTCT was correctly identified by 90% of the respondents. No difference by gender was noted for sexual faithfulness and PMTCT.

Knowing how HIV is transmitted from one person to the next is vital if one is to protect themselves from infection. The study found that among the female respondents, 89% were aware that mosquitoes could not transmit HIV compared to about 90% of the males, and overall about 98% of the respondents were aware that witchcraft did not form part of the modes of HIV transmission. No significant difference was noted between the female and the male respondents.

According to Pettifor et al. (2004), shifts in attitudes form an important precursor to behaviour change. Understanding people's attitudes is also important in reducing stigma around HIV/AIDS. Among the respondents that knew someone who is HIV positive, females were most likely to report *willingness to share meals with such a person* (Figure 12a; $p\leq 0.001$), and *willingness to care for an infected family member regardless of their gender*

(Figure 12c; $p \leq 0.001$). While this would suggest that attitudes among the females is quite favourable, it is noted that a higher proportion of females than males would be uncomfortable with having a person living with HIV as their room-mate (No statistical significance observed between genders). Males were more likely to want the information about a family member who is infected to be kept a secret (Figure 12f; $p \leq 0.001$) and could partly explain why males are not as willing to care for sick family members as females are. Again, while statistical difference was not found, it was noted that among the respondents who knew someone that is infected, about 63% of the females and 44% of the males would not pursue an interest in someone once they discovered the person to be HIV positive (Figure 12e).

Knowledge of HIV status is important in stimulating adoption of safe sexual behaviours. In developing Behaviour Change Communication (BCC) programs, it is therefore essential to have baseline information on levels of knowledge of personal HIV status and assessment of risk to contracting HIV within target populations. Subpopulations considered at most risk for infection with HIV include individuals with experience of unprotected sex, those that do not and have never used condoms during vaginal and anal sex, and those with a history of having been diagnosed with an STI. The vast majority of the respondents in these categories felt they faced little or no risk (no risk, very low risk and low risk) of infection. These findings suggest that young people continue to see themselves as not likely to get infected in spite of taking part in risky sex behaviour. While no significant difference by gender was detected, it is interesting to note, as shown in Table 19a, that among sexually active respondents, the proportion of females assessing themselves as being at high risk (about 17%) of infection was more than twice as in the males (about 7%).

The study found strong evidence that females were more likely to be aware of VCT services being available in the university than males (Table 20a; $p = 0.007$). Additionally, there is very strong evidence that the females were more likely than the males to have undergone Voluntary Counselling and Testing (VCT) for HIV (Table 20b; $p \leq 0.001$) and be willing to undergo testing in the future (Table 20c; $p \leq 0.001$).

It is encouraging to note in Figure 13 that of the 158 respondents that reported having

undergone VCT, 119 (75.3%) respondents indicated having tested at the campus VCT site (i.e. HIV/AIDS Unit). This fact, in conjunction with the predominant reason for uptake of VCT services among students being responding to a campaign indicate the importance of the Unit in the institutional fight against HIV and the peer educator assisted campaigns. Other reasons for seeking the first HIV/AIDS test (i.e. VCT service) included having had unprotected sex, suspecting a partner of being HIV positive or cheating reinforce the position that risk behaviours persist among students.

An analysis of the HIV testing patterns among the students showed that the females tested more during May, June and October over the year 2008 while for males it was over March, June, July and August. This study did not make any further enquiry into this finding but acknowledges that it warrants further investigation to establish possible explanations for the observed pattern.

The study found that about 49% of the respondents would not inform anyone if they were to contract HIV. This suggests that there is still some fear among young people regarding being open about ones' status. This possibly attests to the fact that while a lot has been done to reduce stigmatization of HIV positive people in the world, South Africa and the University, stigmatization and the anticipation of being stigmatized remain an area for intervention for public health practitioners.

It is recommended that further studies be conducted among students at the University of Venda and other tertiary institutions regarding sexual behaviour. These studies should preferably be conducted as repeat surveys so as to monitor any changes in sexual trends among students. It is suggested that the following areas be considered for the further studies:

- The impact of national campaigns and HIV/AIDS prevention messages on students including the potential negative impact of single-acting initiatives
- The factors contributing to low utilization of health services among students at the university.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

CONCLUSION

This study has shown that a number of risk behaviours persist within the student population at the University of Venda. Students continue to engage not only in the use of alcohol and drugs but also in sex under the influence of these substances. The study has also shown that there are students that remain at risk of exposure to HIV and other STIs due to a number of factors including engagement in heterosexual acts as well as homosexual anal sex, inconsistent or non use of condoms, multiple sex partnerships, contact with commercial sex partners, lack of sufficient knowledge regarding symptoms of STIs, underestimating their risk profile for infection, and disinterest in going for VCT services.

It is clear that there are students that have adopted safe sexual behaviour practices including the use of condoms, abstinence, sexual faithfulness, involvement in HIV awareness drives and seeking VCT services. This is testament to the important role being played by the HIV/AIDS Unit, its peer education structures as well as its partnerships with PETT and loveLife in the institutions fight against HIV.

RECOMMENDATIONS

It is recommended that further studies be conducted among students at the University of Venda and other tertiary institutions regarding sexual behaviour. These studies should preferably be conducted as repeat surveys so as to monitor any changes in sexual trends among students. It is suggested that the following aspects be considered key for further studies:

- The impact of national campaigns and HIV/STI prevention messaging on students including the potential negative impact of couple testing initiatives
- The factors contributing to low utilization of female condoms among students at the university.

- A qualitative study into the factors surrounding non-compliance to consistent condom use among students.
- Sexual coercion of male youth by females within the university servicing area.
- The factors associated with individuals discomfort with close and intimate association with people living with HIV whereas they generally present themselves as non-prejudicial against infected people.
- Sexual orientation and stigmatization of homosexual and bisexual individuals and the impact of such stigmatization on intervention efforts.

Interventions should be designed or adapted with a research orientation framework. This will simplify the monitoring and evaluation processes and allow for programmes to be modified as risk profiles and behaviours among students change. Such interventions should include the targeting of sexual unfaithfulness among students and cover aspects on risks related to concurrent multiple partnerships, sexual frequency, and unprotected sex. Young women should also be included as targets for campaigns, targeting individuals with preference for unprotected sex and be granted greater access to programming on the prevention and management of pregnancy as an alternative to standardised HIV/AIDS awareness messaging.

Condom use promotion drives in the institution should be maintained and where possible stepped up to ensure that the message is frequently passed on to the students. Focus in these drives should be placed on the need for consistent and proper use of condoms, the promotion of *Choice* brand condoms as a safe, high quality product, and with condom negotiation empowerment strategies being offered to female students as well as to male students so that they may be receptive to negotiating female partners. This negotiation strategy empowerment should take the broader theme of communication empowerment so that partners are encouraged to have open dialogue on all matters, including their sexuality. This will thereby enhance the opportunity for young women to take part in sexual decisions within a relationship. Interventions addressing safe sexual behaviour during anal sex should be stepped up as they were previously neglected under the assumption that these behaviours were absent among students. Further, the VCT campaigns should take into account the possibility that the idea of couple testing may compromise female students' ability to

negotiate condom use once they and their partners have been found to be HIV negative. Since the risk for infection remains even after couple testing, it is important that these awareness drives stress that being found to be negative is not a substitute for use of condoms with the partner.

It is strongly recommended that the training of peer educators, counsellors and the HIV/AIDS Health promoters take priority to allow them to conduct not only abstinence drives but other campaigns in the promotion of a healthy campus environment, and that aspects of health promotion, health rights, research and project management be incorporated into their training.

It is hoped that these recommendations will advance the position of the HIV/AIDS Unit at the institution and result in safer sexual behaviours, and a significant decrease in the HIV prevalence and threat of infection among students.



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APPENDIX 1: RESEARCH QUESTIONNAIRE

Questionnaire number: _____

Univen Sexual Behaviour Survey of Resident Students 2008.

NB: All information given in this questionnaire will be treated strictly confidential and no names, student numbers or any other identification is required.

INSTRUCTIONS: PLEASE DO NOT PUT YOUR NAME ON ANY PART OF THE QUESTIONNAIRE AND DO NOT TEAR ANY PAGES. Be sure to answer every question. If the question does not apply to you simply pick the answer for "Not applicable-N/A" or write "does not apply".

For ALL questions, answer by circling the answer(s) of your choice or filling in the space provided.

SECTION 1: BACKGROUND CHARACTERISTICS

1. What is your gender?

1. Female

2. Male

2. What is your current marital status?

1. Single – never married

2. Engaged

3. Married

4. Divorced

5. Other: _____ (Please specify)

3. In what **month and year** were you born? _____.

4. Do you suffer from any form of disability?

1. Yes: _____ (Please specify in space provided)

2. No

5. What level of study are you in?

1. 1st year

2. 2nd year

3. 3rd year

4. 4th year/honours

5. Postgraduate

6. Other: _____ (Please specify)

6. To which ethnic group/tribe do you belong? (e.g. Venda, Tsonga, Zulu, Swati, Sotho/Pedi, etc)

(NB: International students - please state your nationality)

SECTION 2: EXPERIENCE WITH ALCOHOL AND DRUGS

7. Have you used any drugs in the last 12 months (Do not count medical drugs treating illness).
1. Yes 2. No
8. During the last 4 weeks how often have you had drinks containing alcohol?
1. Everyday 2. At least once a week 3. Less than once a week
4. Never 5. Other: _____ (Please specify)
9. Considering your pattern of drinking, which of the following best describes you?
1. Alcoholic 2. Frequent/Regular drinker 3. Occasional drinker
4. Non-drinker 5. Other: _____ (Please specify)
10. Some people have tried a range of different types of drugs. Which ones have you tried in the last 12 months? (If none please state "NONE" in the space provided otherwise list the drugs you have tried).
-
-

11. Have you ever taken alcohol and drugs at the same time?
1. Yes I have. 2. No I haven't
12. Have you ever had sexual intercourse while under the influence of alcohol or drugs?
1. Yes I have. 2. No I haven't 3. Have never had sex
-

SECTION 3: ISSUES RELATED TO SEXUAL BEHAVIOUR

The following section asks personal questions about sex. We are asking these questions to learn more about how young people feel in order to help make their lives safer. We know that some young people have had sexual intercourse and some have sexual intercourse with more than one person. Please answer the following questions honestly. Remember, your name is not written on this questionnaire.

13. Which of the following statements best describes your experience of sexual intercourse? (For the purpose of this study, "sexual intercourse" is defined as vaginal or anal penetrative sexual intercourse).
1. Have never had sex 2. Still sexually active 3. Abstaining from sex

14. If you are no longer sexually active, what would you say is your main reason for this?

15. How old were you when you had sexual intercourse for the first time?

1. I have never had sexual intercourse.
2. _____ years old
3. I don't remember

16. The first time you had sexual intercourse, did you want to do it?

1. Yes I did want to.
2. No I did not want to.
3. I am not sure.
4. I have never had sexual intercourse.

17. What is your relationship with your current regular sexual partner?

(Sexual partner in this case means anyone that you have sexual intercourse with)

1. I have never had sex
2. Girlfriend/boyfriend not living with you
3. Girlfriend/boyfriend living with you.
4. Someone whom you paid for sex
5. Someone whom you paid for sex.
6. Casual acquaintance/Just a friend
7. I do not have a sex partner at the moment
8. Other (please specify): _____.

18. Have you ever received payment or favours in exchange for sexual intercourse and/or oral sex?

1. Yes
2. No.
3. I have never had sexual intercourse

19. Have you ever paid anyone or given favours to someone in exchange for sexual intercourse and/or oral sex?

1. Yes
2. No.
3. I have never had sexual intercourse

20. Regarding your sexual orientation, you are primarily?

1. Heterosexual – only have sex with partners of the opposite gender to yours.
2. Gay/Lesbian – only have sex with partners of the same gender as yours.
3. Bisexual – can have sex with both male and female partners.
4. I don't know/Not sure what my orientation is.

21. Did you use any alcohol or drugs the last time you had sexual intercourse?

1. I have never had sexual intercourse.
2. I used alcohol only.
3. I used drugs only.
4. I used both alcohol and drugs.
5. I did not use any alcohol or drugs.

22. The last time you had sexual intercourse, what method(s) did you and your partner use to prevent pregnancy? **(Select those that apply)**
1. I have never had sexual intercourse.
 2. No method was used
 3. Birth control pills
 4. Condoms
 5. Birth control injection
 6. Withdrawal method
 7. No method because we wanted a pregnancy
 8. Emergency/morning after pill
 9. Other (please specify): _____.
23. How many times have you ever been pregnant or gotten someone pregnant?
1. I have never been pregnant or gotten someone pregnant.
 2. _____ times
24. **For females:** Have you ever had an abortion?
1. Yes
 2. No
25. **Please answer this question no matter what gender you are:**
How many partners have you had anal intercourse with in the last 12 months?
1. I don't remember.
 2. _____ male partner(s) and/or _____ female partners.
 3. I have never had anal intercourse.
 4. I have not had anal intercourse in the last 12 months.
26. Have you ever been forced or blackmailed into having sex with someone?
1. Yes.
 2. No.
27. Have you ever forced or blackmailed someone to have sex with you?
1. Yes.
 2. No.
28. If a man and woman have sex before marriage, do you think it is always wrong, almost always wrong, wrong only sometimes, or not wrong at all?
1. Always wrong
 2. Almost always wrong
 3. Wrong only sometimes
 4. Not wrong at all
 5. I'm not sure
29. What if they are in their early teens, say 14 to 16 years old? In that case do you think sex before marriage would be always wrong, almost always wrong, wrong only sometimes, or not wrong at all?
1. Always wrong
 2. Almost always wrong
 3. Wrong only sometimes
 4. Not wrong at all
 5. I'm not sure

30. What is your opinion about boyfriends/girlfriends having sex with someone other than their partner? Is it always wrong, almost always wrong, wrong only sometimes or not wrong at all?
1. Always wrong
 2. Almost always wrong
 3. Wrong only sometimes
 4. Not wrong at all
 5. I'm not sure
31. Is sex between two people of the same sex always wrong, almost always wrong, wrong only sometimes, or not wrong at all?
1. Always wrong
 2. Almost always wrong
 3. Wrong only sometimes
 4. Not wrong at all
 5. I'm not sure

SECTION 4: CONTACT WITH COMMERCIAL SEX PARTNERS

32. With how many commercial partners (**prostitutes**) have you had sex in the last 12 months?
1. I have never had sexual intercourse.
 2. I have never had sexual intercourse with a commercial partner/prostitute.
 3. I have not had sexual intercourse with a commercial partner in the last 12 months.
 4. _____ male commercial partner(s) and _____ female commercial partner(s)
(State the number of male and female commercial partners in the spaces provided)
 5. I can't remember.
33. With what frequency did you use condoms with your commercial partner(s) over the last 12 months?
1. Every time
 2. Almost every time.
 3. Sometimes.
 4. Never.
 5. I don't know.
 6. I have **never** had sexual intercourse.
 7. I have never had sexual intercourse **with a commercial partner/prostitute**.
 8. I have not had sexual intercourse **with a commercial partner/prostitute** in the last 12 months.

SECTION 5: CONTACT WITH NON-COMMERCIAL SEX PARTNERS

34. With how many non-commercial partners (**people that are not prostitutes**) have you had sex in the last 12 months?
1. I have never had sexual intercourse.
 2. I have never had sexual intercourse with a non-commercial partner.
 3. I have not had sexual intercourse with a non-commercial partner in the last 12 months.
 4. _____ male **non-commercial** partner(s) and _____ female **non-commercial** partner(s)
(State the number of male and female non-commercial partners in the spaces provided).
 5. I can't remember
35. How frequently did you use condoms with your non-commercial partner(s) (**anyone except a prostitute**) over the last 12 months?
1. Every time
 2. Almost every time.
 3. Sometimes.
 4. Never.
 5. I don't know.
 6. I have **never** had sexual intercourse.
 7. I have never had sexual intercourse **with a non-commercial partner/prostitute**.
 8. I have not had sexual intercourse **with a non-commercial partner/prostitute** in the last 12 months.

SECTION 6: USE OF CONDOMS

36. Have you at any time in your life had sexual intercourse using a condom?
1. Yes- with **male** condoms only.
 2. Yes- with **female** condoms (femidoms) only.
 3. Yes- sometimes with male condoms and sometimes with female condoms.
 4. I have never used condoms **but** I have had sexual intercourse.
 5. I have never had sexual intercourse so have never needed to use condoms.
37. Have you at any time in your life had sexual intercourse **without using** a condom?
1. Yes I have had sex without a condom.
 2. No. I have always used condoms when having sex
 3. I have never had sexual intercourse.

38. The **first time** you had sexual intercourse, was a condom used?
1. Yes - a condom was used
 2. No - a condom was not used
 3. I don't know
 4. I have never had sexual intercourse
39. What is the main reason why you do not use condoms when having sexual intercourse?
1. Condoms are not available
 2. Condoms are too expensive
 3. My partner does not want us to use condoms.
 4. I don't like using condoms.
 5. Prefer to use contraceptive (birth control) pills.
 6. Never thought of using them.
 7. I don't think it is necessary to use condoms
 8. I have never had sex.
 9. I always use condoms.
 10. Other (please specify): _____.
40. Do you use condoms when you have anal sex?
1. I have never had anal intercourse.
 2. I always use condoms for anal sex.
 3. I sometimes use condoms during anal sex.
 4. I never use condoms during anal sex.
 5. I don't know what anal sex is.
41. The last time you had sex whose idea was it to use a condom?
1. It was my idea.
 2. It was my partners' idea.
 3. It was both our idea.
 4. Condom was not used.
 5. I have never had sexual intercourse.
42. Have you and your current or former sexual partner ever discussed whether or not to use condoms?
1. I have never had sexual intercourse.
 2. We never discussed it.
 3. We agreed to always use them.
 4. We agreed to sometimes use them.
 5. We agreed not to use them.
 6. I don't have a sexual partner
 7. I am abstaining from sex.
43. What brand of condoms do you frequently use?
1. Trust.
 2. Choice.
 3. Loversplus.
 4. Contempo
 5. Ultimate Freedom
 6. Latex.
 7. Femidoms (Female condoms).
 8. I am not using condoms because I am not having/have never had sexual intercourse.
 9. I am having sexual intercourse but do not use condoms
 10. Other (please specify) _____.

44. What is your favourite brand of condoms?

1. Trust.
2. Choice.
3. Loversplus.
4. Contempo
5. Ultimate Freedom
6. Latex.
7. Femidoms (Female condoms).
8. I do not have a favourite brand of condoms
9. Other (please specify)_____.

45. A woman loses a man if she forces him to use a condom.

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

46. Water based lubricants should be used with condoms.

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

47. Do you think sex is cleaner when a condom is not used?

1. Yes
2. No
3. It makes no difference

SECTION 7: HISTORY OF SEXUALLY TRANSMITTED INFECTIONS/DISEASES (STIs/STDs)

48. What are the symptoms of STDs in women?

49. What are the symptoms of STDs in men?

50. Have you ever been diagnosed as having an STD?

1. Yes.
2. No.
3. I don't know/Not sure

51. Have you ever received treatment for an STD?

1. Yes.
2. No.

SECTION 8: KNOWLEDGE ABOUT HIV/AIDS AND LEVEL OF EXPOSURE TO INTERVENTIONS

52. Have you ever been part of arranging or running HIV/AIDS campaigns in the campus or elsewhere?

1. Yes I have.
2. No I have not.

59. If a member of your family became sick with the AIDS virus, would you be willing to care for him or her in your household?
1. I would be willing to care for them if they were **male**.
 2. I would be willing to care for them if they were **female**.
 3. I would not be willing to care for them.
 4. I don't Know/Not sure.
 5. I would be willing to care for them no matter their gender.
60. If you knew that a worker at the cafeteria had the AIDS virus, would you buy food served and prepared by him/her?
1. Yes.
 2. No.
 3. I don't know/Not sure
61. If a member of your family got infected with the AIDS virus, would you want it to remain a secret?
1. Yes.
 2. No.
 3. I don't know/Not sure
62. If you were interested in someone and found out he/she was HIV positive, would you still want a relationship with him/her?
1. Yes.
 2. No.
 3. I don't know/Not sure
63. If you found out that your roommate was HIV positive, would you want to get a new roommate?
1. Yes.
 2. No.
 3. I don't know/Not sure

SECTION 10: EXPERIENCE WITH VCT AND PERCEIVED THREAT TO STI INFECTION

64. Based on your sexual behaviour, what do you think is your risk of getting infected with HIV?
1. No risk at all.
 2. Very low risk.
 3. Low risk.
 4. Medium risk
 5. High risk.
65. Is it possible for someone to get a confidential test at the University of Venda to find out if he/she is infected with HIV?
1. Yes.
 2. No.
 3. I'm not really sure.
66. Have you *ever been tested* to see if you have HIV, the virus that causes AIDS
(Please note that we will not ask you for the results)?
1. Yes I have-at Univen
 2. Yes I have- somewhere else.
 3. No I haven't.

67. The first time you took an HIV test, what were your reasons for seeking the test?

(Please mark all those that apply to you)

1. Referred by health worker.
2. I was pregnant.
3. I was responding to a campaign.
4. I found out that my partner/former partner is HIV positive.
5. Other (specify)_____.
6. I have never had an HIV test.

68. Have you and your partner (or ex-partner) ever taken an HIV test together?

1. Yes.
2. No.

69. When was the last time you took an HIV test?

1. _____ (State when you last took the test in the space provided)
2. I have never had an HIV test.

70. Whom did you tell the results of your HIV test? **(Select all that apply to you)**

1. No one.
2. Sex partner(s).
3. Friend(s).
4. Lecturer
5. Family member(s)
6. Health care worker.
7. Peer educator
8. Pastor
9. Other (Please specify)_____
10. I have never tested for HIV.

71. Would you ever want to be tested (again) for HIV?

1. Yes.
2. No.
3. I'm not really sure.

END OF QUESTIONNAIRE

THANK YOU FOR YOUR PARTICIPATION AND HONESTY