A DESCRIPTION OF THE PERCEPTIONS AND BARRIERS THAT INFLUENCE INITIAL AND CONSISTENT USE OF CONDOMS AMONGST A SAMPLE OF MALE AND FEMALE STUDENTS OF THE POLYTECHNIC OF NAMIBIA

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A description of the perceptions and barriers that influence initial and consistent use of condoms amongst a sample of male and female students of the Polytechnic of Namibia

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KEYWORDS

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ABSTRACT

AIDS is the leading cause of death in Africa and the fourth-leading cause of death worldwide. Around 40 million people worldwide are infected with HIV, 95% of whom live in developing countries. In 2004, approximately 5 million people were newly infected with the virus worldwide. Sub-Saharan Africa is the world's worst affected region. Seventy percent of all people infected with HIV live in sub-Saharan Africa. In 2004, an estimated 3.1 million people in the region were newly infected with HIV (UNAIDS, 2004).

Namibia has the 5th highest HIV prevalence rate in the world with a prevalence rate ranging from 23% – 43% in the different regions of Namibia (UNAIDS, 2003). The percentage of young women and men aged 15-24 reporting the use of a condom the last time they had sex with a non-marital, non-cohabiting sexual partner was reported to be 49%. Of these, 47.94% were women and 69.43% were men (Southern African Regional Poverty Network Report, 2005).

This study aimed to describe the perceptions and barriers that influence initial and consistent use of condoms amongst vocational training students at the Polytechnic of Namibia so as to inform future health promotion programmes and services in the setting.

The study was a descriptive, exploratory study that used a self-administered questionnaire, supplemented by a focus group discussion to collect the data - which were administered in October 2004 and February 2006 respectively.

A sample of 23 students in the Technical Vocational Education & Training Department of the Polytechnic of Namibia participated in the study, 14 of whom completed a self-administered questionnaire and 9 of whom participated in the focus group discussion. The majority of the respondents were in the age category of 25-39 years. Thematic analysis with categorising and coding methods was used to analyse the data.

The study used two theoretical frameworks focusing on behavioural change to explain the impact of the results and to assist in giving recommendations on the study findings. The two models used were the Health Belief Model and the Stages of Change Model. These provided a framework to consider the respondents' perceptions about condoms and their use and to explain the behaviour change required in order to facilitate correct and consistent use of condoms.

The results of the study suggest that:

1. Despite the high level of knowledge about HIV and condoms among the respondents, there is still a low use of condoms that puts them at risk of contracting HIV.
2. Further, consistent condom use is hindered by misconceptions, myths about condoms, and a perceived difference between free condoms and those that are commercially sold.
3. The type of relationship (i.e. whether someone is a regular or a non-regular partner) is revealed to be one of the determinants of condom

use. Consistent condom use appears to be influenced by the period respondents have spent with a partner and the trust they have built with that particular partner.

4. Female condoms appear to be unpopular and are rarely used.

The study recommends that:

1. Condom promotion activities should be strengthened, in particular with regard to the female condom, both within the Department and at the Polytechnic in general. Peer educators and people living with HIV/AIDS should be used to spearhead these campaigns.
2. Free condoms should be made available at strategic places around the campus and within the different Departments. The Polytechnic should also pay attention to the way they store condoms.
3. Gender issues be addressed to improve the empowerment of women and their condom negotiation skills in the context of HIV/AIDS specifically.
4. Accurate information should be provided to help in dispelling some of the reported myths and misconceptions about condoms, and convey accurate information about the correct use of condoms.

The significant limitations of this study were firstly the fact that the questionnaire was self-administered and the responses that the respondents gave were thus not able to be explored in any further depth by the researcher, and secondly that there was a time lapse of approximately one and a half years between the two data

collection methods which may have resulted in differences in the respondents' responses due to attitudinal changes over time.

It is important to note that the findings from the study sample cannot be taken as representative of the student body as a whole at the Polytechnic but provide some clues as to students' ideas and behaviour as far as attitudes and use of condoms is concerned.

DECLARATION

I declare that *'A description of the perceptions and barriers that influence initial and consistent use of condoms amongst a sample of male and female students of the Polytechnic of Namibia'* is my own work, that it has not been submitted for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

Adam Muheua May 2006

Signed:……..

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CONTENTS

List of Abbreviations

NASOMA	–	National Social Marketing Programme
SMA	**–**	Social Marketing Association
SADC	–	Southern African Development Community
PSI	**–**	Population Services International
NDHS	–	Namibia Demographic and Health Survey
MOHSS	–	Ministry of Health and Social Services, Namibia
HIV	**–**	Human Immunodeficiency Virus
AIDS	**–**	Acquired Immuno-Deficiency Syndrome
SIAPAC	**-**	Social Impact Assessment and Policy Analysis Corporation
JHSPH	**-**	Johns Hopkins School of Public Health
WHO	–	World Health Organisation
FHI	–	Family Health International
SCM	**-**	Stages of Change Model
GDP	**-**	Gross Domestic Product

Chapter 1

INTRODUCTION

The purpose of this study is to gain a greater understanding of the perceptions and barriers that influence condom use amongst male and female students at the Polytechnic of Namibia (Technical Vocational Education & Training Department). The specific objectives of this study include the following:

- To obtain a better understanding of knowledge amongst students about the correct use of condoms.
- To identify some of the problems students have in accessing condoms.
- To identify the common sources of information regarding condoms, the common perceptions that exist about condoms, and the extent to which students discuss condoms with others.
- To determine students' personal feelings towards condoms, their experience of using condoms, and the actual and perceived barriers that lead to condom non-use.
- To make recommendations for developing appropriate interventions that would promote the use of condoms by students.

HIV/AIDS represents the single largest health problem in Namibia. The number of people living with HIV/AIDS by the end of 2005 in Namibia was estimated at 230,000 with an estimated 19.6% of adults (aged 15-49) living with HIV/AIDS by the end of 2005. The estimated number of women (aged 15-49) living with

HIV/AIDS by the end of 2005 was 130,000 (UNAIDS, 2006). Namibia's HIV prevalence rate among pregnant women is 19.7% (Ministry of Health and Social Services, 2004).

The use of condoms is seen as a key strategy in the fight against AIDS, and one of the main problems facing all stakeholders in this battle is the issue of how condom usage may be increased, so as to reduce the rate of new infections.

It is well documented in Namibia that condoms are one of the most commonly used preventative methods against Sexually Transmitted Infections (STIs) including HIV/AIDS and are also used for the prevention of unwanted pregnancies (Ministry of Health and Social Services, 2000a*)*. The total number of condoms distributed in Namibia during the year 2001 was 11.1 million (Ministry of Health and Social Services, 2001). Based on the formula for calculating condom requirements by UNFPA (Undated a), Namibia should distribute approximately 10.368 million condoms per year. This is an indication that Namibia is within these limits.

However, there still remains a significant possibility of increasing the rate of usage of condoms in Namibia. The use of condoms in Namibia declines with the increasing age of users. In a study by National Social Marketing Programme (2001) it was revealed that in the age group 19-24 years, 83.9% of the respondents had used condoms compared to 74.9% in the age group 25-29 years and 60% in the age group 30-39 years.

A study conducted in 2000 by the Ministry of Health found that condoms were used significantly less often by spouses and cohabiting partners. The study also found that condom usage varied between regions. Generally, a high percentage of respondents having previously used a condom was recorded in Opuwo (97.6 %), Khorixas (95.2 %), Otavi (93.9 %) and Aminus (92 %). Windhoek is quite close to the national average (81 %), probably influenced by the share of migrants from the different regions. Remarkably low was the percentage of respondents who had previously used condoms in Katima Mulilo (60 percent), Tsumeb (65 %), Walvis Bay (79 %) and Oshikango (71.1 %) (Ministry of Health and Social Services, 2000a).

Despite the differences in condom use figures and the relatively low usage by some sectors of the population, the general awareness of the existence of HIV and AIDS is high among the Namibian population. A study conducted by John Hopkins Bloomberg School of Public Health (2003) in Namibia among 800 youth in greater Windhoek concluded that 94% of all the respondents had heard of AIDS and 93.1% believed there were things one could do to avoid getting infected with HIV. In another study done by Octopus Logistics (2003) in Namibia it was revealed that 99% of all the respondents (between the ages 19-35 years) knew about the virus and the disease.

The rationale for the study

Unprotected sexual intercourse places a considerable number of students at risk of sexually transmitted diseases and HIV infection. It is difficult to know the incidence or prevalence of HIV/AIDS at the Polytechnic of Namibia since there is no compulsory reporting system. However the total reported cases of STIs at the Polytechnic for the year 2004 was 225 students (in all age groups) in total. Derived from this figure, the average STI cases per month are 36. Sexually Transmitted Infections are the second most treated diseases after respiratory diseases at the Polytechnic clinic (Polytechnic of Namibia, 2004a).

However, in a study by Otaala (2000) it was concluded that 75% of the students at the University of Namibia might be infected with HIV, as the blood transfusion services in Namibia have refused 75% of the blood donated by students at the University of Namibia that volunteered for donation. It is reasonable to conclude that the Polytechnic of Namibia may also find itself in this situation since the demographical situation of the two student populations is similar and the two are the largest institutions of higher learning in the country.

Students are more vulnerable to HIV/AIDS because they are sexually active and they are in the age range (19-39 years) that is most affected by the HIV/AIDS pandemic as indicated in the Health Information Report by the Ministry of Health and Social Services, Namibia (2001). They are the future leaders of the country and they need to be equipped with the necessary skills and knowledge to protect

themselves from HIV infection. As potential role models, and because of their future role in the job market, they need to pass this information on to others.

The HIV/AIDS-related health services available at the Polytechnic of Namibia

Social services, HIV/AIDS counselling and coordination services and primary health care are available to all students at the Polytechnic. These services are carried out from the office of the Dean of Students. The primary health care services include the prevention of diseases, health promotion and referrals to higher levels of care. A full-time nurse and social worker render these services.

There are currently no specific policies and guidelines on HIV/AIDS at this institution, but this is being addressed (Personal communication with Ms. McNally, Registered Nurse, Polytechnic Clinic, November 25, 2005). There are periodic workshops organised to cover topics on HIV/AIDS and there is a student counsellor and a social worker that provide counselling on HIV/AIDS. The Polytechnic has a functional HIV Awareness Club, which facilitates monthly educational outreach services around the campus. This is supplemented by peer counsellors that are providing students with information on HIV/AIDS and negotiation and communication skills, and specifically designated days focusing on STIs, condoms and HIV awareness.

The Polytechnic also established 'HIV friendly corners' that provide information to students about HIV/AIDS. These corners served as condom distribution areas

but were discontinued because condoms were exposed to the unfavourable weather conditions outside. The freely distributed condoms are now available at this centre (the reception of the Vocational Training Department) and also at the offices of the Dean of Students (Personal communication with Ms. McNally, Registered Nurse, Polytechnic Clinic, November 25, 2005).

As stated previously, the only condoms that are available at the campus are those that are distributed free from the Ministry of Health and Social Services. With the discontinuation of condom distribution at the 'HIV/AIDS friendly corners' the only places left for distribution are the Dean of Students' offices and in the toilets at the campus.

According to the clinic nurse at the Polytechnic the condoms that are distributed are scatted around the campus unused and some are thrown on the pavements (Personal communication with Ms. McNally, Registered Nurse, Polytechnic Clinic, November 25, 2005). There is no record or mechanism in place to estimate the use of condoms by the students.

Little is known about the factors that influence correct and consistent condom use at the Polytechnic of Namibia since no related studies have been conducted at this institution. However it is understood that condom use with other protective measures will reduce the rates of HIV and slow the spread of AIDS among the students if successfully promoted (Personal communication with Ms. McNally, Registered Nurse, Polytechnic Clinic, November 25, 2005).

No related studies have been published that aim to find out the barriers to condom use among the students of higher leaning in Namibia. Thus any intervention should commence by identifying these barriers and trying to reduce them through the use of appropriate strategies. This study attempts to identify some of these barriers by interviewing a sample of students at the Polytechnic of Namibia. If more people avoided risky sexual behaviour, for example by using condoms or adhering to the other preventive measures (such as abstaining from sex, or only having sex within a monogamous relationship), they could avoid contracting STIs such as AIDS (Population Information Program, 1999).

HIV/AIDS prevention and promotion activities should be based on the recognition of the complex interaction between the cultural, socio-economic, community and individual contexts of people's lives. All the aspects (such as attitudes, behaviour, knowledge and perceptions) that influence an individual's decisions regarding sex should be tackled. It is understood that people's behaviour, including their sexual behaviour, is influenced by culture, environment, beliefs, social norms and gender relations. This is also important to convey and reinforce important behavioural change messages based on the people's perceptions of certain things (like condoms and their use within a particular community). This study attempts to uncover the knowledge and perceptions towards condoms.

Condoms are an effective means of preventing STIs (including HIV) when used correctly and consistently and are impermeable to viruses and to sperm. Modern

condoms are better formulated, processed, finished and packaged than they have ever been in the past. Since correct condom use is both a taught and a learned behaviour it can be improved through improved education and counselling (McNeill et. al., 2005). It is widely proposed that possible ways should be sought to promote and address the correct and consistent use of condoms by addressing factors that contribute to low or non-condom use. Changing negative perceptions of condoms can help increase condom use *(*Population Information Program, 1999).

It is hoped that by obtaining a greater understanding of the above issues, this research would assist the Polytechnic of Namibia in improving their HIV/AIDS preventive activities amongst the students.

This research report is divided into six chapters. The second chapter presents a review of the literature related to the global and regional HIV/AIDS situation and the use of condoms, perceptions and attitudes towards condoms and barriers to the use of condoms. The third chapter describes the methodology used for the study design, data collection and data analysis. The fourth chapter presents the results of the study and the fifth chapter discusses and analyses the results, identifying major themes. In the sixth and final chapter, recommendations are made and conclusions drawn from the study.

Chapter 2

LITERATURE REVIEW

In this chapter a review of the key literature regarding the research topic is presented, in order to place the research topic in a wider context. First, an overview of HIV/AIDS is presented, focusing first on the global picture and then on the regional (Sub-Saharan African) and local (Namibian) situations. Secondly, literature and other research studies regarding the use of condoms, perceptions and attitudes towards condoms and barriers to the use of condoms is reviewed. Finally two theoretical models of behaviour change are considered.

Overview of HIV/AIDS

The global picture

According to estimates from the Joint United Nations programme on HIV/AIDS (UNAIDS, 2004) and the World Health Organization (2004), 40 million adults and 2.3 million children will be living with HIV at the end of 2005. This is more than 50% higher than the figures projected by WHO in 1991 on the basis of the data then available. AIDS related deaths in 2003 alone were 3 million people (UNAIDS, 2003). The total number of AIDS deaths since the beginning of the epidemic until the end of 2001 is estimated at 21.8 million people (UNAIDS, 2003). The majority of people with HIV/AIDS - 95% - live in the developing world (UNAIDS, 2003) and 75% of these are from Sub-Saharan Africa (Yates, 2003).

The Sub-Saharan African situation

Sub-Saharan Africa, especially Southern Africa, is the hardest hit region in the world. AIDS has become the leading cause of death amongst the young population. On average, the HIV prevalence rate in Sub-Saharan Africa is 7.4% (UNAIDS, 2003). In this region, an estimated 3.2 million adults and children became infected with HIV during the year 2003. This brought the total number of people living with HIV/AIDS in the region to 26.6 million by the end of the year. AIDS deaths in Sub-Saharan Africa were 2.4 million (UNAIDS, 2003).

Five Southern African countries show a prevalence rate of more than 18%. The five most affected countries are Botswana, Malawi, Namibia, Swaziland and Zambia (Ministry of Health and Social Services, Namibia, 2001).

The number of women infected is significantly higher than men in all countries in the Southern Africa region. In Botswana, the percentage of young women living with AIDS is 45%; the comparable figure for young men is 19%. In South Africa, the numbers are 31% as compared to 13%; Zimbabwe, 40% to 15%; Namibia, 29% to 8% (UNAIDS, 2003).

The HIV prevalence rate in women attending antenatal care clinics in urban settings in Namibia is 31% and its two neighbouring countries, Botswana (56%) and South Africa (36%). It is also worth mentioning that it is not only an urban phenomenon, the figures outside of major urban areas in these countries are as

follows: Namibia (32%); Botswana, (51%) and South Africa (30%) (UNAIDS, 2003).

The HIV/AIDS context in Namibia

It is estimated that the direct and indirect cost of HIV/AIDS already comprises over 16% of Namibia's GDP. The impact on the country's health system is most severe as HIV/AIDS takes up more than 17% of the country's health budget (World Health Organisation, 2005). At industry level HIV/AIDS has led to loss of productivity as a result of absenteeism due to illness, to care for sick relatives and to attend funerals (International Labour Organisation, 2000).

Namibia has the fifth highest HIV prevalence rate in the world, i.e. prevalence rates of 23% and rising up to 43% in some regions. In 1986 the first HIV/AIDS case was reported in Namibia. Since then the disease has spread fast and by 1998 more than 53,000 HIV cases had been reported. In 1991, life expectancy at birth in Namibia was 60 years of age and currently it is expected to be less than 40. (UNAIDS, 2003). Unprotected commercial and casual sex makes a significant contribution to the spread of HIV/AIDS in Namibia (Ministry of Health and Social Services, 2000a).

In 1999 a total of 14,886 new HIV infections were reported by the laboratory services of the MOHSS thus bringing the total number of HIV positive diagnoses to 68,196 by the end of 1999. The total reported number of deaths in hospitals due to AIDS in 1999 was 2,823. HIV/AIDS is also an increasing cause of

hospitalisation, from 355 hospitalisations in 1993 to 6,878 hospitalisations in 1999 (Ministry of Health and Social Services, 1999 - 2001). In this report, 20% of all sexually active adults in Namibia were found to be HIV positive and almost 200,000 living with HIV/AIDS. Approximately 230,000 people were living with HIV/AIDS in Namibia in 2001. It is estimated that 80% of the HIV/AIDS cases were acquired by heterosexual contact. Sixty percent of the infected people are women (Ministry of Health and Social Services, 2001).

The four sites with the highest prevalence during the 2000 HIV sero-survey were the urban areas: Katima (33%), Windhoek (31%), Oshakati (28%) and Walvisbay (28%). The HIV prevalence among pregnant women varied from 33% in Katima Mulilo to 7% in Opuwo (Ministry of Health and Social Services, 2000b).

Reported use of condoms, perceptions and attitudes towards condoms and barriers to the use of condoms

There is limited literature or studies published on the target population and the institutions of higher learning in Namibia concerning the above areas of interest.

Reported use of condoms

According to Namibian Demographic and Health Survey (Ministry of Health and Social Services, 2000a) in Namibia, the percentage of women and men who said they used a condom the last time they had sex with a spouse or cohabiting partner was (11.9%), non-cohabiting partner (42.6%) and with any partner (28%). In

contrast, men with a spouse or cohabiting partner was (17,9%), non-cohabiting partner (67%) and with any partner (45%).

In a study conducted by UNICEF (2002) in Northern Namibia in the peri-urban group, women mentioned that they saw more used condoms around the houses and observed a decline in pregnancies. In the survey conducted by the Government of Namibia (2001) on rapid assessment related to HIV/AIDS and condom use involving 1,268 respondents in 27 places in Namibia from the age group 12-39 it was found that 81% of respondents who had ever had sex had, at least once, used a condom. This was higher (85%) in the age group 12-18 and lower (61%) in the age group 30-39.

A study done in Ghana, Cape Coast by Ankomah, (1998) revealed that condom use was rare and mostly associated with unfaithfulness, meaning that condoms are used mostly with extra marital relationships or relationships other than the "steady" ones. In this study, carried out in Lira and Soroti districts on a sample of 1,358 and 1,464 residents respectively, it was revealed that around 6% of the respondents in each district had ever used condoms.

According to a study done by Population Services International (2002) it was found that only 6-9 billion condoms were used in Sub-Saharan Africa in 1999 instead of the estimated 24 billion that were needed to protect all sexually active people. In the above PSI study in Sub-Saharan Africa that included 259 women and 2,574 men it was revealed that the use of condoms with regular non-marital

partners varied between 2% and 59% for women and 35% and 74% for men. With casual partners (or non-regular) partners – 28% to 49% of women and 41% to 60% of men reported condom use in last sex with a casual partner. The conclusion was that condom use during the last sexual intercourse was greater with non-regular partners than with spouses or regular partners. The study indicated that use of condoms is associated with religion, educational attainment, marital status, residence, number of sexual partners and having contracted an STD (Population Services International, 2002).

A study on 'Frequency and predictors of condom use and reasons for not using condoms among low-income women' in 27 clinics in Missouri counties involving women with a median age of 25 conducted by Crosby (1999) concluded that less than 14% of respondents reported always using condoms and 67% reported never using condoms 2 months prior to the study. In the same study 73% percent of the rural women reported never using condoms during the past two months, compared to 48% of urban women never using condoms.

There are many factors contributing to the low use of condoms among students. For example, in a study conducted by Gerald et al. (1996) involving 376 respondents from the University of British Colombia, it was established that embarrassment plays a big role in the possession and carrying of condoms. Further, out of 346 students surveyed while entering a campus pub at the University of British Columbia, only 10% had condoms on them. The conclusion

was that the low rate of carrying of condoms by the students seemed to be worrisome and underscored the risky behaviour of this population.

Research by DiClemente (1990*)* found that about 50% of college students in Western Africa who engage in heterosexual intercourse had never used condoms and about two thirds used condoms less than 50% of the time. While these students were knowledgeable about HIV/AIDS, less than 10% reported consistent use of condoms.

In Uganda it was found that only 48.5% of sexually active students use condoms in Iganga (Bita, 2004).

This is confirmed by a study done by Sekadde-Kigondu et al. (1995) that shows that the majority (91.5%) of male university students in Kenya were sexually active, with 54.2% of them reporting ever using a condom. The use is most probably confined to 'promiscuous relationships' where they fear the risk of contracting sexually transmitted diseases, rather than in steady trusted relationships.

The perceptions, attitudes and barriers towards condom use

The Demographic Health Survey conducted by the Ministry of Health and Social Services (2000a) in Namibia explored the perception and attitudes towards condoms and found that 34.5 % of respondents reported that condoms reduced pleasure, 24% of respondents reported that they were convenient to use, and 9.3%

reported that they protected against diseases. This shows negative attitudes and perceptions about the use of condoms.

In another study, an improvement in condom use was brought about by imparting a higher sense of self efficacy, lower embarrassment around condoms, knowing where to buy a condom, knowing how to use a condom and decreasing the number of casual sex partners (Kamya et al., 1997).

In a study conducted by Opio et al. (1997*)* the main reason cited for non-use of condoms was their unavailability, followed by objection by partner and personal dislike of condoms. People also believed that sex with a non-regular partner was more risky than with a regular partner.

In a study conducted by Kamya et al., (1997) it was found that one of the main reasons for not using condoms was because of personal dislikes, which brings us to the unanswered question of what these dislikes are.

In a study conducted by Agha et al. (undated) from 806 respondents it was found that trust in one's partner is the main reason for not using condoms with a marital or regular partner in Africa. Other reasons given are lack of supply, lack of demand and stigma attached to condoms. The objective of their survey was to determine the barriers to condom use by sexually experienced males and females. The unequal power relationships between partners means it can be difficult for women to negotiate the use of condoms.

In a study by Marandu et al. (2006) on attitudes to condom use for prevention of HIV infection in Botswana involving 1,349 respondents, alcohol was believed to be the greatest barrier to condom use. Others included: beliefs in ineffectiveness of condoms, emotional barriers, cultural traditions and complacency.

A study conducted by Wendt and Solomon (1995) among undergraduate psychology classes (309 students) at the University of Vermont concluded that the students were most concerned that condom use reduces the pleasure of sex, that condoms reduce emotional intimacy, about what a partner will think if you suggest using condoms, about what friends would think if they knew that you use condoms and about how to talk with your partner about condom use. This study concluded that it was too much trouble for students to accept using condoms.

In a study by Crosby (1999) conducted in 21 Missouri counties the major reason for not using condoms given by females was a belief that the male partner was not HIV infected, either because she believed he had been tested (46.9%) or because she simply believed that he was HIV negative (26.3%). Other reasons for not using condoms included less sexual pleasure from condom use for both partners, and beliefs that condom use after unprotected sex is not effective.

In another study conducted by UNICEF (2002) in Namibia the following factors that contribute to the low use of condoms were mentioned: access, alcohol & drug abuse, gender relations, sex for economic gain and knowledge-practise gaps.

The following points summarise the findings from the literature review that relate to initial and consistent use of condoms in general and particularly initial and consistent condom use by students:

- The majority of sexually active students do not use condoms consistently and there are some that have never used condoms before.
- Most students do not like to carry condoms because of the stigma and the feeling of embarrassment attached to condoms and their use.
- Condoms are used less often with cohabiting or regular partners.
- Women's inability to negotiate condom use plays a role in non-condom use.
- Common reasons given for non-condom use include the following:
    - reduced sensitivity,
    - an association with unfaithfulness,
    - unavailability of condoms,
    - a general dislike of its use,
    - objections by male partners, and
    - the stigma attached to condoms.

The findings of the various research studies highlighted above offer significant insights into factors that affect the initial and consistent use of condoms, and what some of the perceived and experienced barriers to condom use are, and might be in a Namibian context. As indicated in the introduction to this section little is known about reported use of condoms, perceptions and attitudes towards condoms

and barriers to the use of condoms amongst the target population at the institutions of higher learning in Namibia especially the Polytechnic of Namibia.

Theoretical framework

The study uses two models of behavioural change as a framework to look at perceptions about condoms and their use and to explain the behaviour change required in order to facilitate correct and consistent use of condoms:

The Health Belief Model

The health belief model was developed as a systematic method to explain and predict preventive health behaviour. It is divided into three categories: individual perception, perceived susceptibility and perceived severity. It explains and predicts health behaviour by focusing on the attitudes and beliefs of individuals. The key variables of this model include perceived susceptibility, perceived severity, perceived barriers, cues to action and self-efficacy (The Communication Initiative, 2006).

- Perceived susceptibility relates to the perceived threat that the individual faces (eg. the individual's realisation or recognition that he/she can contract HIV/AIDS or is at risk of contracting HIV/AIDS).
- Perceived severity relates to the consequences of contracting HIV/AIDS (eg. how serious the disease is).
- Perceived benefit relates to the benefits of using condoms (eg. the perception that using condoms is beneficial because it will prevent one contracting the HIV virus).

- Perceived barriers relates to the factors that hinder the use of condoms.
- Cues to action refers to other factors that motivate appropriate actions, either negative or positive (eg. motivation from others to use condoms).
- Self-efficacy refers to the belief in the positive outcomes of the desired actions (eg. the belief that if one uses condoms one is unlikely to contract HIV).

The relevance of the health belief model to this study is highlighted in the discussion and recommendation sections.

Stages of Change Model

The stages of change model is discussed because it is useful for selecting appropriate interventions and for identifying an individual's position in the behaviour change process.

The idea behind the stages of change model is that behaviour change does not happen in one step. Rather, people tend to progress through different stages on their way to successful change (American Family Physician, 2000).

The five stages of change outlined in the model are:

Precontemplation - There is no intention to change behaviour in the foreseeable future. The individual is unaware of the problem, and/or not yet acknowledging that there is a problem behaviour that needs to be changed (i.e. does not know the dangers of HIV/AIDS).

Contemplation - The individual is aware that a problem exists but has not yet made a commitment to take action (i.e. he/she has acknowledged that there is a problem and dangers of HIV/AIDS but is not yet ready or sure of wanting to make a change).

Preparation – The individual is intending to take action (i.e. he/she is getting ready to change the behaviour).

Action – The individual modifies their behaviour, or environment in order to overcome their problem(s). This action to change behaviour requires considerable commitment of time and energy .

Maintenance - The individual works to prevent relapse back into their former behavioural pattern and consolidate the gains attained during action.

Relapse - Returning to older behaviours and abandoning the new changes.

The relevance of the stages of change model to this study is highlighted in the discussion and recommendation sections.

The following chapter sets out the methodology used in the study design, data collection and data analysis that were used in the course of this research.

Chapter 3

RESEARCH DESIGN AND METHODOLOGY

This chapter describes the methodology that informed the design of this research study. It sets out the study objectives, study design, study population and sampling procedures. It goes on to describe the data collection procedure and data collection tools (self-administered questionnaire and focus group) and explains the rationale for the choice of these methods. The pilot testing method and data analysis procedures are then described. Finally, issues of validity, ethics and the limitations of the study are addressed.

Purpose of the study and research objectives

The purpose of the study was to gain a greater understanding of the perceptions and barriers that influence condom use amongst male and female students at the Polytechnic of Namibia.

The specific objectives of this study include the following:

- To obtain a better understanding of knowledge amongst students about the correct use of condoms.
- To identify some of the problems students have in accessing condoms.
- To identify the common sources of information regarding condoms, the common perceptions that exist about condoms, and the extent to which students discuss condoms with others.

- To determine students' personal feelings towards condoms, their experiences of using condoms, and the actual and perceived barriers that lead to condom non-use.
- To make recommendations for developing appropriate interventions that would promote the use of condoms by students.

Study design

This study was a descriptive, exploratory study that used quantitative methods in the form of a self-administered questionnaire and qualitative methods in the form of a focus group discussion to collect data. Both questionnaires used open-ended questions.

According to De Vouse (2002) qualitative methods provide rich data about real life people and situations and are more able to make sense of behaviour and to understand behaviour within its wider context than quantitative methods. A focus group was used in addition to the self-administered questionnaire in order to explore in greater detail and depth some of the findings that had been uncovered in the self-administered questionnaire.

Study population

The study population was the students of the Technical Vocational Education & Training Department of the Polytechnic of Namibia. The Polytechnic, College of Education and the University of Namibia are the only institutions of higher learning of their kind in the country.

The Polytechnic provides tertiary technological career-oriented education to cater for the professional human resource requirements of the country. The Polytechnic of Namibia was established in 1980 with classes in teacher training and secretarial courses. The Polytechnic became an independent and autonomous institution in 1996. Currently the institution offers 18 Certificates, 22 Diplomas and 10 Degrees in 19 programmes ranging from Engineering and Information Technology to Natural Resource Management, Business Management and Journalism. Approximately 5,000 students are currently enrolled at the Polytechnic. The main objective of the curricula is the practice, promotion and transfer of technology. The Polytechnic of Namibia is located in Windhoek, which is the capital city of Namibia. The student population of the Polytechnic of Namibia come from all regions of Namibia and neighbouring countries (Polytechnic of Namibia, 2004b). The Polytechnic is the second largest post-school training institution in Namibia after the University of Namibia.

The Department of Technical Vocational Education and Training was established in 2001 in order to train vocational instructors to work in vocational training centres and training departments within industry. The courses offered include the National Certificate, National Higher Certificate and National Diploma. Each course runs for a period of 1 year full time, therefore by the time a student completes the Diploma level he/she will have followed 3 years of full time study. The students have all completed a trade certificate to artisan level (apprenticeship) and have a minimum of 2 years' work experience following completion of their

technical training. Some students are employed by private and government institutions and have been given paid study leave to attend the course.

The Polytechnic was selected instead of the University of Namibia because of its close proximity to the city of Windhoek. The Vocational Training Department within the Polytechnic was selected because it is a newly established department and comprised of more adult students when compared to the other departments. The students have more life experience and have chosen a career which involves helping and guiding others. The researcher felt that because of their age, their chosen profession and their life experience they would better be able to articulate their ideas, feeling and opinions on the subject. The total number of students in this department was 40 (in 2004) and 45 (in 2006) full time students with the age range between 22 and 40 years. The students come from all regions of the country.

Sample size and sampling procedures

Of the 40 full time students (in 2004) and 45 full time students (in 2006) in the Technical Vocational Education & Training Department, 23 were selected to participate in this study: 14 to respond to the self-administered questionnaire in 2004 and 9 to participate in the focus group discussion in 2006. Different students were chosen for the two groups.

In terms of selecting the 14 to participate in the self-administered questionnaire, the following procedure was followed: The enrolment register for October 2004

was used and the names of all the students (40) in this department were put in a random sampling table with corresponding names and numbers. Out of these students 14 were selected for the self-administered questionnaire. The same procedure was followed in February 2006 to select the 9 respondents for the focus group discussion. In the case of the latter, the February 2006 enrolment register was used with 45 students in total.

In terms of a focus group discussion the recommended number of people per group is usually 6 to 10 (MacIntosh, 1981), but some researchers have used up to 15 people (Goss and Leinbach, 1996) or as few as 4 (Kitzinger, 1995).

The selection of students for both questionnaires was based on the following characteristics:

- All students who were enrolled as full time students in the Department of Vocational Training (both in October 2004 and February 2006).
- Both men and women were included, both from rural and urban settings, married and unmarried, from all age groups between 22 – 40 years.

Generally, there are no fixed rules for sample size in qualitative research, it is also stressed that richness of the data and analytical capability of the researcher determines the validity and meaningfulness of the qualitative data more than sample size (Patton, 1990).

Thus, despite the fact that due to the small sample size the findings of this sample cannot be taken as representative of the student body at the Polytechnic, they can provide some clues as to student ideas and behaviour as far as the attitudes and use of condoms is concerned.

The data collection procedure and the data collection tools

Both questionnaires were structured in such a way so that they started with less sensitive questions and progressed to more sensitive questions. To maintain confidentiality and spontaneous responses the questions on respondents' characteristics (such as language group, marital status) were asked at the end of the questionnaire.

A letter of permission to conduct the study was granted through the Research Department of the Polytechnic in collaboration with the Head of Department of Vocational Training for both the questionnaire and the focus group discussion. In both cases the respondents were assembled in a vacant classroom where the interview took place. They were told how they were selected and the aim and the purpose of the study was explained. The issue of confidentiality was discussed and they gave their consent for the interview. The whole interview was conducted in approximately one hour for the focus group and 45 minutes for the self-administered questionnaire. As a token of appreciation for their time and willingness all the respondents were given key holders and pens that were donated by Social Marketing Association and National Social Marketing Programme.

Self-administered questionnaire

The study used a self-administered structured questionnaire with open-ended questions as a primary data collection tool (see annexure 1). A self-administered questionnaire was used because it was judged by the researcher that the respondents had a sufficiently high educational level in order to be able to complete the questionnaire themselves. The choice of this method also gave the students more independent space to air their views without fear of repercussions from airing unfavourable opinions or being scared of what the other students might think of them. It was felt students might be more open as they would not be inhibited by talking about a sensitive subject with the interviewer. This also facilitated the issue of capturing more direct quotations.

Structured, open-ended questions were used in the questionnaire which, according to William (1993) allows the respondents to respond freely and in their own words. Further, it is less likely to impose the researcher's point of view on the respondents. Open-ended questions were also used as the research was intended to obtain information that was not previously considered in this specific context and thus aimed to uncover a new way of understanding the issue that was being investigated.

A supportive environment was maintained during the data collection through the following:

- The researcher took the lead to read, explain and clarify the questions from the questionnaire to the respondents.

- The respondents were encouraged to ask questions to ensure their understanding of the questionnaire.
- Where necessary, the researcher answered individual questions and gave guidance to individual inquiries from respondents.

Focus Group Discussion

The researcher used a semi-structured interview guide (see annexure 2) and posed open-ended questions to collect data from the focus group discussion.

The benefits of focus group research include gaining insights into people's shared understandings of everyday life. The main purpose of focus group research is to draw upon respondents' attitudes, feelings, beliefs, experiences and reactions in a way in which would not be feasible using other methods, for example observation, one-to-one interviewing, or questionnaire surveys (Gibbs, 1997).

In addition, a focus group is appropriate to use in a context where the research is exploratory and the issue explored has not been considered previously within a particular context or with the respondents.

The focus group was also used to gain depth of information that may have been limited by the first data collection method due to the self-administered nature of the questionnaire.

Rationale for the selection of chosen data collection tools

The use of the self-administered questionnaire was chosen because it was felt that by respondents completing their own questionnaire in written form the interviewer would be less likely to bias respondents' responses. It would also allow respondents ample time to consider their responses and would provide respondents with a sense of privacy and confidentiality (Wikipedia, 2006). These characteristics of the self-administered questionnaire were considered particularly important for this study because of the sensitive nature of the subject being studied. It was felt that respondents would be less inhibited through the use of this method.

The use of a self-administered questionnaire, however, has its disadvantages. For example, it may not achieve some of the characteristics of other qualitative methods such as individual interviewing, which bring a richness of data, or that of focus groups which illustrates shared understandings. For this reason it was decided to supplement the self-administered questionnaire with a focus group discussion.

The focus group itself has some disadvantages such as that the more articulate individuals may dominate the discussion, that the possible personal bias of the researcher and participants may distort the data, and that some participants may feel inhibited in expressing their opinion (Dixon, J., undated).

The use of the two methods together was thus seen as complementary**.** By using the two methods the researcher aimed to get more comprehensive responses than would be achieved using one method alone. The views that might be concealed with the focus group discussion were supplemented by the self-administered questionnaire and vice versa. Open-ended questions were used in both methods in order to obtain rich, detailed data.

Pilot testing

Pilot testing of the questionnaire was conducted using 5 randomly selected first year Engineering Department students at the Polytechnic. Students in the department were randomly asked to participate in the study, and 5 students volunteered to take part in the pilot study. The study followed the same pattern using a questionnaire as the main study (i.e. the students were grouped and were given the opportunity to fill in the questionnaire individually). The researcher introduced the questionnaire and clarified questions beforehand, and responded to queries and questions during the completion of the questionnaire). The students were recruited outside under a shade where the students gather during their break. These 5 students were not included in the main study. The purpose of the pilot study was to evaluate the research procedures and data collection tools. The following were assessed during the pilot testing:

- The identification of potential problems in the proposed questionnaire.
- The acceptability of the methods used to present the questionnaire.
- Acceptability of the questions asked.

- Willingness of the respondents to answer the questions and collaborate with the study.
- How the tool allowed collection of the needed information and whether those tools were perceived to be reliable to the researcher.
- Sequence and how logical the questions were and the flow of questions (researcher).
- Appropriateness of the wording.

(See pre-test summary sheet, Annexure 3)

At the end of the questionnaire the students were asked to comment verbally to the researcher on the questionnaire itself, how easy they found it to complete, whether any questions were difficult to understand and which questions they found particularly sensitive.

After the pilot testing the questions were rearranged based on the sensitivity of their content. Sensitive questions were moved to the end of the questionnaire. The overall approach was changed. For example, instead of doing the interview outside where distractions such as curious onlookers and passers-by were an issue, it was decided to hold the interview in a private classroom where there were less distractions.

Data Analysis

In the analysis of the results, themes and patterns were identified and organised into coherent categories with sub-categories. The data was organised in such way

as to capture the similarities and differences in people's responses within categories and sub-categories. The results from the two data collection methods were then compared to each other and combined to make a comprehensive result that is outlined in the results section. An independent researcher (Mr H Obida, Senior Lecturer from the Polytechnic of Namibia School of Engineering and Information Technology) assisted in the data analysis, and a comparison and summary was made between the results of both researchers.

Validity

The validity of the research was assured through the following:

- The self-administered questionnaire was anonymous.
- The respondents completed the questionnaire themselves, therefore they were not intimidated by other respondents or the researcher himself.
- The questionnaire was open-ended and avoided 'yes' or 'no' questions to smooth the responses.
- The researcher explained the objectives of the study to the respondents and they gave their verbal consent to participate in the study.
- Respondents were given the opportunity not to participate in the study.
- The research was conducted in a private classroom where respondents could not be overseen or overheard and were free from distractions.
- The focus group discussion was conducted in a non-threatening atmosphere. An ice-breaker was used before commencing the discussion.

- The researcher actively encouraged the quieter respondents to contribute during the focus group, and minimised the influence of the louder respondents by asking them to give some time for others to respond.
- Methods triangulation was used. The questionnaire was complimented with a focus group discussion to ensure the validity of the study. Furthermore, the research was compared with other research through the literature review in order to identify similarities and differences of the findings.
- An independent researcher was used for data coding and analysis in order to maximise research validity. The researcher was given a copy of the raw results and requested to analyse them. Areas of difference were identified and discussed between the two researchers. The results presented incorporate these differences.
- A pilot study was done to ensure the content validity of the questionnaire.
- The researcher was the main interviewer and was able to respond more easily to questions, e.g. when some questions were not clear, and also for probing purposes.

Ethics

The study was designed not to cause any physical or emotional harm and the rights of the respondents were respected at all times, as stipulated in the Declaration of Helsinki II of 1995 (World Medical Association, 2000). Adequate measures were taken towards maintaining ethical standards at all stages.

During the introduction of both the self-administered questionnaire and the focus group the researcher discussed how each participant's confidentiality and (in the case of the focus group) anonymity would be protected and how they, too, needed to respect the confidentiality and anonymity of the group and each group member. Confidentiality and anonymity were assured since the respondents did not have to list their names or student numbers on the questionnaire. An explanation of the purpose of the study was given before information was collected from the respondents. The researcher thanked the respondents for their time, explained why and how they were selected, assured them to feel free to air their views and to respect the other members' views, and that there were no right or wrong answers. Voluntary participation was ensured – they were asked to participate in the study voluntarily and were also allowed to leave at any time. The respondents participated in the interview after giving their full verbal consent They were also assured that the questionnaire and focus group notes would be destroyed after the finalisation of the thesis.

Limitations

Despite all positive initiatives taken to conduct this assessment properly, the findings of the study have a number of limitations.

The subject was sensitive and is not often discussed in public, particularly by certain communities. The discussion of sexual behaviours is often considered a taboo subject in some cultures in Namibia. The sample represents various cultural backgrounds that might be sensitive to the topic.

There was a lapse of approximately eighteen months between the self-administered questionnaire and the focus group discussion. The influence that this had on the results should be noted because of the time lapse. For example, during this period the access to and level of information available to such tertiary-level students had might have increased, pubic access to condoms might also have increased, and perhaps more students might have encountered people living with HIV/AIDS and behavior and perceptions towards condoms and their use could have changed.

In addition, the self-administered questionnaire lacked the in-depth approach of a qualitative data gathering technique because of the fact that it was self-administered rather than being administered by the interviewer and as a consequence, even though the questions were open-ended it was not possible for the researcher to use probing techniques gain more in depth information from the respondents.

The self-administered questionnaire also lacked equal representation of men and women as it was dominated by men (9 males and 5 females). The views from of female students were therefore limited. The scenario was due to the field of study (Vocational and Technical Education) that is currently dominated by men. This situation was balanced by the focus group discussion in which the representation of both sexes was more equal (4 males and 5 females).

A final limitation was that due to the limited number of respondents, it is not possible to generalise the findings of the study.

Chapter 4

RESULTS

The following chapter presents the results of the study, highlighting the key themes and findings that emerged.

This chapter first sets out the characteristics of the respondents and then describes the key results of the research. Results are presented according to key discussion areas that were identified during the study design and used to inform the data collection process. Results from both the data collection methods were analysed and compared, and in most cases findings were found to be slightly different. The differences can be also attributed partly to the time lapse between the administration of the two data collection tools. Findings from both data collection methods have been synthesised into a single set of results, and any differences in the results from the two methods are highlighted.

Characteristics of the respondents

The 14 students that participated in the self-administered questionnaire were all full-time students registered at the Technical Vocational Education & Training Department of the Polytechnic of Namibia. Nine of the 14 students (62%) fell in the age category of 25-29 years and 5 of the 14 students (38%) in the age category of 30-39 years. Nine of the respondents were male and 5 were female. A total of 10 respondents were from the Oshiwambo linguistic group whilst the remaining 4

were from the other language groups (Afrikaans, Otjiherero, Damara/Nama and Angolan).

The 9 students that participated in the focus group discussion in 2006 were from the same department as those who originally participated in the self-administered questionnaire in 2004, but were different respondents. These respondents were in the age group between 24-34 years with 6 Oshiwambo, 2 Rukwangali and 1 Otjiherero speaking. Further the respondents comprised of 5 females and 4 males.

Main findings

Knowledge on protective measures other than condoms

The majority (10) of the respondents who took part in the self-administered questionnaire mentioned *'one faithful partner'* as the first alternative with the following expressions: *'one partner only'*, *'one of the best ways to protect yourself from HIV is stick to one partner or use a condom'*, *'stay with one partner and be faithful to her/him'*. The rest (4) mentioned '*abstinence'* and avoidance of using '*infected objects eg. needles and razors'*.

These results were confirmed in the focus group. In addition, during the focus group discussion respondents mentioned that they would avoid HIV infection by ensuring their partner's status through testing before they would have intercourse. This was illustrated by the following comment: *'I won't have sex until we've both tested negative'*.

Places where respondents obtain their condoms

When asked about the places where they usually get their condoms, '*pharmacies'* was the favoured place mentioned by the majority of the respondents in both data collection methods because of the believed high quality storing system and the consequence on the quality and safety of condoms. The following were expressed regarding pharmacies: '*pharmacy, I believe and trust pharmacy things', 'from the pharmacy, they are kept in a cool places', 'pharmacies are selling medicine', 'it is the safest place', 'the temperature in the pharmacy is air conditioned', ' I respect things from the pharmacy', 'they will not sell you an expiring product'.*

The mention of pharmacies was followed by other places like '*service stations', 'hospitals', 'Dean of Students' office', 'government health institutions'* and '*supermarkets'*. In addition, the focus group mentioned other places such as '*shops', 'shebeens'* and *'bottle stores'*. There was no difference between male and female responses regarding either where the respondents get condoms now or where they want to get them in the future.

Preferred places of availability

For the majority (9) of the respondents to the self-administered questionnaire the preferred places of availability were '*places of entertainment'* that included *'shebeens'* (traditional drinking places in black suburbs), *'bars'* and '*cuca shops'* (traditional unlicensed shops). Their choice was supported/stressed by the following phrases: '*all places where the youth gather and have fun', 'it is where sexual interactions starts', 'where most youth come and get partners when they*

are drunk', 'at the bar is where the youth used to meet and drink and get partners for unsafe/unprotected sex'.

Both the questionnaire and focus group respondents frequently mentioned '*institutions of higher leaning'* at the *'gates of these institutions', 'all departments' 'secretary offices', 'toilets'* and '*showers in the hostels'* in order to make condoms more accessible to the students because students are the most sexually active members of the community: *'students are highly active and the number of pregnancies are high', 'most of the youth stay there'.* Other places that were mentioned include *'pharmacies', 'market places', 'workplaces'* and *'supermarkets'.*

In addition to the above, the focus group suggested that notice boards should be put around stating where the condoms are available.

Use of condoms

All respondents claimed that they have used condoms before, with the exception of one female respondent from the focus group. Only two respondents said that they had used female condoms with their partner.

Favoured brands

The preferred condoms among the respondents (focus group and self-administered questionnaire) were ***SENSE*** followed by (in descending order) ***Cool Ryder, Bare***

Back and ***Rough Ryder***. It is important to note that the majority of the females mentioned they like SENSE.

The reasons for the above likings were given as:

Cool Ryder was chosen because it is '*dotted'*, '*strong'*, *'fits properly'*, and '*not smelly'*. The following expressions were made regarding Cool Ryder: *'it is cool'*, *'cheaper'*, *'good in operation'*, *'very strong'*, *'fits properly' 'does not have a strong smell'* and *'because it does not rupture easily and does not cause any allergy'*.

SENSE was chosen because it has *'a nice smell'* and it is '*strong'*. The following expressions were quoted regarding SENSE condoms; *'the colour makes me enjoy sex more'*, *'strong and nice smell'*, *'girls are mad about the different colours and flavours'*, and *'is of high quality'*. The female respondents favoured this brand.

Bareback was mentioned because it is *'comfortable'* and *'sensitive'*. The following expressions were made about Bareback condoms: *'they are comfortable'*, *'sensitive'*, *'feels like flesh to flesh'*. *(See annexure 4, for the Description of condoms).*

Current level of knowledge regarding condom use

When asked to describe the use of condoms, the majority of respondents highlighted most of the key steps of how to use male condoms as set out by International Disease Control programme (University of British Colombia, 2004):

- Hold the tip
- Put on erected penis
- Roll down
- Penetrate
- After sex remove carefully by holding the base of the condom while penis is still slightly erect (prevent any spilling)
- Discard

Regarding female condoms, none of the respondents from either data collection method (with the exception of 1) had used them and none knew how to use them, as shown by the following expressions: *'I never use it'*, *'it is difficult to use'*, *'I do not have a clue since I do not use it'*. The only respondent that had used the female condom said *'it was difficult to use it'*.

Communication relating to condoms

Taught how to use condoms by:

In the self-administered questionnaire the most frequently mentioned sources of advice on how to use condoms (mentioned by 8 respondents) were the '*instruction leaflets'* in the condom packets followed by '*peer counsellors'*, *'friends'* and '*partners'*. In contrast, in the focus group the majority mentioned the following: '*seen in the TV'*, *'my future my choice programme'*, *'radio'*, *'posters'*, *'boyfriend'*, *'lecturers'*, *'teachers'* and *'parents'*.

Got general information on condoms from:

In the self-administered questionnaire the reported sources of information in descending order were: radio, workplace, television and print. In contrast, the focus group mentioned, in descending order, friends followed by partners, colleagues and family members.

Among the respondents who have heard of HIV/AIDS, the reported sources of information, in descending order, were: radio, workplace, television, print, friends and relatives and health workers.

Understanding of the risks of contracting HIV when using condoms

The majority of respondents in both groups felt that they are ***at risk*** of contracting the HIV virus in their lifetime even when using condoms. This was expressed by the following direct quotations: *'condoms are man made and will not be 100% perfect', 'most people get pregnant while using condoms', 'they can burst (condoms)', 'I asked two different positive friends but both of them claimed that they were infected while using condoms'*. The issue of trust plays a major role in their views. In particular the respondents did not trust government (freely distributed) condoms but had greater trust in socially or commercially marketed condoms. Others lacked trust in their partners, stating that the other partner may purposely tamper with the condom to make it ineffective.

In addition, in the self-administered questionnaire, for those that felt at risk (9), ***incorrect use*** of condoms (bursting of condoms due to low quality) was

mentioned as the major reason they felt at risk while using condoms. A small minority felt that '*if condoms are used correctly and consistently they will protect them from getting the virus'*.

Expected condom safety

The majority of the respondents mentioned that condoms are not 100% safe. They accept that the safety of condoms is due to handling and storage. The also see condom use as a gambling game. The following expressions give evidence to this notion: *'it depends on how lucky you are, you can be having sex using a condom for 10 years without any problem, but one day will be enough to contract the virus if anything happens with the condom or the use thereof*'.

In addition to this, respondents from the self-administered questionnaire mentioned incorrect usage as a major reason, as evidenced by the following quotations: *'they are only safe when you know how to use them correctly', 'although they are 100% they are not safe when they are not used well', 'because when you do not use a condom properly there is a possibility to get the HIV virus'*. They also mentioned bursting, which is supported by the following expressions: *'they are not 100% safe as I say they used to explode', 'I feel safe when using them but sometimes they burst'*. They expected more safety in the bought ones *'expensive ones'* supported by the following expression: *'they are okay, but I enjoy sex when using the expensive ones like Rough Rider and Bare back'*.

Reasons for not using condoms

The reasons given for not using condoms were different between the two groups of students. Respondents from the self-administered questionnaire gave the following reasons:

Male Condoms

The majority (12) of the respondents mentioned the ***rupturing*** of condoms '*they most of the time rupture'* as the major reason for not using them. The other reasons mentioned were ***lack of sensations*** *('one does not feel anything when using condoms'),* ***size*** and ***quality***. The ***quality*** worry was stressed mostly with regard to the freely available condoms that respondents regard as cheap and of low quality.

Female Condoms

The reasons for not using female condoms were more complex. The majority (13) of the respondents were not in favour of using the female condoms at all. The majority (9) of the respondents stated that the female condom makes ***'****lots of noise'****.*** Further they mentioned that the ***appearance*** *('is not eye-catching', 'it looks too big').* The other striking responses related to the appearance were illustrated by the following phrases: '*when I saw the female condom, it seemed like it can slide through into the vagina during sex'*. Some of the respondents mentioned that female condoms are ***not readily available*** *('not always available')* and are ***very expensive*** *('it is very expensive sometimes it is not available in the*

market'). They also mentioned that they are ***not user friendly*** (*'it is a hassle to put it on').*

In contrast, all respondents from the focus group discussion agreed that the only reason for not using both male and female condoms is when both partners are tested.

Situation least likely to use condoms

The majority of the respondents mentioned that they would be least likely to use condoms due to ***marriage*** (*'with my wife', 'when married')* followed by ***steady partner*** *('when I am with someone who is trustworthy', 'I will use condoms only with someone who is not my regular partner').*

In addition, respondents from the self-administered questionnaire mentioned when the ***status*** of the partner is known *('when I know the status of my partner'*) and those from the focus group mentioned when the partner's baby does not show signs of the disease.

Situation most likely to use condoms

When asked about the situation in which they are most likely to use condoms the majority of the respondents from the self-administered questionnaire mentioned circumstances where they suspect that their partner has ***'multiple partners'*** with the following direct quotation: *'when I suspect that my partner has more than one*

partner'. ***Trust*** also plays a role as expressed in the following statement*: 'if I do not trust him'*.

Respondents from both groups mentioned that they would be most likely to use condoms when they ***do not know the partner*** as evidenced by the following: *'if I do not know my partner', 'new partner for a certain period'* or when it is a first meeting *'touch and go', 'when I sleep with a stranger'* or with a ***commercial sex worker*** *'when I sleep with sex workers'*.

Stopping condom use

On the question: 'Under what conditions one would stop using condoms?', most of the respondents in the self-administered questionnaire stated that they would stop *only when they are married*. The issue of stopping the use of condoms once in a *steady relationship* was also very pertinent.

The majority of respondents mentioned trust as the biggest factor when stopping condom use as shown by the following expressions: '*partner seems to be faithful'* and *'when I am with someone who is trustworthy'*. Being with a steady partner was also a major reason as evidenced by the following statements: '*if they stay for some time together*', '*should start not using condoms when you have stayed with her for at least three months', 'with my steady partner', 'I will use condoms only with someone who is not my regular partner'*.

Apart from the above, a majority (11) of the respondents to the self-administered questionnaire stated that the right time to stop using condoms is only when one *'got married'*. Some of the respondents from this group also mentioned that they will only stop when their '*partner tests negative'* for the HIV virus.

Respondents from the focus group mentioned when ***wanting to have a baby***. The other interesting comments from this group were based on knowing you partner better as can be seen with the following expressions: *'first I watch my partner's reaction to things like when I say I do not want to use a condom whether she will agree easily or when I sustain an injury whether she wants to touch my blood easily etc', 'my friend if you meet a new partner first look at her baby of approximately two years and look for signs of HIV/AIDS if he looks healthy then go for her'.*

Reaction when partner refuses to use condoms

All respondents, with the exception of one respondent, from the self-administered questionnaire group said they would refuse sex if the partner refuses to use a condom and will not use any physical force. This was reinforced by the following expressions: *'I will not force her, will just stop everything', 'will try to let her use condom if she totally refuses I also totally refuse', 'I will run away', 'leave her in peace and go to another one who wants to use condoms', 'you take it or you leave it'.*

Having sex with a known HIV positive partner

Most of the respondents from both groups were opposed to the idea of having sex with a positive person stating that condoms '*are not 100% safe*'**.** These views were expressed with the following phrases: *'I won't take that chance, because condoms are not 100% safe', 'what will happen if the condom bursts?', 'I will be afraid thinking that the condom might rupture or something happen and I will get the virus'.*

The other responses from the self-administered questionnaire were based on 'mistrust' because some thought that the positive person would purposely try to infect the healthy person. This was expressed by the respondents as follows: *'somebody will purposely make a hole in the condom to infect you', 'no, because condoms are not 100% safe, condoms can burst, and some of the people are not trustful (honest) maybe he can make a hole on the condom'.*

With regard to sleeping with a positive person a small minority (3) from the self-administered questionnaire said that they would sleep with a positive person. This argument was expressed by the following phrases: '*yes, I will sleep with her, because she is a person like the others', 'I will sleep with her if possible because so far she is still a person like others', 'will sleep with her when one partner is positive and we are married'* . Others said that it depends on their 'own status' meaning that if they themselves are positive then they would sleep with a positive person. This was expressed by the following phrase: *'I will sleep with her if I am positive' 'no, only when I am positive'.*

In the focus group opinions were more evenly divided between those that would and would not sleep with a positive person. Some said that they would have sex with a positive person and mentioned the name of a local well-known woman living with the virus: *'I will sleep with her because she is beautiful, celebrity and has money'*. Others said that they would sleep with a positive person that publicly revealed that she or he is positive because this shows that she is honest and will not do tricky things to infect others.

Rumours about condoms

When asked about bad or good things they have heard or been told about condoms the following surfaced: respondents in the self-administered questionnaire had heard that condoms are ***purposely infected*** with the HIV virus: *'condoms are purposely infected with the HIV virus to make people sick'*; free condoms are of ***poor quality:*** *'condoms distributed by the government are of poor quality, smell bad and also make noise during operations', 'the poor quality ones are only as standby once you run out of the expensive ones', 'sometimes they say the poor quality one should be used as standby once you run out of the expensive ones then you have a contingency plan B', 'ladies refuse to use cheap/free condoms'*; if one uses a condom one ***feels nothing:*** *'I heard that once you got a condom on you will not feel anything', 'some say they do not feel the intensity of sex', 'never feel anything when they use condoms*' and that they cause allergies.

Personal feelings towards condoms

On personal feelings towards condoms, the respondents were equally divided. Approximately half the respondents were in favour of using condoms, saying that condoms are *'good and safe'*. The other positive attributes mentioned by those in favour were quoted as follows: *'condoms are good, they should be continued to protect us against STIs', 'with condoms sex is clean, good feelings and safe sex', 'it is an important device to be applied every time during the performance, good feelings, clean sex process and safe sex'* and *'good for STI protection including HIV/AIDS and also unwanted pregnancies'*. Some respondents were positive only about using 'expensive' condoms: '*enjoy sex when using the expensive ones', 'it's only good when one uses the expensive ones'*.

For those not in favour of using condoms, their logic was based on the ***'value'***, ***'trust'*** and the ***'attributes'*** of some condoms. ***'Trust'*** appeared more consistently, mentioned by 8 respondents from the self-administered questionnaire with the following expressions: *'the manufacturers must increase the quality to avoid damage during operation', 'I do not have any trust in condoms because there will be always human error', 'I feel that by protecting ourselves from HIV we must abstain from sex and not trust the condoms because they are manufactured by people, to be used by people, so we should not trust condoms'*. The respondents indicated that they only trust '***quality condoms***' and one respondent mentioned that condoms only promote sexual activities: '*When new condoms are promoted many people get the wish to experiment with the new product and in turn many people are tempted to practise sexual activities.*

With regard to female condoms only negative comments from both groups were made, with the reasons given being because of its appearance *'not appealing'*, cost *'expensive'*, availability *'not readily available'* and the ease of use *'not user friendly'*.

An interesting point raised in the focus group discussion addressed the perceived purpose of condom use. Half of the respondents claimed that condoms are only used to prevent pregnancies instead of STIs. Half of the male respondents disagreed saying that it is only that the female does not want to face the male partner and instruct him to use a condom, so they are only using pregnancies as a pretext to try and convince them to use condoms.

Drugs and alcohol

Most of the respondents mentioned that drugs and alcohol make students irresponsible and it is then that they tend to indulge in unprotected sex. This was illustrated by the following phrase: *'They enjoy themselves and tend to be irresponsible especially under the influence of alcohol and drugs'*.

Gender issues related to condoms

The majority of respondents from the self-administered questionnaire stated that women do not take any lead when coming to negotiating condom use as illustrated by the following phrases: *'women do not care much when it comes to the use of condoms', 'most people don't have an idea of using condoms,*

especially the ladies, because they are shy about watching their partners putting on condoms', 'women do not care when you use condoms or not', 'the discretion to use or not to use is in the hands of the male counterparts'.

Similarly, the respondents in the focus group mentioned that women only depend on male condoms, as they do not know how to use female condoms. *'Demonstration of male condoms is easy because they use artificial penises'.*

How can the use of condoms be improved?

When asked about how the use of condoms can be improved amongst students the following direct phrases were expressed in the self-administered questionnaire in this regard:

- *'If they are told the danger of the disease'.*
- *'Have more sessions with them where people can talk to them.'*
- *'Bring an HIV positive people to talk to them'.*
- *'Awareness and campaigns must be strong to gather all students to remind them like each week or HIV/AIDS must be covered in as many subjects as possible to remind them always'.*
- **'***HIVAIDS and condom use should be like a subject at this institution and secondary schools'.*
- *'Should ask for volunteer peers to demonstrate both male and female condoms'.*
- *'Female condoms should be promoted.'*

- *'Condoms should be available at places where you cannot be watched while picking up condoms'.*

This chapter has presented the main results of the study. The following chapter discusses and analyses these results, identifying key trends and patterns that emerged during the data analysis.

Chapter 5

DISCUSSION

This chapter analyses and discusses the results of both the data collection methods that were presented in chapter 4. Firstly, the implications of the respondents' characteristics are discussed. Following this, key themes are identified from the findings, and where relevant these are compared to the findings of previous studies as identified in the literature. Each theme is discussed under a separate heading.

These findings offer significant insights into factors that affect initial and consistent condom use. The results also allow one to consider the barriers and reasons that influence poor and inconsistent condom use among the students at The Department of Vocational Training at the Polytechnic of Namibia.

Respondents' Characteristics

This study has focused its aim and objectives on a very specific community, namely a group of first-year students at the Polytechnic of Namibia who were registered in 2003 and 2005.

In this study, the respondents were in the age group between 24-39 years for both the focus group discussion and the self-administered questionnaire. This means that the majority of the respondents are in the sexually active category of 25-39

years. The subjects of this study are mature and although relatively well educated are in a risky age group for the contraction of the HIV virus given the findings of the Ministry of Health and Social Services in Namibia that the transmission of HIV/AIDS in this age group (25-39) is the highest of all age groups (Ministry of Health and Social Services, 2001).

A further significant characteristic of the study sample was the under-representation of females in the self-administered questionnaire. Only 4 out of 14 respondents were female. This was balanced, however, by the focus group discussion where 5 out of 9 respondents were female. The inclusion of more males than females in the study is not necessarily a disadvantage since it allowed the researcher to gain more insight into the male perspective on issues related to condom use. Many recent studies and publications have cited their discontent with HIV/AIDS interventions that exclusively focus on females, as they have limited sexual behaviour bargaining power. Although males are reportedly more promiscuous than females and wield all the sexual behaviour bargaining power, they are commonly ignored when sexual behaviour modification strategies are implemented (World Health Organisation, 2003). According to Warren (2002), in many settings, men still maintain the dominant role in sexual decision-making, including those decisions relating to contraception, consequently it is proposed that the inclusion of mainly men is not a discrediting issue in formulating interventions in this study.

Furthermore, according to Caldwell and Caldwell (2002) extramarital relationships are common in many African societies because of patriarchy and the history of polygamy; consequently, the focus on males is of great importance. Put in other words, in order to focus intervention strategies, albeit in a specific microcosm, on the historically excluded males, one would have to obtain male-biased perceptions and information. It is felt that this study has significantly contributed towards this endeavour.

Current level of knowledge amongst students about the correct use of condoms and their benefits in relation to the prevention of HIV/AIDS (both groups)

The current knowledge of the students interviewed about the male condom and its use is high. This includes the use of condoms not only against protection of HIV/AIDS but also against pregnancies and other STIs. This is supported by other studies; in the Namibian Demographic and Health Survey (Ministry of Health and Social Services, 2000a) it was found that the age group 15-59 years knows about condoms and their use (97.6% women, 99.5 % men). Similarly, findings of a survey conducted by Smarter Sex (undated) among 1,051 students in the age group of 18-24 years in the United States states that the majority of men (87 percent) know how to use a condom correctly.

However, the fact that the respondents have an extensive knowledge on HIV/AIDS including condoms and their use does not necessarily mean that they will use condoms. In a qualitative study conducted among 1,196 Malian

adolescents it was found that although over 90% of sexually active adolescents reported having heard of the HIV virus only a few of them use condoms. It was concluded that information alone is not sufficient to ensure safe sexual behaviour (Konate et al., 2000).

The respondents' knowledge about female condoms and their use is very low or non-existent. The respondents lack sufficient exposure to female condoms, such as being given the opportunity to have a close look at the condoms and to touch or feel them. This explains the non-popularity of the device among the respondents. Similarly, in a study done by Warren (2002) it was found that more than 90% of all female delegates attending an HIV/AIDS workshop in Karoo (South Africa) had never touched a female condom and were surprised that there was 'oil' on the condom.

The students' lack of exposure to the female condom resulted in a lack of competence and familiarity in using the female condom, which in turn led to a perception that the female condom is not user friendly and has an unfavourable appearance.

Sources of information regarding condoms

The most frequently mentioned sources of information on how to use condoms were friends, the peer education group 'My Future My Choice' and the instruction leaflets in condom packets. This suggests that the role of external or mass communication in condom promotion and use is not sufficiently reaching this

target population, and indicates that initiatives targeting condom promotion and use both within the Polytechnic, the community and the media could be strengthened and expanded to address issues of condom use in addition to the general information currently provided.

Mass media (radio, television and newspapers) only seemed to have had an impact on the students in terms of providing them with information on HIV/AIDS but not on condom use.

In support of mass media, a study conducted by Future Group Europe (2003) concluded that mass media advertising can help de-stigmatise condoms, improves the selling environment, and expands the condom market. Retail audit results by an HIV/AIDS Prevention Project in Jakarta, Indonesia (World Health Organisation, 2001) also suggest that the TV campaign has had a strong impact on condom sales. Further a study done by Caldwell and Caldwell (2002*)* concluded that a mass media campaign had a substantial impact at the population level because of its considerable reach.

Current condom use and experience of using condoms

Though the respondents show experience in using male condoms they report practicing inconsistent and selective use of condoms that could place them at risk of HIV transmission. The study revealed there was a tendency against sustained condom use particularly with regular or steady partners.

The above suggests that although knowledge of condoms is high, correct and consistent use is not. Strategies should therefore be sought that might enhance positive experiences and minimise negative experiences of condom use.

Similarly, in a study conducted in sentinel STD clinics in 25 metropolitan areas in the United States amongst 10,037 heterosexual STD clients, among clients with both steady and non-steady partners, constant condom use was more common with the non-steady partners (28% vs. 3%, p less than 0.001) (McCray and Onorato, 1991).

The experience of using female condoms within the respondents was very low. This correlates with the lack of knowledge about female condoms and the perception that they are not user friendly. This unacceptability of the female condom is supported by other research. In a study by Andrzej et al. (2004) with a sample of 108 women in stable relationships it was concluded that: "Across a range of criteria, the female condom was less acceptable than the male condom to most women and their partners".

Conditions influencing the decision to use condoms

A positive attitude prevails among the students for refusing sex without a condom; Thus the respondents are empowered to take their own decisions regardless of what the outcome may be.

According to a qualitative and quantitative study that involved 712 respondents between the age of 21–35 (48.3% female and 57.1% male) in four informal settlements in Windhoek and Okahandja conducted by Edwards et al. (Undated) it was revealed that women are unable to express their own sexual desires or to even discuss sexual matters with their partners because women are taught culturally to show a passive disinterested aloofness in sex to confirm male sexual dominance in relation to female innocence and ignorance.

In a study by Edwards et al. (undated) it was revealed that the wide spread gender based violence creates a culture of fear that inhibits women's ability to express their sexual preferences freely. In the same study it was found that 73.7% of all men and 43.3% of all women thought that a man has a right to have sexual intercourse with his wife without a condom. The study concluded that patriarchal gender relations and gender inequality and the prevailing sexual cultures are the most important factors that intersect and shape the spread of HIV/AIDS in Namibia.

Gender issues, such as power imbalances in sexual relationships interfere with condom use and may prevent women from protecting themselves, even if they are aware that their partner's behaviour may be putting them at risk (The Futures Group International - Ethiopia, 2000).

Self-efficacy

The majority of the respondents felt at risk of contracting HIV. Even when they know how to use condoms they are still hesitant in the use of condoms, and as a consequence believe that there are still chances of contracting the virus even when using condoms.

Further, this study revealed a high-perceived risk of having sex with an HIV positive person even with a condom, which can be attributed to the low trust in condoms. This minimises the likelihood of having sex with a positive person. However, a small minority indicated they would have sex with a known HIV positive person. The reasons given related to the positive person's celebrity, material richness, status in the community and trust. This indicates that despite their high level of knowledge of the risks of contracting HIV and their lack of faith in condoms, the respondents would place themselves at risk for material or other irrational reasons. The respondents are therefore prone to external influences over the stance that they take relating to condom use.

A study conducted by Martin et al. (2000) revealed that self-efficacy to use condoms strongly predicted actual use with a secondary partner. A study by Tao-Yuan (1998) deduced that strong perceived self-efficacy to use a condom, and prior experiences of condom use are associated with condom use intention. Subsequently this should be promoted and maintained by stressing the importance of adherence to positive self-efficacy.

Personal feelings towards condoms and common perceptions that exist about condoms

The students have a negative perception of free condoms that is based on perceived low quality and lack of enhanced attributes (e.g. dots, aroma).

In contrast, the socially marketed and commercial condoms are regarded as of good quality. The majority of the respondents use socially marketed and commercial condoms as a result of their unique anticipated attributes. The preferred condoms are informed by the price, whether sold or freely distributed, and other added features/attributes such as smell, texture, packaging and branding.

Likewise, a study conducted by World Health Organisation (2003) found that colour, smell and texture (ribbed/dotted) play an important role in the choice of condoms.

The findings suggest that the government and other parties involved in distribution of free condoms should change the way they market their condoms to maximise their impact. 'Condoms should not only be a necessity but should be seen as sexy and part of fun' (Henry Kaiser Family Foundations, 2004). Another study conducted by Douglas et al. (1996) ranked Durex best amongst the six tested brands with respect to packaging. Many respondents thought that the packaging of Durex was neat, attractive, clean (probably due to the blue and white combination of colours) and gave a feeling of safety (states *"extra safe"* on the packaging) and were manufactured by an international company. These

characteristics need to be incorporated into the condoms freely supplied by the government of Namibia.

Myths and other negative feelings play a considerable role in respondents' perceptions about condoms. Interestingly, respondents in this study reported a belief that condoms promote sexual activity, however this belief is not borne out by research: in a study by Blake (2003) it was concluded that making condoms available in high schools does not increase sexual activity among students, but does raise their use by those already sexually active. Further in the same study it was found that condom availability was associated with greater condom use among those who were already sexually active - a highly positive result.

A further, worrying myth reported by the students is that condoms are purposely infected with HIV. The reporting of this type of myth by a relatively well-educated group illustrates the strength and persistence of negative myths and rumours associated with condoms.

Generally there appear to be mixed feelings about condoms among the respondents**.** Rumours and beliefs regarding condoms and their use play a significant role in deciding to use condoms or not. A study by Finklestein and Brannick (2000) concluded that those people who have a positive attitude about condoms are more likely to use condoms consistently and thus are less likely to contract HIV. It is clear that one's attitude towards condoms influences whether or not they use a condom to practice safe sex.

The above suggests that interventions aimed at dispelling myths and incorrect perceptions about condoms can improve condom use amongst this group.

Attainment of desired safety

The respondents do not regard condoms as safe and they believe that they stand a chance of contracting HIV even when using condoms. The incorrect use and the consequences thereof have resulted in considering condoms as unsafe. Most condom failure occurs as a result of the behaviours of the user, not due to a faulty device (Family Health International, 2005).

However, most respondents could explain the correct procedure for using a condom; therefore this suggests again a gap between knowledge and practice. The reasons for incorrect use of condoms among this group should therefore be the subject of further study.

Freely accessible condoms were largely regarded as unsafe. This view results from the quality or value attached to purchased things in relation to things given free. The most highly valued condoms were the socially marketed and the commercially sold ones.

In accordance with the results of this study, a study conducted by Meekers (1997) has shown that price is associated with perception of higher quality and that this may discourage persons from obtaining and using products distributed free of

charge and that people have less faith in the quality of free products than in the quality of products they pay for.

Drugs and alcohol

The use of alcohol and drugs prevent condom use, as people are more likely to have risky sexual behaviour when under the influence of these substances. Although this study did not investigate this aspect in any depth, the respondents mentioned it as an important consideration. Some researchers have shown that when people have used drugs and alcohol, they are much less likely to use condoms. Cordis (undated) says that when a person is under the influence of alcohol they will lose the ability to exercise self-control, make good choices and most importantly, be less likely to practice safe sex. Consequently, prevention measures aimed at reducing alcohol/drug abuse should be put in place in order to influence the behaviour of drinking and taking drugs. A further study should be conducted to determine the extent of alcohol/drug use among students as this is an important determinant in spreading HIV among students.

Gender issues related to condoms and their use

The study reveals that women tend to lack power to initiate and negotiate condom use with their partners. Similarly, in a study conducted by Alan Guttmacher Institute (2004), twenty-seven percent of men and 30% of women said that they could not insist on using a condom if their partner did not want to use one. In a study by Finger and Pribila (2001) it was found that more males than females also reported being able to negotiate condom use (88 percent, compared to 82 percent)

and being willing to buy a condom (49 percent, compared to 33 percent). The study revealed that if a partner refuses to use a condom, respondents will simply stop the sexual act without any attempt in negotiating the use of condoms. This concludes there is a lack of negotiation skills among the respondents**.**

In a study by UNICEF (2002) gender relations surfaced as a major problem in rural and peri-urban areas. The discussion of sexual matters among partners seemed to be non-existent and many girls felt they were not in a position to negotiate condom use. Equally, a study of women in a rural and peri-urban setting in KwaZulu-Natal found that most women in marital or permanent relationships accept that their husbands or partners have other sexual partners, but had little power or leverage in the relationship to negotiate safer sex (Vetten and Bhana, 2001).

Similarly, in a study conducted by Alan Guttmacher Institute (2004), 27% of men and 30% of women say that they could not insist on using a condom if their partner did not want to use one. In the same study, more than 40% of respondents agreed with the statement that a young woman who carried a condom in her purse was "bad".

In a study conducted by the National AIDS Control Programme, (1992), it was found that young women felt that they had little power to determine whether or not to use condoms during sexual intercourse and they felt that they had to accept

their male partner's refusal to use condoms and that they were not allowed to make decisions regarding condom use.

Another study concluded that females are not able to initiate condom use with their partner. They cannot request - let alone insist on - using a condom or any other form of protection. If they refuse sex or request condom use, they often risk abuse, as there may be a suspicion of infidelity (AIDS Law Project International, 2001). This suggests that interventions aimed at improving negotiation skills, particularly focusing on women, would be effective.

Women themselves may not want to use condoms because condoms are perceived to be used only in casual relationships and with 'casual' women. Alternatively, women may perceive unprotected sex as a symbolic step towards a more meaningful, long-term relationship, or partners may ask it as proof of commitment to a relationship (Vetten and Bhana, 2001). This reinforces the attitudes revealed by the current study that condoms are most likely to be used with casual relationships and least likely to be used in steady relationships, as mentioned before.

Current and desired level of access to condoms

The students interviewed reported that there is lack of availability of desired condoms at the Polytechnic at strategic places like gates, departments and hostels. This suggests that risky HIV/AIDS behaviour is common practice as it has been shown that when condoms are not at hand, many couples will still have

unprotected sex, regardless of risk. The respondents are only getting their condoms from the office of the Dean of Students and at other public places outside the Polytechnic. Condoms that are readily available (free condoms) at the Polytechnic are standard condoms with fewer desired attributes, and there is a negative perception towards these free condoms.

The students interviewed know the current sources of condoms (where and how they can get them). Similarly, it is reported in the Demographic and Health Survey (Ministry of Health and Social Services, 2000a) that the number of respondents who did not know where to obtain condoms was 11.3% women, 8.0% men. In another survey conducted among 253 respondents (34% male, 65% female) by the Center for Health Program Development and Management (2004), the findings were that most of the respondents (83 percent) knew where to get condoms.

The students interviewed in this study reported that they prefer places where they cannot be seen or where there is nobody that they know when obtaining condoms. This illustrates that an acceptance to strategies of reducing embarrassment around condoms would possibly be embraced.

The respondents prefer condoms from pharmacies because of issues of quality, storage and trust. It has transpired in this study that the way condoms are dispensed contributes to the perceived quality of condoms. In relation to this, in a study conducted by Population Service International (2002) it was found that

adolescents expressed concerns about the quality of condoms sold in different locations. Many believed that condoms sold in cool, air-conditioned pharmacies are better quality—newer and better preserved—than those obtained in outdoor markets, from street vendors, or from friends. Strategies that enable the Polytechnic to approximate a similar environment for the distribution of condoms could therefore be considered.

How can the use of condoms be improved?

The respondents felt that awareness and condom promotion activities that emphasise the signs and symptoms of an HIV positive person could be useful in improving the use of condoms. The use of a person living with HIV/AIDS was strongly stressed.

Most of the respondents suggested greater use of the media for the promotion of condom use. This was explored with the question: How can condom use be improved among students? In response to this most of the students mentioned radio and television as one of the favourite distribution channels for information regarding condoms and their use. Likewise in a study conducted by the Alan Guttmacher Institute (2004), the following was concluded: mass media and the workplace are the main sources of HIV/AIDS information for adolescents. This reinforces the findings of this study, where it was found that the media currently serves to impart information about HIV/AIDS but not condoms and their use.

Perceived barriers that lead to condom non-use.

Besides the respondent's exposure to and experience in using condoms, the consistent use of condoms was hindered by their bad experience of rupturing, diminished sensations and inappropriate sizes of the condoms they used. This also resulted in questioning the quality of the readily available condoms and in mistrust of these condoms. It was reported that previous experience and perceptions about condoms serve as some of the main barriers to the use of condoms. Similarly, a study in 14 countries by the World Health Organization's Global Programme on AIDS (1998) reported that the most important reason people gave for not using condoms was that condoms reduce sexual pleasure.

In conclusion the study revealed that the use of condoms among the target group depends on the following:

- Previous experience in using condoms
- Knowledge about condoms
- Perceived risk of contracting HIV
- Sources of information
- Availability of condoms at desired places
- Attainment of the desired safety
- Unavailability of desired condoms based on the anticipated attributes
- Influence of rumours and beliefs
- Control over the use of condoms

The health belief model

The respondents recognise feel the possibility of contracting the HIV virus and seriousness of the disease but they are hindered by various barriers eg. the inconvenience, unpleasant experience of using condoms, and other negative perceptions towards condoms and their use. The benefits of condoms are well understood but their commitment to use condoms is hampered by their previous unpleasant experiences and their general perceptions towards condoms and their use. Besides these there are several other factors that affect the perceptions about condom use that include social, cultural, environment and peers and norms that influence behaviour change (The Communication Initiative, 2006).

Stages of change model

Relating to the stages of change model (American Family Physician, 2000), the respondents have been through the first stages of this model i.e. pre-contemplation, contemplation and preparation and are currently at the beginning of the action stage. They have yet to move to maintenance and relapse.

The respondents know and believe that HIV/AIDS exists and know about condoms and their use but they are not yet completely ready to change. They have taken action by starting to use and experiment with condoms. Due to their past negative experience/perceptions and other influences they do not yet use condoms consistently. There are no significant signs of maintenance and importantly there

are various signs of relapse (they are practicing selective and interrupted condom use).

Although respondents indicated that they use condoms, the analysis of the study shows that condom use depends on particular situations and the nature of the sexual relations and reflects unequal gender power relationships.

In the following chapter, recommendations are made about steps that might be taken to improve the correct and consistent use of condoms among the target population. Finally, salient points from the study are discussed, conclusions are drawn and recommendations made for further research.

Chapter 6

RECOMMENDATIONS AND CONCLUSIONS

This chapter sets out recommended actions that might be taken to improve the correct and consistent use of condoms among the target population and the general student population at the Polytechnic of Namibia. The recommendations involve actions from agencies both within and outside of the Polytechnic.

Following the recommendations, final conclusions are drawn and recommendations are made for further research.

Recommendations

Based on the findings of the study, a number of recommendations are proposed. Recommendations are made specifically for the Polytechnic Department of Vocational Training, for the Polytechnic as a whole and in general. Recommendations fall into the categories of public advocacy, awareness-raising and service delivery.

Although the study showed that awareness of HIV, condoms and their use is high, awareness-raising remains crucial in order to sustain the current level of knowledge and support safer sex behaviour change.

Condom promotion is, however, only one aspect of a health promotion project to decrease the risk of sexually transmitted diseases – including HIV. Abstinence and sticking to me faithful partner should be strongly promoted as better and safer choices, however given that a significant proportion of students will undertake risky sexual activity, especially under the influence of alcohol, condom promotion is an important health promotion activity.

Condom Promotion

If at all cost-effective, the promotion of free condoms by the Ministry of Health and Social Services should consider research on appropriate packaging of condoms, trendy branding and should address the issue of smell. This change in appearance and consequent perception would have to be supported with active marketing, especially in terms of the quality of the product.

Other issues relating to perceived disadvantages of condoms such as poor quality should be seriously investigated, as it is a recurring theme in this study. Thus again, representatives from the government ministries and other agencies distributing free condoms should be requested by the Polytechnic to conduct extensive condom awareness and training activities to dispel the misconceptions and negative rumours about the freely distributed condoms.

If feasible, a mass media campaign focusing on condom promotion and use should be implemented by the Ministry of Health and Social Services, using radio, television and the press. The Polytechnic of Namibia should implement a

campus-wide media campaign using the Polytechnic newspaper and should investigate the possibility of establishing a Polytechnic radio station. Innovative ways should be sought by the Polytechnic of Namibia to ensure that the audience transforms messages into actions.

Condom availability

To take the next step and begin using condoms, people must find condoms readily available and affordable. As a result, condoms should be available at most places where students meet, e.g. canteens, entrance gates, and receptions of the different faculties, in the hostel and social areas. Further, the Polytechnic should seriously consider the logistics needed for keeping dispensing units e.g. provision of trendy units and in an environment that depicts coolness.

Considering the embarrassment of procuring condoms, an optional suggestion could be the erection of vending machines. The students who experience the highest level of embarrassment are likely to purchase condoms from a vending machine rather than from a known person or any places where people dispense them personally. Further, attention should also be given to the discreet location of these vending machines as poorly placed vending machines may also contribute to embarrassment (eg. vending machines that are placed in public places around the campus where students might be observed by others – e.g. lecturers - while obtaining them).

Desired condom brands

The Department of Vocational Training should make funds available to buy condoms (preferred condoms like Cool Ryder and SENSE) from the social marketing institutions. It is suggested that they should never be given free of charge since the cost benefit will be sacrificed and it will also undermine the principles of social marketing e.g. equating money with quality. This should only be done by reducing the direct cost to the students. This will make it affordable, yet be aligned with students' perception of paying for a quality product. If references regarding product attributes can encourage consistent condom use over a sustained period of time, students should be given the opportunity to access their preferred brand easily.

Gender issues

The desired interventions should be gender-neutral and gender sensitive. Hence, although males are reportedly more promiscuous than females and wield all the sexual behaviour bargaining power, they are commonly ignored when sexual behaviour modification strategies are implemented (World Health Organisation, 2003). Therefore, male students should be considered in all interventions, particularly those related to the use of the female condom so that they can take the lead to initiate use of the female condom. Strategies should also be used to sensitise men to issues of gender related power balance within relationships. The institution should invite influential people or role models to tackle the issue of condom use and negotiation among the female students. People living with AIDS can be used here. Women should be taught negotiation skills to enable them to ask

a sexual partner to use a condom if there is any fear that the partner has been unfaithful. Issues of self-esteem and self-worth should also be addressed, due to the fact that females succumb to the stopping of condom use in order to signify or maintain relationship stability. This should possibly be done as part of gender sensitivity workshops that should be made available by the Polytechnic of Namibia to all students during their first year.

Development of HIV/AIDS related curriculum

The Polytechnic of Namibia should explore the development of the curriculum that will look at increasing students' positive attitudes, sustain confidence and skill development in condom use and prevention of pregnancy, build strong negotiation skills and increase students' perception of their own risk factors for contracting HIV/AIDS.

Beliefs and rumours

Derived from these findings, behaviour change and dispelling of myths must be prioritised amongst the students. Peer educators should be used in a complementary manner, within the student population, to improve students' understanding about condoms and to provide accurate information to students that would dispel the general rumours, myths and misconceptions about condoms and their use. An attempt should be made to decrease social stigma about condoms by addressing cultural norms.

The preventive campaigns should emphasise how to maintain the new behaviour of consistent and correct use of condoms (i.e. student's knowledge is relatively high; they see themselves at risk of contacting the virus and have already started to use condoms though not consistently). Campaigns should concentrate on maintaining and improving the current condom use behaviour and the positive self-efficacy, and should counteract negative peer influences and students' vulnerability to engage in unsafe sexual practices.

The institution should therefore liase with NGOs with behavioural change communication strategies in place, like NaSoMa, or set up its own Behaviour Change Communications strategy, utilising the media, particularly radio, to encourage the students to practice safe sex.

Female condoms

The institution should embark upon interventions that will include training and introduction programs for the female condom that address potential problems, encourage 'practice makes perfect', do not overcomplicate female condom use, incorporate anatomy, sexuality, communication and negotiation, respect women and provide opportunities for control and empowerment. Further the intervention should promote discussion of the female condom between partners and communication messages should be targeted to both men and women.

Supplementary to this the Polytechnic should also explore the viability of providing free female condoms around the campus and at the various departments.

Inclusion of people living with HIV/AIDS in educational activities

Presentations and discussions by people living with HIV/AIDS should be included in HIV prevention programmes as a strategy to target a range of outcomes, such as perceived risk for HIV infection, knowledge related to HIV transmission and prevention, and empathy for people with HIV or AIDS.

One of the goals with this type of intervention is to rid students of any stereotype they may have of the "type" of people who become infected with STDs or HIV by listening to someone with a disease speak about being infected and also to hear the dangers first-hand from someone (just like them) who has contracted the disease.

The reduction of alcohol abuse

Prevention measures aimed at reducing alcohol/drug abuse should be put in place in order to influence the behaviour of drinking and taking drugs. A further study should be conducted to determine the extent of alcohol/drug use among students as this is an important determinant in spreading HIV among students.

The recommendations resulting from this study focus on the following: Condom promotion, gender issues including use of the female condom, development of HIV/AIDS related curriculum, availability of condoms, provision of desired condom brands, overcoming negative beliefs and rumours, overcoming stigma and reducing alcohol misuse among students.

Stages of change model

The stages of change model showed that the respondents are at the stage of action and need to move on to the stage of maintenance, also minimising the incidence of relapse. Interventions should be based on an approach that involves assisting students to successfully avoid any temptations to return to the bad habit (American Family Physician, 2000).

The motivation activities should take into consideration the stage of maintenance in order to maintain the new behaviour. Students need to be reminded of and practise the proper use of condoms including the other mentioned factors (name some) that facilitate the consistent use of condoms. This will assist in avoiding relapse. They should be reminded of the existence of negative perceptions of condoms and their use so that they prepare coping strategies in advance for situations in which they encounter these. They should be made aware that their positive actions are personally worthwhile and meaningful so that they can resist the negative factors and temptations. Students may need to learn to anticipate high-risk situations more effectively and control environmental cues that tempt them to engage in their bad behaviour.

If one maintains the new behaviour long enough, you will reach a point where you will be able to work with your emotions and understand your own behaviour and view it in a new light. In this stage, not only is your bad habit no longer an integral part of your life but also to return to it would seem atypical, abnormal, even weird to you (American Family Physician, 2000).

The health belief model

Related to the health belief model (The Communication Initiative, 2006), the students are in the state of 'inertia' (about to adapt to the new behaviour) where they need a continuous and persistent motivation towards the consistent use of condoms. This can be realised by intensifying health promotion activities and planning the activities at short periodic intervals. The motivating activities should emphasise the success in reducing the risk of HIV by enjoyment of sex with condoms and persisting with their use to reduce the risk of HIV transmission.

Campaign messages should be steeped in the students' social, cultural and historical context, so that people can relate the messages to their own circumstances.

Conclusions

The purpose of this study was to gain a greater understanding of the perceptions and barriers that influence condom use amongst male and female students at the Polytechnic of Namibia.

The study found that although there was a high level of knowledge about HIV/AIDS and condom use, this did not translate into consistent and correct use of condoms. There are indeed pertinent barriers that influence condom use and reasons for non-condom use among students. The study also found that rumours and individual perceptions regarding condoms still play a role in condom-related

decisions. The knowledge and experience of female condoms was found to be very low, and the female condom is extremely unpopular. One of the most significant results was that there is a high level of mistrust and low use of freely available condoms.

Based on the results and findings of this study, any actions to be taken by the Polytechnic of Namibia should emphasise a behavioural change approach. Behaviour change workshops aimed at changing the current behaviour of students towards condoms and their use, especially toward the use of female condoms and the empowerment of women, should be conducted. The Polytechnic should consider subsidising the price of female condoms and take steps to ensure their availability at all places that male condoms are currently available.

The findings of this study should be communicated to institutions and organisations catering for or targeting a similar population, i.e. tertiary level students. A more extended and in-depth study on the knowledge, attitudes and practices relating to condoms and their use should be carried out in order to adopt a more comprehensive approach towards the institutions of higher learning in the country. Specifically, the following areas should be the subject of further study:

- Myths regarding HIV transmission and condoms.
- Perceived disadvantages of condoms, particularly free condoms, such as poor quality.
- How to equate the knowledge about condoms with an increased level of condom use.

- The reasons for incorrect use of condoms among this group.
- Levels of drug and alcohol misuse and strategies for reducing these among students.

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ANNEXURE 1

Perceptions – Survey

Self-administered questionnaire

This survey will assess the perceptions of the students at the Polytechnic of Namibia. The results will be used for the future activities and planning in preventing the spread of HIV/AIDS at the Polytechnic of Namibia

Since this survey is dealing with personal and sensitive issues, you are requested to answer all questions honestly. Your participation is voluntary and you have the right to refuse or to abort the session at any time.

The highest confidentiality will be maintained; the questionnaire is anonymous and no name or addresses are needed.

Code no……

Name of the interviewer……

Perceptions (Condoms and their use)		
No	**Questions**	**Codes**

001	Generally where do you want condoms to be available and why? (name the place that will be more convenient to you) Where…… Why…… …… …… …… …… ……	

002	Are there any chances of contacting the HIV virus when using condoms? (Tick in the appropriate box) Yes or ☐ No ☐ Why…… …… …… …… …… …… ……	

003	How safe do you feel condoms are? …… …… ……	
004	What other ways of protecting yourself from HIV could you use? …… …… …… …… ……	

005	What are your personal feelings towards condoms? ……. ……. …… …… ……	

006	Describe what have you have heard about condoms from your peers (good or bad things) …… …… …… …… …… …… …… ……	

007	When should one consider stopping the use of condoms in a relationship and why? When…… Why…… ……. …… …… Have you followed this belief? Yes/No…… …… ……..	

008	In what situation are you least likely to use condoms? ……. …… …… …… ……..	

009	In what situations are you most likely to use condoms? …… …… …… ……	
010	What will you do if your partner refuses to use a condom? …… …… …… ……	

011	Will you sleep with an HIV positive person with a condom though you know his status and why? …… …… …… …… ……..	

012	Have you ever talked to someone about condoms and their use? Yes/No …… Who? …… …… Why? …… …… ……..	

013	What reason(s) will you have for not using condoms (Male and Female) Male condoms (reasons)……..…… …… …… …… …….. …… Female condoms (reasons)…… …… …… …… …….. ……	

014	Do you know how to use condom in a proper manner? Yes/No If yes: Explain how to put it on (male and female condoms) Male condom …… …… …… …… …… …… …… …… …… ……	

015	Who taught you how to use a condom? Who…… ……	
016	Describe any gender issues relating to condom use in your community …… …… …….. …… …….. ……	

017	How can the use of condoms be improved among students? …… …… …….. …… …… …….. ……	

018	Have you ever use a condom (Tick in the appropriate box) Yes ☐ No ☐	
019	If no please explain why …….. …… …… …….. …… If yes please proceed with the following questions	

020	Which brand of condoms do you like to use and why? Brand (Name of the condoms) …….. Why …….. …….. …… …… …….. ……	

021	Do you have experience with using a female condom? Yes/No. …… …… If yes, describe the experience (good and/or bad things) …… …… …… ……	

022	Describe your experience of using male condoms …… …… …… …… …… …… …… ……	

023	Where do you usually get your condoms from and why? Where…… Why…… …… ……	

Thank you for your time and co-operation. In order to demarcate and for analysis purposes will you please supply us with the following information about your self.

024	Which linguistic groups do you belong to? (Put a cross in the correct box – mark one box only)	English ☐ 1 Afrikaans ☐ 2 Oshiwambo ☐ 3 Damara/Nama ☐ 4 Otjiherero ☐ 5 Lozi ☐ 6 Kwangali ☐ 7 Tswana 8 San ☐ 9 German ☐ 10 Others (specify) 11 ……
025	How old are you now? **(Put a cross in an appropriate box)**	15-18 ☐ 1 19-24 ☐ 2 25-29 ☐ 3 30-39 ☐ 4 40-49 ☐ 5 50 and over 6
026	What is your sex **(Put a cross in an appropriate box)**	Male ☐ 1 Female ☐ 2

ANNEXURE 2

Perceptions – Survey

Interview Guide – Focus Group Discussion

This survey will assess the perceptions of the students at the Polytechnic of Namibia. The results will be used for the future activities and planning in preventing the spread of HIV/AIDS at the Polytechnic of Namibia

Since this survey is dealing with personal and sensitive issues, you are requested to answer all questions honestly. Your participation is voluntary and you have the right to refuse or to abort the session at any time.

The highest confidentiality will be maintained; the questionnaire is anonymous and no name or addresses are needed.

Ice Breaker – Their personality related to animals. Each to choose and tell group. Interviewer to start.

Discussion Questions

1. Generally where do you want condoms to be available and why?
2. Are there any chances of contacting the HIV virus when using condoms?
3. How safe do you feel condoms are?
4. What other ways of protecting yourself from HIV could you use?
5. What are your personal feelings towards condoms?
6. Describe what have you have heard about condoms from your peers (good or bad things)

7. When should one consider stopping the use of condoms in a relationship and why?
8. In what situation are you least likely to use condoms?
9. In what situations are you most likely to use condoms?
10. What will you do if your partner refuses to use a condom?
11. Will you sleep with an HIV positive person with a condom though you know his/her status?
12. Have you ever talked to someone about condoms and their use?
13. What reason(s) will you have for not using condoms (Male and Female)
14. Explain how to put a condom on (male and female condoms)
15. Who taught you how to use a condom?
16. Describe any gender issues relating to condom use in your community
17. Have you ever used a condom?
18. Which brand of condoms do you like to use and why?
19. Do you have experience with using a female condom?
20. Describe your experience of using male condoms
21. Describe your experience of using female condoms
22. Where do you usually get your condoms from and why?
23. How can the use of condoms be improved among students?

Thank you for your time and co-operation. In order to demarcate and for analysis purposes will you please supply us with the following information about your self.

24. Which linguistic groups do you belong to?
25. How old are you now?

ANNEXURE 3

Pre-Test evaluation sheet

Respondents reactions	**Acceptable**	**Not acceptable**	**Suggestions**
Desire of population to participate			
Acceptability of questions			
Clarity of the language used			
Data Collection tools			
Tool provide the information that you need and whether they are reliable			
Procedures for data processing and analysis			
Effectiveness of data quality control			
Ease of data interpretation			

ANNEXURE 4

Cool Ryder: Dotted (with pimples /dots on it), non-coloured and non-flavoured condoms distributed by NaSoMa (National Social Marketing Programme). NaSoMa is a National company financed by he German Development Bank and supported by the Ministry of Health and Social Services, Namibia. Their distribution is nationwide and their head office is located in Windhoek. The cost of the condoms is * N$ 2.00 for the packet of six. NaSoMa's distribution points include pharmacy, shops, Shebeens, service stations, supermarkets, clubs etc.

SENSE: Socially marketed condoms also distributed by NaSoMa. The attributes of the condoms comprise the following: ribbed (round protruding lines), flavoured (mint, banana, and strawberry) and coloured (red, yellow and green). The cost is N$ 3.00 for the packet of three and they are nationally available.

Bare Back and Rough Ryder: Commercially marketed. They are available in most of the local pharmacies and cost around N$ 8 for the packet of six.

*1 N$ = 1 ZAR