SOURCES OF HIV/AIDS INFORMATION USED BY RESIDENTIAL STUDENTS ON THE PIETERMARITZBURG CAMPUS OF THE UNIVERSITY OF NATAL

by

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DEDICATION

This work is dedicated to my mother, Alina Matsenatsi Ntombela, to my father, Albert Bandoyi Ntombela who passed away towards the end of this research, and to my late grandmother, Selina Khoni Ntombela, who made it possible for me to attend primary school.

DECLARATION

I, the undersigned, hereby declare that the entire thesis is my own original work and has not been submitted to any other university for similar or any other degree.

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ABSTRACT

The study was conducted to identify the sources of HIV/AIDS information used by residential university students on the Pietermaritzburg campus of the former University of Natal. HIV/AIDS is one of the scourges that the world is faced with. South Africa, before the 1994 elections, was fighting the obvious enemy, apartheid. The enemy now is the silent killer, HIV/AIDS. The future leaders, the students of this country, need to be challenged to behave in a manner that will bring about a change in their sexual behaviour, so that no students are lost to the AIDS epidemic and neither are the skills that they have acquired.

The research was conducted at the then University of Natal (now known as the University of KwaZulu-Natal). The researcher administered a questionnaire to residential students of Pietermaritzburg campus to determine the sources of HIV/AIDS information used by them. There were four residences included in the study, namely Denison, Malherbe Hall, Petrie Hall and William O'Brien Hall.

The study argues that it is time for the university sector and its partners to take stock of a situation that might quickly outpace the institutions. AIDS has become an everyday reality in the university system. There is a need for a clearer, more forceful definition of roles and responsibilities amongst all the partners in response to the epidemic. Provision of relevant information in an appropriate format needs to be an integral part of the University's response to HIV/AIDS.

The study found that the residential students were generally satisfied with the existing sources of HIV/AIDS information. They did encounter problems in finding information in some of the sources given in the study. The study revealed that some of the sources of HIV/AIDS information were used more than others.

The study suggested that the sources that are most frequently used should be utilised by information providers or university information stakeholders to disseminate information on HIV/AIDS among students. This study should help the University of KwaZulu-Natal to improve the information – related aspect of its HIV/AIDS intervention strategies at a time when the HIV/AIDS epidemic is threatening the academic sphere and the whole community at large.

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ACRONYMS AND ABBREVIATIONS

ACTS Association of Catholic Tertiary Students

AIDS Acquired Immune Deficiency Syndrome

BMR Bureau of Market Research

CC Campus Clinic

CDC Centre for Disease Control

CRS Catholic Relief Services

CTP Committee of Technikon Principals

HIV Human Immunodeficiency Virus

HIVAN HIV/AIDS Networking

HSRC Human Sciences Research Council

IATT Inter-Agency Task Team

LSM Living Standards Measure

MTCT Mother-to-Child Transmission

NGOs Non-Governmental Organizations

OIs Opportunistic Infections

RA Residence Assistant

RAU Rand Afrikaans University

RLO Residence Life Officer

RLP Residence Life Programme

SAUVCA South African Universities' Vice Chancellors' Association

SCC Student Counselling Centre

SCF Student Christian Fellowship

SCO Student Christian Organization

SLDO Student Leadership Development Office

SRC Students Representative Council

UNISA University of South Africa

WHO World Health Organization

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CHAPTER ONE: INTRODUCTION

Chapter one will provide the background to the study. This will be followed by the definitions of key terms, the research problem, justification for the study, purpose, research questions and, finally, the limitations of the study.

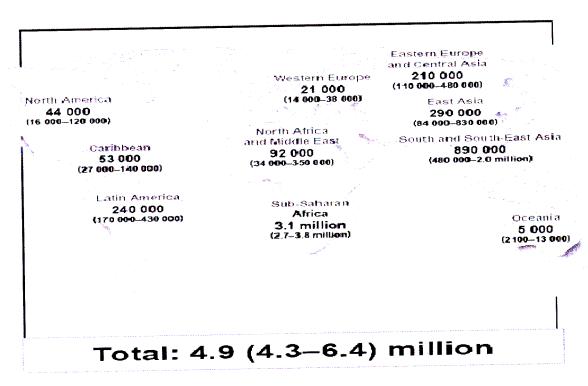
1.1 Background to the study

AIDS or Acquired Immunodeficiency Syndrome was recognized as a global crisis by the mid-1980s. In 1986 the World Health Organization (WHO) estimated that there were 100 000 AIDS cases worldwide and from five to 10 million cases of infection with HIV - the human immunodeficiency virus that causes AIDS. Researchers projected that the annual number of deaths due to AIDS would peak in 2006 at 1.7 million. Instead, three million AIDS deaths were reported for 2001 alone. An estimated total of over 22 million people have already died of AIDS. More than 40 million people are living with HIV. Thus the number of people now living who will die of AIDS exceeds the number of those have already died. The crisis has become a catastrophe. Southern Africa has the highest HIV/AIDS prevalence worldwide (UNAIDS 2002), with estimates of 600 to 1 000 AIDS-related deaths daily in South Africa alone. If the infection trend persists there is evidence that the economic consequences may be daunting for the region (Van Arndt and Lewis 2000; Bell, Devarajan and Gersbach, 2003).

The trend was vividly captured in a comprehensive study on HIV and sexual behaviour among young South Africans (Reproductive Health Research Unit, Medical Research Council, 2004). The study showed HIV prevalence to be comparatively low among 15 - 19 year-olds, at 4.8%. This is not that surprising, given that the mean age at which respondents first reported having sex was 16 years for young men and 17 years for young women. It is in the next age group 20 - 24 year olds - that HIV prevalence soars, reaching 16.5%. In this age group, HIV infections are massively concentrated among women. About one-in-four (24.5%) women surveyed was HIV-positive, compared to one-in-thirteen (7.6%) men. Indeed, more than three-quarters (77%) of young South Africans living with HIV are female, a discrepancy that only begins to decrease among South Africans of 30 years and older. Similar to young people around the world, many young South Africans (62%) who learn they are HIV-positive believed they had faced little or no risk of contracting the virus (Reproductive Health Research Unit, Medical Research Council 2004).

Young women were found to be disproportionately at risk of HIV infection. Sexual aggression is common, with more than one quarter (28%) of the women saying their first sexual experience was unwanted and one in ten (10%) saying they had been forced to have sex. Almost half (49%) the young women who had had sex said they had been pregnant at some point - suggesting that condom use was not the norm. Indeed, fully one-third of those youths who had had sex in the previous 12 months did not use a condom and two-thirds had not used one with their most recent sexual partner (Reproductive Health Research Unit, Medical Research Council, 2004). Map 1 below shows HIV infection rates worldwide in 2004:

Map 1: Estimated number of adults and children newly infected with HIV during 2004



(UNAIDS, 2004)

Africa is depicted in Map 1 as the continent with the highest number of HIV/AIDS cases with Sub-Saharan Africa being by far the most affected region. South Africa continues to have the highest number of people living with HIV in the world. An estimated 5.3 million people were living with HIV at the end of 2003 in South Africa, with 2.9 million of them being women. Unfortunately, there is no sign yet of a decline in the epidemic. Overall, HIV prevalence among pregnant women was 27.9% in 2003, compared with 26.5% in 2002 and 25% the year before that. Latest data suggest occurrences are still increasing in all age groups, except for pregnant

women older than 35 years of age, as Figure One shows. One recent population-based survey has indicated possible shifts towards safer sex among young South Africans (Reproductive Health Research Unit, Medical Research Council, 2004). However, prevalence levels among pregnant women aged 15 – 24 years have continued to rise - from 23.1% in 2001 to 24.3% in 2003. The survey reveals significant regional variation, with prevalence among pregnant women exceeding 30% in three provinces (Free State, Mpumalanga and KwaZulu-Natal, reaching 37.5% in the latter) while ranging from 13% to 17.5% in the Western Cape, Northern Cape and Limpopo. Since 2001, HIV prevalence has risen in all but two provinces (Free State and Gauteng) (Ministry of Health South Africa, 2004).

The incidence of infection is one of the most important indicators of the progression of the epidemic that needs to be monitored, particularly in the more mature stage of the epidemic. Figure One shows the projected number of people who will be expected to be newly infected with HIV each year (Dorrington *et al*, 2004). It is clear that it is the 15-24 year age group, and particularly young women, that contribute to the high numbers of new infections (Dorrington *et al*, 2004). Empowerment of young women is clearly an important strategy if the spread of the epidemic is to be slowed down.

180,000
160,000
140,000
120,000
100,000
80,000
40,000
20,000
20,000
20,000
Tear

— Children <15
Fem 15-24
Male 15-24
Male 25-34

Male 35+

Figure 1 Projected number of people newly infected with HIV

(Dorrington et al., 2004)

Figure One indicates that there is a need to conduct the present study. An additional motivation (see below) is that HIV/AIDS mostly affects people in the 15-24 ages, a group range into which tertiary students fall, especially undergraduate.

More than forty percent of people infected in Sub-Saharan Africa are aged fifteen to twenty four and half of all new infections - over seven thousand daily - occur among young people. This vulnerability is founded in risky sexual behavior and a lack of access to HIV information and preventive services. Despite the generalized nature of the epidemic in countries across Sub-Saharan Africa, many young people in the region still do not know how to protect themselves from HIV. Reports on levels of accurate information among youth about HIV/AIDS are startling: half of the teenage girls in Sub-Saharan Africa do not realize that a healthy-looking person can be living with HIV/AIDS (Forman, 2003).

HIV/AIDS is the fourth largest cause of death, globally, and the leading cause of death in Africa. Despite being so widespread, the epidemic is still in its early stages. Public health officials estimate that the illnesses and deaths to date represent only 10% of the eventual impact. Researchers project that by 2010 HIV/AIDS will reduce average life-expectancy in some southern African countries to around 30 years (World Health Organization, 2004). The United Nations 2004 global report on AIDS, which is being released worldwide, states that South Africa has the largest number of people living with AIDS, at 4, 8 million, and has a prevalence rate of 21, 5%. In Zambia 16, 5% of adults are living with HIV/AIDS, 21, 3% in Namibia, 14,2% in Malawi and 12,2% in Mozambique (World Health Organization, 2004).

Although proportionately more young people suffer from HIV/AIDS, the epidemic among young people remains largely invisible, both to young people themselves and to society as a whole. Young people often carry the HIV virus for years without knowing that they are infected. As a consequence, the epidemic spreads beyond high-risk groups (to the broader population of young people, making it even harder to control). The first high-risk group is viewed as "gays". This is confirmed by a UNAIDS (2002) study which found that more than a third of HIV-infected people in the U.S. (320 000) are living with full-blown AIDS. Men who have sex with men (MSM) still comprise the majority of AIDS cases (42%). Heterosexual injection drug users account for 25% of new cases. Those infected by heterosexual contact with an infected partner make up 33% of new cases (UNAIDS, 2002).

Already, AIDS has become generalized among the youth in almost half of Sub-Saharan Africa. In a generalized HIV epidemic, five percent or more of the population are infected. In nearly 20 Sub-Saharan countries an estimated five percent or more of young women aged 15 - 24 are infected with HIV. As each new generation of young people reaches reproductive age, another wave of infection becomes more likely. As the AIDS epidemic spreads, younger and younger people are becoming exposed to the risk of HIV. Infection spreads to younger age groups as men choose increasingly younger sexual partners. Many men believe, probably correctly, that younger girls are less likely to be infected with HIV, while others hold the mistaken belief that having sex with a virgin can cure AIDS (World Health Organization, 2004).

The prevalence of HIV/AIDS among young people varies widely among regions and countries. Sub-Saharan Africa faces the worst prospects. Although just 10% of the world's youth live in Sub-Saharan Africa, the region contained almost three-quarters of all youth living with HIV/AIDS in 2004—a total of 3.1 million (UNAIDS 2004). South Africa's higher education sector appears to be particularly badly affected by the HIV/AIDS epidemic, with some estimates indicating that infection levels amongst undergraduates might be as high as one in four (SAUVCA, 2002). Given these figures, it would be hard to dispute the South African Universities' Vice Chancellors' Association's (SAUVCA) assertion that "within the next five years, AIDS will become an everyday reality in university" (University of Zululand HIV/AIDS policy, 2001). It can be said that AIDS is now a reality at university campuses. The KwaZulu-Natal Department of Health (1998) confirms that, in Africa, the HIV virus infection is highest in 25-35 year old males and 15-25 year old females. Moore and Rosenthal (1993) and Marcus (2000) say that HIV/AIDS infection occurs among young people for various reasons. Some of these can be summarized as follows:

- Due to their-self centredness and fantasy thoughts, young people believe that they are somehow immune to the disease and they think that it may affect others, but not them.
- The myth of 'love' is identified as a major reason for unsafe sexual behaviour among young people. Thus, according to Moore and Rosenthal (1993), youth, especially girls, believe that having sex with a steady boyfriend or having one partner at a time are ways of avoiding an HIV/AIDS infection.

Many interventions have been designed by non-governmental organizations (NGOs) and the government in the fight against HIV/AIDS and are geared at promoting young people's

participation in ensuring awareness. The model that has been introduced by both sectors is ABC, where the A stands for abstinence, B – for be faithful and C – for condomise (Chilisa, and Bennell 2001: 16). Love-Life (an innovative organization started in September of 1999) uses a youth-teaching youth model to curb the spread of AIDS in South Africa. It believes the three keys to reversing the rate of infection among young people are to get them to delay their first sexual experience, to reduce the number of sexual partners they have and to encourage sexuality within committed relationships (Love-Life,... 2004).

Critics say that messages might work for urban youth, but could be lost on rural youngsters - a point Harrison (Love-Life Chief Executive Director) disputes: "There is no difference in aspiration. Rural young people are very aware and brand-sussed" (Love-Life, 2004).

Government interventions should respond to other complications that are evoked by HIV/AIDS deaths, such as support of immediate family members, especially if the deceased was a breadwinner. Marcus's (1999: 61) study reveals that "experience of non-governmental welfare organizations clearly show the need for welfare and support, and that the demand is growing and will increase. In the face of this reality, welfare is likely to flounder, howsoever it is approached, in the absence of sustained and increase resource inputs, especially from the state". The approaches that the government has in place are more of prevention, awareness and information provision for AIDS victims (which includes financial support for those who have*CD4 counts of less than 200), but the big question is the support that should be provided to the bereaved or affected family members after the infected person has died. For example, provision of emotional and psychological help could be rendered through professionals, 'inter alia' by a minister of religion, HIV/AIDS counsellor, psychologist, or social/health worker.

^{*}HIV adheres itself to CD4 cells, ultimately destroying the cell. This depletion in CD4 cells results in individuals being susceptible to infection. This is a measure of the number of CD4 cells in a specified volume of blood. CD4 cell counts are usually expressed in cells/mm3 (Love-Life, 2004: 4).

In 1998, the South African government's policy with respect to AIDS prevention among young people was introduced. It entails conducting awareness campaigns and government's starting point is based on the premise that HIV causes AIDS. It is also critical for South Africa, as a nation, to note that there is no cure for AIDS. In this regard, promoting awareness and life skills and HIV/AIDS education forms the core approach. According to the Minister of Health, a response to the challenge of developing innovative and effective youth programs, the Youth to Youth project specifically targets tertiary level students and aims to provide lessons on the value of addressing HIV/AIDS through personal effectiveness training" (Tshabalala Msimang, 2002). It is also useful to note that Tshabalala Msimang's viewpoint is controversial, too, as politicians do change their statements. The project's main objective is to generate changes in personal behaviour towards sexual health, sexuality and gender relations amongst students. The reason for the policy's introduction was that young adults are seen as the resources of the country and the future of the country belongs to them. They have the power to change the course of the epidemic, should adequate information be provided to them (World AIDS Campaign UNAIDS 1998: 4).

The toll of the HIV/AIDS epidemic in South Africa continues to mount, as is evident from the increasing numbers of HIV-positive people and a rapid increase in the number of AIDS-related deaths. AIDS-related deaths among the adult population increased from about 9% of adult deaths in 1995/1996 to about 40% of adult deaths in 2000/2001. This is one of the alarming findings of a study conducted by Prof Carel Van Aardt of the Bureau of Market Research (BMR) of the University of South Africa (UNISA) and published in a report entitled "The demographic impact of HIV/AIDS on provinces and Living Standards Measure (LSM) groups in South Africa" (Van Aardt, 2002).

Efforts made by the government and NGOs in South Africa suggest that the ABC model should be adopted for the prevention of HIV/AIDS, especially by the youth, for example Love-Life Programs to which the government has contributed a substantial amount (Department of Health, 2002). However, according to Phupheli (2003: 6), "the stage of teaching people about the ABC of sex is no more essential and people are sick and tired of hearing it". Phupheli suggested that moral regeneration should be the order of the day, a grassroots communication that will foster an understanding and culture among the youth about what is morally accepted, when it comes to issues related to sex.

1.2 Definitions of key terms

In this section key terms used in the study are defined.

1.2.1 AIDS

Acquired Immune Deficiency Syndrome – is the slow dying stage of the person infected by HIV. According to the University of Zululand HIV/AIDS policy (2001:13), AIDS is defined as "a group of different diseases resulting from a breakdown in the body's immune (defence) system. AIDS stands for A- Acquired, it is passed from person to person, it is not inherited, I – Immune, to do with the body's defence against disease, D – Deficiency, not working properly, a breakdown and S – Syndrome, a collection of different diseases".

1.2.2 HIV

Human Immunodeficiency Virus is the virus that leads to AIDS. Although there is controversy about this in South Africa, this study uses the term to denote the virus that leads to AIDS. HIV attacks the immune system's soldiers - the CD4 cells. When the immune system loses too many CD4 cells, the victim is less able to fight off infection and can develop serious opportunistic infections (OIs). A person is diagnosed with AIDS when he or she has less than 200 CD4 cells and/or one of 21 AIDS-defining OIs.

1.2.3 Information

Kaniki (2001: 85) looks at information as something different from knowledge. He defines information as "awareness". Knowledge is information that has been applied (integrated) and used in an appropriate situation. Feather and Sturges (1997:184) define information as "an assemblage of data in comprehensible form capable of communication and use; facts to which a meaning has been attached". This study will adopt Kaniki's definition of information as "awareness" that leads to informed decisions. In the study the focus is on the particular information, necessary to clarify a situation or solve a problem relating to HIV/AIDS.

1.2.4 Sources of information

Sources of information differ with several levels of understanding and are influenced by politico-economic, social and religious factors (Adimorah, 1995). People use different sources

to get information. The most commonly used sources are interpersonal sources such as parents (or other authoritative personalities), friends and relatives; institutional sources such as schools and churches; mass media such as radio, television and newspapers; and others which include audio or video cassettes, films, musical shows, books, posters, museums, libraries, literacy classes, storytellers, village reading rooms, politicians, traditional groups, public talks, clinics, shops and bars (Karlsson, 1995; Legwaila, 1995; Adimorah, 1995).

1.2.5 Use

Abbott (1989) has explored many variations of the meaning of the word "use" in terms of "use of literature". The present study is concerned with the use of sources of HIV/AIDS information by young adults (students). The definition of "use" given in *The Oxford English dictionary* (1989: 351), in common with other definitions of this word, suggests that the thing being "used" is being employed, especially for a profitable purpose, or is being applied or converted to some (especially good or useful) end. The purpose of HIV/AIDS information is to reduce infection, as at present there is no cure. The word "used" in this study will thus mean having read or listened to or seen information on HIV/AIDS in one or more of a variety of sources.

1.2.6 University students

The World Health Organization (WHO) defines the adolescent, in Nduati and Kikai (1997), as someone aged between 15 and 24 years. The Centre for Disease Control (CDC) defines the adolescent as someone between 13 and 19 years, a definition that Nsengiyumva (2000) adopted as well. The American Academy of Paediatrics and Society of Adolescents Medicine define it as 13-31 years (Kunins, 1993). In this study the term adolescents or young people are used interchangeably with young adults or youths and will refer to people within an age range of 18 and 31. In this case they are also university students.

1.3 Research problem

The question of HIV/AIDS among young people or students is a major concern for both adults and youths. In spite of apparent awareness about HIV/AIDS, there is still inadequate use of HIV/AIDS information. An assumption of this study is that a better use of information could lead to a lower rate of infection in the long term. The high rate of infection suggests a need for information appropriate to the situation and appropriately communicated. Little is known about

the sources of information young people use to inform themselves about HIV/AIDS and the usefulness of those sources. Abdool Karim *et al.*, (1991) state that a number of studies have explored knowledge and awareness of HIV/AIDS, indicating that while young people are very much aware of HIV/AIDS, they have not widely adopted safe sexual behaviours in response. It is this apparent lack of knowledge about sources of HIV/AIDS information that the proposed study attempts to address. In doing so, it investigates the sources which the students use.

1.4 Justification for the study

According to the Technical Centre for Agricultural and Rural Cooperation (2004) "40% of health is exchanging information". Silence and denial considerably limit effective communication and information availability about the disease amongst individuals and communities most at risk (Technical Centre for Agricultural and Rural Cooperation, 2004). More effective communication about the disease and greater flows of information are central to the success of AIDS strategies and for reducing vulnerability (Technical Centre for Agricultural and Rural Cooperation, 2004). Young people are aware that there is HIV/AIDS, but the rate of infected young people increases in large numbers, although recent information from the Human Research Social Council (HRSC) has shown that the rate of HIV infections is levelling out (Technical Centre for Agricultural and Rural Cooperation, 2004). The recent United Nations 2004 Global Report also confirms that different aspects of infection are levelling out, as indicated above (HIV prevention in South Africa, 2004). The National Management Game-Levy Annual Report on Labour Relations and Employee Benefits (Mbeki's policy is bad for ANC, 2002:1) predicted that close to 30% of South Africa's workforce will be HIV positive in 2005 and it said that by 2010 one million South Africans will be sick with AIDS and six million will already have died. It is anticipated that the present study will help information providers in developing strategies that will affect the provision of relevant HIV/AIDS information. It is also envisaged that the study will help youths to make use of HIV/AIDS sources of information.

The University of Natal has a responsibility to provide HIV/AIDS prevention, care and support programs for its staff and students and to mitigate the impact of HIV/AIDS on the University. Further, as a pre-eminent academic institution in the epicentre of the HIV pandemic in South Africa, it has the additional responsibility of providing leadership in the response to HIV/AIDS and of undertaking research to enhance and strengthen the broader societal response to HIV/AIDS.

1.5. Purpose

The purpose of the study was to identify the sources of HIV/AIDS information used by residential university students on the Pietermaritzburg campus of the University of Natal.

1.6 Research questions

The study addressed the following research questions:

- Which sources of HIV/AIDS information are available on the Pietermaritzburg campus of the University of Natal?
- Which sources of HIV/AIDS information do the residential students on the Pietermaritzburg campus use?
- What are the barriers to the use of HIV/AIDS information on the Pietermaritzburg campus?
- What kinds of HIV/AIDS information content would students like to have that is not available?
- In what format would students like to receive HIV/AIDS information?
- What recommendations can be made regarding the provision of HIV/AIDS information to students on the Pietermaritzburg campus?

1.7 Limitations of the study

The study was based on South African university students and, because of accessibility, the study was limited to students in residences on the Pietermaritzburg campus of the then University of Natal. Secondly, as the vast majority of students in residences are African, the sample was going to reflect this majority. African students form 80% of the students residing in the Pietermaritzburg campus residences of the former University of Natal. There were four campuses namely: Howard College, the Nelson R Mandela School of Medicine, Edgewood College and Pietermaritzburg, with a total resident student population of 28 78 (Singh, 2005). In Pietermaritzburg the total student population was 7026 (Singh, 2005). The total number of students residing in Pietermaritzburg residences was 1550 (Singh, 2005) and the total number of African students studying on the Pietermaritzburg campus was 2599, which was 37% of the student body (Singh, 2005). Given, as noted, that the vast majority of students in residences are African, the sample comprised a majority of Africans.

1.8 Summary

In this introductory chapter, the background to the study and definitions of terms, research problem, the purpose, the objectives and limitations of the study were given. The background to this study brought out the fact that the HIV/AIDS epidemic challenges the whole world and has left no part of the world untouched. The problem is worldwide, although the greatest concentration of HIV infections and AIDS related deaths is in developing countries, which includes South Africa. The broad context of this study focuses on students in university campus residences and the sources of HIV/AIDS information used by them.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Chapter Two reviews some of the literature on the sources of HIV/AIDS information used by young people, with special focus on residential students. It must be noted however, that most of the literature covers the origins of HIV/AIDS, mother to child transmission (MTCT); political and socio-economic debates; awareness and counselling and medical research around HIV/AIDS. There is little on HIV/AIDS and students in terms of sources of HIV/AIDS information. However, some extrapolation about HIV/AIDS and students has been made from governmental policies and institutional policies. South Africa has SAUVCA on national policies on HIV/AIDS and higher learning and institutions have their own policies extracted from SAUVCA as the main policy. For example, the University of KwaZulu-Natal has HIV/AIDS Networking (HIVAN) as its institutional policy. It is the view of the present researcher that information on HIV/AIDS cannot be separated from communities and institutions because it affects all.

Much research has been done on information provision and information sources, but not much on evaluating the sources of HIV/AIDS information. Nsengiyumva (2000), in her survey, examined information sources and provision on sexuality and sexual health, including HIV/AIDS and information provision for school going-teenagers in Pietermaritzburg. The present study differs from Nsengiyumva's, because it looks not only at the provision of information on sexuality and sexual health issues, but also at HIV/AIDS information sources. The current work targets tertiary students, not secondary school learners. Nduati and Kiai (1997) studied "communicating with adolescents about AIDS in order to be able to develop programs that address change of behaviour in adolescents, as it is important to have an understanding of the culture surrounding sexuality, their sources of information and the factors in the region that influence them". These authors presented the results on the assessment of HIV/AIDS that could be communicated to the youth using quantitative and qualitative search techniques. These techniques are used in the current study as well. Nduati and Kiai's (1997) study suggested that there was a need for evaluation of all programs (sources) to determine which method definitely reduces the incidence of STDs/HIV/AIDS among the youth.

2.2 University students and HIV/AIDS

In her study on HIV/AIDS and Universities in Africa, Kelly (2001: 37) noted that while university students displayed a lack of basic knowledge about both HIV/AIDS and sexually transmitted diseases (STDs), they seemed to be generally aware of the existence of HIV/AIDS and of some facts about its transmission. Yet students do not generally regard themselves as being seriously at risk of HIV infection. Their dominant attitudes towards AIDS are denial, fatalism and an air of invulnerability (Mthembu, 1996). Nevertheless, students acknowledge that HIV/AIDS is a problem on campus. Students feel that there is a strong stigma associated with HIV/AIDS. Even where there may be no overt discrimination against them, HIV-positive individuals may experience subtle forms of prejudice and ostracism (Chetty, 2000: 86). One consequence of this is that it is difficult for those who are willing to do so, to come out publicly about their HIV status. This has contributed to the absence of clearly identified Persons-Living-With-AIDS groups on university campuses.

The University of KwaZulu-Natal does provide the Campus Support Unit, which evolved as one of HIVAN's contributions towards ensuring that staff and students of the University are informed about and engage actively with the HIV epidemic and its implications for society. The core activities of the Unit include student and staff outreach, community outreach, counselling and training, referrals and information dissemination. The policy states "Peer-education programs will continue to inform and support students. Suitable volunteer students will be identified and trained as peer educators. Programs will provide ongoing training and support for peer educators in the execution of their roles" (University of Natal, AIDS-Plan 2002-2004), but little is developed in terms of engaging residential students.

HIVAN does have different programs that are largely targeted at the University community, but it appears that these programs are not reaching the community of students, especially residential ones. HIVAN links academics and students to outside communities through a range of oncampus activities and outreach initiatives, which consider the following goal and research agenda:

A fundamental goal of HIVAN is to ensure that its programs are responsive to community needs and all its research projects are directed towards informing, intervention, treatment and care. HIVAN's research agenda is set in collaboration with a Community Advisory Panel and it has active partnerships with numerous community-based organisations. HIVAN also produces a regular community newsletter, Sondela ('coming closer' in isiZulu), which aims to bridge the gap between the academic, community and NGO sectors and to convey important policy decisions and trends from the public and private sectors to stakeholders at a community level. Demand for Sondela grows with every issue and HIVAN is currently hard-pressed to produce sufficient copies to meet this demand (Centre for HIV/AIDS Networking (HIVAN), 2005).

Students are at the crucial stage of deciding whom they choose as a friend or a lover for the first time in their lives. Some are first-timers in an academic environment which is independent; usually they are from a secure institution, for example, either home or boarding school, where there are strict rules on behaviour. Lear (1997) points out that "besides the overt influence of how friends talk about sex with each other, their personal behaviour affords a subtle influence in the ability to imagine safer sex and not practically engage them in it" (Lear, 1997: 41). Dorrington *et al.* (2001: 5), concur with Lear (1997) when they speculate that life expectancy (without the use of preventative medicine) can be taken as 5-10 years after contracting the HIV virus, it may be deduced that many infections are contracted around the age of 20, the age, more or less, of students during their sojourn in higher education.

Shapiro (2001) quotes Dana (1996) on the influence of cultural variability in the context of HIV/AIDS as being clearly profound, which means considering a population's characteristics including lifestyles and beliefs, as essential references to the creation of action plans (UNESCO, 2000). This is indispensable, if behaviour patterns are to be changed on a long-term basis, a vital condition for slowing down or for stopping the expansion of the epidemic. Often no guidelines are given by universities with respect to birth control and/or protection against sexually transmitted diseases. Abt Associates (2000), which worked with the Health Economics and HIV/AIDS Research Division of the University of Natal to develop toolkits for integrating careful thinking about HIV/AIDS into the strategic thinking of various non-health sectors of the economy, projected that one in four of all under-graduates and one in eight of postgraduates at institutions are infected. The importance of addressing issues of prevention, treatment and care, as well as promoting research at institutions of higher education on the effects and consequences of the pandemic, can no longer be treated as a negligible aside.

The youth or students at university cannot be separated from the youth outside the university. The epidemic takes its toll on all and kills without sympathy. For example, the report presented by Chilisa and Bennell (2001) at the University of Botswana showed that the university community is not a separate entity at all and is very much affected by the expansion of the HIV/AIDS epidemic. They suggested an immediate institutional strategy to combat or to improve the strategy of fighting the AIDS pandemic (in South Africa the intervention has already been introduced by SAUVCA). Chilisa and Bennell (2001) suggested, *interalia*, AIDS support sources or institutions such as the university clinic, the health wellness clinic, the HIV/AIDS policy and university houses for care and support.

Following the public call from the Minister of Education in October 1999, SAUVCA commissioned a survey of current university responses on HIV/AIDS. It emerged that, while there are pockets of expertise in the system, the response to date, in terms of policy, management and programs of HIV/AIDS were uneven across the sector. It is evident that, although some universities have made groundbreaking inroads into research, education and support programs for students and staff who were directly affected by the virus, others were constrained by budgetary and management difficulties (SAUVCA, 2002). These findings highlighted the need for a national sectoral plan, so that existing initiatives are encouraged and resources are made available to assist universities who have had less success in implementing HIV/AIDS programs (Kotecha, 2000). At SAUVCA's workshop in October 2000, all twenty-one universities endorsed the call for the formulation of a national plan, as well as the next step of putting a strategic plan into place.

SAUVCA and the Committee of Technikon Principals (CTP) represent the institutional leaders of higher education in South Africa. Whilst higher education institutions have made invaluable contributions to research on HIV/AIDS and lead the way in advocacy programs, more work needs to be done to put in place institution-wide comprehensive policies and programs for prevention, treatment, care and support. Leaders in the higher education community have therefore committed themselves to putting in place policies, procedures and programs through this initiative, which aims to keep students and staff free from the threat of infection and to ensure that those who are infected or affected are supported and remain active, productive and valued members of the higher education community (Kotecha, 2000).

Therefore the challenge remains with the institutions of higher learning to take the initiative of implementing those programs on HIV/AIDS that have been approved by SAUVCA. According to the present author's observations the University of Natal has diligently considered and implemented most of the approved strategies of SAUVCA to mitigate the pandemic, through HIVAN and other projects which have partnership with it. However, little has been introduced in residence settings, where most students can be reached, as well as to members of the broader university community.

Noting risk factors in tertiary education life, Fowler (2002: 1) raises five crucial issues that should be specially considered on HIV/AIDS interventions in higher education in South Africa. Behaviour of all students worldwide is in one way or the other similar and Fowler's issues are arguably applicable in other contexts as well. The issues are: (a) the changing face of dating, (b) the multi-cultural environment, (c) the need to survive financially, (d) changing sex patterns and (e) peer education (Fowler, 2002:3). Each of these is elaborated on:

> Changing face of dating

Dating has undergone a number of changes. This has happened because of a number of factors. One has to do with the emancipation of women. No longer do they sit at home alone "with the embroidery", but frequent, in pairs or groups and sometimes even singly, clubs, bars and discos. Another has to do with the fact that some students appear to have far more money and time to spend on luxuries and leisure activities than was the case a number of years ago. Furthermore, alcohol and drugs seem to be more freely available and even regarded as the "in" things to use (Fowler, 2002:3).

> Multi-cultural environments

Higher education environments are progressively multi-cultural. Generally this is positive and interesting. It can, however, be problematic where there is no understanding of, and tolerance for, different views, perspectives and cultural norms. Knowledge and understanding of different cultures, cultural norms and pressures has become crucial in the event of successful interventions regarding sexuality training and HIV/AIDS issues (Fowler, 2002).

Need to survive financially

Often students need to survive financially, independent of their parents, whilst studying. Although many students are able to obtain bursaries for further studies, these usually cover class fees only. Due to the economic recession and unemployment, and because many parents are infected and ill, or for other reasons, many parents are unable or unwilling to lend financial support after school. Students are often expected to buy their own books, clothes, and luxuries and some are expected to house and feed themselves at their own expense. A tendency that has currently emerged is that many female (and perhaps male) students are resorting to prostitution to survive and/or afford luxuries otherwise unavailable to them (Fowler, 2002).

Changing sex patterns

To a great extent the silence that has traditionally cloaked sexual orientation, activity, patterns and deviations has been lifted and many of these formerly undeclared and unspoken practices are openly portrayed and tolerated by society. Sex has become a commodity that is made explicit in the media and advertisements (Fowler, 2002). It is associated (and often confused) with love, happiness, popularity, self-esteem and even wealth. Students, usually during the period of higher education, are in the experimental stage of their lives. They experiment with their sexuality, try out various sexual techniques and partners and they test boundaries. Sexual deviations such as cross-dressing, exhibitionism and fetishes are tried. Sexual coercion is also a problem that is becoming more common by the day (Nduati and Kiai, 1997).

Peer education

Although less obvious than during adolescence, peer pressure around the age of 20 is a factor to contend with. This, however, is what makes the strategy of peer education viable as one of a number of interventions in sexuality training. Life skills and peer education programs are delivery systems for prevention and early intervention (Fowler, 2002). Peer education can do much to provide information and to influence attitude changes related to sexuality practices (Fowler, 2002). With the number of youngsters present in a higher education context, identifying, training and monitoring champions as peer educators holds much potential.

What complicates matters somewhat is that higher educational level peer educators are usually selected from amongst second-and third-year students. This factor, together with a relatively high drop-out rate, means that peer educators are often operational for a relatively short period of time, only. Fast turnover of peer educators results in recurrent training and monitoring and may be regarded as costly in terms of time, energy and finances (Love-Life, 2002).

The age group of 19 to 29 years (within which the average student falls) is the one with the highest incidence of HIV/AIDS infection. Between 70% and 80% of new infections occur amongst those aged 15-25 years. Reasons for this relatively high incidence may be attributed to factors unique to this age group in higher education (Fowler, 2002). These factors are peer pressure and high sex drive.

✓ Peer pressure

As noted above, although students are at an age at which they are better able to withstand peer pressure, it is nevertheless still a force to be reckoned with. Often, cultural norms promote sexual activities and this may lead to having sex without condoms, or coercive sex. During this time students establish their own identities and life philosophies – this is natural and is done by means of experimentation; they experiment with, *inter alia*, clothing, hair styles, relationships, drink, drugs and sex. This is also a time of questioning and testing; students question religion, ethics and values. They test rules, regulations, norms and authority. Sometimes they go "too far" and perform indiscriminately with the result that some of these behaviours and experimentations may go wrong. Very often, for example, the use of drink and drugs accompanies irresponsible (amongst others, sexual) behaviour (Fowler, 2002). Lear (1997) suggested normative pressure among friends occurs not just with respect to sexual behaviour. He refers to a constellation of social behaviours that include drinking and smoking. Whether associated with a fraternity or not, the first semester or year at university, according to Lear (1997), is a time to explore through partying, drinking, smoking and sex.

✓ High sex drive

It is a time during which the sex drive is known to be very high (Sherr, 1997). Compounding this is the fact that, often, sexuality education may be minimal or completely absent. In some cultures youngsters are encouraged to prove their masculinity by engaging in multiple sexual

encounters and often they believe that it is their right to have sexual intercourse at will (Fowler, 2002). In other cultures sexual inhibition is the norm and masturbation is frowned upon as a sin or disgrace, whilst no other form of sexual release is advocated.

2.3 Awareness among students of HIV/AIDS

From the researcher's personal observation, university students seem to be generally aware of the existence of HIV/AIDS and to know the basic facts about its transmission. Earlier misconceptions, such as that HIV could be transmitted through saliva or mosquito bites, are no longer very common. They also possess good knowledge of STD symptoms, but not all students seek treatment for these, partly because university health services may not have the necessary reagents or drugs and partly because students fear that their STD status will not remain confidential.

However, according to Kelly (2001), important shortcomings in students' basic knowledge about HIV/AIDS and STDs still remain, for example, that oral contraceptives prevent HIV infection or that the HIV virus can pass through an undamaged condom. Encouragingly, the University of the Western Cape (Kelly, 2001) found that what students learned had an influence on their behaviour. Almost two-thirds of students surveyed stated that they had changed their behaviour because of what they had learned about HIV/AIDS, with significant proportions saying that their changed behaviour now allowed for condom use or for abstinence. Yet there is widespread evidence that students do not generally regard themselves as being seriously at risk of HIV infection. A survey at the University of Ghana found that only 45 percent considered themselves at risk of contracting the disease (UNAIDS, 2001). The SAUVCA investigation found a similar situation in South African universities, with student attitudes manifesting denial, fatalism and an air of invulnerability (Kotecha, 2000).

A preliminary government study conducted by Ndebele, who was the vice-chancellor of the University of Cape Town and SAUVCA chairperson, indicates that 22% of undergraduate university students could be HIV-positive; and this could have risen to 33% by 2005. The same study estimates the infection level among university postgraduates to be 11% and predicted this rising to 21% by 2005. Nearly 25% of technikon undergraduates are estimated to be HIV-positive - rising to about 36% within three years (AIDS in tertiary institutions, 2002: 13). This concurs with Abt Associate's study conducted in 2000 on HIV infections in tertiary education,

where results also indicated that universities were just over 20% and technikons just under 25%. That study projected that in the year 2005 these would increase to just over 30% and 35% respectively (Abt Associates, 2000 b).

According to Kotecha (2000: 19), the 18-to 30-year olds who make up the majority of student enrolments are among "the most capable and promising members of all societies and they represent the future corps of the highly skilled base of any economy of any country". In almost all universities, new students are provided with information on the disease as part of their orientation programme when first they arrive on campus. The orientation may include information on the availability, location and resources of university counselling and health services. In the present author's personal experience as a student, in many instances, Vice Chancellors personally address incoming students on this issue of HIV/AIDS. However, cases are also documented in health source centres or student counselling centres, where HIV/AIDS plays a very insignificant role in student orientation and where it may be omitted entirely, particularly if the designated trainer is not available.

In general, students tend to acknowledge that HIV/AIDS is a problem on campus. The majority of students know somebody who is HIV-positive and know of students or staff who have died of the disease. It is not clear how they come by such definite knowledge, given that so much silence and denial enshroud the existence of the infection. The University of Nairobi suggests that these diagnoses are based more on 'social' than 'clinical' evidence: "You could just observe his physical appearance to know that he had got it or she was such a loose woman, we knew it was a question of time and it (AIDS) would catch on with her" (International Labour Office, 2000).

In the present author's preliminary interview (2002) with the Pietermaritzburg Campus Clinic and Student Counselling Centre (SCC), it was estimated that almost 11% of the university population was affected (some had already died) by the HIV/AIDS pandemic. The Students' Counselling Centre had counselled about 42 (one percent) out of 4298 students on HIV/AIDS related issues. These figures do not mean the campus infection rate is low, because many students are not visiting the Campus Clinic and SCC on issues related to their HIV/AIDS status. The proposed study will identify other sources of information that are used by residential students who represent the large majority of full time students.

Marcus's (2000) study, "Understanding campus client services needs: a study at three Eastern Seaboard Tertiary Institution Clinics", was conducted at three sites, namely the campus clinics at the former Natal Technikon, Durban, University of Durban-Westville (UDW) and the University of Natal, Pietermaritzburg (UNP), respectively. All three institutions offer different services, including HIV/AIDS services. She found that 86% of the students were sexually active. She recommended that campus clinic services need to put a service package together in terms of what they can deliver with regard to HIV/AIDS, focusing especially on the process of identifying and managing the infection, including prevention. Marcus (2002) indicated that "the other arises from the informational division of labour. Generally, information around AIDS is concentrated in working partnerships in which UNAIDS, WHO and UNICEF are the main collaborators" (Marcus, 2002: 48). A number of studies have explored the impact of HIV/AIDS on government, providing invaluable information on the global scale and breadth of the problem (Marcus, 2002: 87).

HIV/AIDS-related services in universities focus mostly on students. Moreover, they are essentially health-centred. They provide mainly public information, together with a modicum of prevention, some health treatment and some counselling. They do not appear to be very comprehensive in either scope or coverage. Although not formally restricted to students, they do not seem to extend adequately to academic and non-academic staff. The main thrust of university information, education and communication efforts in relation to HIV/AIDS tends to occur in the brief period of student orientation at the beginning of the academic year. Incoming students are given some factual information about the disease, STDs and the avoidance of unwanted pregnancies (Marcus, 2000). Information is also provided about available university health services, counselling, and condom availability. In almost all cases, however, these are, one-off presentations, with little or no follow-through. The principal university response to HIV/AIDS takes place through university health services and clinics. These have been giving increased medical attention to the needs of students and staff, undertaking condom distribution, promoting the raising of awareness through posters and other educational materials and, in conjunction with other student service units, extending their capacity to offer counselling. The demand pressures on university medical centres, which tend to be seriously understaffed and under-resourced, have greatly increased in recent years. More cases of STDs and of tuberculosis are being treated than in the past, even though it is acknowledged that many in the university community seek treatment elsewhere for these complaints (Marcus, 2000:7).

University clinics supply condoms, either directly on request or through outlet points in student halls of residence or counselling centres. In some cases, members of anti-AIDS clubs or AIDS societies may distribute condoms directly to students in their rooms. UNAIDS (2002) figures suggests that condom distribution has increased in recent years. Some universities have seen the formation of Student Welfare Societies, AIDS Societies, or Anti-AIDS Clubs, designed to sensitise students to HIV/AIDS issues, provide peer support and promote HIV/AIDS awareness in nearby secondary schools. No investigations have been conducted to evaluate the impact that these non-formal associations may be having. The fortunes of these groups fluctuate greatly, with much depending on the dynamism of a few individuals and support from 'patrons' or 'users'.

The study on HIV/AIDS and students at Rand Afrikaans University (RAU) investigated the current and future demographic impact of HIV/AIDS on South Africa as a whole, the different provinces and the different Living Standards Measure (LSM) groups (Van Aardt, 2002). On a national level it was predicted that HIV/AIDS will reduce the life expectancies of South Africans dramatically and will impact on fertility rates in South Africa, as well as on the size and structure of the South African population, the composition of labour supply in South Africa, the rate of natural increase in the population and future population size outcomes. Whereas the total South African population would have numbered about 61 million in the absence of HIV/AIDS by 2015, the total population is now expected to grow to only about 49 million by 2015 (Van Aardt, 2002).

According to Van Aardt (2002: 13), with regard to the provinces, it should be noted that HIV/AIDS would have a different demographic impact on the various provinces. KwaZulu-Natal, with the highest provincial HIV prevalence, is expected to experience the highest number of annual AIDS-related deaths, followed by the two provinces with the largest populations after KwaZulu-Natal, namely Gauteng and the Eastern Cape. The impact of HIV/AIDS will be particularly high in the age groups between 15 and 49 years. In KwaZulu-Natal about 350 000 people and in Gauteng about 500 000 people in the 15 to 49 year age cohorts will have died due to AIDS-related diseases by 2006. This study at the University of Natal takes place in the context of this statistical profile.

Life expectancies at birth will also be differentially affected by HIV/AIDS in the different provinces. The most significant declines in life expectancy at birth that may be attributed to

HIV/AIDS will occur in KwaZulu-Natal (life expectancy of 33 by 2010) and Mpumalanga (life expectancy of 34 by 2010) (Van Aardt, 2002).

The study also looks at the impact of HIV/AIDS on the different LSM groups. In 2001 about 19% of LSM 1 and about 18% of LSM 2 and LSM 3 members were HIV positive. However, lower HIV rates (5% for LSM 9 and 2, 5% for LSM 10) were found in the higher LSMs in 2001. It was also evident that the bulk of HIV-positive people in the various LSMs in 2001 were still in the early phases of the HIV/AIDS lifecycle. By 2008 HIV prevalence rates in the different LSMs are anticipated to grow by 25% to 30%, on average, and the bulk of the HIV-positive population in the various LSMs will be in the later phases of the HIV/AIDS lifecycle (Van Aardt, 2002).

As noted in Chapter One, the University of Natal has a responsibility to provide HIV/AIDS prevention, care and support programs for its staff and students and to mitigate the impact of HIV/AIDS on the University. Further, as a pre-eminent academic institution in the epicentre of the HIV pandemic in South Africa, it has the additional responsibility of providing leadership in the response to HIV/AIDS and of undertaking research to enhance and strengthen the broader societal response to HIV/AIDS. The HIVAN document presents a catalytic, comprehensive, coordinated plan of action on HIV/AIDS for the University. The plan builds on and co-ordinates AIDS initiatives and programs already under way at the University of Natal (HIVAN, 2001).

2.4 Government interventions in higher education and HIV/AIDS

Over the decade 1990-1999, South Africa's response to HIV/AIDS intensified and diversified, in line with the progression of the epidemic. For the most part, these activities have been located within the governmental health sector and within a range of non-governmental organisations (NGOs) and community-based organisations (CBOs). Activities have focused primarily on prevention and have combined resource and service development, supported by communication activities (HIVAN, 1999).

At national level there have been a variety of communication campaigns located within the Department of Health, as well as within national NGOs. At provincial level activities are considerably more diversified, but are led largely by provincial departments of health, AIDS Training, Information and Counselling Centres (ATICCs), NGOs and CBOs. By 1999 it was apparent that there was a complex array of interventions conducted by diverse organisations and

agencies. However, there was little information readily available regarding the extent of these activities and particularly key aspects such as core objectives, strategies, initiatives and budgets.

Higher Education against HIV/AIDS is South Africa's first nationally co-ordinated programme designed to improve the capacity of higher education institutions in preventing, managing and mitigating the impact of the HIV/AIDS epidemic. In November 2001 the programme was launched. It involved a partnership of three higher education organizations: The Committee of Technikon Principals (CTP), the South African Universities Vice Chancellors' Association (SAUVCA) and the national Department of Education (DoE). Together these institutions comprise more than half a million students and thousands of staff members. According to Kotecha (2000),

South African higher education has been engaged in a process of major transformation since the end of apartheid in 1994. Institutions have been changing at a rapid pace in terms of who their students are, where they come from, what they study, what modalities they study through, what higher education costs and what their new mission is in a post-apartheid dispensation. Needless to say, the historical lines of cleavage between them still shape the higher education landscape, but much has been done in terms of policy and organization to overcome such boundaries. Though legally and operationally part of a single system, higher education institutions vary widely in terms of their management capacity, their resources, their research capability and their institutional cultures. All of these have a direct bearing on the way in which they have responded to the AIDS epidemic.

Students and staff at universities have, in fact, been responding to the AIDS epidemic since the late 1980s (Perkel and Strebel, 1989). Small-scale but important initiatives are reflected in work such as that Perkel and Strebel (1991). There may well be other such examples, which have not yet come to light. A decade later, South African institutions are now hosts to recognized centres of research and practice in the fight against AIDS. The University of the Free State has moved to establish an AIDS Centre and the University of Natal has an international reputation for research in paediatric AIDS and other developments. These developments include the recently opened Doris Duke Medical Research Institute at the Nelson R. Mandela School of Medicine at the University of KwaZulu-Natal. The University of Durban-Westville had an intensive counselling and support programme. The Medical University of Southern Africa (Medusa) is a

recognized centre of vaccine research. The University of Pretoria hosts a Centre for the Study of AIDS in Southern Africa and the University of the Witwatersrand is home to the AIDS Law Project. The University of Zululand is host to the Dramaid Project, which has developed innovative approaches to AIDS education using drama and performance.

All these initiatives have put higher education under the spotlight, but there are many problems too. In some respects South African institutions have advanced quickly enough to set important precedents, whilst in other respects they are not moving at all. By mid-2000 it was clear that the picture across the South African higher education system had some defining features:

- ❖ Responses to HIV/AIDS are often driven by individuals and small groupings which have often exerted huge effort
- Responses to HIV/AIDS are typically focused on prevention strategies and programs
- ❖ Responses to HIV/AIDS take the form, in many instances, of *ad hoc* activities with no backing by an institutional framework or plan
- ❖ There is a radically uneven spread across the sector while some institutions have highly developed policies and programs, others have neither in place
- ❖ The context in which these responses occur is weakened by the absence of a national policy or guidelines that are specific to higher education
- ❖ National government had a temporary support mechanism in terms of the ABC models in place which have yielded no results
- ❖ There are no incentives to make HIV/AIDS an institutional priority or to keep it as such
- ❖ In the absence of available models, some institutions are struggling to define their response to HIV/AIDS because of problems of capacity, resources or a lack of leadership (Kotecha, 2000: SAUVCA, 2002).

Understanding and planning for HIV/AIDS in South Africa is of increasing importance, in particular to a subgroup of the South African population, its youth. This is especially significant, as this is the cohort with the fastest growing rate of HIV infection (Whiteside and Sunter 2000: 32). Moreover, the negative implications on social and economic progress of a high death rate in this age category on social and economic progress cannot be overstated. The growing incidence of HIV infection amongst students at tertiary institutions in South Africa is similarly highlighted as a cause for concern. A limited number of studies of HIV/AIDS have been undertaken among

students at tertiary institutions in South Africa, but only one of these (the University of Durban-Westville study) has attempted to establish the rate of HIV infection at a tertiary institution (Stremlau and Nkosi, 2001).

According to Godwin (1998), most HIV/AIDS programs, whether government or NGOs have tended to regard HIV/AIDS as an isolated, separate issue, which must be dealt with externally, or in addition to other health and social developments programs and not as an integral part of the development challenge. Mbeki set alarm bells ringing by resisting the use of the drug AZT, especially in the prevention of mother-to-child transmission (MTCT), on the grounds of its supposed toxicity (Brink, 2000).

The Botswana Government may soon test all prospective students for HIV/AIDS, as reported in the "All Africa-Botswana, Gazette". Addressing first-year students of the University of Botswana, career guidance officers from the Ministry of Education said the government was considering compulsory testing of students. The newspaper reported that the overwhelming response of students to the proposed mass testing was negative. A committee member of the National AIDS Co-ordinating Agency, Rupert Hambira, said that the compulsory testing of students was inhuman: 'The government is already failing to help the current large number of people who are infected; what more with the students?" (All Africa-Botswana, Gazette 2001).

Kelly, (2001: 27) points to the vast amount that the South African Government invests in the education of the country and ultimately loses because of the high number of deaths from HIV/AIDS related diseases of students and graduates before they have repaid their university loans.

2.5 Tertiary students and HIV/AIDS prevention programs

The majority of previous studies of HIV/AIDS at tertiary institutions focused on the knowledge, awareness and practices of students. All of the studies indicated that students were generally knowledgeable about the causes and modes of transmission of HIV/AIDS. They were able to specify the activities that constitute high-risk behaviour, as well as the best ways to protect themselves from HIV infection (Barnes 1999: 17; Friedland *et al.*, 1991: 151; Kaya and Kau 1994: 11-12; Kelly 2001: 19; Marcus 2001: 3-4; Smith *et al.*, 1998: 283-285). They also tended to recognise HIV/AIDS as a problem on campus (Barnes 1999: 19; Kelly 2001: 19).

Student awareness and knowledge of HIV/AIDS did not always correspond with their sexual behaviour, however. Previous studies found that a large number of students are sexually active and considered university studies to be concurrent with this activity. They showed a tendency towards indulging in casual sex, without necessarily practising safe sex by using condoms. There seemed to be negligent attitude towards using condoms. Students tended to be more concerned about falling pregnant than becoming infected with HIV (Marcus 2001: 8-9). Alcohol use and peer pressure were two important factors impacting on the tendency towards casual sex, combined with the absence of safe sex practices (Barnes 1999: 23-29; Kaya and Kau 1994: 13; Marcus 2001: 4-10; Smith *et al.*, 1998: 285-288).

Students generally did not consider themselves to be at serious risk of contracting HIV/AIDS (Rosenthal, 1995). They believe that students who are indulging in drugs and promiscuity are more likely to spread the disease, that is, they believed that drug users, male homosexuals, uneducated people, rural people, African people and residence students are more likely to be infected. Related to this belief is the tendency to stigmatise and avoid those who are known to be HIV positive (Barnes 1999: 19-23; Kelly 2001: 19-20; Marcus 2001: 10-16; Smith *et al.*, 1998: 288).

Holland et al. (1990) and Rosenthal (1995) concur that young people are less likely to use condoms with regular rather than casual partners. Young women are more likely than young men to insist on condom usage. Gardner, Millstein, and Wilcox (1990) argue that there is an urgent need for prevention efforts among high-risk youth. Prevention campaigns must do more than merely providing health information. Green (1994: 1) stated "AIDS is about sex and death together and is loaded with the combined weight of their significance for us". One of the most deeply entrenched misconceptions about HIV/AIDS among students is one they share with the rest of society. Most Nigerians, for example, believe AIDS to be a disease of commercial sex workers that does not threaten university students because they are too knowledgeable, intelligent and hygienic, making safe sex precautions and condom use unnecessary (Kotecha, 2000). Given the high exchange rate of sex partners on campuses and the widespread practice of older men seeking sex among female students, the risks are very serious and growing continuously. The health of students is also endangered when, fearful that they have contracted an STD, they engage in the common practice of going to a pharmacy for antibiotics without seeing a doctor first. The staff working at these shops are rarely trained in STD management, yet often prescribes treatment (Kotecha, 2000). Marcus notes a similar problem in the KwaZuluNatal situation, that after a visit to a pharmacist or some such outlet, students, the very next day, believing themselves cured, may engage in high-risk sexual behaviour all over again (Marcus, 2001: 8).

Students in Uganda (ILO, 2001: 3) have requested that condoms be supplied to them in schools because drug shop operators and other distribution operators harass them. Student leaders from five Kampala secondary schools said many of them resort to unprotected sex because there are no teenage-friendly sources of condoms.

According to Kaya (1994) AIDS educational campaigns are necessary to reduce the spread of HIV infection by changing the attitudes and practices related to high-risk behaviour, but, before such programs are implemented, needs assessments should be conducted. This involves assessing the existing knowledge, attitudes and sexual practices of the specific risk group. In Kaya's study the risk group were the students at the then University of Bophuthatswana. The majority of the respondents showed a general knowledge about AIDS in terms of its main symptoms, common modes of transmission and the non-availability of a cure. They did, however, express the need for more information about AIDS. Lack of sufficient knowledge was shown by their negative attitudes towards those who have already contracted the diseases and the number of sexual partners that they had. Furthermore, despite the realization of the necessity of using condoms during sexual intercourse, the majority of them did not use condoms. The study also revealed the minimal role that parents, teachers and lecturers played in the dissemination of information about AIDS. The findings called for more AIDS educational programs, to clear up misconceptions, and for parents, schools and universities to become actively involved in the dissemination of information about AIDS.

The survey conducted by Cok, Gray and Ersever (2001) surveyed over 500 university students in Ankara, Turkey, to determine their knowledge, attitudes and perceptions of risk related to HIV/AIDS. Specific sexual behaviours and sexual communication behaviours of the population were assessed. Respondents reported a moderate level of knowledge about the transmission, symptomology and prevention of the disease. Significant misconceptions regarding HIV/AIDS were found. Students' attitudes toward people with HIV/AIDS were contradictory, showing both accepting and unaccepting views depending, in part, on their personal involvement with an HIV positive person. One third of the participants reported sexual activity. The same students described limited safer sexual behaviour. Regardless of sexual activity, students' perceptions of

their personal risk were low. Recommendations were made concerning HIV/AIDS education for Turkish university students, including funding for volunteer organizations, which were currently in place and training formats for media personnel.

Kelly (2001:5) showed that the most striking feature of the African university response to HIV/AIDS is what can be described as the awe-inspiring silence that surrounds the disease at the institutional, academic and personal levels. Notwithstanding some qualifications, for all practical purpose both individuals and institutions conduct themselves as if the disease does not exist. The Campus Clinic at the University of Natal (Pietermaritzburg) confirms that House Committee (HC) representatives do come to collect condoms for residence students, but the use of condoms in some cases is low and this is indicated by the increased rate of unsafe sex practices and by the high incidence of visits to the clinic for abortions and unwanted pregnancies (Marcus 1999: 7).

At least one institution in Kenya, the Jomo Kenyatta University, has witnessed a concomitant decrease in STDs, including HIV/AIDS and student pregnancies because of campus based awareness programs. None of the case studies speak of female condoms being made available, so the assumption is that the supply and distribution has been confined to male condoms, although in South Africa the government has provided free "femidoms". According to the present author's personal observation, as much as the University of Natal, Pietermaritzburg has prioritised issues on HIV/AIDS little has been done in providing femidoms to campus residences, which would help female students to protect themselves from men who do not want to use condoms. As UNAIDS (2004:2) points out "Even though girls and women are highly vulnerable to HIV infection, they know less than males about HIV/AIDS and how it is transmitted".

Data from UNICEF surveys conducted in South-East Asia between 1998 and 2003 on condom use among 15-20 year old youths revealed that, globally, more than 80% of young women did not have 'sufficient' knowledge of HIV/AIDS. Many had no idea how HIV/AIDS is transmitted and little or no information on protection methods. In South-East Asia, only 13% of young women were able to correctly identify two prevention methods (using condoms and limiting sex to one faithful, uninfected partner) and three common misconceptions about HIV/AIDS. In addition, many young women did not know that a healthy-looking person can be infected with HIV (UNAIDS, 2004).

2.6 Higher education against HIV/AIDS

Gourley (1999) argues that many Commonwealth universities face grim realities daily. Staff and students are falling sick and dying, with concomitant reductions in income and productivity, on the one hand, and rising costs on the other. She asks how universities, already facing severe budgetary problems, deal with it and emphasises that to deal with it is a must (Gourley, 1999: 6). She points to the role of universities as opinion-formers within society, their pivotal position in the creation and dissemination of knowledge and the fostering of innovation. Their contribution to their nation's human resource capacity marks them out as an essential site for the establishment of national, regional and global responses to the scourge of HIV/AIDS.

According to HIVAN (2004) "the unprecedented and exceptional imperative that the HIV/AIDS epidemic imposes, threatening and distorting every aspect of social existence as it does, means that the very survival of UKZN residents (students) hinges on the HIVAN initiative that has the vision to steward the UKZN community through to a post-AIDS future" (HIVAN, 2004: 3). In taking that challenge to confront HIV/AIDS, the HIVAN is not doing enough, as it transpires in this study that majority of students did not know about HIVAN as the structure put in place to educate and conduct research for the whole institution. It is not without resources, as it is suggested in the present study that some of sources that should be more effective, in terms of providing HIV/AIDS information, are not utilised to the utmost (HIVAN, 2004).

2.7 Sources of HIV/AIDS information

Coleman and Roker (1998:15) stated that popular culture sources, such as magazines and television shows, may be perceived to offer information, which is "cool" and "relevant", not pushing a point of view alien to the young person. Shapiro (2001:49) stresses that the media has had a significant impact on public awareness and perception of HIV and AIDS. A great deal of valuable information has been disseminated in the media, but there have also been distortions and sensationalist reports, many of which have left lasting misconceptions. There are also problems, as noted, with the receipt and implementation of these messages.

In other parts of the world, for example, the Kazakhstan survey of 400 Almaty University students, it was found that the main source of information about sexually transmitted infections (STIs) students was the mass media (Zhusupov, 2000:3). The second source of the information in terms of influence was informal dialogue with the general population. The present author's

point of view is that it is astonishing how insignificant the role parents and educational institutions play in informing the youth about safe sexual behaviour. The findings of the Kazakhstan survey are presented in Table 1.

TABLE 1: Sources of information about safe sex and STI's

| Sources | Men | | Women | |
|---------------------------|-------|-------|-------|-------|
| | Cases | % | Cases | 0/0 |
| TV and radio | 107 | 53,5 | 137 | 68,5 |
| Press | 123 | 61,5 | 138 | 69,0 |
| Peers | 102 | 51,0 | 98 | 49,0 |
| Sexual partners | 52 | 26,0 | 37 | 18,5 |
| Parents/relatives | 67 | 33,5 | 42 | 21,0 |
| VD dispensary | 9 | 4,5 | 9 | 4,5 |
| Special literature | 7 | 3,5 | 11 | 5,5 |
| School/college/university | | | 14 | 7,0 |
| Others | 1 | 0,5 | 5 | 2,5 |
| TOTAL | 300 | 237,3 | 200 | 245,5 |

(Zhusupov, 2000:5)

The survey of Almaty students shows that the purchase of condoms, by virtue of tradition and education, remains a man's prerogative; among the unmarried, sexually active young people, men buy condoms three times more often than women (92 % and 30 %, respectively). The requirement for the woman to ensure the safety of sexual contacts by means of condoms is not always justified, as the condom is a man's means of preventive control, and women frequently have limited opportunities to influence their partners' behaviour (Zhusupov, 2000: 3). Therefore, preventive measures directed at reducing the danger of sexual contacts should be taken into account in studying the mutual relations between the sexes. The study also revealed

that the mass media is one of the effective sources for distributing information on HIV/AIDS or sexual information to students. This concurs with UNAIDS (1999) findings that "more than ninety percent (90%) of the young population of the Republic of Kazakhstan are informed about existence of the STIs though radio and television". Unfortunately, the theme of sexual education in Kazakhstan's students did not become a subject of public debate and there has been no research on the influence of education in the area of HIV infection and sexual health on the sexual behaviour of young people (Zhusupov, 2000).

What follows is a discussion of various sources of HIV/AIDS information.

2.7.1 Books

The Sourcebook of HIV/AIDS Prevention Programs, issued by the Global Health Council (Global Health Council, 2003), aims to support efforts by countries to strengthen the role of the education sector in the prevention of HIV/AIDS. It was developed in response to numerous requests for a simple forum to help countries share their practical experiences of designing and implementing programs that are targeted at school-age children. The Sourcebook seeks to fulfil the role of providing concise summaries of programs, using a standard format that highlights the main elements of the programs and makes it easier to compare the programs with each other. All the programs were benchmarked against criteria that the Joint United Nations Programme on HIV/AIDS (UNAIDS) Inter-Agency Task Team (IATT) for Education considers to be sound programming practice. This provides a framework for exploring the strengths and weaknesses of the program design, pending more conclusive evaluation. The Sourcebook has been developed rapidly to fill an important gap in information on programming within the education sector. It is a work in progress, and the content will be expanded and refined in use (Global Health Council, 2003).

2.7.2 Billboards

The medium of billboards are used for advertisements and placed upon structures along major transport routes and at places where people converge. They rely on colour, pictures and a few words to convey a message. According to the Outdoor Advertising Association of South Africa (2001) research undertaken by the University of Alberta found that the effectiveness of a billboard was dependent upon the message style, number of messages, linkage of the product

and service being displayed to a brand, the use of illustrations, legibility and copy length and the mixing of media for greater impact. Similar research undertaken by AKA Instant Energy Food indicated that the use of outdoor advertising is effective in increasing brand awareness (Community Agency for Social Enquiry, 2000:3). What makes the use of outdoor media effective in achieving brand awareness is the subliminal manner in which the media communicates. Such awareness is accentuated when the creative execution of the message is bright, bold and visually stimulating. Where outdoor advertising is utilised to supplement television it can sustain awareness levels initially established by television (Community Agency for Social Enquiry, 2000: 3).

Love-Life, which uses billboards for messages, relies upon public service announcements on television, television programs and radio spots. Their use of the billboard advertising takes on an added significance in generating brand awareness and getting its message across with the objective of getting youth to "talk about it" (Love-Life. 2002, 5). Through the use of billboards, Love-Life aims to keep the messages to a minimum and to grab and sustain the attention of its target audience and others interacting with the messages. However the messages are expanded upon with the use of other media. For example Love-Life advertisements on taxis encouraged the viewer to call the Thethajunction which is a combination of the Nguni word for talk and the English word for coming together. The advertisements are intended to reinforce the notion of "talk about it" as indicated above, for free sexual health information (Love-Life. 2002, 7).

2.7.3 Radio

Juma (2001), in his study on "Coping with HIV/AIDS in Education", pointed out that the most frequently used source of information about HIV/AIDS for the youth was the radio and television, which were used by 16.4% of respondents, followed by newspaper 14.5%, school 14%, friends /schoolmates 10.8%, clinics and hospitals 10.1%, churches and others less than 10% (Juma, 2001: 8). Youth Radio Station was introduced at the University of Namibia in 2001, under the auspices of the UN. It uses music, jingles, drama and talk shows as a means of mainstreaming HIV/AIDS issues among the youth. It aims to entertain and educate and a survey revealed that it is the most popular radio programme for young people. Seventy-eight percent (78%) of young people in the 16-24 age bracket and 98% of the students on campus listen to it. Incidentally, it promotes and enhances the image of the university and provides a range of practical training, skills and experience that are of value to graduates wanting to work

in the broadcasting and communication industries (Katjavivi and Otaala, 2003). More programs targeting youth should be introduced. The South African government is engaged in partnership with Love-Life to carry out some of the projects including educational programs on HIV/AIDS awareness.

Love-Life (2002) projects revealed that in a continent where the divide between rural and urban is wider, radio becomes, and remains, the cheapest and most accessible means of information dissemination. There can be no doubt that radio plays an important role in Africa. Radio stations are an important source of information and entertainment for many millions of people, all over the world. Most important is information that will have a direct impact on people's quality of life and on their levels of participation in dealing with the scourge of HIV/AIDS. Furthermore, this participation will have implications for health and development structures, as well as for civil society organizations that are so vital if a better life for all is to be realized. The delivery of current and humanitarian information to those in need is very important. For many persons living with HIV or AIDS, access to timely, correct information about treatment advances, drug interventions and other important issues relating to HIV infection and AIDS, could literally mean the difference between life and death. For various reasons, which are outlined below, receiving the information does not necessarily lead to behaviour modification. To facilitate such delivery of information, audio footage is produced which carry messages about HIV/AIDS (Love-Life, 2002). Love-Life utilises the mass media such as the South African Broadcasting Corporation (SABC) to communicate its messages on HIV/AIDS and radio stations and television channels are used to reach a mass audience.

The SABC is South Africa's public broadcaster, with a network of nineteen radio stations. These stations have a collective listenership of 20 834 million (SABC, 2003) within a national population of over 40.6 million (Census Statistics on South Africa, 2004). UKHOZI FM, as part of this network and with the social responsibility mandate of Love-Life, provides some of the programs on HIV/AIDS, commands a listenership of around 4,6 million listeners, making it the largest radio station in the southern hemisphere (UKHOZI FM profile, 2003). The station's main broadcast area, KwaZulu-Natal, is the most densely populated province in the country, with 8, 4 million people who are predominantly Zulu speakers and Zulu is the broadcast language of the station. According to Khumalo (2002) a communication intervention targeting a mass audience should reach a large part of the populace, especially in KwaZulu-Natal.

There is next to no HIV/AIDS message presence in the drama programs broadcast on Ukhozi FM. While HIV/AIDS education and awareness is carried in other general programming, it does not occur in the entertainment-education formatted drama serial. Khumalo (2000), the station manager of UKHOZI FM, could only recall one popular HIV/AIDS drama done by playwright, Nkosi, in 1994, but nothing subsequent to that. The same level of recollection prevailed with the acting drama unit manager and playwright. Sentiments expressed were "HIV/AIDS depresses people, if you are writing drama, you always make sure that people will be interested in your drama, that's why most of the writers do not talk about AIDS and HIV" (Khumalo, 2002: 8). The assumption was that the station, in the highly competitive market-driven broadcast environment, needs to respond to audience preferences. Khumalo (2002) asks that the question whether, through the continuous absence of the HIV/AIDS subject in these dramas, the audience, including authors, have begun to assume that the station policy does not include the subject of HIV/AIDS in the dramas, lest they depress people. From the list of eight different drama themes adopted by UKHOZI FM there was a glaring absence of HIV/AIDS and STDs as preferred themes (Khumalo, 2002: 12).

Khumalo (2002) concluded by saying that the change agents were the information sources such as the public and private sectors (including the non-governmental fraternity), while the grassroots were the listening audience for the UKHOZI FM entertainment-education drama serial. Khumalo (2002) was not advocating a weekday social drama series overly saturated with HIV/AIDS on UKHOZI FM but a clear policy on the epidemic issue.

It is apparent, given the above, that radio (in the form of Ukhozi FM) is not being used to the extent it could be in disseminating HIV/AIDS information.

2.7.4 Television

Kelly (2000) found that about 80% of South African youth, polled nationally on how they acquired their information on HIV/AIDS, received it through television and radio. Love-Life is designed around South Africa's very high media coverage: 99% of the population have access to radio and 75% have access to television (Love-Life, 2002:12).

Sherr (1997) suggests that while parents and peers are important sources of information, they are not the only sources. While television was the most influential source of information for young people, Rosenthal and Smith (1995) found that the most trusted sources of information were those perceived as having 'legitimate' knowledge, namely health professionals, school or university sources and information booklets.

2.7.5 Girl/Boy friend

Many young people are afraid to ask their partner's sexual history for fear they might endanger the relationship. They prefer to consider themselves "safe" rather than face the discomfort of taking steps to ensure their safety. At the same time, however, many say they would be relieved if the partner brought up the issue of protection (Nsengiyumva, 2000). Obstacles to safer behaviour include negative beliefs about safer sex practices, sporadic sexual behaviour and lack of communication. According to the American Association for World Health (2001), 50 percent of adolescents have never talked to a partner about condoms or birth control, and more than half have never talked to a partner about HIV/AIDS or other STDS.

2.7.6 Parents

Addressing the HIV/AIDS epidemic among young people requires reaching not only youth themselves but also others who influence their lives. Parents and other family members can help prevent HIV/AIDS among young people. Similarly, AIDS-prevention programs can do more to address men, both adolescents and adults, who often play dominant roles in sexual relationships with young women. The parents in the study conducted by Nduati and Kiai (1997), Communicating with adolescents about AIDS: experience from Eastern and Southern Africa, indicated a need for communicating skills and the need for training to improve skills on how to discuss sensitive issues or topics with their children. Fathers felt that youth should know the

social and legal consequences of improper behaviour, for example alcohol and drug abuse and impregnating a girl (Nduati and Kiai, 1997).

Parents, of course, greatly influence their children's health behaviour. In a US study that asked students who most influenced their decisions about sex, 37% cited their parents, while 30% cited their friends (Reaching Out, 2003). In addition to parents, other adult family members and others in the community influence adolescent health behaviour. Studies show that young people with a stable, positive and supportive family environment that includes parental monitoring engage in less risk-taking (Sherr, 1997). Parental affection helps deter such adolescent behaviour problems as violence and delinquency. In a US school, sixth and seventh graders with supportive parents were less likely to use drugs or to get into fights and were more likely to delay sex than classmates who were emotionally detached. A variety of other studies report similar findings (Reaching Out, 2003).

Parents often say that young people should be taught about HIV/AIDS. In Brazil, for example, the vast majority of women interviewed in a low-income area said that they did not want their daughters to grow up as uninformed about sex as they themselves were (Reaching Out, 2003). In a study in Kenya, over three-quarters of parents of children ages 10 to 14 said that adolescents should be taught in school about HIV/AIDS and other STIs, as well as about family planning and other reproductive health subjects (Reaching Out, 2003). Some youth programs have sought to involve parents in reproductive health education, training parents in workshops and discussion groups, providing print materials, hotlines and other information sources, and depicting parental roles in mass media presentations. The best programs are often those that bring parents and young people together and stimulate an exchange of views (Reaching Out, 2003).

It is known that the perceived attitudes and values of "significant others" have an important shaping effect on an individual's intention to act in a particular manner and, ultimately, on the performance of that action. Moore and Rosenthal (1995) reported that tertiary students perceived their parents as non-liberal in their sexual attitudes and relatively unlikely to discuss sex or safe sex with them. Those findings were confirmed by Stancombe (1994). Many young people cannot talk about AIDS, either at home or in the community, nor can they talk about the risk behaviours that can lead to HIV infection. In many countries family planning clinics are mostly restricted to married women and couples, and young people are reluctant to talk about

sex to doctors or nurses, either out of embarrassment or because they are worried that confidentiality will not be respected. They may feel equally uncomfortable talking to their parents and their parents, in turn, may be embarrassed or lack the confidence to discuss the subject with their children (Avert Organization in Zimbabwe, 2003).

2.7.7 Residence Life Programs

Universities provide social support programs in residences, in which issues related to HIV/AIDS are addressed (HIVAN, 2003). The University of KwaZulu-Natal provides this programme through part time staff (Residence Life Officer (RLO) and Residence Assistants (RAs) for each residence), under the supervision of the Director of the Student Housing Department. There are guidelines that should be followed in executing programs, but the University of KwaZulu-Natal does not provide them separately and programs are provided within HIVAN guidelines (HIVAN, 2003).

According to the Rowan University in the United States, decisions concerning residential housing for students with HIV disease are made on a case-by-case basis. The Americans with Disabilities Act provides equal access to housing for those with HIV/AIDS. The best currently available medical information does not support the existence of a risk to those sharing residences with infected individuals. There may be, however, in some circumstances, reasonable concern for the health of those with HIV/AIDS, who might be exposed to certain communicable diseases (for example measles, chicken pox) in a close-living situation. The university may choose to provide private rooms and recommend that students with HIV/AIDS be assigned to them to protect their health (Rowan University HIV/ADS Policy, 2003). The Rowan University room allocation system can be challenged in terms of discrimination through their separation of sick students.

Concordia University, also in the United States, has residence guidelines for HIV-related concerns, which were determined on the best information available and were subject to revision based on new developments in HIV/AIDS research and related issues. In terms of the guidelines:

- ❖ No student will be denied on-campus housing for reasons of HIV infection alone.
- ❖ To assist all students and employees in on-campus residences in avoiding behaviour which places them at risk for HIV infection, the University will provide an inresidence HIV/AIDS educational programme.
- ❖ Students in residence with any immuno-compromised medical condition, including HIV infection, may wish to notify Health Services who can advise them of any outbreak of communicable disease within the residence, with a view to protecting the student from unnecessary exposure (Concordia Legal Council Policies, 2001).

2.7.8 Lecturers/lectures

The Office of the Orientation Programme at the University of Natal, Pietermaritzburg campus had been advised by student society's forum to introduce new students to lectures on HIV/AIDS awareness through the Student Leadership Development Office (Ngubane, 2002).

The HIV/AIDS programme in colleges in Botswana is timetabled and taught as a separate compulsory subject and is allocated one to two hours weekly. In Botswana the Teachers' Training HIV/AIDS programme is the key to the success of the schools HIV/AIDS programme, for it equips future teachers with essential knowledge, skills, methods and attitudes to effectively and competently handle the subject of HIV/AIDS. The programme is also intended to enable lecturers and student teachers to deal with their own life situations and behaviour, to face the challenge of HIV/AIDS as they fall in the most productive section of Botswana's population and also happen to be in the high-risk group. In this endeavour the achievements of the programme appear limited. Although the actual cause of death is not disclosed, the high number of teaching staff and student teachers dying in colleges is alarming (Kelly, 2000).

In Zimbabwe, the Ministry of Education in all tertiary colleges introduced the General Course on HIV/AIDS Education in 1994, as one of the key intervention strategies to combat the spread of HIV/AIDS through preventative education. That the HIV/AIDS pandemic has reached a

development crisis in Zimbabwe is now an acknowledged fact, for it is estimated that one in every four adults is infected and that at least 2000 individuals die weekly as a result (Zimbabwe Jesuit AIDS Project, 2003). Significant input and progress has been made in the main components of the Zimbabwe programme, namely basic training for lecturers in HIV/AIDS and provision of relevant teaching and learning materials and equipment. Preliminary discussions in the Jesuit AIDS Project report which were held with the key stakeholders in the programme namely vice principals, lecturers and student teachers, indicated the need for a more determined effort by the Ministry of Education to address several problems which make it difficult for colleges to effectively implement the programme and give it the serious attention it deserves (Zimbabwe Jesuit AIDS Project, 2003). The same sentiments are expressed in the evaluation reports on the programs, for example the November 1999 impact evaluation of HIV/AIDS Education in Tertiary Colleges and the 1998 evaluation of the three UNICEF, Zimbabwe AIDS Prevention Programs and Status Report on the General Course in HIV/AIDS in Teachers' Training Colleges, May 2002 (Zimbabwe Jesuit AIDS Project, 2003).

Some of the universities have introduced a curriculum that covers HIV/AIDS related issues, for example the Kenyatta University has an academic structured intervention, with certificate courses and/or modules offering a wide variety of HIV/AIDS-related courses at the certificate, diploma (mainly in the holidays, for teachers) and post-graduate levels, as well as a compulsory core unit for all students (Katjavivi and Otaala 2003). According to Katjavivi and Otaala (2003), in one of the previous graduations, there were 85 recipients of certificates for one or other of these HIV/AIDS courses; and they were proving increasingly popular because of their reputation for helping graduates to secure really good jobs. Kenyatta University's approach is organizing incentives to motivate more participation from the community including students who register and pay for these programs, which are perceived to be of value and relevance. The fee being structured, also means that the university can afford to pay for well-qualified and able teachers, thereby perpetuating the success of the programs (Katjavivi and Otaala, 2003).

2.7.9 Friends or peers

Studies show that peers can be well-respected sources of information and support on AIDS-related concerns. Peer-led education has been shown to be effective in the field of substance abuse and there are studies demonstrating its ability to bring about changes in HIV-related knowledge and attitudes. Studies focusing on risk behaviours are harder to come by. The best

peer-led education programs have clear objectives, provide training, support and supervision for peer educators, are accompanied by service provision or referral to appropriate services and include regular monitoring and evaluation (Avert Organization, 2003). Avert Organization argues that:

Contrary to what might popularly be believed, research looking at the effects of sex education on young people's sexual behaviour offers little evidence that it hastens the onset of sexual experience, or increases sexual risk among those who are already sexually active. Indeed, several studies from different countries show that good quality sex education can actually decrease the likelihood that young people will have sex, and increases condom use among those who are already sexually active. Most young people are keenly sensitive to peers opinion. Especially among older adolescents, perceptions of what peers think often have a greater influence on sexual and other risk-taking behaviour than the opinions of parents and other adults. Studies in the US and elsewhere have shown that the sexual behaviour of friends influences young people's own sexual behaviour. When adolescents believe that their peers think that unprotected sex is not risky, then they are more likely to have unprotected sex themselves (Avert Organization, 2003).

In Kenya, adolescent men whose friends were sexually active were seven times more likely to be sexually active themselves (Kotecha, 2000). In Uganda, young men report that peers urged them to "prove that you are a man" (Nizigiyimana, 2001). According to one South African young man, "it is not enough to get her to fall in love with you. You must be able to show your friends that you have slept with her" (Shezi, 2002). Young women can also experience pressure. In South Africa, adolescent females say that their peers will ridicule a person who fails to hold onto a relationship because she refused sex (Shezi, 2002).

2.7.10 Churches

From the researcher's point of view most students from residences use churches for their spiritual enrichment and to glean information related to moral issues. Nizigiyimana's study confirmed that young people in churches are in need of HIV/AIDS information. They need to know methods of HIV/AIDS transmission, how to avoid HIV/AIDS and how to be involved in helping the sick. Nizigiyimana found that churches were providers of HIV/AIDS information to

a certain extent but that there was still a need to improve information provision in this context (Nizigiyimana, 2002). In Zimbabwe, the Jesuit AIDS Project works with young people aged 12–19 years, who are in and out of school, by training peer educators and promoting "youth against AIDS clubs" (Zimbabwe Jesuit AIDS Project, 2003). The goal of these clubs is to increase the level of HIV/AIDS information and knowledge among youth; to influence positive behaviour practices relevant to preventing the spread of HIV among young people; to reduce the stigma attached to HIV/AIDS, impart knowledge of right relationships, life skills and gender sensitivity among young people; to foster attitudes of caring and supporting people who are infected and affected by HIV/AIDS; and to increase community and institutional support for young people so that they can effectively participate in their own HIV/AIDS prevention and care initiatives. These clubs meet regularly to discuss issues of sexuality and to support each other in their decisions to remain abstinent until marriage, as well as the importance of remaining faithful to one's spouse (Stercker, 2003).

The National Catholic AIDS Network in Kenya is collaborating with six Catholic diocese, to gather information about HIV/AIDS educational programs and resources currently being implemented in their Catholic schools and religious education programs (Stercker, 2003). This information will provide a basis for continued networking with Catholic educational leaders and organizations to ensure that accurate and appropriate education is offered to Catholic youth. Youth Alive in Kenya, an interdenominational organization, is committed to fighting against HIV/AIDS and social injustice, primarily through "Behaviour Change Processes" and "Education for Life." Catholic Relief Services (CRS) supports Youth Alive in several countries (Stercker, 2003).

In Zimbabwe, where it is estimated that close to 27% of youth aged 15–19 are HIV positive, CRS-supported Youth Alive has trained over 100 behaviour change facilitators and is directly targeting 18 000 young people in school and 16 000 young people out of school. These programs are assisting young people to organize and manage interventions that develop a sense of responsibility towards themselves and others. Their activities are promoted in secondary schools, colleges and out-of-school youth clubs. By partnering with the diocesan youth organizations in the diocese of Harare, Bulawayo, Mutare and Hwange, they have access to an infrastructure that can bring the programme to remote parishes and communities in the country (Stercker, 2003).

In 1990 Nkumbi, Kisembira and Arikrah studied HIV/AIDS and church clergy in Uganda. The objective was to assess the perceptions of clergy about AIDS and to examine the policy and programmatic measures introduced by the church to combat the spread of HIV/AIDS. Results revealed that pastors are not disseminating factual knowledge about the disease, most having never heard of the virus, called HIV. Over 50% believed that promiscuity was the cause and the major transmission-factor and only a few knew about other modes of infection. The results proved that much needs to be done in educating church leaders and people in churches about HIV/AIDS facts.

A South African study in Pietermaritzburg, conducted by Nizigiyimana (2001: 63), explained "the methods presently used by churches in providing HIV/AIDS information are mainly posters and pamphlets". On the Pietermaritzburg campus there are organizations such as the Association of Catholic Tertiary Students (ACTS), Student Christian Fellowship (SCF), the Methodist's Society, and Student Christian Organization (SCO), but personal observations suggest that they have not done much in delivering HIV/AIDS information to students in residences.

2.8 Conclusion

Jemmott (1996) found that although parents, church and peers play an important role in influencing sexual beliefs by focusing solely on the individual, these individual or peer interactions could sometimes lead to unwanted results such as unwanted pregnancy or HIV/AIDS. Paradoxically, although it is the most common source of information used by most students, the mass media still lack credibility and could not be trusted. Clearly, the high use of a particular information source should not be regarded as an indication that this source is effective. Rather, there must accessible sources of information that young people prefer and trust, which are seen to have legitimate knowledge so that myths and heresies around the HIV/AIDS epidemic can be eradicated. This study explored the sources available for use by residential students who could be encountering different conditions socially and mentally, in terms of culture, norms and values. The most accessible sources of HIV/AIDS information should be determined or identified and utilized by information providers to deliver information. This will go some way toward providing information in a source that will be used.

2.9 Summary

Chapter Two has examined the literature related to the provision of HIV/AIDS information to youth, with special attention to university students. Issues examined were risk factors, awareness among students of HIV/AIDS, impact of sources of HIVAIDS information on young people, tertiary students and HIV/AIDS prevention programs, the involvement of higher education in the fight against HIV/AIDS, interventions from the government on educating students on HIV/AIDS and the sources of HIV/AIDS information.

CHAPTER THREE: RESEARCH METHODOLOGY

3. 1 Introduction

In the present study the descriptive survey method was used to gather and process the collected data. The method implies that whatever is observed at one time could be observed again in future, under the same conditions (Nsengiyumva, 2001). According to Fraenkel and Wallen (1993), survey methods are often chosen when researchers are interested in the behaviour and/or opinions of a large group of people about a particular topic or issue. Furthermore, the major purpose of a survey is to describe the characteristics of a population in terms of its distribution, for example age, race, religious preference and attitudes, and to determine the relationships among the variables. Likalimba (2001) used the survey method to establish "the practical strategies used by religious organisations in dealing with issues related to HIV/AIDS...in greater Pietermaritzburg". Lekau (1998) also used the survey method to investigate how young people use information centres for sexuality and related information.

Fraenkel and Wallen (1993: 343) outline three common characteristics of the majority of survey research, namely:

- ❖ The fact that the data is collected from a group of people in order to describe some aspects or characteristics (such as attitudes, beliefs, abilities) of the population of which that group is a part.
- ❖ The main way in which the data is collected is through asking questions.
- ❖ Data is collected from a sample rather than from every member of the population.

3.2 Population of the study

The population studied was resident students on the Pietermaritzburg campus at the former University of Natal. A population is a group of individual persons, objects, or items, from which samples are taken for measurement, for example, a population of presidents or professors, books or students. The research was based at the four university residences, Denison with 540 students, Malherbe with 350 students, William O' Brien with 370 students and Petrie Hall with 290 students. The total population of these residences was 1550 students. The students constituted the age that is viewed by different studies as mostly likely to be affected by the virus. The residential students in this population come from diverse social, economic, gender,

religious and racial backgrounds. These students are also from different residential areas in South Africa. There is an assumption that those areas represent upper, middle and lower middle social classes. While discriminatory laws of the apartheid system have been abolished and there is no area reserved for a particular race, many students still reside in areas populated predominantly by a given race and culture. The possible effect of this is that students may have different perceptions, attitudes and understanding of matters relating to HIV/AIDS and Sexually Transmitted Infections (STIs) depending on their background and place of residence.

Most residences of the University of Natal (on the Pietermaritzburg campus) were generally occupied by African students and less than five percent of other races, with the exception of one residence that is more representative in terms of race, namely Denison, which has students from all racial groups.

3.3 Sample size

A sample is a finite part of a statistical population whose properties are studied to gain information about the whole (Webster, 1985: 28). When dealing with people, it can be defined as a set of respondents (people) selected from a larger population for the purpose of a survey. Sampling is the act, process, or technique of selecting a suitable sample, or a representative part of a population, for the purpose of determining parameters or characteristics of the whole population.

Probability sampling was used for this study. Huysamen (1994) distinguishes between probability and non-probability samples: examples of probability samples include random samples, cluster samples and stratified samples. In probability sampling, the size of the population under investigation is known to the researcher. Other characteristics of probability sampling are, for example: every individual and unit has a chance of being sampled and the researcher can make generalizations to the larger population. McMillan and Schumacher (1993:161) state that, in simple random sampling, subjects are selected from the population so that all members have the same probability of being selected. Therefore, the probability exists that any element or subject in the population can be included in the sample.

Simple random sampling was used in the study, to choose the residential students. Gay (1991:88) and Powell (1993:65) recommended random sampling as the best means of drawing representative, or unbiased samples from a population.

The advantage of this sampling is that it increases representativeness, ensuring that any key feature of individuals in the population is included in the same proportions in the sample (Fraenkel and Wallen, 1993). This simple random sampling required a list of all students in the residences and this was obtained from the residence administrators, with the permission of the Director of Student Housing at the University of Natal.

An attempt was made to maintain a balance between the number of females and males in the sampled variables. As mentioned above, most of the students were Africans. Due to time and financial constraints, the sample was limited to 325 students. The sample size was selected from Powell's guide to sample size (Powell, 1985: 81).

The 325 students who comprised the sample were selected randomly on the following basis:

Total number = 325; this represented 21% of 1550 (the whole population of the residential students). In every residence, 21% was reflected in the sample; thus in

TABLE 2: Number of respondents and total population

| Name of residence | Number of residents | Selected number | |
|-------------------|---------------------|-----------------|--|
| Denison | 540 | 113 | |
| William O'Brien | 370 | 78 | |
| Malherbe | 350 | 73 | |
| Petrie Hall | 290 | 61 | |
| Total | 1550 | 325 | |

Denison and Malherbe Residences are mixed (females and males); Petrie Hall accommodates only female students and William O'Brien accommodates only male students.

3.4 Data collection instrument

The self-administered questionnaire was used for collecting the data needed for the study. The questionnaire was considered the more appropriate method for collecting data because of the advantages it provides when compared to other types of instruments (Busha and Harter, 1980).

3.4.1 Self-administered questionnaire

Lancaster (1977) pointed out that most researchers have used questionnaires as a major source of data collection, although statistics, correspondence and interviews have been used in various combinations. This study has chosen to follow the procedures of using self-administered questionnaires, which Wood (1971) indicated are used most frequently for the study of information transfer. Gay (1992) stated that self-administered questionnaires eliminate or avoid biases in cases where the researcher is not present. Furthermore, there is room for privacy and confidentiality (Gay, 1992), important considerations in this study, where sensitive and potentially embarrassing questions relating to HIV/AIDS were being asked. Thus students were instructed not to write their name on the questionnaire and were encouraged to be open in answering the questions. Both closed and open-ended questions were used for the study.

3.4.2 Pre-testing

Pre-testing of questionnaires was done at the Malherbe Residence, on ten students, in October 2003. Fraenkel and Wallen (1993) see pre-testing as an important process in data collection, because it gives a clear understanding of possible problems with the questionnaire and gives the researcher a chance to refine the questions so that the respondents have no problems in answering them. A pre-test of the questionnaire can reveal ambiguities, poorly worded questions and unclear choices. It also indicates whether or not the instructions to the respondents are clear. Gay (1981) warns against complex questions, to avoid ambiguity, vagueness and misinterpretation in general. In terms of the present study, the questionnaire was kept short and to the point to avoid complexity and ambiguity.

In the pre-test, respondents were asked to give their comments regarding clarity, language, length and the appropriateness of the questions asked in terms of embarrassment. Some minor problems were identified and were addressed prior to distribution of the questionnaire.

3.5 Data collection procedure

Questionnaires were distributed using the list of the residents. All the questionnaires (325) were given to specific residence students by the researcher, in accordance with the sampling procedure. They were personally requested to complete the questionnaires and were informed about the confidentiality of the personal information provided. Questionnaires were collected by

the researcher from respondents and other questionnaires were returned to residence administrators. The completion and collection of questionnaires was done within a two-week period, in October 2002. Three hundred and twenty five questionnaires were distributed and 273 were returned giving a response rate of 84%.

3.6 Data analysis and presentation

Since the purpose of gathering data is to solve a research problem, the collected data must be analysed. Leedy (1989) spoke of the need for a researcher to be able to interpret and analyse data so as to draw information that can lead to decision-making. Data analysis was done through the use of the SPSS 9.0 program. Responses to open-ended questions were categorised and quantified for input into SPSS. Content analysis is a useful method that can be employed to facilitate the objective analysis of the open-ended questions (Busha and Harter, 1980:171). Frequencies and percentages were used for easier reading and comparison of figures. Findings were represented in the form of tables. Demographic data concerning respondents were presented in graphs and charts.

3.7 Evaluation of the methodology

The descriptive survey method used in this study was appropriate, because of its relatively low cost in terms of time and money when compared to other methods that could have been used. The method allowed simple random sampling, which helped to ensure representivity of the sample. The data collection took place over a period of two weeks.

The use of the self-administered questionnaire, through open-ended questions, allowed for freedom of expression on the part of respondents. Closed questions were also beneficial in the study as they limited the length of responses and standardized responses. However, the use of the self-administered questionnaire did not permit any possible follow-up, in terms of, for example, clarifying ambiguous responses. When evaluating a particular research method, issues of validity and reliability become another important factor.

3. 8 Validity and reliability

According to Newell (1993: 99), validity in the study refers to its ability to measure what it sets out to measure and to the accuracy of the information. Leedy (1997: 160) stipulates the different forms of validity, such as face validity, criteria and construction validity. Leedy (1989: 105)

says that "reliability refers to the accuracy of the instrument", which requires elimination of bias from the interviewer aspect; this was done through the pre-testing of the questionnaire.

According to Bell (1999:104), validity is a complex concept, with many variations and subdivisions, and measuring its extent can be very involved. In essence, validity "tells us whether an item measures or describes what it is supposed to measure or describe" (Bell, 1999:104). There are many ways of ensuring validity (Cohen, Manion, Morrison, 2000: 105-6), one of which is to devise and use an appropriate instrument (Cohen, Manion, Morrison, 2000:116). The instrument used in the present study was pre-tested on the sampled students from one residence and, in order to ensure validity, questions were adjusted on the basis of the responses and comments received from the pre-test. An effort was made to ensure that the questions asked related closely to the objectives of the study. In terms of the present study, it could be argued, given the very good response rate achieved, that the results can be generalized to residential students at the University of KwaZulu-Natal, or any university residential students. To what extent these results can be generalized to students in other countries is debatable and any generalization to students outside South Africa must be done with caution.

3.9 Summary

Chapter Three focused on the research methodology used in the study. The sampling method used was discussed. The procedures adopted to collect and analyse data were presented and explained. The descriptive survey method was used to gather data, which was collected over a period of two weeks. The sample from which the data was received was selected through stratified random sampling of all the residential students on the Pietermaritzburg campus of the University of Natal. Before the study was carried out, pre-testing was done to eliminate possible ambiguity and poorly worded questions. The data collected was analysed on SPSS. Finally the method was evaluated and the issues of validity and reliability of the data collection method were discussed.

CHAPTER FOUR: PRESENTATION OF THE FINDINGS

4.1 Introduction

Chapter Four presents an analysis of the collected data. The interpretation of the findings is presented in Chapter Five. The questionnaire used to collect the data was divided into two sections. Section one sought to determine biographical information on the student, such as gender, race, age, faculty and level of study (this information was asked in order to provide variables that could give the required research results). Section two dealt with sources of HIV/AIDS information that were utilised by university students, such as radio, television, friends, parents, clinics, lecturers, health workers and churches.

The purpose of this study was to identify the sources of HIV/AIDS information used by residential students on the Pietermaritzburg campus of the University of Natal.

The objectives of this study were to:

- Identify which sources of HIV/AIDS information are available on the Pietermaritzburg campus.
- Identify which sources of HIV/AIDS information the residential students on the Pietermaritzburg campus use.
- Identify barriers to the use of HIV/AIDS information among the students surveyed.
- Establish what kinds of HIV/AIDS information content students would like to have that is not available.
- Identify how (in what format) students would like to receive HIV/AIDS information.
- Make recommendations or suggestions on the basis of information from the study, on what can be done regarding the provision of AIDS/HIV information on the Pietermaritzburg campus of the University of Natal.

Three hundred and twenty five (325) self-administered questionnaires were distributed to students. Two hundred and seventy two (272) were returned, giving a response rate of 84%.

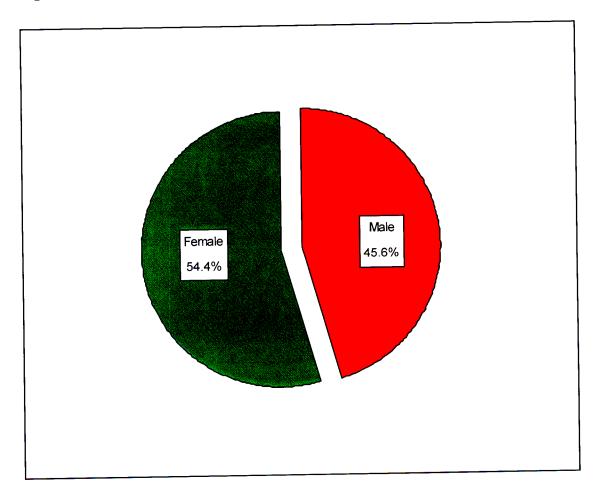
4.2 Biographical data

In this section the findings of the survey relating to the respondents' biographical data are presented.

4.2.1 Gender

Question one determined the gender of respondents. As can be seen from the pie chart (Figure 1), there were slightly more female respondents 145 (54.4%) than male 127(45.6%). According to Singh (2005), of the office of Academic Affairs in 2002, the university had more females than males, with the former comprising 58% of the student body and the latter 42%.

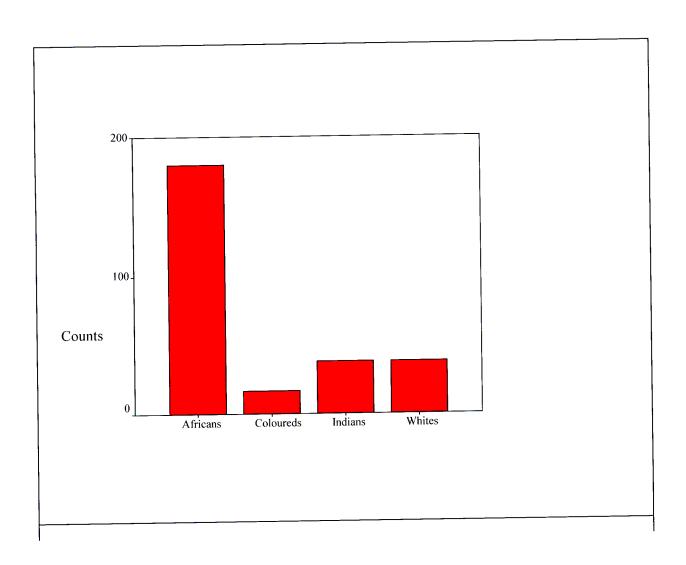
Figure 2: Gender of respondents



4.2.2 Race

Question two determined the race of the respondents. The majority of respondents were Africans 183 (67.4%); Indians 37 (13.6%); Whites 34 (12.5%) and Coloured 17 (6.5%). See Figure 3.

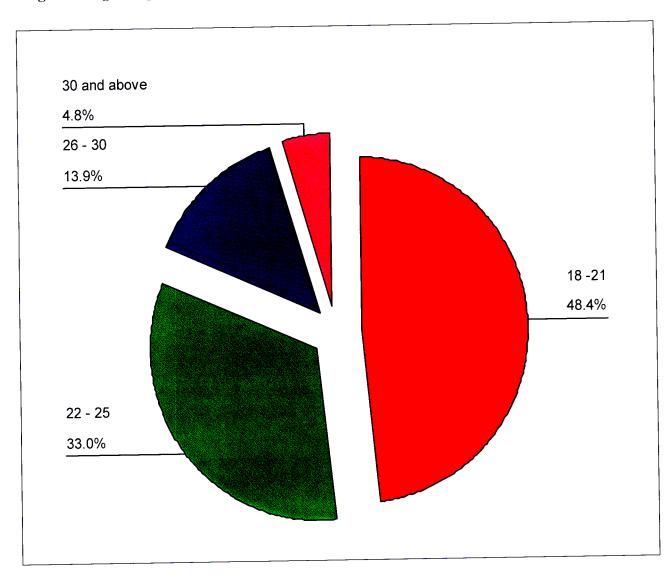
Figure 3: Race of respondents



4.2.3 Age

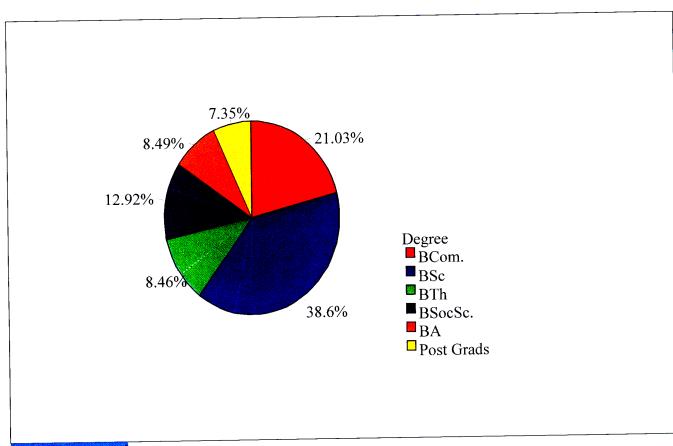
Question three dealt with the age group of the respondents. In terms of age distribution, 48.4% of the students were aged between 18 and 21 years, 33% aged between 22 and 25 years, 21 (13.9%) aged between 26 and 30 and the remaining 4.8% were 30 and above. Figure 4 shows the age range of respondents.

Figure 4: Age range of respondents



4.2.4 Degree studied

Figure 5: Degree

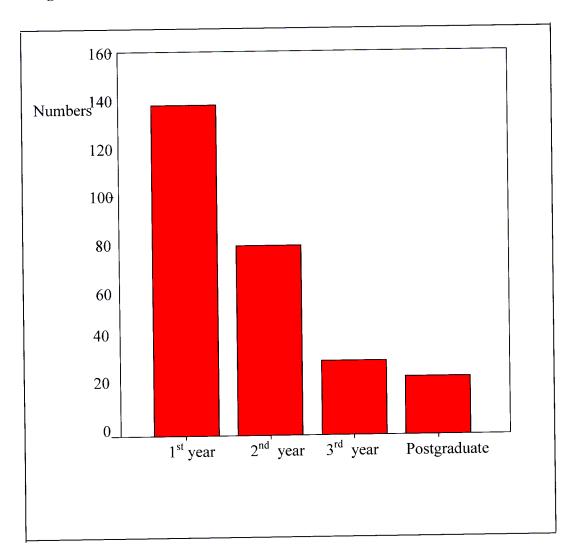


3.4 % did not respond

Questions four and five determined what degree respondents were registered for. The majority of students, 105 (38.6%) were from the Faculty of Science and Agriculture. Many of these were students from the Science Foundation Programme, most of whom were accommodated in residences. Bachelor of Commerce students numbered 57 (21%); Bachelor of Social Sciences 35 (12.9%); Bachelor of Theology 30 (11%); Bachelor of Arts were 23 (8.5%); and 19 (7%) were postgraduate students.

The year of study of the respondents is depicted in Figure 6.

Figure 6: Year of Study



As can be seen from Figure 6, the vast majority of respondents 207 (76%) were in either their first or second year of study.

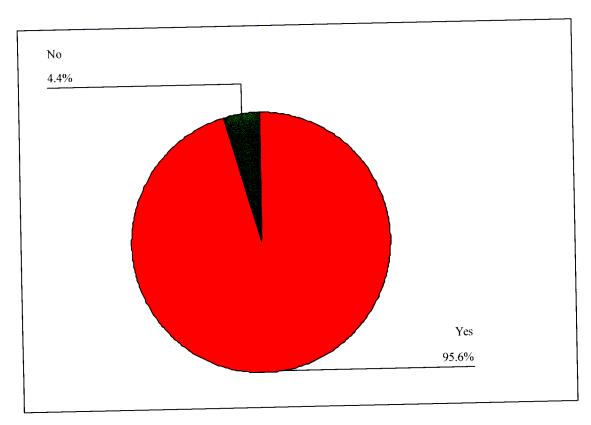
4.2.5 Belief in the existence of HIV/AIDS and sexual activity

4.2.5.1 Existence of HIV/AIDS

Question six was asked to establish the influence of political, philosophical, psychological and scientific arguments or debates around the existence of HIV/AIDS.

Figure 7: Existence of HIV/AIDS

N == 261



The vast majority 260 (95.6%) of the students agreed that HIV/AIDS exists and 12 (4.4%) disagreed.

4.2.5. 2 Sexual activity

Question seven established whether respondents were sexually active or not and whether they took preventative methods to avoid sexually transmitted diseases or infections (STDs or STIs).

The vast majority of respondents 261 (96%) from 272 respondents, believed that the virus does exist. Of interest was that 11 (4%) denied its existence. These respondents associated it with other "old" diseases which people could die from, for example "ungcusula", which is one of the STDs like gonorrhoea (which is curable if discovered early).

4.2.5. 3 Preventative measures

Table 3: Sexual activity

N=272

| Response | Frequency | Percent |
|-------------|-----------|---------|
| Yes | 124 | 45.6 |
| No | 145 | 53.3 |
| No response | 3 | 1.1 |
| Total | 272 | 100.0 |

Less than half (124 or 45.6%) of the respondents said they were sexually active. The 124 respondents were asked what measures they took to avoid STDs and the response was that they used condoms. Of the total number of 272 respondents, 145 (53.3%) were not sexually active and 3 (1.1%) did not respond.

4.3 Sources of HIV/AIDS information

The sources of HIV/AIDS information used by respondents were asked about in questions eight and nine. Table 4 indicates that the most frequently used source by respondents was television, being used by 230 (84.6%) respondents. The second most frequently used source was the radio, used by 226 (83.1%). The third most mentioned source was friends, used by 166 (61%) respondents. The least used sources were the Residence Life Programme and lectures/lecturers, each being used by 39 (14.3%) respondents. Other sources which were mentioned was the Internet, listed by 42 (15.4%), and finally, books/magazines, mentioned by 18 (7%) respondents.

Table 4: Sources of HIV/AIDS information

N=272

| Sources of information | Frequency | Percentage |
|----------------------------|-----------|------------|
| Watching the television | 230 | 84.6 |
| Listening to the radio | 226 | 83.1 |
| Friends | 166 | 61 |
| Boy/Girl friend | 127 | 46.7 |
| Campus Clinic | 94 | 34.6 |
| Parents | 92 | 33.8 |
| Health worker | 84 | 30.9 |
| Student Counselling Centre | 83 | 30.5 |
| Church | 81 | 29.8 |
| Other (Internet) | 42 | 15.4 |
| Residence Life Programme | 39 | 14.3 |
| Lectures/lecturers | 39 | 14.3 |
| Other (Books/Magazines) | 18 | 7 |

Multiple responses were received.

4.3.1 Most recently used sources

The three most recently used sources were the same as the most frequently used sources, namely television, radio and friends.

Question 10 ascertained the views on the usefulness of the sources listed. As shown in Table 5, the vast majority of respondents 232 (85.3%) stated that the sources listed in Table 4 were useful.

Table 5: Usefulness of HIV/AIDS information sources

N = 272

| Usefulness | Frequency | Percent |
|-------------|-----------|---------|
| Yes | 232 | 85.3 |
| No | 34 | 12.5 |
| No response | 6 | 2.2 |
| Total | 272 | 100.0 |

4.3.2 Most useful sources

Question 11 asked respondents to list the sources they found most useful. Television 230 (84.6), followed by radio 226 (83.1) and friends 166 (61%) were the most useful sources of HIV/AIDS information for many residential students. The reason given by 92 (33.8%) was that in residence students spend most of their time watching television or listening to the radio. If not doing so, they chat with friends about different issues, which include HIV/AIDS issues; one percent indicated that the campus clinic has brought awareness by showing pictures of people with HIV/AIDS and teaching about them using protection when having sex. Three percent said that health workers do not hide anything when they speak about sexual issues and HIV/AIDS. Five percent of the respondents did not believe that HIV is real and does infect persons. They requested proof such as more people living with it. Television was mentioned because the communication is visual and verbal and the issues related to HIV/AIDS are dramatised. Radio is found everywhere they go in the community and most students listen to it. The church was viewed by 30 (11%) of the respondents as a playing role for those who are affected and infected, either on campus, or off campus as it brought a message of hope.

4.3.3 Sources not found useful

In Question 12, students were asked to name sources that were not useful and in Question 13 they were asked to explain why they were not useful. Respondents who did not give a response numbered 127 (46.7%) and 57 (21%) found almost all the sources useful and 83 (30.5%) criticised friends for being not well informed and because "they lie about the issues related to drugs and sex and on HIV/AIDS" and "sometimes the same excuses are utilised by a girl/boy friend when they are trying to make excuses for not condomising" (friends in Table 4 used as one of the first three sources of information). Three (1.1%) respondents raised concerns that some students are encouraged by their peers to have more than one partner for economic reasons which creates bitterness and undermines fidelity.

The last two responses in Table 4 had equivalent percentages and were both 39 (14.3%) that is, Residence Life Programme and lecturers. Both were viewed by respondents as not regularly highlighting HIV/AIDS issues but rather concentrating on academic issues. The 42 (15.4%) respondents reporting on the Residence Life Programs had HIV/AIDS related issues discussed once during residence life programme (especially when students arrived at the beginning of the year) and these issues were not given more time during the course of the year. The 35 (12.9%) respondents reporting on lecturers had experienced pressure to finish the prescribed curriculum or courses; they were unable to give much time to focusing on issues pertaining to HIV/AIDS. Three percent of the respondents made an exception of lecturers teaching in the Social Science disciplines or modules as they sometime do touch on issues related to HIV/AIDS.

The other three percent of the respondents criticised the church for not taking the issue of HIV/AIDS seriously and casting out people who were infected with the virus. They also noted that the information material provided for raising awareness is extensively censored by the church. One percent of respondents looked at the health workers as not useful as they cannot be believed because they protect their work and they can utter contradictory statements on HIV/AIDS, for example, information on reliability of testing equipment. Books/magazines 3 (1.1%) were not useful in terms of providing HIV/AIDS information. In fact only a small proportion of respondents, 18 (7%) used books/magazines as a source of information (see Table 4) - the least of all sources of information used by respondents in this study. With regard to radio three (1.1%) did not emphasize or stress the point as one hoped they would and one

percent said television programs on HIV/AIDS were not well marketed and sometimes the information was too severely censored.

4.4 Satisfaction with the information obtained

The results of Question 14, which determined respondents' satisfaction with information obtained, are provided in Table 6.

Table 6: Level of satisfaction

| Level of satisfaction | Frequency | Percent |
|-----------------------|-----------|---------|
| Very satisfied | 94 | 34.6 |
| Satisfied | 144 | 52.9 |
| Not satisfied | 19 | 7.0 |
| Not at all satisfied | 11 | 4.0 |
| No response | 4 | 1.5 |
| Total | 272 | 100.0 |

The vast majority of respondents 238 (87.5%) were either very satisfied or satisfied. However, 30 (11%) were not satisfied with the information obtained.

4.5 Reasons for dissatisfaction

In Question 15, respondents who were not satisfied or not at all satisfied were asked to explain why not. These respondents were not satisfied because they preferred to use the Internet 11 (4%) and books/magazines 3 (1.1%), and these sources were not provided in their respective residences. There are no residence libraries and Local Area Networks (LANs) and four (1.5%) respondents explained that the distance from residences to the university LAN was considerable. Eleven (4%) were scared to return to their residences alone, late at night. Their appeal was to have computers in residences, so that they can access the Internet within their residences.

4.6 Problems in obtaining information about HIV/AIDS

Question 16 asked whether respondents had experienced problems in obtaining information about HIV/AIDS on campus. The responses are indicated in Table 7.

TABLE 7: Problems experienced in obtaining information about HIV/AIDS on campus

N = 272

| Problems experienced | Frequency | Percent |
|----------------------|-----------|---------|
| Yes | 232 | 85.3 |
| No | 34 | 12.5 |
| No response | 6 | 2.2 |
| Total | 272 | 100.0 |

Table 7 indicates that the vast majority of respondents 232 (85.3%) had experienced problems in obtaining information about HIV/AIDS on campus.

Question 17 asked respondents to give an explanation for their response to Question 16 and 144 (52.9) responded. Thirty (11%) wanted facilities to be provided in residences. Ninety four (34.6%) explained that HIV/AIDS should be a part of lectures (in other words should be part of the curriculum in all courses offered by the University), eight (2%) wanted health workers to be stationed in residences, and not only at the campus clinic. Three (1.1%) felt that the system of holding clinics during the day clashed with their timetables during the week and were unhappy that health workers were not available on weekends and in the evenings. Five (1.9%) respondents found the information provided very concise and that it did not provide details on new developments and current research. Seven (2.3%) said their academic work pressures did not give them any time to spend looking for other information, which included HIV/AIDS information.

4.7 HIV/AIDS information needed by respondents

In Question 18 respondents were asked: "what information about HIV/AIDS would you like to have?"

There were 144 (52.9%) responses. Of these, 41 (28.4%) suggested that they would like information on anti-retroviral drugs and how these save the child but not the mother (this is around Mother to Child Transmission). Twenty two (15.2%) respondents required information that would deal with the reliability of the testing instruments, because they believed that some instruments give inaccurate results. One of the students narrated the story of a friend who failed his final year exams due to the information he got from the student clinic. He twice tested positive and the third time tested negative.

Forty two (29.1%) respondents needed more information on abstinence and faithfulness, because they felt that the current provision of information focussed too much on condomising. Thirty four (33.6%) said information on HIV/AIDS gave the impression that HIV/AIDS is normal and similar to other diseases and that it was not being considered as a life-threatening or frightening chronic disease, but also as a challenge to moral regeneration. Five (3.4%) wanted information on the developments on vaccines and medicines on HIV/AIDS and one needed the information on Nevirapine for pregnant women.

4.8 The format of the information source

Most respondents in Question 8 had used television 230 (84.6%) and radio 226 (83.1) as channels of information. Question 19 sought to determine from the respondents what format they would like the information on HIV/AIDS to be in.

There were 143 (53%) responses and these were varied. Of those who preferred the verbal format, 69 (48%) wanted talk shows and debates pertaining to information on HIV/AIDS to be regularly arranged in residences. Secondly, in the form of lectures, 44 (31%) wanted HIV/AIDS to be taught as part of lectures and students to be examined on it. In the form of print, 23 (16%) wanted to have current research findings accessible and the remaining seven (5%) wanted to have information in the form of pamphlets. In Question 15, respondents were not satisfied because they preferred to use the Internet 11 (4%) and books/magazines had three respondents (1.1%), and these sources were not provided in their respective residences.

4.9 Recommendations concerning HIV/AIDS information provision.

Question 20 requested recommendations regarding the provision of HIV/AIDS information on the Pietermaritzburg campus. Of the 272 respondents, 221 (81%) responded:

- ❖ 63 (29%) respondents recommended that workshops should be arranged in the evenings and suitable times should be found.
- ❖ 52 (24%) said that students should be encouraged to go for testing, so that they know their status
- ❖ 45 (20%) said that students should have access to computers and Internet-based systems in residences as a means of getting up to date HIV/AIDS information.
- ❖ 36 (16%) stated that more offices for health workers should be provided in the residences for after-hours counselling and other services such as testing.
- 14 (6.5%) suggested that researchers should be more involved in finding the cure.
- Nine (3%) said the University of Natal should have competitions and workshops to promote abstinence or no sex before marriage, as condoms are not 100% safe.
- ❖ Five (2%) suggested that the church should help in teaching students on the campus.

4. 10 Summary

Chapter Four dealt with the presentation of the findings. Sources of HIV/AIDS information used by residential students were established by asking questions that were divided into two categories: (i) biographical information and (ii) sources of HIV/AIDS information. The results indicated that the most frequently used source by respondents was television, the second most frequently used source was the radio, the third most mentioned source was friends and the least used sources were the Residence Life Programme and lectures/lecturers. Other sources mentioned were Internet and books/magazines. Data was presented in the form of charts and tables. Chapter Five interprets the findings.

CHAPTER FIVE: INTERPRETATION OF THE FINDINGS

5.1 Introduction

In this chapter the findings of the study are considered, in the light of the research problem and literature reviewed. The purpose of the study was to identify the sources of HIV/AIDS information used by residential students on the Pietermaritzburg campus of the University of Natal. The objectives were: to identify which sources of HIV/AIDS information are available on the Pietermaritzburg campus; identify which sources of HIV/AIDS information are used by residential students on the Pietermaritzburg campus; identify barriers to the use of HIV/AIDS information among the student surveyed; established what kind of HIV/AIDS information content student would like to have that is not available; identify how (in what format) students would like to receive HIV/AIDS information and make recommendations or suggestions on the basis of information from the study and on what can be done regarding the provision of HIV/AIDS information on the Pietermaritzburg campus of the University of Natal. Due to the very high response rate of the study, generalisation to the student residential population is possible.

5.2 Background information on the respondents

The demographics of the study indicated that more females than male students were respondents for the study and that the university had more female than male students. This was confirmed through the office of the University of Natal-Academic Affairs (Singh, 2005). African students were in the majority in the sample that was used. Most of the residences had a large population of African students followed by Indians, Whites and Coloureds. The highest age group reflected in the study were students between 18 and 21 years, followed by those between 22 and 25 years. Most students came from different fields of study, but most were undergraduate students.

The vast majority 253 (93%) of the students agreed that HIV/AIDS does exist and very few students disagreed. This portrayed a clear picture of their awareness levels, even though in the study it transpired that their levels of understanding need a profound intervention for the sake of all stakeholders in the fight against HIV/AIDS infection.

5.3 Sources of HIV/AIDS information used by the residential students on the Pietermaritzburg campus

This section deals with the findings relating to sources of HIV/AIDS information available on the Pietermaritzburg campus.

Twelve sources that were likely to be used by both males and females were presented to respondents. Respondents added a further two as other category sources being used, namely the Internet and books or magazines. However, a small minority of respondents used these sources. The various sources listed will be discussed below.

5.3.1 Television

The source of HIV/AIDS information most frequently used by residential students was television, as 230 (84%) indicated that they used this source. The researcher evaluated the reason for this, by visiting all four residences in which the study was conducted. All residences have common rooms that are furnished with spacious lounges and 74 cm televisions. This evaluation confirmed the reason for frequent usage of television in residences. It is a very conducive environment for television-watching that Residence Management and the Student Housing Department provide. This finding is confirmed in the study conducted by Nizigiyimana (2002), on the role of the churches in disseminating HIV/AIDS information in Pietermaritzburg. She found that the television was used by 54% of the respondents. Kelly (2000), as was explained in chapter two, found that about 80% of South African youth received their information on HIV/AIDS through television and radio. Zhusupov (2000) revealed that 107 (53, 5%) men and 137 (68, 5%) women frequently used TV and the radio as sources of HIV/AIDS information.

5.3.2 Radio

Listening to the radio was mentioned by 226 (83.1%) of the respondents. There was little difference (1.5%) between radio-listening and television-viewing numbers. Most students listen to music often and radio systems are one of the first assets that students acquire. Zhusupov (2000) revealed that TV and radio were among the highest used sources of information about safe sex, STIs and HIV/AIDS related information.

5.3.3 Friends and girl/boy friends

Friends were listed by 166 (61%) of the respondents as a source of HIV/AIDS information. Information is exchanged and debated when friends are sitting together. Win and Coleman (1995) however, found that the information exchanged is filled with exaggeration, lies and boasting. Pivotal issues that young people discuss are girl/boy friend relationships, sex, academic work, movies, AIDS and STDs and general issues that include politics and religion (Marcus, 2000). Friends were followed by girl/boy friends, mentioned as a source by 124 (46.7%) of the respondents, which shows that much information is received from these sources. Related to this study is the finding by Nsengiyumva (2000), that friends were the best source of sexuality and sexual health information. The following section looks at the campus clinic and health worker.

5.3.4 Campus clinic and health worker

According to Table 4, the campus clinic and health worker were used by 94 (34.6%) of the respondents and 84 (30.9%) respondents, respectively. It is evident that a strategy that will make the clinic more effective, and benefit more residence students, should be developed. Most students had a problem accessing the clinic, due to inconvenient opening times. Similar findings were discovered by Marcus (2000), whose respondents said that they had problems with the clinic's services. These related mostly to the times of opening (35 %). Several respondents complained that they had to skip lectures or found the clinic closed too early, over lunch-time or without notification. Marcus (2000) found that, in most cases, students preferred to go to a health worker outside the Campus Clinic for HIV/AIDS information, especially with regard to testing. Confidentiality was the apparent reason for using outside services, rather than an internal one. Services that were provided on campus by the Clinic or health workers were not generally communicated in the most available sources of information except during orientation programs and in residence booklets. It would be useful for the Campus Clinic to use societies and the student newspaper to spread awareness of the services that are provided. Residence Management programs could be used in extending exposure to their services through, for example, public presentations. Significantly, 178 (65.4%) of the respondents had never been to the Campus Clinic for HIV/AIDS related issues, although they might have been for other illness. The majority of respondents made it clear that they did not know about the Campus Clinics.

This underscores the need for a strategy to be developed which will make the clinics more accessible to residence students.

5.3.5 Parents

Parents as an information source on HIV/ AIDS were used fairly often by respondents, with 92 (33.4%) indicating use. Nsengiyumva (2000) found that parents, especially mothers, were the most important source of information delivered to young people. Respondents in the present study revealed that, although they were in a campus residence, they still used their parents as a source of HIV/AIDS information, more often than some of the sources provided on campus.

5.3.6 Student Counselling Centre

The SCC is one of the campus services that is used by most students especially SFP students, when they arrive on campus, but mostly for issues concerning stress, academic pressure, relationship problems, drugs and alcohol. In this study the SCC was used by less than a third 83 (30.5%) of respondents as a source HIV/AIDS information.

5.3.7 Church

This source of HIV/AIDS information was used by 81 (29.8%) of the respondents. Pastors and youth leaders deliver information through preaching and discussions. Nizigiyimana (2001) found that the sources least used were the church, youth leaders, church elders and social workers. Kareeba (2000) stated that some religious leaders have added to the misery of people living with HIV/AIDS, by condemning them as "wrong-doers" or "sinners", thus contributing to their experience of HIV/AIDS as a stigma to which they were already subjected by society. The present researcher sees that some students at the tertiary level still maintain the values and principles of their religions; however, other students change due to conformity to peer pressure or the unavailability of their own churches or related spiritual movements on campus. Only one church was campus based, namely, Maranatha Crusades. All other movements were societies which were governed by students themselves that is the Student Christian Fellowship (SCF), Student Christian Organization (SCO), Methodist Society and Association of Catholic Tertiary Students Society (ACTS).

In the experience of the present researcher, the issue of HIV/AIDS was not prioritised in these societies. They tended to view the AIDS issue as being for people outside their organizations. Churches sometimes have similar views. Again, in the researcher's experience, some churches do not think that there are people who are HIV positive amongst their members.

5.3.8 Residence Life Programme

The Residence Life Programme (RLP), used by 39 (14.3%) respondents, was the least utilised source in providing HIV/AIDS related information. This is in spite of the fact that it is conveniently close to students and that it is funded from student residence fees. Clearly, though, it has not prioritised the issue of HIV/AIDS. It has concentrated more on academic issues than social issues amongst its community (students). Workshops and seminars convened by the RLP could be very important for introducing students to HIV/AIDS related information, especially as the RLP is the centre of students' activities and controls House Committees budgets and activities.

5.3.9 Lecturers/lectures

Along with the RLP, Lecturers/Lectures were the least utilised source of HIV/AIDS information, also being used by 39 (14.3%) of respondents. The reason for their being not productive in terms of providing HIV/AIDS information is that they are structured in a way that understandably prioritises academic issues and does not consider AIDS as a silent killer of academics (lecturers) and students. In this regard, it is said in the literature review of this study that the actual cause of death of staff and students is not disclosed. This was noted by Kelly (2000). Teachers in colleges had an alarming infection rate (Kelly, 2000). It is becoming imperative in terms of HIV/AIDS information provision to include the issues of HIV/AIDS as part of the curriculum as was done by the Zimbabwe Ministry of Education in their tertiary colleges (Zimbabwe Jesuit AIDS project 2003).

5.3.10 Internet and books/magazines

Respondents named these sources under the "other" category, as they were not listed on the questionnaire by the researcher. The Internet was mentioned by 42 (15.4%) respondents and books/magazines by 18 (7%) respondents. At the University of Natal, Internet access was available on a 24-hour basis in some of the LANs. The University Library opened from 08:00

until 22:30 and students had access to books, magazines and newspapers. It should be noted that some newspapers were provided in residences.

5.4 Identified problems in the use of HIV/AIDS information among the students surveyed

Results from Question 15 indicated that 30 (11%) of the respondents were not satisfied with the information they obtained from the various sources.

As indicated in Table 7, the vast majority 232 (85.3%) of respondents experienced problems in obtaining information about HIV/AIDS on campus.

In Question 17 respondents were asked to give an explanation of their response to Question 16, that is an explanation of problems experienced in accessing HIV/AIDS information. Reasons from the 30 (11%) respondents were based on the provision of the facilities in residences, such as Internet. Students wanted information about AIDS in lectures; 94 (34.6%) respondents viewed HIV/AIDS as part of the curriculum that the University should offer in all courses and eight (2%) respondents pointed out that health workers should be stationed in residences, as well as being at the campus clinic. The clinic hours also clashed with the students' timetables during the day and health workers were not available on weekends and in the evening.

5.5 The HIV/AIDS information content students would like to have

There were 63 (23%) respondents who responded. Forty one (15%) suggested that they would like information on anti-retroviral drugs, especially on how it saves the child but not the mother - this is associated with the Mother to Child Transmission (MTCT). Twenty two (8%) wanted information on the reliability of testing material. Information on HIV/AIDS, that HIV/AIDS does exist and is "normal", was requested by 17 (6.5%) respondents. Five (3.4%) wanted information on the developments on vaccines and medicines on HIV/AIDS and one needed information on Nevirapine for pregnant women.

The present researcher is of the opinion that the information on MTCT should have been raised by HIVAN. Most students did not know anything about HIVAN until 2002, when its offices were opened on the Pietermaritzburg campus. Clearly, this indicates that more information needs to be disseminated to residential students, using effective sources of HIV/AIDS information.

5.6 The format in which students would like to receive HIV/AIDS information

Sixty nine (48 %) respondents wanted to have information through talk shows and debates in residences. Marcus stated that students tended to be more concerned about falling pregnant than becoming infected with HIV (Marcus 2001: 8-9). Discussion and debates on unplanned pregnancy should be part of this information, as it was shown in the study by Rosenthal (1990) who revealed that students did not consider themselves to be at serious risk of contracting HIV/AIDS. Cok, Ann and Ersever's (2001) survey conducted at Ankara in Turkey on university students sought to determine their knowledge, attitudes and perceptions of risk related to HIV/AIDS. It transpired from the study of sexual behaviour and sexual communication that respondents had a moderate level of knowledge about transmission, symptomology and prevention of the epidemic. Significantly, misconceptions regarding HIV/AIDS were also found. Students' attitude toward people with HIV/AIDS was contradictory, showing both accepting and unaccepting views, depending, in part, on their personal involvement with an HIV positive person.

Forty four (31%) respondents wanted HIV/AIDS to be taught as part of lectures and students examined on it. This is done at Kenyatta University. HIV/AIDS-related courses are an academically structured intervention, with a certificate after their completion. Courses and/or modules are offered in a wide variety, including a compulsory core unit, for all students (Katjavivi and Otaala, 2003). In Zimbabwe the Ministry of Education in all tertiary colleges since 1994 took the initiative of offering a general course on HIV/AIDS as an intervention strategy (Zimbabwe Jesuit AIDS Project, 2003).

Twenty three (16%) respondents wanted to have current research findings accessible either online or in books. As noted computers linked to the Internet were not provided in the residences.

The Sourcebook (Global Health Council, 2003) which sought to fulfil the role of providing concise summaries of programs, using a standard format that highlighted the main elements of the programs and made it easier to compare the programs with each other. All the programs were benchmarked against criteria that the Joint United Nations Programme on HIV/AIDS (UNAIDS) Inter-Agency Task Team (IATT) for Education considered to be sound programming practice. That provided a framework for exploring the strengths and weaknesses

of the programme designed, pending more conclusive evaluations. The Sourcebook has been developed rapidly to fill an important gap in information on programming within the education sector. It was a work in progress and the content was to be expanded and refined in use (Global Health Council, 2003). Finally, the remaining (5%) respondents indicated that they would like to have information in the form of pamphlets which have information in print or point form. This, in their view, would be better than reading the whole book because they were under pressure regarding their academic work.

5.7 Recommendations of students relating to the provision of HIV/AIDS information

A large majority of respondents 221 (81%) made recommendations: 63 (29%) respondents recommended that workshops should be arranged in the evenings and at suitable times. Fifty two (24%) respondents said that students should be encouraged to go for testing, so that they know their own status. Forty five (20%) said that students should have access to computers and Internet-based systems in residences as a means of getting up-to-date HIV/AIDS information. Finally, 36 (16%) respondents stated that more offices for health workers should be provided in residences for after-hours counselling and other services such as testing.

5.8 Summary

The purpose of this chapter was to interpret the findings presented in Chapter Four in the light of the objectives of the study. While the findings as a whole revealed problems encountered by the respondents, the majority of respondents appeared satisfied with the overall provision of the sources of HIV/AIDS information on the Pietermaritzburg campus of the then University of Natal. Suggestions and recommendations were given by respondents on what and how information sources on HIV/AIDS should be provided. These could be of benefit to the University of KwaZulu-Natal information providers and other information specialists dealing with youth and young adults to improve information sources on HIV/AIDS.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

Chapter Six reviews the research purposes and the research questions and provides an overview of the study. The conclusions and recommendations of the study and the researcher's suggestions for further research will be presented.

The study attempted to identify the sources of HIV/AIDS information used by residential students on the Pietermaritzburg campus of the then University of Natal. It was assumed that little is known by information-providers about the sources of information that young people use to inform themselves about HIV/AIDS and the usefulness of those sources. It is that lack of knowledge that the study was attempting to address. It was anticipated that the present study would help information providers in developing strategies that would affect the provision of relevant HIV/AIDS information to young people. It was also envisaged that the study would help the youth to make use of HIV/AIDS sources of information.

6.2 Purpose

The purpose of the study was to identify the sources of HIV/AIDS information used by residential university students on the Pietermaritzburg campus of the then University of Natal.

6.3 Research questions

The purpose led to the following questions:

- Which sources of HIV/AIDS information are available on the Pietermaritzburg campus?
- ♣ Which sources of HIV/AIDS information do the residential students on the Pietermaritzburg campus use?
- ♣ What are the barriers to the use of HIV/AIDS information on the Pietermaritzburg campus?
- ♣ What kinds of HIV/AIDS information content would students like to have that is not available?
- In what format would students like to receive HIV/AIDS information?

♣ What recommendations can be made regarding the provision of HIV/AIDS information sources for residential students on the Pietermaritzburg campus of the University of Natal?

6.4 Overview of the study

This section recapitulates the various chapters of this study:

Chapter One provided the background to the study and definitions of the terms, research problem, purpose, the objectives and the limitations of the study. The background of this study highlighted the fact that challenges concerning the HIV/AIDS epidemic have left no part of the world untouched. While the problem is worldwide, the greatest concentration of HIV infections and AIDS-related deaths is in developing countries, including South Africa - the broad context for the present study, which focuses on students in university campus residences.

Chapter Two reviewed the literature related to the provision of HIV/AIDS information for youth, with special attention to university students. Issues examined include risk factors, awareness among students of HIV/AIDS and the impact of sources of HIVAIDS information on young people, especially tertiary students, and on HIV/AIDS prevention programs, the involvement of higher education in the fight against AIDS, the interventions from government on educating students on HIV/AIDS and the sources of HIV/AIDS information.

Chapter Three discussed the methodology used for the study. The sampling method was described. The procedures to collect and analyse data were presented and explained. The descriptive survey method with a self-administered questionnaire was used to gather data, which was collected over a period of two weeks. The sample from which the data was extracted was selected through stratified random sampling of all the residential students on the Pietermaritzburg campus of the then University of Natal. Pre-testing of the instrument was done to eliminate possible ambiguity and poorly worded questions. The data collected was analysed on SPSS. Finally, the method was evaluated.

Chapter Four presented the findings of the survey. Data was presented in the form of charts and tables. The results of the study revealed that the most frequently used source by respondents was television, the second most frequently used source was the radio, the third most mentioned source was friends and the least used sources were the Residence Life Programme and

lectures/lecturers. Other sources mentioned were Internet and books/magazines in addition to sources which were provided by the researcher.

Chapter Five discussed the findings of the study, in the light of the research problem and literature reviewed. The findings as a whole discovered problems encountered by the respondents in terms of assessing some of sources of HIV/AIDS information especially in residences. The majority of respondents appeared satisfied with the overall provision of the sources of HIV/AIDS information on the Pietermaritzburg campus of the then University of Natal.

6.5 Conclusions

From the research findings, the following conclusions were drawn about the sources of HIV/AIDS information used by residential students on the Pietermaritzburg campus of the then University of Natal. Most respondents indicated that HIV/AIDS does exist, which means students are aware of HIV/AIDS. The study found that the most used sources of HIV/AIDS information were the television and radio. The study also showed that the Student Counselling Centre, parents and the church were amongst the sources that were much used for HIV/AIDS information. It was suggested that information providers should use the above sources to disseminate HIV/AIDS information more effectively. Regarding the format, electronic sources such as Internet and printed out HIV/AIDS information, especially as pamphlets, were suggested. Subsequently, communication through talk shows and debates were mostly viewed as other effective formats to disseminate HIV/AIDS information in residences. The study established that the RLP and Lecturers/lectures were the least used source of HIV/AIDS information.

From the findings the researcher suggests that:

- More sources of HIV/AIDS information should be developed. The role of the Campus Clinic, RLP and Lecturers/lectures and other sources need to be identified for further research. Information providers from various sections on campus should be listed and publicised, so that residential students can be partakers, as well, in the fight against HIV/AIDS. Infected or affected people can get internal support.
- Campus radio can play an important role in providing education and awareness in terms
 of HIV/AIDS information. Residential students considered radio as one of the most

- effective sources in this study, but at the time of this research there was only one radio station, based on the Durban campus.
- There is a need for a clearer, more forceful definition of roles and responsibilities amongst all the partners or information providers in responses to the epidemic.
- The response to date needs evaluation and those channels that work well need to be further explored and more thoroughly developed, on a systematic basis. The role of this study was to identify those sources that are sufficiently effective to educate and make the student community aware of the epidemic. The struggle against HIV/AIDS is a struggle against death, for everyone, within or out of the University campus or community.

6.6 Recommendations

The following recommendations are made to the university and information providers in an attempt to improve their information provision regarding access to the favoured sources, for communication with students or young people concerning information on HIV/AIDS:

- Workshops, for example, to promote abstinence or no sex before marriage as condoms are not 100% safe, should be arranged in the evenings and the Campus Clinic and the RLP should organize suitable times for awareness and education programs.
- > Students should be encouraged to undergo testing, so that they know their own status, and be told of the support that is available on post-testing, either internal or external. Information on statistics of students or staff infected should be revealed, so that many will emerge and disclose and support each other. If that is not the case everyone think that he/she will be the first on the campus to test positive.
- > Students should have access to computers and Internet based systems in residences, as a means of getting up-to-date HIV/AIDS information.
- More offices for Health Workers should be provided in residences for after-hours counselling and other services such as testing.
- The church should help to teach students around the campus about HIV/AIDS information via the various student societies.
- ➤ The church should make an effort to provide HIV/AIDS information on campus residences more effectively, without judging students.
- Residential students need a special focus system such as the Residence Life Programme, to be intertwined with the Campus Health Clinic, to provide HIV/AIDS

- information, by communicating and collaborating with appropriate bodies within the UKZN, to develop and implement pragmatic strategies to assist HIV/AIDS infected or affected victims or students in managing their academic performances and social activities and to create the balance of coping with their condition.
- Stakeholders such as the Vice-Chancellor, Deans, Heads of Departments, Student Counselling Centre, Student Leadership Development Office (SLDO), Student Housing Department, Campus Clinic, Student Representative Committee (SRC), House Committees (HC), and all societies existing on campus, need to formulate programs of action. These should be appropriate to a particular context and situation and linked to the HIV/AIDS information available. Annual plans should be drawn up, mostly based on students' activities evolving around HIV/AIDS informational material. Stakeholders should be able to disseminate that HIV/AIDS information through the most effective sources such as radio and television.

6.7 Recommendations for further study

- ❖ The study has identified the necessity for further research in other fields related to HIV/AIDS and on other sources of HIV/AIDS information and sources that were revealed not to be effective in this study.
- ❖ Most efforts to curb the disease have been concentrated on raising awareness. If that is the case, there is a need to question whether or not information on awareness actually leads to behavioural change.
- ❖ Factors that determine and influence the link between HIV/AIDS education and behavioural change.

In conclusion, the study fulfilled its original intention of identifying sources of HIV/AIDS information that are used by residential students and of generating recommendations and suggestions for the provision of HIV/AIDS information and for further research.

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APPENDIX: A

QUESTIONNAIRE ON "SOURCES OF HIV/AIDS INFORMATION USED BY RESIDENTIAL STUDENTS ON THE PIETERMARITZBURG CAMPUS OF THE UNIVERSITY OF NATAL".

| Instructions to complete the questionnaire. | | | | |
|---|----------------------------|---|--|--|
| Please | do not write your name | e on the questionnaire. | | |
| Read e | very question carefully | and tick in a correct box (if requested to explain, please do so). | | |
| If a qu | estion is unclear, pleas | e check with the distributor (residence administrator) or researcher. | | |
| A. Biographical Data | | | | |
| Gende | r | | | |
| 1. | Male | [] | | |
| 2. | Female | [] | | |
| Please | Please indicate your race. | | | |
| 1. | African | [] | | |
| | Coloured | [] | | |
| 3. | Indian | [] | | |
| 4. | White | [] | | |
| 5. | Other | [] please specify | | |
| | | | | |

| 3. Age group? Pl | lease tick your category: | |
|---|---------------------------|--|
| 18 – 21 | [] | |
| 22 – 25 | [] | |
| 26 – 30 | [] | |
| 30 and above | [] | |
| 4. Degree e.g. BTH, | , BSC, BA | |
| 5. What year of st | udy are you in? | |
| 1 st year | [] | |
| 2 nd year | [] | |
| Final year | [] | |
| Post Graduate | [] | |
| 6. Do you belie | ve that HIV/AIDS exists? | |
| 1. Yes | | |
| 2. No | | |
| Please explain your answer (from no. 6) | | |
| | | |

| 7. | Are you sexually active? | |
|----------|-----------------------------------|--|
| 1. Yes | [] | |
| 2. No | [] | |
| If yes v | what measures do you take to avo | oid sexually transmitted diseases? |
| | | |
| B. Sou | rces of HIV/AIDS information | |
| 8. Whi | ich of the following sources of H | IV/AIDS information have you used? Tick those that |
| apply | to you: | |
| 1. | Listening on the radio | [] |
| 2. | Watching the television | [] |
| 3. | Girl/Boy friend | [] |
| 4. | Parents | |
| 5. | Student Counselling Centre | [] |
| 6. | Campus Clinic | [] |
| 7. | Residence Life Programme | [] |
| 8. | Lecturers/lectures | [] |
| 9. | Friends | [] |
| 10. | Health worker | [] |
| 11. | Church | [] |
| 12. | Other [] please specify | |

| | listed more than three of the above, please specify which three were the most |
|---------------|---|
| cently used? | |
| | |
| | |
| | |
| | |
| 0. Did you fi | nd the information contained in these sources useful? |
| . Yes | [] |
| 2. No | [] |
| 11. Which sou | arces did you find most useful and why? (If more than 3, please limit it to the 3 |
| nost useful). | |
| | |
| | |
| | |
| | |
| 12. Which so | urces did you find not useful? |
| | |
| 12 Dl | plain why these sources were not useful? |
| 13. Please ex | plant why these sources were not assessed. |
| | |
| | |

| 14. To what extent are you satisfied with the inform | nation you obtained? |
|---|---------------------------------------|
| 1. Very satisfied | [] |
| 2. Satisfied | [] |
| 3. Not satisfied | [] |
| 4. Not at all satisfied | [] |
| 15. If not satisfied or not all satisfied, please explain | n why?———— |
| | |
| | |
| 16. Have you experienced any problems obtaining | information about HIV/AIDS on campus? |
| Yes [] | |
| No [] | |
| 17. Please explain | |
| | |
| 18. What information about HIV/AIDS would you | like to have? |
| | |
| 19. Given the sources in Question 8. In what form HIV/AIDS to be? | would you like this information about |
| | |

| 20. Is there any recommendation/s you would like to make regarding the provision of HIV/AIDS information on the Pietermaritzburg campus? | | |
|--|--|--|
| | | |
| | | |
| | | |
| Thank you, for your cooperation – please return the completed questionnaire to your residence | | |
| administrator. | | |
| Mandla Maxwell Ntombela | | |
| Contact number 0834784626 or E-mail ntombelam@nu.ac.za | | |

APPENDIX: B



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Fax: (033) 260 5092

E-mail: acutt@nu.ac.za

16 September 2002

TO WHOM IT MAY CONCERN

Mandla Ntombela (972153038) is a registered Masters in Information student in the School of Human and Social Studies. His area of research is

"Sources of HIV/AIDS information used by residential students on the Pietermaritzburg campus of the University of Natal"

Any assistance that he can be given towards his research will be greatly appreciated.

Darlene Holtz

Post Graduate Administrator

APPENDIX: C

>>> Themba Khumalo 11/4/2002 10:31:52 AM >>>

Dear Mr Ntombela

May I profusely apologies for not responding to you e-mail. It is only now that I have had a chance to read my e-mails. As for the meeting we were supposed to have I got delayed in a meeting that took longer than I had anticipated.

Given the fact that I have delayed you this long, I can have my clarity questions on your research answered later. Please continue with you questionnaire distribution and data collection.

Once more forgive me for not being able to respond to your request on time.

Warm regards.

TH Khumalo

Director Student Housing

University of Natal

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