

**KNOWLEDGE, ATTITUDES AND SEXUAL BEHAVIOURS  
REGARDING HIV/AIDS AMONG ADOLESCENTS  
AT A RURAL SECONDARY SCHOOL  
IN THE EASTERN CAPE.**

*Submitted as a full dissertation*

*in partial fulfilment of the requirements for*

*the degree of Master of Education*

**MONTSENG KWILI**

**University of KwaZulu-Natal**

**Faculty of Education**

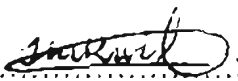
**Durban**

**February 2004**

## DECLARATION

I hereby declare that the work presented in this major thesis has been done by the author and that reference to the work of others have duly been acknowledged and referenced.

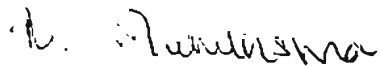
The research was undertaken under the supervision of Professor A. Muthukrishna during the period February 2003 to February 2004.



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Montseng Temperance Kwili

Durban, February 2004



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## **ABSTRACT**

AIDS is a syndrome that affects millions of South Africans. Adolescents have been regarded as a potential high-risk group with regard to HIV infection due to their increased sexual activity. Changing behaviour, even that of adolescents, who are just beginning to experience and experiment with their sexuality is perhaps the biggest challenge facing HIV / AIDS prevention in South Africa. There is an urgent need for more knowledge and information on adolescent sexuality, and their knowledge of and attitudes towards HIV / AIDS that can impact intervention programmes. The aim of this research was to examine knowledge, attitudes and behaviours regarding HIV / AIDS among adolescents at a rural Junior Secondary School in the Eastern Cape. The study used both qualitative and quantitative methodology. The participants were grade 7 to 9 learners at the school; 46 males, and 74 females ( $n=120$ ). The research instrument used was an anonymous self-report questionnaire. Data on behavior was gathered through 9 open-ended questions. Findings revealed that adolescents had higher-level knowledge about AIDS although there were also misconceptions. Their attitudes were both negative and positive. Data on reported behaviours revealed that most learners have changed their behaviours, 90% reported that they would use a condom to prevent the spread of the disease and, they indicated that a person should have one partner. It is recommended that a programme be developed to educate adolescents about sexuality in an objective and factual manner. Outsiders, not necessarily teachers should be used to implement such programmes, and the programmes should be adaptable to any circumstances, as not all schools have the facilities to their disposal like videos and films.

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## **CHAPTER ONE: INTRODUCTION**

### **1.1. Contextualising the study.**

Chapter one presents an introduction to the research by stating the nature, relevance and importance of the problem; definition of terms, and the research aims and objectives.

South African men, women and children are facing a future dominated by the fatal disease of HIV/AIDS. AIDS was first identified in 1981 (Moller & Mitchell, 2003). At the beginning of 1980's only about 100 000 persons worldwide were HIV positive. According to Franzkowiak & Wenzel (2001) since then, more than 13 million men, women and children have been living with HIV. (Visser & Moleko, 2002) indicate that unprotected sexual behavior is one of the most important high-risk behaviors that should be addressed urgently, as it is related to teenage pregnancy. The transmission of HIV is escalating and is creating serious problems in the communities.

Horn (2001) and Terry, Gallois & MacCamish (1993) explain that AIDS stands for Acquired Immune Deficiency Syndrome. 'Acquired' means that it does not occur naturally in our bodies. 'Immune Deficiency' means that the immune system, the body's natural defence against germs weakens and stops functioning properly. 'Syndrome' refers to a group of infections, which can occur in people with immune deficiency. HIV is a virus and AIDS is a syndrome. Horn (2001) describes AIDS as a fatal condition that result from infection with the HIV. It can spread from one person to another.

Once inside the body, HIV infects and destroys important immune-system cells, CD4 cells. These cells are important because they communicate with other important immune system cells in the body. If too many CD4 cells are destroyed, the immune system loses its ability to fight germs that can cause illness. These germs and the illnesses they cause are often referred to as opportunistic infections (OI). This is because they have the opportunity to grow and cause disease inside the body because the immune system is no longer functioning properly. People do not become sick from AIDS, rather they get sick and die from the opportunistic infections associated with AIDS such as pneumonia, tuberculosis, diarrhoea, weight loss, fevers and certain cancers. Death is not caused by HIV itself but by one or more of these infections.

Rehle & Shisana (2003) describe prevalence, as the absolute number of people infected at a given time, while prevalence rate is the percentage of the population, which exhibits the disease at a particular time. Incidence is the number of new infections over a given period of time and incidence rate is the number of specified unit of population (this can be 1 000, per 10 000). HIV is unique in that, it is the only virus where prevalence is given as a percentage rather than a rate. Prevalence rates are given as a percentage of specific segment of the population, for example children below the age of five, adults aged between 15 and 65, antenatal clinic attendees, blood donors, men with Sexually Transmitted Diseases, or the 'at risk' population, taken to mean 15 to 49 year olds who are sexually active.

To appreciate the need for AIDS education programs, some basic facts about the disease itself are necessary. AIDS is caused by HIV virus, which is found in high concentrations in certain body secretives, namely blood, semen and vaginal secretions.

The three modes of transmission of HIV documented according to Franzkowiak & Wenzel (1994) are:

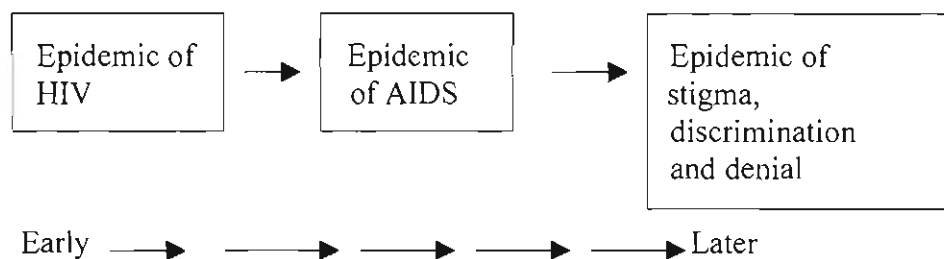
- Unprotected penetrative sexual intercourse (unsafe sex) between men and women, or between men and men when one of the partners is infected with the virus,
- Injection (during self-injecting drug abuse through needle-sharing of unsterelized instruments) or by transfusion of HIV infected blood,
- Pregnancy that is from an infected mother to her infant either in the uterus across the placenta or during birth from blood or by breast-feeding.

Sexual transmission seems to remain the major mode of infection and heterosexual transmission is increasing rapidly (Franzkowiak & Wenzel, 1994). AIDS does not spread by casual contact such as hugging, shaking hands or dry kissing nor by sharing the same toilet, swimming pool or eating utensils.

Mann (1987) cited in Parker & Aggleton (2003) stressed that it is possible to identify at least three phases of the AIDS epidemic in any community, these phases are so distinct that they can be described as three different epidemics. He described the first of these phases as the epidemic of HIV infection, an epidemic that typically enters every community silently and unnoticed, and often develops over many years without being widely understood.

He described the second phase as the epidemic of AIDS itself, the syndrome of infectious diseases that can occur because of HIV infection only after a delay of a number of years. Finally, he identified what he described as the third epidemic, potentially the most explosive, as the epidemic of social, cultural, economic and political responses to AIDS. At this stage there are exceptionally high levels of stigma, discrimination and at times collective denial that 'are central to the global AIDS challenge as the disease itself'.

Figure 1: Phases of HIV/AIDS



Source: Parker & Aggleton (2003)

Franzkowiak & Wenzel (2001) state that AIDS is a major concern affecting youth in every country, as many of them are likely to have acquired the HIV infection before the age of 18. About half of those infected with HIV/AIDS worldwide typically die of the life-threatening group of illnesses called AIDS before their 35<sup>th</sup> birthdays. This illness can be described as a deadly community disease and South Africa's biggest crisis.

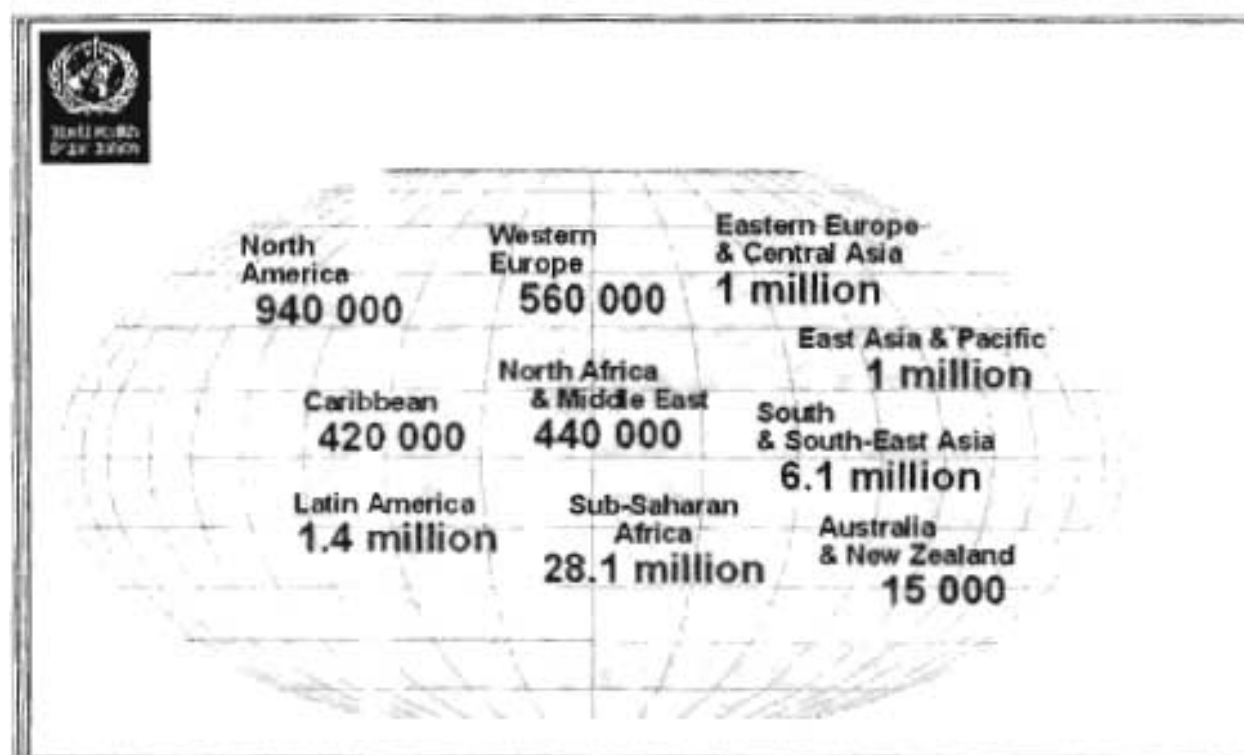
## 1.2.Perspectives on HIV prevalence in Africa

Estimates of HIV-infections vary considerably. According to figures released by UNAIDS & World Health Organisation (2001) countries with the highest adult infection rate in Sub-Saharan were as follows: Botswana (35.8%), Swaziland (25.5%), Zimbabwe (25,6), Lesotho (23.5%), South Africa (19,4%) and Namibia (19,5%). These countries appear to be worst affected by the epidemic.

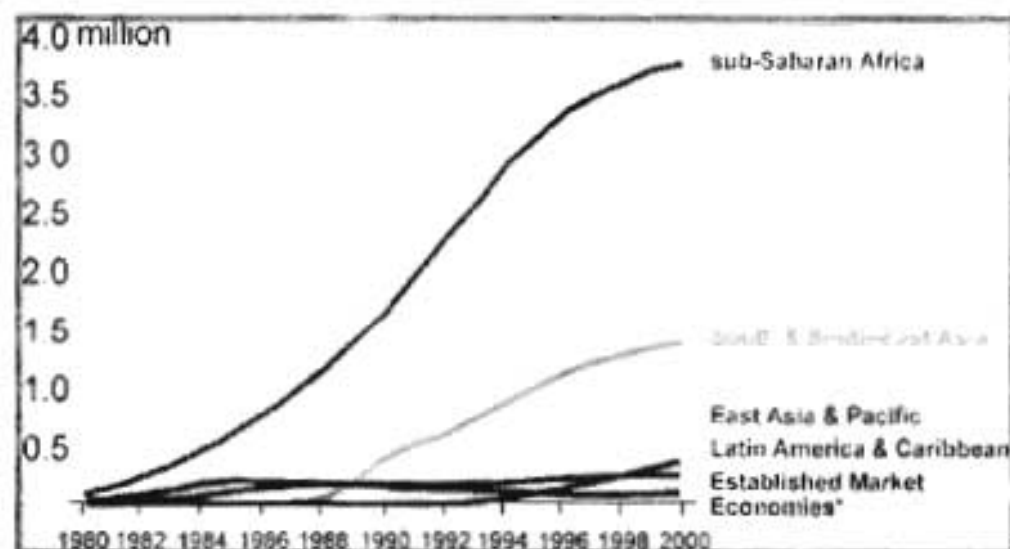
Strydom (2003) explained that the highest infection rates are found in Sub-Saharan Africa especially in countries of South East Asia and Southern Africa. Almost 70% of the global total of people (20, 8 million) infected with HIV live in Sub-Saharan Region. At the end of 1999, 23.4 million people of whom were in the age group of 15-49, more than 50% of women, were living with HIV in Sub-Saharan Africa. Some 85% of the AIDS-related death worldwide are in Sub-Saharan Africa (Moller & Mitchell, 2003). As can be seen below, the epidemic has most prevalence in Sub-Saharan Africa. Approximately 3,5 million new infections occurred in 2001, bringing to 28,5 million the total number of people living with HIV, with a total number of 2,4 million children infected in Sub-Saharan Africa only. The estimated number of children orphaned in the context of HIV/AIDS living in this region is 11 million. It is estimated that 95% of AIDS cases in Africa are due to unsafe sex. Moller & Mitchell (2003) estimate that 90% of HIV transmission takes place during heterosexual intercourse.



Figure 2: Adults and children estimated to be living with HIV/AIDS as at the end of 2001



**TOTAL:40Million.**



Source: UNAIDS and World Health Organisation (2001)

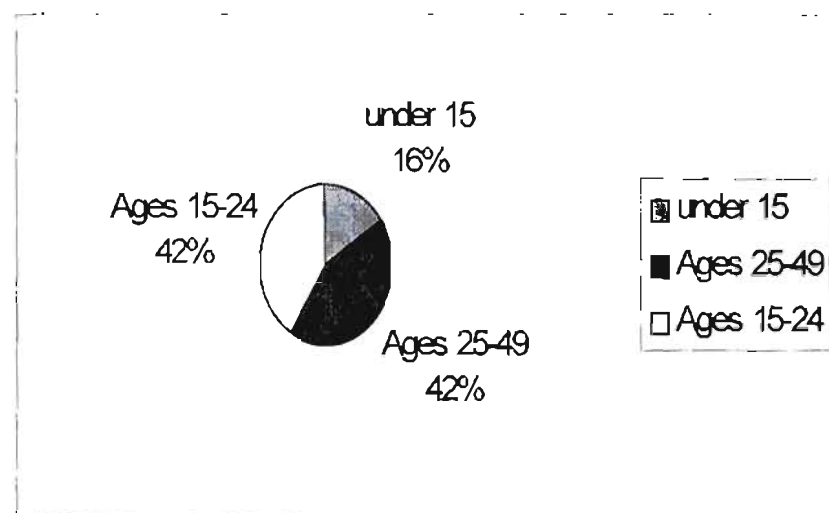
Recent statistics reveals that in Sub-Saharan Africa last year (2003), 2,4 million people died, as a result of AIDS related diseases, out 46 million people (UNAIDS & World Health Organisation, 2001). In Eastern Asia, South Asia 58 000 people died. Affected adults numbered to 43 million people, while children under 15 years numbered to 2,5 million people. Children and female populations are more affected in poor countries.

Kates (2002) explains that deaths due to HIV/AIDS is premature death and many that die from AIDS-related causes were infected as teens and young adults. The estimated survival time from HIV infection to death in sub-Saharan Africa is approximately 8 to 9 years. As such, most of those who die from AIDS-related causes between the ages of 20 and 34 were infected 8 to 9 years earlier as teens. It is projected that a total of 26,7 million people aged between 20 to 34 will have died from AIDS-related causes. According to Kates (2002) the majority (59%) of these death will be among young women and most of these deaths will occur in the current decade.

The global total of young people living with HIV/AIDS could rise from the estimate of 12,4 million to 21,5 million in 2010, a more than 70% increase between 2000 and 2010. Kates (2002) estimates that 40 million people worldwide are living with HIV/AIDS more than a third of whom (38%) are under the age of 25. Teens and young adults between the ages of 15 and 24 represent almost a third (12,4 million) of the global total of people living with HIV/AIDS. They account 33% of adult's aged between 15-49 to be living with HIV/AIDS. Those young people aged 15-24 account for half of all new infections (Figure 3).

Among young people (15-24 years) approximately three-quarter (76%) of those already infected live in the Sub-Saharan Africa (Figure 3 below). Of the 28,1 million people newly infected with HIV/AIDS in 2001 (Figure 2 above), almost 6 in 10 (58%) were under the age of 25.

Figure 3: New HIV infections in 2001 by age groups (with % of total)



Source: Kates (2002)

### 1.3. National level HIV/AIDS estimates

Harrison, Xaba & Kunene (2001) explain that in South Africa, AIDS has spread rapidly and has become a major health issue. Recent statistics estimate that 4,7 million people in South Africa are HIV positive. Within five years, 6 million of the 40 millions of South Africans will be suffering from AIDS, and it is estimated that 500,000 people will die

annually due to AIDS related illnesses. According to Morrell, Enterhalter, Moletsane & Epstein (2001) each year, children are infected at the rate of 50,000.

As one of the societies worst affected by AIDS it has been declared an epidemic in South Africa. The AIDS epidemic in South Africa does not show signs of declining soon. Many families and communities are increasingly experiencing the direct impact of the epidemic. Strydom (2003) indicates that one of the most serious obstacles in the fight against AIDS in South Africa is the cloud of secretiveness that surrounds the problem. This culture of silence and fear of rejection and isolation that developed around the disease leads infected persons to refrain from disclosing their HIV/AIDS status.

Taylor, Dlamini, Kagoro, Jinabhai & de Vries (2003) explain that there is a rapid development of HIV/AIDS epidemic in South Africa. Being that the case, an urgent need exists to understand the behaviors that place youth at risk of HIV/AIDS in order to develop and implement appropriate interventions. HIV-infection leading to AIDS is a psychosocial and behavioral problem that urgently needs to be addressed because youth are the future of society and HIV/AIDS is destroying communities.

According to Morrel et al (2001) we do not know what the rates of HIV infection are in South African schools. Data taken from a National Metropolitan Life study estimates that among 15-19 year olds, 15,6% are likely to be living with the virus. Lerlec-Madlala (2001) found that some young Zulu South Africans who are infected with HIV are knowingly infecting others. They sleep with as many partners as possible to spread the infection.

One reason given was that these young people did not want to die alone. MacPhail (1998) states that high levels of teenage pregnancy indicate high levels of unprotected sex. Research done by (Flisher & Liberty, 2000) has shown that knowledge of HIV does not change behaviour and that despite knowing that condoms prevent HIV transmission, condom use has remained disappointingly low.

#### 1.4. Regional HIV estimates

Van Aardt (2003) cited in All Africa.com (2003) indicates that Eastern Cape had the third highest number of HIV people in 2002, the highest number being KwaZulu-Natal, followed by Gauteng. He predicted that 30 000 people in this province will die of HIV/AIDS related causes in 2003, in 2004, 40 000 people will die and in 2005, 50 000 people will die. He found that 800 000 of the Eastern Cape population are infected. This figure is expected to grow by 400 000 to a total of infected people out of 7,5 million people in the Eastern Cape.

#### 1.5. Adolescence and HIV

Adolescence, the developmental period between 10 to 19 years, and youth as the stage between 15 to 24 years are periods of profound physiological, psychological, and social change. Adolescents are faced with many health needs and challenges (Mukoma, 2001). They are also periods of time particularly related to behavioural experimentation in many aspects of everyday life, including sexuality and drug abuse. Sexual intercourse between adolescents may bring about a potential risk of HIV infection.

Harrison et al (2001) mention that adolescents are of interest in the HIV/AIDS studies as they are a group whose behavior places them at risk of HIV infection, due to apparent gap between awareness and practice. It has been observed that a large number of adolescents do not protect themselves and their partners in case of intercourse. Franzkowiak & Wenzel (1994) explain that sexually active adolescents often change partners before they establish a family or long-term relationships. They are not aware that each act of sexual intercourse carries the risk of contracting or transmitting the virus as long as no one can be certain whether he/she is already infected.

Although AIDS has been a major issue of public debate nearly everywhere, a majority of people world-wide especially adolescents and youth do not perceive themselves as being threatened by HIV transmission. The prevention of HIV transmission seems to be of utmost importance, as no medical cure will be available for AIDS in the near future.

When a person has contracted the virus, he/she often may have to cope with the subsequent disease, and, there is no vaccine available for the transmission of HIV/AIDS.

There have been more than one hundred studies of knowledge, attitudes, beliefs and practices in South Africa. Mukoma (2001) indicates that South African youth have high levels of knowledge regarding HIV/AIDS, including spread and preventive measures, but on the other hand report that this knowledge has not been translated into safer sexual behaviour. Tillotson & Maharaj (2001) rely on the assumption that correct information on transmission and prevention will lead to behavioral change. Kelly & Ntlabathi (2002) view behavioral prevention as today's prevention.

Kelly (2000) indicates that behavior change will not occur simply by providing access to information, but also from a combination of knowledge, attitudes, socio-cultural contexts and available behavior options.

According to Strydom (2003) the Minister of Education, Kader Asmal announced a nine-point plan for education. Programs to be included are related to HIV/AIDS, the focus will be on increasing awareness, communicating the correct knowledge and encouraging subsequent behavioral change. Prevention of HIV/AIDS infection is of vital importance and efforts should be focused on all groups in society, especially young people.

Taylor, Jinnabhai & Dladla (1999) indicate that communicating correct and factual information can only change the attitudes of people. Communication of knowledge to pupils needs a strong eye, because information may be provided too late and may be of little use to children who are already sexually active. Recognizing that providing information is not enough, teenagers need skills to negotiate safe sex practices, such as delaying the age of first sexual intercourse and the use of condoms. Franzkowiak & Wenzel (1994) and Kelly & Ntlabathi (2002) explain that schools are a common focus of educational activities because a large number of adolescents throughout the world attend schools, therefore, adolescent sexuality should be one of the concerned topics.

#### 1.6. Objectives of the study

The study presented on this dissertation aimed at investigating the following:

- knowledge level of adolescents regarding HIV / AIDS, in a rural school,
- the kind of attitudes students hold towards HIV/ AIDS and attitudes towards people living with it, and
- how, if at all, they have changed their sexual practices as a result of AIDS.

The research question explored was: What are the knowledge, attitudes and sexual behaviors regarding HIV/AIDS among adolescents in a rural school?

Data in this research was collected through an anonymous self-administered questionnaire to investigate knowledge, attitudes and behaviors regarding HIV/AIDS among adolescents. The study was conducted among adolescents from grade 7 to 9 in a rural school in the Eastern Cape. The study has used both qualitative and quantitative methods.



## **CHAPTER TWO: THEORETICAL FRAMEWORK FOR THE STUDY**

### **2.1. Introduction**

The purpose of this second chapter is to review the relevant theories, principles and concepts underpinning health and to present, where necessary those research findings in health and HIV/AIDS education which informed and guided the study.

Well-known models of health behavior based on cognitive decision making theories have been applied to preventive behavior. Perhaps the two most frequently cited are the Health Belief Model and the Theory of Reasoned Action. According to Terry et al (1993) these two theories display some similar components: they both deal with volitional behavior, both are premised on the value expectancy-theory of behavior, and are both based on beliefs.

### **2.2. The Health Belief Model**

Terry et al (1993) state that the Health Belief Model was first introduced by Becker and Rosenstock in 1974. It attempts to explain health-related behaviour. The Health Belief Model has been widely used to predict health behaviors from knowledge of a person's beliefs and attitudes. It focuses on behaviours that are under an individual's control. It is primarily concerned with conscious decisions about utility of specific actions.

According to Wulfert, Edelgard, Wan & Choi (1995) the Health Belief Model preventive actions result from a decision-making process through which people evaluate the severity of a disease as well as the analysis of the costs and the benefits of taking the action. Terry et al (1993) explain the following as the four major components of this model.

- *The perceived susceptibility*: this is the individual's perception of vulnerability of contracting the disease.
- *The perceived severity*: this refers to the individual beliefs about the seriousness of consequences associated with that disease.
- *The perceived benefits*: this includes estimates of risk reduction and feelings of security.
- *The perceived barriers*: this is the potential negative aspect that may result from performing the preventive behavior. This may include the estimate of physical, psychological, financial and other costs in performing the behaviour.

Additionally, two other factors thought to play a supportive role in preventive health behaviour are: cues to action and social norms to the individual. Cues to action include environmental action (e.g. media publicity) or bodily (e.g. physical symptoms of a health that motivate people to take action). However, this has not been studied extensively. Some researchers (Wulfert et., 1995) have found the benefit and barrier dimension to be more influential components for predicting and explaining health-related behavior than either perceived severity or vulnerability.

Brown, DiClement & Reynolds (1999) in Wulfert et al (1995) question whether HIV epidemic fits well within the conceptual framework of the Health Belief Model.

Heunis (1994) explains that the Health Belief Model provides a theoretical framework to guide programs such as knowledge, attitudes and behaviors regarding HIV within which students response to AIDS can be comprehended. The model posits that perceptions of one's vulnerability to a disease, its seriousness, the perceived efficacy and costs, and benefits of recommended health-related behavior and a sense of likelihood of adherence to recommended health action are the factors determining whether a recommended health-related behaviour will be adopted. His attempt to incorporate the thinking of the Health Belief Model is based on data relating to student's perceptions of their own susceptibility to HIV and AIDS.

According to Terry et al (1993) the Health Belief Model lacks utility in the prediction of safer sex as its focus is on health or disease outcomes. Although engaging in safer sex is a strategy that can be used to avoid the transmission of HIV and other sexually transmitted diseases, it is difficult to reduce the behaviour to the same status as other health behaviours such as receiving vaccination against influenza.

Denison (1996) argues that although this theory makes a valuable contribution in explaining how and why people change their behaviours, it does not take into account environmental and economic factors, social norms and peer influences and socio-cultural

issues that influence and limit an individual's behaviour choices and ability to take action.

### 2.3. Theory of Reasoned Action

Pick & Susan (1999) explained that Ajzen & Fishbein first introduced the Theory of Reasoned Action in 1975. In comparison to the Health Belief Model, the Theory of Reasoned Action has been empirically more successful in its predictions. It has been designed to predict behaviors under volitional control. More over, although the theory has been employed as an explanatory model in health context (e.g. weight loss behaviors, modification to smoking and drinking), it is not restricted to use in this context. The predictors in the model allow consideration of the role of this model (e.g. the perceived effectiveness of condom use as a safer strategy) and more general beliefs about the consequences of performing a particular behavior (Terry et al.,1993). However, automatic behaviors are not within the scope of this theory. The theory also acknowledges the role of normative influence on behavioral choice, an influence that is likely to be important in the context of safer sex, given the co-operative nature of the behavior. For these reasons, the Theory of Reasoned Action may form an appropriate theoretical basis for research into determinants of safer sex. The Theory of Reasoned Action is the theoretical framework guiding the present study because it incorporates social influences on behavior.

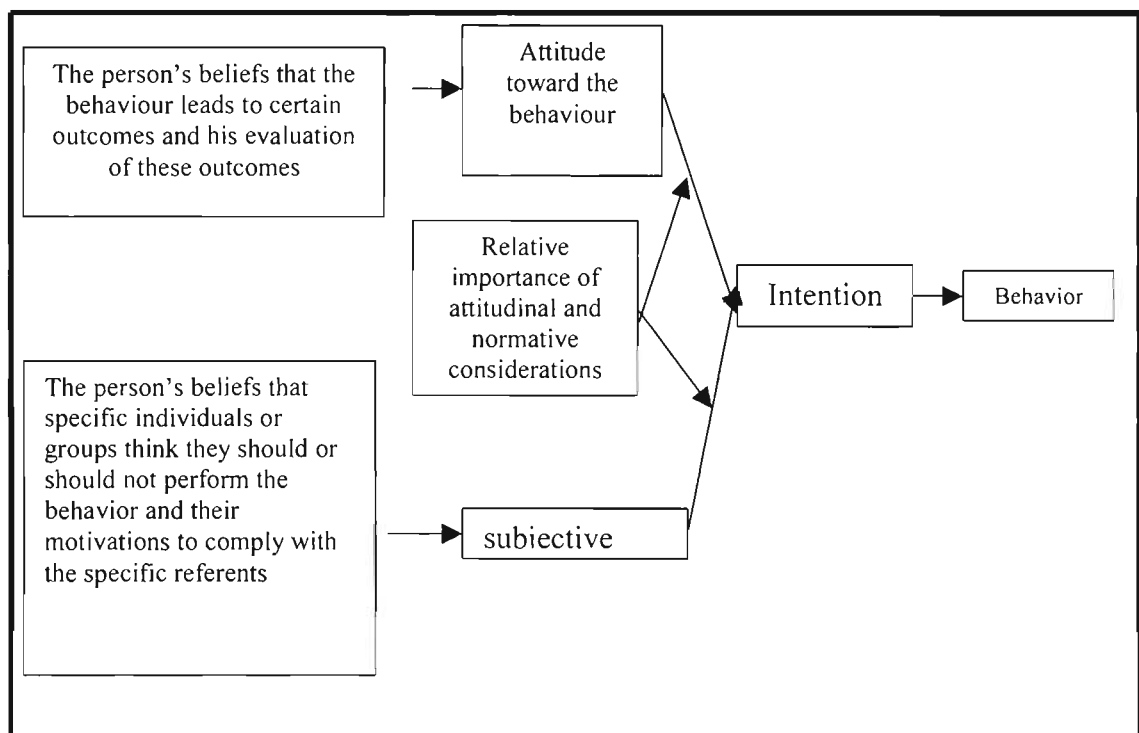
The Theory of Reasoned Action emphasizes the relationship between highly specific attitudes, subjective social norms, beliefs, intentions and behaviors. Patry, Alain, Pelletier, Luc (2001) explain that this theory is based on the assumption that behavior results primarily from a cognitive process that systematically makes use of all available information (internal or external). Patry et al (2001) argue that, if one knows what information is processed, then one can accurately predict individual behavior, in other words, human beings make use of the information available to them when making decisions.

According to this theory, human social behavior is not controlled by unconscious motives rather a specific behavior can be predicted if the actor's attitudes and subjective norms are known (Patry et al., 2001). The theory basically states that a person's behavior is determined by their behavioral intentions to perform it. A person's behavioral intentions are a function of two different factors. The first factor, being the favourability attitude toward the behavior. Behavior is the result of a specific intention to perform it, and a specific intention is perceived as being determined by the attitude toward the specific behavior (an individual's positive or negative evaluation of performing the behavior).

The second factor is subjective norm (Terry et al 1993). The subjective social norm regarding that behavior (an individual's perception of the social pressure put on them by significant others to perform or not to perform the behavior in question).

The model further proposes that people's attitudes towards a behavior are a function of their beliefs concerning the consequences of performing the behavior (behavioral beliefs) and evaluation of these consequences. Subjective social norms, on the other hand, are then seen as a function of people's perceptions of the pressure from others to perform the behavior (normative beliefs) and the motivation to comply with these referents.

Figure 4: A grammatical representation of the theory of reasoned action



Source: Terry, Gallois & MacCamish (1993)

As shown in Figure 4 above, the Theory of Reasoned Action proposes that a person's decision to engage in particular behaviour is influenced by the extent to which the person intends to do so. Behavioural intentions reflect the person's willingness to perform the behaviour. Terry et al (1993) state that people are more likely to intend to perform a certain behaviour when they have a favourable view towards doing so, and perceive normative support for performing the behaviour. For some groups of people or some behaviours, attitudes may be the primary determinants of intentions, whereas for other behaviours or other groups of people, intentions may be normatively controlled. The Theory of Reasoned Action also identifies the determinants of both attitudes and subjective norm.

The person's attitude towards the behavior is proposed to be influenced by his or her beliefs about the consequences (i.e. costs and benefits) of performing a behavior (e.g., using a condom is likely to reduce one's risk of contracting HIV / AIDS, destroy the spontaneity of sex, prevent pregnancy, reduce sexual pleasure). According to Terry et al (1993) the person's evaluation of each of the consequences e.g. reducing the risk of contracting HIV/AIDS is a highly desirable outcome. A person will have positive attitude towards performing the behavior if he or she believes that performing the behavior will lead to mostly positive outcomes; that is, positive outcomes are considered likely, negative outcomes are considered unlikely.

Terry et al (1993) explained that like attitudes, people's norms are considered to be belief-based. According to the Theory of Reasoned Action, normative beliefs reflect the person's judgments about whether other people (e.g., sexual partner, friends, parents, and medical professionals) would think that it was a good idea to perform the behavior. As such, it represents a global judgment of perceived pressure to perform the behavior. This theory assumes that in the final analysis behaviors are caused by beliefs. Behavioral norms are conceptually different from subjective norms, in that, behavioral norms have to do with what significant others are perceived to do, whereas subjective norm is concerned with what they are perceived to think the actor should do. Recommended intervention strategies revolve around identifying beliefs that lead to risky or risk-reducing behaviors.

According to Patry et al (2001) this model has been tested in many different situations, and has been useful in understanding and predicting many types of behaviors such as, attitudes and moral behaviors. It has been used to explain a wide range of health-protective behaviors, like condom use. Some tests of the model's predictive power have found that attitude toward a particular behavior has more influence than subjective norm. They came to the conclusion that most behaviors are controlled by attitude rather than by social influence.



The Theory of Reasoned Action received substantial empirical support in predicting health-protective behaviours including safer sex. Tsvere (2000) explains that healthy living and risk taking behaviours can be explored using this model as it has been found to be more useful in situations that it was developed for. It is based on the idea that HIV/AIDS is a behavioural problem that is influenced by psychological, as well as socio-cultural forces in the social environment in which sexual behaviour is played.

#### 2.4. Conclusion

Attitudes and social norms form the basis upon which the decision to perform or not to perform a specific behavior is made. Attitudes are not inherent, but are acquired or learned within a social setting, in which they are formed or shaped. It is therefore this learned nature of attitudes that contributes to the difficulty of changing high-risk sexual behavior. Behavior should be understood as a function of the interaction between inherent biological motivations and attitudes and subjective social norms that are determined by the socio-cultural environment in which the behavior takes place such as gender role norms (Terry et al, 1993). Many obstacles to changing high-risk sexual practices can be understood in the context of norms and values that influence sexual behavior within a specific social group. For instance, the decision to use or not to use condoms is influenced by various factors such as age, gender and cultural differences regarding sexuality.

## **CHAPTER THREE: LITERATURE REVIEW**

### **3.1. Introduction**

This chapter reviews the literature on knowledge, attitudes and behaviors regarding HIV/AIDS among adolescents. The first part of the chapter will present a more in depth examination of HIV/AIDS in South Africa. The second part will focus on studies done on knowledge, attitudes and behaviors internationally and in South Africa.

### **3.2. HIV/AIDS in South Africa.**

The South African epidemic is the most severe in the world with the fastest-growing number of infections. Tillotson & Maharaj (2001) indicate that 150 young people under the age of 15 are infected with HIV/AIDS every day in South Africa. Shisana & Simbayi (2002) estimated that the national South African HIV prevalence rate among 15-19 year-olds was 4% in males, and 7% in females; 20 to 24 year olds, 8% in males and 17% in females; 25 to 29 year olds; 22% in males and 32% in females; and among African/Black youth 15-24 years, colored youth was 6,4%; Indian youth was 0,3% and Whites 15-49 years, 6,2%. Strydom (2003) indicates that 200 babies are born daily in South Africa infected with the virus and about 25% of pregnant women are HIV positive. AIDS is a communicable syndrome that is caused by the HIV. In South Africa (Department of Education, 1999) like other countries HIV is spread mainly through sexual contact between men and women.

Infection through contact with HIV infected blood, intravenous drug use and homosexual sex does occur in South Africa, but constitutes a very small proportion of all infections. Blood transfusions are screened and the chances of infection from transfusion are extremely low.

In 1998, the Metropolitan Doyle model, using national prevalence data, was used to predict levels of infection at the University of Natal, Durban (Ichharam & Martin, 2002). It was estimated that, by 2003, almost 20% of the university's students would be HIV positive, and that, in twelve years to 2010, roughly 4,850 would be infected while studying at the institution. The following year, a study conducted at the neighboring University of Durban Westville revealed infection rates of 25% in women and 12% in men aged 20 to 24.

In 2000, the South African Universities Vice Chancellors Association published the following estimates for levels of infection: 22% for university undergraduates, eleven percent for post-graduates university students, and 24.5% for technikon undergraduates. The above estimates emphasize that HIV/AIDS was a real problem on university campuses. Kelly & Ntlabathi (2002) revealed that student's social lives often involved high-risk behaviour, including sugar daddy practices, sexual experimentation, unprotected casual sex, and multiple violence. He also found that for many students, especially if they lived on campus, commencement of university studies was concurrent with the onset of sexual activity. Students find it difficult to negotiate the use of condoms to prevent infection.

In this case women are at greater risk not only for biological reasons, but also because of 'social disempowerment' as they found it more difficult than men to insist on the use of a condom during sexual intercourse. People do not develop AIDS as soon as they are infected with HIV. During this period they can pass their infection on to other people without realizing that they are HIV positive (Department of Education, 1999). It is during this period that the virus gradually weakens the infected person's immune system, making it increasingly difficult to fight off other infections. The estimated average time from HIV infection to death in South Africa is 6 to 10 years.

Richter (1996) explained that the Director-General of Health identified teen pregnancies as one of the most critical public health problems in South Africa. Unwanted adolescent pregnancies are of worldwide concern. According to Richter (1996) AIDS epidemic has revealed that infection in adolescence constitutes a predominant risk phase, with about 60% of new HIV infections occurring among 15-24 year-olds. Teenage pregnancy is more prevalent among Colored and rural African school. The majority of young people have either never used a condom during sexual intercourse, or use them inconsistently.

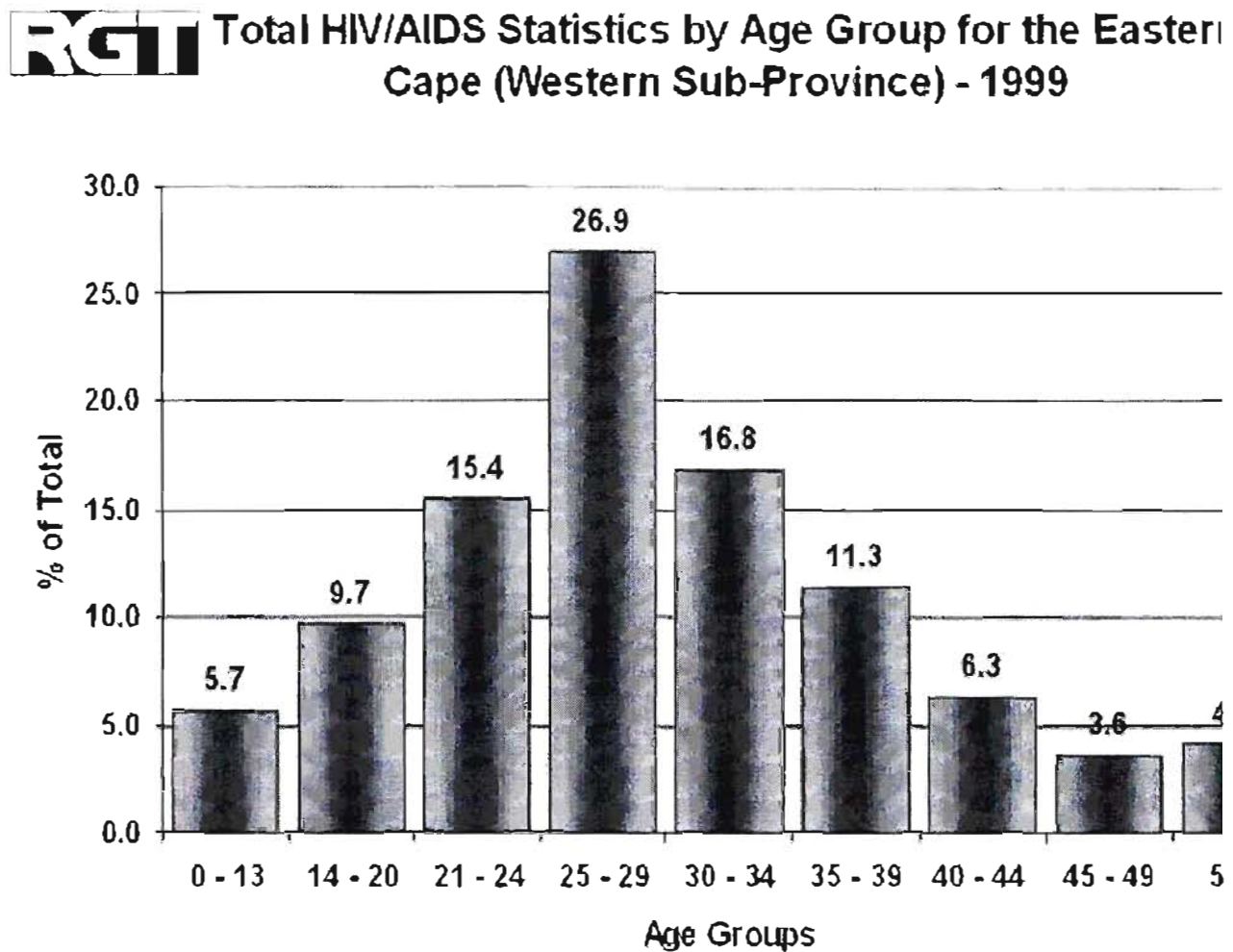
Karim (2000) cited in Tillotson & Maharaj (2001) argued that HIV infection is increasing much faster and is ten times more common among black South Africans than other race groups. Tillotson & Maharaj (2001) explain that for most black South African, where the majority live below the poverty line, infection with HIV means imminent onset of AIDS and death.

Robert, Shell & Zeitlin (2000) claimed that, what AIDS does to human body, it does to institutions; it undermines those institutions that protect us. According to Tillotson & Maharaj (2001) health, a sector in South Africa already affected by lack of resources, will be severely strained by the epidemic, through resources devoted, staff lost, and hospital beds taken by HIV/AIDS patients. Adult sickness leads households to expend more on health care and less on productivity. Adult deaths entail income shocks, and in agricultural households, a large loss of productivity. HIV/AIDS in South Africa, like other African countries, is already affecting and will increasingly affect all sectors, from industry to education. Companies are losing workers and money due to health insurance claims, while schools are losing teachers and students.

Robert, Shell & Zeitlin (2000) mentioned that the HIV rates among the age group 25-29 in the Eastern Cape are now among the fastest HIV growth rates in the world since 1999 (Figure 5.1 below). HIV rates among school-going adolescent women in the Eastern Cape are growing extremely higher.

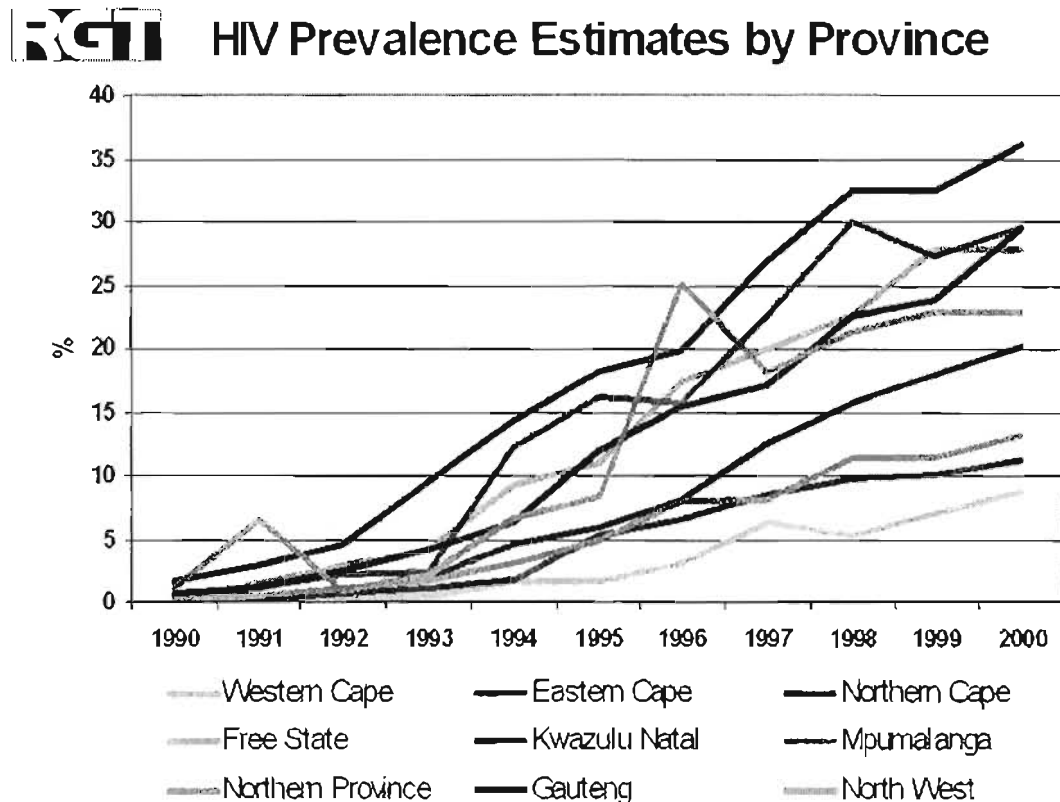
According to the National Health and Population Development Anonymous HIV report (April 1994), there were 862 new cases of HIV infection reported in the Eastern Cape in 1993, of which 37 were in the Albany district. Ninety of the 862 in this region were people under the age of 20. It follows that HIV infection is a present and immediate concern for the youth of the region.

Figure 5.1: Eastern Cape Statistics



Source: UNAIDS & World Health Organisation (2001).

Figure 5.2: HIV prevalence estimates by Province



Source: UNAIDS & World Health Organisation (2001)

Van Aardt (2003) cited in All Africa.com (2003) argues that according to birth statistics the province with the highest number of live births in 2001 was KwaZulu-Natal (28%) followed by the Eastern Cape (17,5%) and Gauteng (13,9%). KwaZulu-Natal had highest HIV prevalence from 1990-2000 (Figure 5.2.above). These three provinces accounted for 59,4% of the population in the country. These three provinces are also the most populated with the highest HIV prevalence rates in the country. His analysis reveals that in these provinces large numbers of females are already in more advanced phases of HIV/AIDS cycle.

Antenatal clinic prevalence data continue to be the most readily available source of data for modeling the HIV/AIDS epidemic in many countries. Whereas HIV prevalence is routinely measured in almost all countries of the world to produce fairly accurate data, AIDS is not. In South Africa HIV is not a noticeable virus, and therefore statistics on HIV/AIDS are based on estimates and models. The National HIV prevalence surveys among pregnant women from 1990-2001 (Department of Health, 2000) served as the data used to mark the input HIV prevalence values for the model.

A survey that was conducted (following the one conducted in 1998) across all nine provinces between 1<sup>st</sup> and 31<sup>st</sup> October 2002, with the aim of making nationally representative estimates of HIV prevalence in South Africa. The survey (Statistics South Africa, 2002) was based on pregnant women attending public antenatal clinics in South Africa. It was the 12<sup>th</sup> annual survey to be carried out. The findings have shown that since 1998 South Africa had one of the fastest growing and most severe epidemics in the world. AIDS mortality began rising rapidly while HIV incidence remained high after 1998. The statistics for 1998 showed that 25% of women attending antenatal clinics, tested positive in Gauteng and 30% in KwaZulu Natal. The figure raised from the figure of 24,8% in 2001 from 26,5%, and 24,5% in 2000.

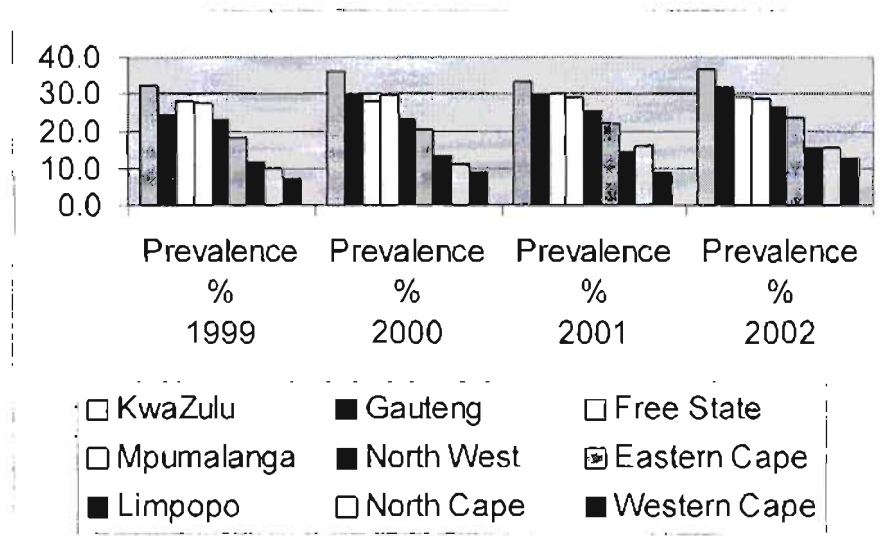


Table 1: Estimated HIV prevalence 1999-2002 by province among antenatal clinic attendees.

Province	1999 Prevalence %	2000 Prevalence %	2001 Prevalence %	2002 Prevalence %
KwaZulu Natal	32.5	36.2	33.5	36.5
Gauteng	23.9	29.4	29.8	31.6
Free State	27.9	27.9	30.1	28.8
Mpumalanga	27.3	29.7	29.2	28.6
North West	23.0	22.9	25.2	26.2
Eastern Cape	18.0	20.2	21.7	23.6
Limpopo	11.4	13.2	14.5	15.1
Northern Cape	10.1	11.2	15.9	12.4
Western Cape	7.1	8.7	8.6	26.5

Source: Statistics South Africa (2002).

Figure 6: A grammatical representation of the estimated HIV prevalence trends among antenatal clinic attendees in South Africa



Source: Statistics South Africa (2002)

The table and the graph above show that in 2002, KwaZulu-Natal recorded the highest HIV prevalence, which had a rate of 36,5% an increase of 3% since 2001, followed by Gauteng (31,6%) and Free State (28,8). There were larger increases in the Northern Cape and North West Province. These estimates have been made using a model developed by the South African Department of Health for this purpose. The prevalence of HIV/AIDS among pregnant women under the age of 20 years has risen by a frightening 65,4%. The rate of increase is estimated at 33,8%, which means that one in eight of the country's sexually active population, those over 14 years, is now infected. The South African Department of Health has estimated that in 2001, in the general South African population, 2,65 million women and 2,09 million men between the ages of 15 to 49 were living with HIV.

It was estimated that 83,581 babies had become infected with HIV through mother to child transmission. These high rates show what a significant problem HIV/AIDS is in South Africa.

The comparison of the HIV prevalence levels reported in 2002 household survey (15,6%), and 2001 antenatal clinic survey (24%) produced an adjustment of 0.63. The 1998 antenatal prevalence was considered an 'extreme' result and an adjustment factor of 0.63 were applied for the year 2003 survey.

The number of HIV infected people, by age group and sex, projected for the year 2003 is displayed in Table 2 below. The total HIV population is estimated to be 4,68 million this year, with 0,37 million infections in the 0-14 years age group and 4.04 million infections in the 15 – 49 years age group. The annual deaths due to HIV/AIDS is expected to peak with 486 320 AIDS deaths in year 2008. By 2020, the total population of South Africa is expected to be 23% smaller than it would be in the no AIDS scenario. The projections for some other selected years:

2003: 375 670

2010: 470 420

2020: 443 520

Table 2: HIV age distribution in the year 2003 (the distribution is in units of a million).

Age group	Male	Female	Total
0-4	0,9	0,9	0,18
5 to 9	0,3	0,03	0,06
10 to 14	0,04	0,09	0,13
15-19	0,09	0,22	0,31
20-24	0,23	0,46	0,69
25-29	0,34	0,55	0,89
30-34	0,36	0,47	0,83
35-39	0,30	0,34	0,65
40-44	0,23	0,19	0,42
45-49	0,16	0,11	0,26

Source: Rehle & Shisana (2003).

### 3.3. Empirical studies on knowledge, attitudes & sexual behaviors

#### 3.3.1. International perspectives on HIV/AIDS

Mukoma (2001) states that the emergence of HIV/AIDS, the lack of a cure, the high and increasing incidences of infection amongst this age group have led to increased interest and research on adolescent health internationally. Uwalaka & Matsuo (2002); Nhamo, (2000); Johnson, Campbell, Toewe & Bell (1990); Dusenbury, Gilbert, Barker & Laurence (1991) confirm that, internationally, knowledge of AIDS has been assessed in several different populations including adolescents and college students.

Johnson et al (1990) conducted a study concerning knowledge of and attitudes about HIV/AIDS among 73 preclinical medical students at Virginia Medical School. The attitudes expressed by medical students did not indicate inherent discrimination towards AIDS patients by the students. They rejected the notion that AIDS is a punishment from God to homosexuals and drug users, and that AIDS patients deserve their illness because of their behavior.

Dunsberry et al (1991) conducted a study to determine how much young adolescents know about AIDS, attitudes, and behavioral intentions concerning AIDS. Their sample consisted of 303 seventh grade students in 3 schools in greater New York area. The results indicated that for the total sample, 94% of students were aware that AIDS affects the immune system, and 93% knew that there is presently no cure for AIDS.

In terms of knowledge that AIDS can be transmitted through sexual intercourse, 69% indicated that not having sex is the most effective way of preventing AIDS. Regarding attitudes, 16% of adolescents indicated that they would not want to be in the same room with a person who had AIDS. 19% indicated that they would avoid a friend who had AIDS. For the total sample, 57% indicated that they would likely have sexual intercourse prior to marriage, while 41% indicated it was likely prior to finishing high school. Fear of social contact was common. They were afraid to attend school with someone with AIDS. Most students also indicated that they would avoid a friend who had AIDS. Some were afraid to share a bathroom, but fear was less frequent among the few students who said that AIDS couldn't be spread by that contact than among those who taught it could be.

Strunick, Johnson, Quinones, Foster & Louria (1991) administered a questionnaire to 1,793 urban and suburban New Jersey High School students, to survey their knowledge, attitudes, and behavior related to the acquisition of AIDS. These New Jersey students were knowledgeable about high-risk groups and situations. They showed the intention of using condoms in future as condoms reduce risks of AIDS, and they are protective. Nearly half (49%) of all participants reported having used condoms, indicating that condom use is somewhat familiar, available, and acceptable to them. Only 33% did not know about condoms. Most students claimed to have changed their behavior, they were using condoms, reducing the number of partners, and 18% claimed to have stopped having sex.

UNICEF (2001) cited in Nhamo (2002) carried out a national knowledge, attitudes, behavior and practices (KABP) survey in 14 districts among the 10-19 year olds in Zimbabwe. The aim of the survey was to obtain relevant data on knowledge, attitudes, behaviour and practice of the 10-19 year olds in relation to drug abuse and other health related behavior. Data was collected through questionnaires, which were administered to 931 in school children, 480 out of school youth.

The study findings indicate that 90% of in and out of school youth in the 14 selected districts mentioned sexual intercourse as the main mode through which HIV/AIDS occurs. 63% of the in school youth were of the view that having multiple partners increases the risk of infection with HIV, 43% cited sex outside marriage, while 38% associated risk infection with sleeping with prostitutes. Out of school youth held the same views. Other risk behaviours that expose one to HIV infection were less frequently mentioned. In Zimbabwe, general knowledge about HIV transmission was fairly high among young people. Youth perceived themselves as less vulnerable to HIV compared to adults and married couples.

Muze & Ndlovu (1996) conducted a survey of knowledge, attitudes, and behaviour about HIV/AIDS among high school students in Zimbabwe. A stratified randomly selected sample of 478 High School Students were given self-administered questionnaires. Generally, respondents demonstrated a 50% to 80% accuracy of factual knowledge, 30% preferred only sexually involved relationships without protection, and a small number considered the possibility of HIV/AIDS.

According to Strunick et al (1991); Dunsberry et al (1991); Sy (1999); Nhamo (2002) almost all of the studies show that in virtually every group studied, large gaps exist in knowledge concerning AIDS. Participants were aware that AIDS affects the immune system and that presently there is no cure for AIDS. Most students recognized that abstaining from sex with an infected person and always using condoms would reduce the risk.

Kaiser Family Foundation (2002) conducted a study on knowledge and attitudes on sexual health issues, where a national random-sample survey of 1200 adolescents and young adults, including 202 (13 to 14 year olds), 296 (15-17 year olds), and 702 (18 to 24 year olds) was used. Findings indicated that for many teens and young adults alcohol and drug use are closely linked to sexual decision-making and risk taking. Nearly nine out of ten said that their peers use alcohol or drugs before having sex, and condoms are often not used when people are drinking or using drugs. Many young people (88%) 15-24 year olds, who are sexually active, reported that they themselves have engaged in risky sexual behaviors because of substance use. Seven out of ten (73%) young people, 15 to 24 years old also agreed that condoms often do not get used when people are drinking or using drugs. Girls and young women (79%) are more likely than boys and young men (65%) to report that their peers are having unprotected sex under the influence of alcohol and drugs. Sixty-seven percent of 15 to 24 year olds reported having had sexual intercourse. Young males (85%) were more likely to have had intercourse than their female counterparts (77%), amongst young adults (18 to 24).



### 3.3.2. South African studies

Lerlec-Madlala (2002) indicated that the arrival of HIV/AIDS epidemic more than twenty years ago in developed world prompted many studies on youth and HIV. Much of the published research in South Africa was conducted among high school and college students in an attempt to discern knowledge of the virus, attitudes towards HIV/AIDS, and the sexual behaviour of teenagers.

Richter (1996) mentioned that there have been a variety of South African studies of adolescent's sexual behaviors, and knowledge about HIV/AIDS. Nicholas, Daniels & Hurwitz (1994) designed and conducted an anonymous structured questionnaire to obtain baseline data on knowledge and attitudes about HIV/AIDS among first- year black university students in the Western Cape for three successive years. In 1990 a sample of 1,902 students was used, in 1991 a sample consisted of 2,113, and, in 1992 a sample of 1558 subjects was used. This study revealed striking misinformation about the risk of contracting AIDS by giving blood, (41,5% said Yes, and 10,5 % were unsure), 6% agreed that AIDS could be contracted from a toilet seat compared to 8,1% who were unsure. They found that the students knowledge of AIDS was inadequate, and misconceptions about HIV/AIDS transmission were relevant. Prejudiced and exclusionary beliefs about people with AIDS were also common. Little difference over a three-year period was evident.

Nicholas et al (1994) explained that very little published research on the sexuality behaviors of South African adolescents is available, and hardly any sexuality research on black South Africans has been done. The sexual behavior of blacks has been misrepresented to such an extent that an objective discussion is difficult.

Taylor et al (1999) surveyed two primary schools in the southern KwaZulu-Natal to find out knowledge and behavior regarding HIV/AIDS among young learners. All pupils (691) in grades 3-7 with an average age of 11 years completed a questionnaire in Zulu. The results showed that 21% did not know how HIV is transmitted, 55% believed that it could be transmitted by playing with an infected person, 59% did not want to use the same cup with an infected person, and 48% did not want to use the same toilet as an infected person, and 35% thought that even touching could result in infection. Most of the pupils (73%) did not think they were at risk of getting AIDS. 53% agreed that HIV/AIDS could be prevented by behaviors such as using a condom, avoiding sex, and having a single faithful partner but only 34% of the pupils would use a condom themselves.

Morrell et al (2001) conducted a research in two black working class township schools in Durban through a survey of 450 students at these schools. Most of the learners (88%) revealed that they knew about HIV/AIDS with 70% identifying unprotected sex as a cause. Generalized awareness of AIDS was evident with a high level of knowledge. The girls knowledge about HIV/AIDS seemed set in a powerful context of their first hand experience of rape and sexual assault.

Amongst the fifteen girls interviewed, at least three had suffered rape. All the others spoke of knowing at least one friend or relative who had been raped (Morrel et al., 2001). Girls felt the pressure to have unprotected sex with their boyfriends, regardless of their knowledge about the use of condoms to reduce the risk of pregnancy, HIV, and other sexually transmitted diseases.

Harrison et al (2001) conducted a study on sexual risk among adolescents aged between 13-19 in the rural Hlabisa District of northern KwaZulu/Natal, South Africa's most populous province. The objectives of the study were to understand sexual risk perceptions in this age group. Participating schools were randomly selected. All participants were enrolled in schools, and were selected through a self-administered questionnaire given to all students in selected grades. The findings were different, according to sex. Girls saw condom use as a sign of love and protection, whereas boys tended to use them with casual partners. Girls considered young people to be at lower risk generally, and sex was seen as the domain of older people, and the right time to engage in sex was age 18 or older. Girls feared HIV/AIDS generally but that did not influence prevention. Both boys and girls mentioned not having sex as another means of practicing safe sex, but they did not know other methods of safe sex other than condom.

A recent survey was conducted by MacPhail (1998) in a South African mining town of Carletonville. Even though the findings point to adolescent's high levels of knowledge, they have little impact on current adolescent's sexual behaviors, in various communities, and various age groups.

Few adolescents were able to translate their knowledge into adopting safer behaviors. MacPhail (1998) indicates that one of the greatest barriers to the adoption of safe sex behavior in South Africa and the use of condoms, is that; girls are expected to prove fertility before marriage.

In South Africa, sexual behavior is reported to start at around 13 years among rural boys than urban young people, and 15 years among girls, and fewer reported using condoms (Ritcher, 1996). As a result there is a high rate of unwanted adolescent pregnancies. Ritcher (1996) on the other hand, reported that sexuality activity in South Africa begins on average anywhere from 13-15 years old. In a recent survey that was done in 1999 among adolescents in Durban, 50,2% of 14-22 year olds respondents were sexually active.

Buga, Amoko & Ncayiya (1996) conducted a study of 2,018 learners in 26 schools in 22 rural districts of the Transkei region of the Eastern Cape on 'adolescent sexuality.' The purpose of the study was to determine the patterns of sexual behavior, contraceptive practice and reproductive health amongst Transkeian adolescents. Of the 126,13 year old girls and 67,13 year old boys were already sexually experienced, while 12,7% and 45% were engaged in regular sexual activity. Generally, sexual experience followed shortly after the first boyfriend or girlfriend was acquired. They concluded that, early initiation, high level of sexual activity, a high rate of adolescent pregnancies and Sexually Transmitted Diseases (STD's) characterize adolescent sexuality in rural Transkei. These adolescents are therefore at high risk of HIV.

The average length of time between the first date and first intercourse was approximately three months for both boys and girls. Males tended to report 'proof of normality' as the reason for initiating sex. Of all female sexually active respondents, the most commonly reported reason for having sex was 'forced by partner.' The next most common was peer pressure. Unplanned pregnancy interrupts schools, and may even affect performance since 11,2 % of adolescent mothers were attending schools as well as looking after their own babies.

Kelly & Ntlabathi (2002) reported the results of a survey of six sites (n = 620) across South Africa on adolescent early sexual activity with respondents aged 15-30 years. The study investigated a wide range of issues concerning youth sexuality in the HIV/AIDS context. The findings relating to age differences between partners indicate some of the age differentials from the survey: girl aged 6 with boy aged 24; girl 9, boy 14; girl 11, boy 19; girl 13, boy 18; and girl 14, boy 19. Boys tend to start experiment with sex earlier, but take longer to become involved in steady relationships. Twenty-three percent of women, who have had sex before, had sex with someone five or more years older than themselves on the first occasion that they had sex. Nearly three in ten male students said that they drank alcohol or used drugs before the last time they had sexual intercourse. Sixty-two percent of male students who had ever had sex and 56% of female students reported using a condom the first time they had sexual intercourse. There are indications that students become more sexually responsible as they pass through higher grades.

Table 3.1. shows that there are strong differences in the age of first sexual intercourse experience in each of the sites. Almost three out of four respondents (71%) had had sex before. Table3.2.below indicate that in some sites, adolescents had sex before 14 years with partners three or more years older

Table 3.1: Age of first sexual activity.

Province	Had sex before 14 years(%)		Average age of first intercourse	
	Male	Female	Male	Female
KZN	78	54	15.8	15.9
Eastern Cape	97	90	14.8	15.9
Western Cape	87	69	15.6	17.8
Gauteng	38	23	14.8	15.9
Northern Cape	88	88	15.7	17.6
N.Province	88	85	16.7	18
All	77	66	15.7	17

Table 3.2: Female respondents who first had sex aged 14 or younger with partners three or more years older.

Percentage of all female respondents					
KZN	EC	WC	Gauteng	NC	NP
16%	20%	9%	14%	5%	3%

Source: Kelly & Ntlabathi (2002).

Richter (1996) explained that in two national surveys conducted to discern the levels of youth knowledge, attitudes and practices high levels of HIV/AIDS knowledge in some areas were found, but little education on sexuality other than misinformation obtained from peers. In 1999, the Medical Research Council reported on a major survey of adolescents in Durban, which found that over 50% of youth between the ages of 14 and 22 were sexually active. Swart-Kruger & Richter (1997) concluded that although these surveys were directed primarily towards knowledge, attitudes and practices of adolescents, prevention could not be achieved without the reflections on wider context of sexuality.

Carelse (1993) investigated the sexual behavior and knowledge of AIDS of the pupils at an industrial school for boys in Cape Town. All pupils had been referred to the school via judicial system. Pupils ranged from the ages of 13 to 21 from Sub A to Std 9, with 259 learners having completed the questionnaire. Results suggest that there is a general lack of accurate knowledge about HIV/AIDS at the institution. While the majority of pupils correctly identified shared needles (73,4%), sexual intercourse (93%), and contact with body fluids (79,9%) as transmission routes for HIV, many also believed that kissing (59,1), hugging (26,3), touching (26,3%) or sitting near AIDS victims (16,6%) could also lead to infection. Many pupils (65,3%) believed that people with HIV / AIDS looked differently from other people; 33,6% thought that HIV could not be contracted from someone who appeared healthy, 35% were unsure, and only 29% knew that healthy-looking people could transmit the HIV. Of all pupils, 80,7% reported having had sexual intercourse.

Carelse (1993) suggested that institutionalized youths and juvenile offenders might be more sexually active, and have their sexual experience earlier than youths from the general population. While 40, 5% of the youth reported only one sexual partner, 24,3% reported between 2 and 5 partners, and 14,3% claimed more than 5 partners. Thirty-two percent of pupils reported never using condoms outside school, 22,1% sometimes used them, and only 27% reported 'always' using them. Most pupils found condoms easy to obtain outside school, but did not know how easy it was to obtain them at school.

Researchers, Coughlan, Coughlan & Jameson (1996) administered a structured questionnaire to 535 high school pupils of Grahamstown (Eastern Cape) to find out adolescent HIV/AIDS knowledge. A sample involved grade 9 and 11 pupils, 70% English speaking, 15,5% Afrikaans speaking and 13,5% were from the Eastern Cape African language groups. The survey found that only 2% of the pupils said that they did not know anything about HIV/AIDS, while 35 (7%) said that they had received no instruction at school about the disease. These pupils were mostly drawn from the younger group of one school. Knowledge levels about transmission were high with minority students that were still holding myth beliefs. Coughlan et al (1996) indicate that of the total sample ( $n= 460$ , 86%) of the pupils stated that the disease is primarily spread through sexual contact. However, ( $n = 369$ , 69%) listed blood transfusions as the second most means of transmission. Very few of these scholars believe that screening of blood lowered the risk of those receiving it. They also mentioned sharing of needles (51%) as one of the most common means of transmission.



The number of pupils who hold views that would currently be considered to be myths was relatively small: 4%( $n=21$ ), while 3%( $n=16$ ) believed HIV is transmitted in saliva and that any contact with saliva is therefore risky. A small group ( $n=21,4\%$ ) believed that it is drug use (and not needles) that transmits the virus.

Dickson-Tettch & Ladla (2000) conducted a baseline study to determine levels of knowledge, attitudes and practices in relation to reproductive health among male and female refugees aged between 10-24 years living in Gauteng Province in South Africa. There was a high level of awareness of HIV/AIDS among them. They also found that ninety five percent of female teenagers knew about AIDS in interviews conducted during the South African Demographic and Health Survey. Only 19% said they use condoms, which indicates that there is a gap between what they know to be protective and what they do.

Visser & Moleko (2002) conducted a study to evaluate the knowledge, attitudes and sexual behavior of learners with regard to HIV/AIDS. The participants were 460 Grade 6 and 7 learners in four primary schools in a historically disadvantaged urban area in the Pretoria Metropolitan area. All four schools draw a large portion of their learners from an informal settlement. The findings indicated that 24% of the learners were sexually active, while 77% said that it is not appropriate for learners of their age to be sexually active. Of the sexually active learners, only 40% indicated that they protect themselves from HIV by using condoms, and 35% use some form of birth control.

Many of the learners did not have accurate knowledge about the transmission of HIV, and many of them might be at risk of contracting the virus. Forty per cent of the learners did not think that learners of their age could get the virus, while 28% were unsure. Only 51% knew that a person does not know when he/she has contracted the virus, and 45% knew that the virus could be passed on even when the person looks and feels healthy. Although they have basic knowledge about AIDS, they did not see it as a personal threat. They had very negative attitude towards people with the virus. Almost half (46%) did not want to allow learners with AIDS to be in the same school with other learners.

Strydom (2003) conducted a study to assess attitudes and knowledge of high school pupils on HIV/AIDS among adolescents at secondary schools in the Northwest Province. There were 535(53%) females and 464(46,4) males from 13 to 25 years of age. It was found that adolescents had an urgent need for more knowledge and information on sexuality and HIV/AIDS.

There were highest positive responses on the following items; 73,6% felt sorry for people with AIDS, while 73,9 % felt that all prostitutes should be tested for HIV/AIDS on regular basis. There were also negative responses. Of the total 64,1% said that HIV/AIDS positive pupils should not be allowed in their schools, while 58,7% said that AIDS patients should be forced to place their names on a list in order that people can be protected. With pregnant women that tested HIV positive, 53,3% felt that they should be forced to undergo an abortion.

Regarding knowledge, 70% indicated that their knowledge on AIDS was uncertain and inadequate, with 128 pupils indicating that they have no knowledge of AIDS, 86 had little knowledge and only 21 knew enough about the infection and its spread.

### 3.4.Conclusion

Findings of selected knowledge, attitudes, practices and behavior studies of South Africa and internationally point out high levels of knowledge about HIV/AIDS. However, despite high levels of knowledge about HIV/AIDS in the general population, levels of HIV-infections still remain high. This expresses the need to explore determinants of sexual behavior other than knowledge.

## **CHAPTER FOUR: RESEARCH METHODOLOGY AND DESIGN**

### **4.1.Introduction**

Chapter four explains the research design, procedures and organization of the investigation, implementation and administration of the questionnaires, data collection and verification, coding of the responses, and the scoring of responses and data transformation of all quantitative measures. This is an exploratory study of the relationship among the following variables: knowledge, attitudes towards HIV/AIDS and people living with it in a rural context, and behaviors regarding HIV/AIDS among adolescents. Ethical issues will also be discussed.

According to Bryman (1999) cited in Uys (2002) when conducting research about a sensitive issue such as HIV/AIDS and sexual behavior it is important to consider the research design of the study carefully. A decision has to be made in relation to the choice of quantitative or qualitative design or a combination of both. A large part of the research on sexual behaviour and HIV/AIDS falls under what is referred to as (KAPB) that is knowledge, attitudes, practices, beliefs and use of methods such as self-administered questionnaires.

### **4.2. Selection of the sample and data collection**

A survey was conducted at Elukholweni Junior Secondary School (where the researcher is employed) in Matatiele (Eastern Cape) during July and September 2003. This is a public school with the population of 772 learners and 98% of the learners are Xhosa's.

The learners reside at the same location (few learners from the nearest locations), with their backgrounds ranging from lower to working class. Fees in this school differ according to phases and there are parents who do not afford paying such fees. Eastern Cape is predominantly rural with the main language being Xhosa. The area is still remote with no electricity, bad road conditions, and it very far from town. This is one of the schools that experience shortage of textbooks and receives stationery from the government later than expected. The selected school is one of the larger Junior Secondary Schools within the district and, is similar to other schools situated in the district, and to other rural areas in the province. A sample comprised of 120 female and male learners from grade 7 to grade 9. They were between 12 and 19 years of age.

Table 4: The sample selected for the study

Age group	Female	Male	Total
12 years and under	8	5	13
13-14 years old	19	11	30
15-16 years old	33	22	55
17-18 years old	13	8	21
19 years old	1	-	1
TOTAL	74	46	120

Permission to conduct the study and administer the questionnaires was received from Maluti District Department of Education (refer to appendix B). The purpose of the survey was to examine knowledge levels, the kind of attitudes students hold towards AIDS and people living with it, and how, if at all, they have changed their sexual practices as a result of HIV/AIDS. In order to identify possible knowledge, attitudes and behaviors, a structured questionnaire was, therefore, designed with mixed open-ended and closed-ended questions of 46 items (refer to appendix A). The questionnaire was first developed in English, translated into Xhosa to ensure clarity, and then translated back into English.

The questionnaire was divided into four parts. Part 1, comprised demographic information. Part 2, involved general knowledge about HIV/AIDS. This part included 21 statements to which learners had to respond either true/ false/ don't know. These items, were related and judged mainly to the transmission of HIV, were to be reasonable and to represent the kind of knowledge the average person should have in order to safeguard him or herself against AIDS. Some items were included to determine whether students regard AIDS as being more contagious than is actually is. They were all closed questions. Part 3 contained 16 items on attitudes about HIV/AIDS and infected persons. The questions were closed and involved a 5-point Likert scale from Strongly Agree to Strongly Disagree.

Part 4 explored self-reported sexual behaviors regarding HIV/AIDS. Learners were requested to answer in their own language (Xhosa). Closed-ended questions about sexual behaviours consisted 9 items (open-ended questions), which were followed by a request to explain why the respondents felt that way. For an example question 1 goes as 'Is premarital sex acceptable' followed by, why..... The items were designed to flow logically and, as Labaw (1980) cited in Tillotson & Maharaj (2001) prescribes them they go from less sensitive questions to more personal due to the sensitivity of the topic. The questionnaires were administered in the classroom by the researcher only, during school hours. I verbally explained questions and pupils were shown how to indicate their choice of answers. There were no members of school staff present, and all students were seated in single desks.

#### 4.3. Ethical Issues

Informed consent was obtained from learners. I stressed the anonymous and confidential nature of the research. HIV/AIDS and sexual behavior are sensitive issues that are not openly discussed due to cultural reasons, hence confidentiality was ensured. Participants were informed of the following:

- The purpose of the research.
- The procedure
- No financial compensation would be given.
- Participation was voluntary.
- Refusal to participate would involve no penalty.
- Participants could discontinue if they felt uncomfortable at any stage.

#### 4.4. Data analysis

The data were entered into the program Statistical Package for the Social Sciences (SPSS), (Hedderson, 1994). With SPSS one can count the number of cases from each question and it can display data in a variety of reports and graphic formats. The analysis included all females and males participants that is, 120 cases. All sections were entered according to different age groups, sex and grade. With respect to last part (sexual behaviours) data was first translated into English as participants were allowed to write in Xhosa and then translated back into English. Data was summarized according to identified themes and patterns.

With respect to the knowledge questionnaire, the analysis examined the % scored correct by gender across the various items. It was possible to ascertain the proportion of students who have good knowledge about AIDS. The analysis also examined misconceptions by gender, that is the % of students who held different misconceptions. With attitudes questionnaire, the analysis examined the % that hold various attitudes towards HIV/AIDS and those people living with it by gender. Some items required reverse coding to ascertain positive and negative attitudes.

For scoring, it was decided to use score values from 1-5 on Part 1(Demographic information) for respective responses, that is, 1- represented learners who were 12 years old. 2- represented learners who were 13-14 years, while 4-represented learners between 15-16 years of age. 3-represented learners from 17-18 years of age and 5 represented learners who were 19 years of age.



Regarding 'knowledge about AIDS ' score values used were from 1-3 for categories: 3 represented 'True', 'False' was represented by 2, and 'Don't know' was represented by 1. Item number 5, 15 & 17 required reverse coding.

With regard to part 3, 'attitudes about AIDS ', 'it was decided to use score values 1 to 5 for respective response categories 'strongly disagree, ' was rated as 5, 'disagree' was rated as 4, 'neutral' was rated as 3, 'agree' was rated as 2 and 'strongly agree' as 1 to a favorable statement. Scoring was reversed for negative statement. Item numbers 6, 8, 10, 11, 12, 14, 15 & 16 required reverse coding. Scores were obtained such that a strongly agree response to a favorable statement and a strongly disagree response to a negative statement both received scores of one.

#### 4.5. Limitation of the study

Although permission to conduct the study was granted by the school principal and the District Department of Education, parents of participants were never consulted.

## CHAPTER FIVE: RESULTS OF FINDINGS

### 5.1. Introduction

This chapter contains the results of the analyses that were carried out in this study. To get the aims of the study the data is analyzed in different ways. The first part analyzed the results of the first question of the study: ‘What are the learner’s knowledge about AIDS’? Secondly, the study analyses ‘attitudes towards AIDS’ and lastly, also considering ‘sexual behaviors of learners’.

### 5.2. Learners knowledge about AIDS

Table 5: Learners knowledge about AIDS

Items	Correct		Incorrect		Don't know		Missing data	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1. Eating healthy foods can keep you away from getting AIDS.	23	18,9	58	47,5	37	30,0	4	3.3
2. You can get AIDS by shaking hands with someone with AIDS.	58	47,5	31	25,4	31	25,4	2	1.6
3. You can get AIDS by giving blood	14	11.5	76	62.3	30	24.6	2	1.6
4. An infected pregnant woman can give AIDS to her unborn child.	67	54.9	14	11.5	35	28.7	6	4.9
5. AIDS is so contagious that you can get it by being in the same room with someone with it.	35	28.7	34	27.9	50	41.0	32.5	2.5

6. People with AIDS can seem and look healthy	44	36.1	27	22.1	48	39.3	3	2.5
7. AIDS is a syndrome that affects the immune system	59	48.4	13	10.7	47	38.5	3	2.5
8. AIDS cannot be caught by casual contact.	19	15.6	60	49.2	40	32.8	3	2.5
9. You can have the AIDS virus and spread it without being sick.	46	37.7	16	13.1	55	45.1	5	4.1
10. AIDS can be caught by sharing dirty needles.	79	64.8	16	13.1	24	19.7	3	2.5
11. Using condoms when having sex reduce the risks catching AIDS.	97	79.5	5	4.1	14	11.5	6	4.9
12. The most effective way of preventing AIDS is not to have sex.	84	68.9	10	8.2	24	19.7	4	3.3
13. Intra- Venous (IV) drug users who share needles have a high risk of catching AIDS.	61	50.0	8	6.6	48	39.3	5	4.1
14. Any person with the AIDS virus can pass it on to someone else through sexual intercourse.	81	66.4	10	8.2	29	23.8	2	1.6
15. There is cure of AIDS.	19	15.6	55	45.1	44	36.1	4	3.3
16. People with AIDS will die from it.	82	67.2	12	9.8	22	18.0	6	4.9
17. Most People catch AIDS from toilets seats.	35	28.7	31	25.4	51	41.8	5	4.1
18. Abstain, be faithful and condomise are best methods of avoiding HIV/AIDS.	80	65.6	7	5.7	33	27.0	2	1.6

19. Infected person will eventually get sick.	78	63.9	8	6.6	30	24.6	6	4.9
20. People with many partners are at high risk of getting AIDS.	78	63.9	7	5.7	35	28.7	2	1.6
21. AIDS is caused by HIV.	75	61.5	2	1.6	43	35.2	2	1.6

### 5.3. Learner's attitudes towards AIDS

Table 5: Learner's attitudes towards AIDS

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Missing data	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1.AIDS is God's punishment to homosexuals and drug users.	18	14.7	8	6.5	65	53.2	7	5.73	21	17.5	1	0.8
2.Doctors should not be required to see AIDS patients.	24	19.6	20	16.3	25	20.4	23	18.8	27	22.1	-	
3.AIDS patients deserve illness because of their behavior.	21	17.2	11	9.0	32	26.2	9	7.3	47	38.5	-	
4.HIV infected persons should not be allowed to work with other people.	20	16.3	23	18.8	27	22.3	16	13.1	34	28	-	
5.We should not take care of an HIV infected person.	33	27	28	23	19	16	13	11	27	22		
6.We should continue friendship with infected person.	14	11.4	9	7.5	30	25	18	15	49	41		
7.We should not be willing to look after a relative who is having AIDS.	31	26	26	22	30	25	13	10.8	20	17	-	
8.HIV infected persons should be allowed to keep working.	21	17.5	18	15	24	20	15	12.5	41	34.1	1	.8

9.We should keep HIV infected person's status confidential.	38	31.6	21	17.5	18	15	18	15	25	20.8		
10.HIV/AIDS patients should live freely in the community.	41	34.1	16	13.3	16	13.3	18	15	27	22.5	2	1.7
11.We should be willing to take AIDS test.	43	36	22	18.3	17	14	16	13.3	21	18		-
12.In case the test is HIV+ we should be willing to tell our families the results.	41	34	19	16	24	20	10	8.3	26	22		-
13.Women who transmits HIV to their babies should have their babies taken away from them.	34	28.3	15	13	25	21	12	10	34	28.3		-
14.We should be happy to be in the same room with someone with AIDS.	20	17	9	8	23	19	13	11	54	45	1	.8
15.A person who has AIDS should attend his/her nearest school.	40	33.3	15	13	15	13	19	16	31	26		-
16.We should visit someone with HIV/AIDS.	29	24	11	9	18	15	15	13	47	39		-

#### 5.4. Sexual behaviours of learners

Question 1. Is premarital sex acceptable?

- 9 male respondents answered 'yes' (19.5%). When asked the reason, they reported that they like it, and have seen others doing it.
- 13 female respondents answered 'yes' (17.1%). They reported that they are in love, so it is right when you trust one another and nice.
- 36 male respondents answered 'no' (78.2%). They mentioned fear of the diseases, pregnancy and that they are still young and not ready. 12% responded that there must be no sex before marriage while 1 mention that the society does not allow that.
- 62 female respondents said 'no' (81.5%). When asked the reasons, 15(20.2%) said it is not allowed before marriage, while 2(2.7%), mentioned the fear of the diseases, and 41(70.6%) reported pregnancy as the reason.

Question 2. Are you involved in any sexual relationship?

- 14(30.4%) male respondents answered 'yes'. When asked the reason, they mentioned happiness, time, and a need to have someone to help and love.
- 15(20%), female respondents answered 'yes'. When asked the reason, they mentioned love, nature, having an affair with an opposite sex is something normal, age, happiness, marriage, and to have someone to share problems with, taking away loneliness.
- 22(47.8%) male respondents answered 'no'. They reported the risk of the diseases, pregnancy, HIV/AIDS, still young, and that they are not ready before finishing studies as the reason why.

- 59(79.7%) female respondents answered 'no'. When asked the reason why, these were their responses:
  - 'church restrictions',
  - 'parents are watching them at home',
  - 'they are still young',
  - 'they hate boys',
  - 'not yet ready for marriage',
  - 'have a fear of getting AIDS',
  - 'avoiding headache caused by boys, they are not honest',
  - 'it is not important',
  - 'there is no need for a relationship'.
- 8.4% did not indicate whether they are involved or not.

### Question 3. How many partners should a person have?

- 30(65.2%) male respondents answered '1 partner', the reasons being: 'to avoid HIV/AIDS, to avoid fights, trust only one partner and be honest to her, to avoid misunderstandings, so as to know when pregnant, who has done the damage'.
- 8(17.3%) male respondents answered '2 partners'. The reasons being that, 'when one is not available, the other one will help', two is right, more than two will fight and cause trouble, more than two force one to do what they like'.
- 3(6.5%) male respondents answered '3-4 partners'. These were the responses given, 'if she is the only one you might think that she is honest, then more substitutes are needed', 'I love them'.



- 2(4.3%) males responded by indicating that ‘five partners are right, three of them are the best and are boss’.
- 1(2.1%) male responded by saying ‘10 is right’, but there was no reason given.
- 1(2.1%) male did not know.
- 55(76.3%) female respondents reported that ‘1 partner is right’, ‘so as to avoid the diseases like HIV’, and ‘to help know when one is pregnant who is the father of the child’. ‘When many you will not know who is fooling you and loving you’, ‘to avoid problems’ and ‘to get a nice treatment’, ‘when many they may fight and end up killing each other’.
- 11(14.8%) female respondents indicated that ‘2 partners are right’, the reasons being that ‘when the other one is not there the other one will be readily available’.
- 4(5.4%) female respondents indicated that ‘3 partners are right’, so that ‘when rejected by the other one, the next one is there to get sex and be happy’.
- 1(2.1%) female indicated that ‘5 partners are right’ so that ‘when faced with problems they can help solve them’.
- 1(2.1%) female respondent reported that ‘10 partners are better than one’.

Question 4. The possibility of having sex before finishing high school.

- 22(47.8%) male said ‘yes’, it is possible ‘so as to learn’, and ‘because girls these days start being in love at an early age with boys’. Others reported that ‘they wouldn’t be able to wait for a long time, cause they are in love’.
- Some claimed that ‘they are old enough to have partners and other pupils are doing it, and this is natural’.

- 23(50%)male reported that ‘they will not have sex before they finish their high school because they want to brighten their future first’. Some claim that, ‘they are still young’. Some, ‘fear pregnancy and their parents are very strict’. They see it as something that will delay their progress at school and to avoid problems. They fear the diseases and claim that sex is worth waiting for. Sex is not allowed before marriage.
- 1(2.1%) male respondent said ‘I don’t know as no-one knows the end of his life’.

Female responses were as follows:

- Out of 74 females, 46(62.1%) indicated that they will not have sex before finishing high school. When asked about the reasons for their responses, they reported the following;
  - ‘I don’t like boys’, 1(2.1%)
  - ‘Still a student’ 2, (4.3%)
  - ‘Not before marriage’, 2 (4.3%)
  - ‘Must first work for my parent’, 2 (4.3%)
  - ‘To avoid pregnancy’, 6 (13%)
  - ‘To protect myself from the virus’, 2 (4.3%)
  - ‘A partner forces you to have sex with him’, 2(4.3%)
  - ‘Parents will ask me why I don’t wait’, 3(6.5%)
  - ‘I will loose my virginity and be pregnant’, 3 (6.5%)
  - ‘If you have sex before passing standard ten you will catch HIV/AIDS’, 2(4.3%)
  - ‘My studies are important to me’, 2 (4.3%)

- 'Don't need another type except the one I already have', 1(2.1%%)
- 'It is not right to have sex before marriage', 4(8.6%)
- 'To avoid the spread of the diseases', 3(6.5%)
- 'When you get married you will be no more be a virgin', 2 (4.3%)
- 'You will be pregnant before finishing high school classes', 6(13%)
- 'I am still young', 4(8.6%)
- 'Not before you pass your studies', 2(4.3%)
- 'Only at age 21<sup>st</sup> before that it is not allowed', 3(6.5%)
- 'It will delay my studies', 2(4.3%)
- 2 (2.7%) out of 74 females said 'I don't know', the reason being that they do not know what future brings for them.
- 26(35.1%) out of 74 females responded with a 'yes' they gave the following as their reasons;
  - 'I like it because it is natural', 3(5.4%)
  - 'Others are doing it so must I', 3(4%)
  - ' I will have sex but take care so as to concentrate on my studies', 2(2.7%)
  - ' because they beat us when we refuse',
  - ' because you will be true with your studies by then', 2(2.7%)
  - ' to make your brains feel right'
  - 'to protect myself from AIDS', 1(1.3%)
  - 'sometimes we become on and feel like having sex', 3 (1.3%)
  - 'being an adult you are free to', 2(2.7%)

- 'because they beat us when we refuse',
- 'because you will be true with your studies by then', 2(2.7%)
- 'to make your brains feel right'
- 'to protect myself from AIDS', 1(1.3%)
- 'sometimes we become on and feel like having sex', 3 (1.3%)
- 'being an adult you are free to', 2(2.7%)
- 'because it is nice and very important in life', 3(4%)
- 'at least after finishing your studies you will be old enough to have sex'  
3(4%)
- 'a partner forces you to have sex with him', 2(2.7%)
- 'because you go and enjoy with your partner and you forget about school' 2  
(2.7%)

Question 5. Would you use a condom?

- Among male respondents 40 (86.9%) reported that they would use condoms, and when asked why, the reasons given were, to avoid the spread of the diseases such as HIV/AIDS, to avoid pregnancy.
- 6(13%) of male respondents reported that they would not use condoms as it is not safe it carries the virus; it gives the problem of no satisfaction, and the fact that they are old for using condoms.
- 68(92.8%) of female respondents approved the use of condoms,
  - the reasons being that they protect against the diseases such as HIV/AIDS, and
  - they prevent pregnancy.

- 6(8.1) of female respondents did not approve the use of condoms, saying that condoms are dangerous, they slip out sometimes.

#### 6. Situations that might put young people at risk of catching HIV/AIDS infections.

##### Boys

- 1(2.1%) male did not respond.
- 1(2.1%) out of 46 boys said 'I don't know because I don't know their behavior'
- Other responses were as follows:
  - 'They give blood', 1(2.4%)
  - 'They do not behave well', 6(13%)
  - 'Girls like playing with boys',
  - 'They sleep around', 3(6.5%)
  - 'They see from others', 1(2.1%)
  - 'Playing in a very bad way', 1(2.1%)
  - 'Girls in this school like boys', 1(2.1%)
  - 'When called by any man they go running, so they may be raped', 1(2.1%)
  - 'They have sex with many partners', 4(8.6%)
  - 'They kiss, and are highly in love here at school' 5(10.8%)
  - 'From the dirty toilets they can get the diseases', 1(2.1%)
  - 'They help bleeding students without using gloves', 6(13%)
  - 'They smoke dagga and we inhale the smoke', 1(2.4%)
  - 'They use dirty water', 2(2.4%)
  - 'Most go and stay where they like', 1(2.1%)

-‘They cheat parents while go jollying’, 2(2.4%)

-‘They love us and we love them too and end up having sex’, 6(13%)

‘Most girls go alone, and there are no cars to fetch learners after school, 2(2.4%)

#### Girls

- 1 female (out of 74 respondents) said that there are no such situations in their school.
- The following were some of the responses from 73 female (respondents out of 74).
  - ‘Smoking, no control’,
  - ‘Eating sweets eaten by others, dirty water from the tanks’, and
  - ‘There are insects in our toilets and the school is on top of the mountain’,
  - ‘Girls going with man they do not know’
  - ‘Learners who come from other schools and infect the whole school’.
  - ‘Staying with boys, kissing and having sex with many partners without using condoms’.

7.What are the safer types of behavior that could minimize the risks of catching HIV/AIDS?

#### Boys

- Only one boy did not respond (2.1%).
- The following were the different responses from 45(97.8%) out of 46 learners.
  - ‘Knives’, 1(2.1%)-
  - ‘Do not smoke’, 1(1.3%%).
  - ‘No love affairs’, 7(9.4%%).
  - ‘Trying not to go late’, 1(1.3%).

- ‘They need an injection’, 1(1.3%)
- ‘Condoms can save lives’, 1(1.3%).
- ‘Eating fruit and vegetables’, 3(4%).
- ‘Clean toilets can save learners’, 1(1.3%)
- ‘Avoid sleeping with many partners’, 20(27%)
- ‘Avoid taking anything from strangers’, 1(1.3%).
- ‘Running away from sex before marriage’, 3(4%)
- ‘Do not sleep with someone you do not trust’, 4(5.4%).
- ‘Do not sleep with a boy even if he requests you, 1(1.3%)
- ‘Do not be in love failing which use condoms, 19(25.6%)

#### 8. Has your behavior changed since knowing about HIV/AIDS?

##### Boys

- 1(2.1%) out of 46 boys did not answer
- 39(84.7%) out of 46 boys reported changing their sexual behaviour since they heard about HIV.
- 6(13%) boys responded by saying ‘no’ they have not changed

##### Girls

- 1(1.3%) did not answer.
- 71(95.9%) answered with a ‘yes’.
- -2(2.7%) out of 76 girls reported that they have changed their behavior
- -2-missing cases.

Question 9. If it has changed what sort of changes did you experience ?

- Two boys reported that they have not changed (4.3%)
- Regarding behavior changes the following were the pupil's responses,
  - 'I trust no-one', 2(4.3%)
  - 'I stay indoors', 4(8.6%)
  - 'No more interest in girls', 2(4.3%)
  - 'No more female friends', 1(1.3%)
  - 'No more loitering around', 2(4.3%)
  - 'I no longer comes late home', 2(4.3%)
  - 'I have developed spiritually', 1(1.3%)
  - 'I have one partner and faithful to her', 1(1.3%)
  - 'Decided to stay without a boyfriend until marriage' 4(8.6%)
  - 'I am in love with one partner whom I trust', 1(1.3%)
  - 'I am using contraceptives to protect myself', 1(1.3%)
  - 'I have no affair and I do not have sex with anyone', 2(4.3%)
  - 'I no more have sex with girls and no more use drugs' 1 (1.3-%)
  - 'I am no longer in love because I do not get an erection', 1(1.3%)
  - 'Decided to stay without a boyfriend until marriage' 4(8.6%)
  - 'No more sleeping with many girls as I used to do before', 4(8.6%)
  - 'I don't have an affair, if I decide to, we will first go for a test', 2(4.3%)
  - 'Have started using a condom as I did not know about it before', 3(6.5%)
  - 'No more having sex with girls as I am trying to protect myself', 12(26%)



## Girls

- ‘One partner’, 1(1.3%)
- ‘Behaving well’, 3(4%)
- ‘No more in love’, 3(4.5%)
- ‘No more male friends’, 1(1.3%)
- ‘I am now using condoms’, 7(9.4%)
- ‘I does not smile with anybody’. 1(1.3%)
- ‘No more eating unhealthy foods’. 3 (4%)
- ‘Has changed my face, body and work’, 1(1.3%)
- ‘I don’t allow anyone to touch my body’, 1(1.3%).
- ‘Has changed my face, body and work’, 1(1.3%)
- ‘I see what AIDS has done to the world’, 2(2.7%)
- ‘No more washing late as I might be raped’, 1(1.3%)
- ‘No more using alcohol, smoking and drugs’, 1(1.3%)
- ‘No more sex if it happens I will use condoms’, 8(10.8%)
- ‘When helping an injured person I use plastic gloves’, 1(1.3%)
- ‘I am not in love with anyone and I am not having sex’, 36(48.6%)
- ‘I won’t have sex with anyone without taking blood test’, 1(1.3%)
- ‘I listen to my parents I come early home, I stay home read my books’, 2(2.7%)
- ‘Since aware of this virus, ‘I no more eat whatever comes to me, no more going around’,2(2.7%).

## **CHAPTER SIX: DISCUSSION OF RESULTS**

The present study had three major aims. Firstly, to describe the rural adolescents levels of knowledge regarding HIV/AIDS. Secondly to investigate attitudes they hold towards AIDS and people with the virus. Lastly to look at how, if at all, they have changed their sexual practices as a result of AIDS. These findings are discussed with reference to Fishbein and Ajzen's Theory of Reasoned Action presented in chapter two.

### **6.1. Learners knowledge about AIDS**

Findings from this study indicate that learners in the sample are knowledgeable about AIDS. The most publicized methods of transmission, namely, sexual intercourse, sharing dirty needles, from an infected mother to her child were generally well known.

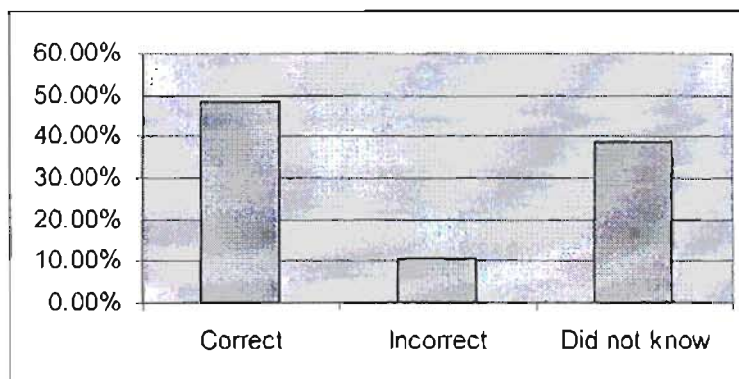
It was found that the average knowledge level of HIV was high among adolescents even on other items including knowing that: condoms help reduce the risk of catching HIV (97%), abstaining from sex is the best method of preventing AIDS (80%), that people with many partners are at risk of getting AIDS (78%), and that AIDS is caused by an HIV (75%). The theory of reasoned action may be applied to other forms of low-risk HIV sexual practices such as sexual abstinence.

The study revealed that 97% of students correctly identified abstinence from sexual intercourse as the best method of preventing the spread of the disease.

Abstinence is part of the norm that plays an important role in influencing attitudes, which in turn determine behavior. According to Terry, Gallois & McCamish (1993) sex appears to be largely based on socio-cultural norms within a given social environment.

An average 59(48.4%) of learners were correct that AIDS affects the immune system, 13(10.7%) were incorrect and 47(38.5%) did not know (Figure 7).

*Figure 7: Question-AIDS affects the immune system.*



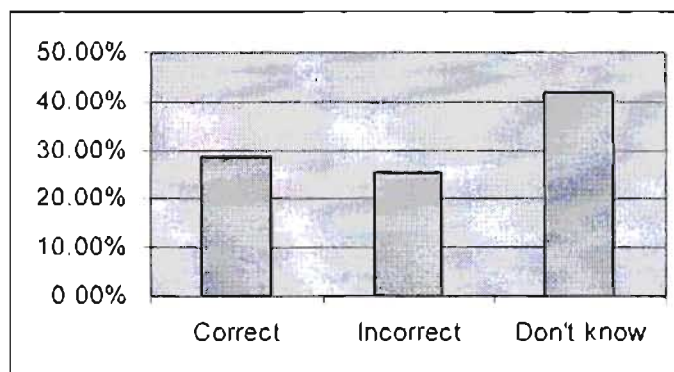
Some confusion about eating healthy foods to prevent people from getting AIDS existed, only 18.9% were correct, 47.5% were incorrect while 30% did not know.

With regard to shaking hands with someone with AIDS, a large group, 58(47.5%) was incorrect they held the misconception that AIDS can be caught by shaking hands with someone with AIDS, a small group, 31(25.4%) was correct, and 25.4(31%) did not know.

Regarding casual contact, catching AIDS from the toilets, 35(28.7%) learners thought it was one of the possible routes of transmission and, only 31(25.4%) respondents were correct, and a large number did not know, 51(41.8%).

This indicates that despite awareness, there is poor knowledge somewhere. Only 35(28.7%) knew that AIDS cannot be caught by being in the same room with someone with it, while 34(27.9%) were incorrect and 50(41%) did not know.

*Figure 8: Question-Most people catch AIDS from the toilets.*



Out of 120 respondents, 55(45.1%) learners did not know that a person with AIDS can spread it without being sick and only 46(37.7%) had that knowledge, and 16(13.1%) of the respondents were incorrect. 78(63.9%) learners indicated that they knew that infected person will eventually get sick, while 8(6.6%) were incorrect, and 30(24.6%) did not know. Regarding cure for AIDS, only 19(15.6%) knew that there was no cure for AIDS, 55(45.1%), thought there was cure for AIDS, and 44(36.3%) did not know.

In summary, from this study it can be concluded that students at Elukholweni J.S.S. are fairly knowledgeable about transmission of HIV. Of the total sample ( $n=120$ ), 81(66.4%) knew that AIDS can pass on to someone else through sexual intercourse, and 97(79.5%) indicated that using condoms can help reduce the risk of catching AIDS. However, there were misconceptions, although these were in the absolute minority. A relatively small number of learners, 14(11.5%) view AIDS as being transmitted by giving blood. A large group 58(47.5%) thought that eating healthy foods can keep a person away from getting AIDS. A small group 22(18,3%) indicated that they did not know that AIDS is an infectious disease, and 24(19.7%) did not know that the most effective way of preventing AIDS is not to have sex.

These low levels of knowledge and misconceptions provide pointers for more meaningful information; there is a need for open discussion on this topic with all pupils in the sample.

## 6.2. Attitudes towards AIDS

While knowledge of AIDS and how people become infected with HIV is a necessary prerequisite for understanding what constitute safe behavior, it is not itself generally adequate to achieve appropriate behavior changes (Heunis, 1994). An important motivation for changing risky behavior patterns or for initially establishing safe behavior patterns, is the perception that AIDS constitutes a personal threat. Once people perceive themselves vulnerable to the disease, it is then that they can take precautions.

- A small group of students, 26(21.6%) disagreed that AIDS is God's punishment to homosexuals, while 28(23.3%) agreed, and 65(53.2%) were neutral. Such judgmental attitudes indicate reluctance from students to come to terms with the possibility of personal risk. With respect to this statement, 'AIDS patients deserve illness because of their behavior', 32(26.6%) disagreed, while 56(46.6%) agreed, and 32(26.2%) were neutral. 44(36.6%) of the learners disagreed that doctors should not be required to see AIDS patients, while 50(41.6%) agreed, and 25(20.4%) were neutral. A small group 43(35.8%) disagreed that HIV infected person should not be allowed to work with other people, while a large group, 50(41.6%) agreed, and 27(22.3%) were neutral. These statements suggest negative attitudes from students. Almost 58% of respondents clearly disagreed that people with the virus should not be taken care of, while only 33% agreed with this statement. 'We should not be willing to look after a relative who is having AIDS', 33(27.5%) agreed with the statement.

- These negative attitudes to people living with the virus show a lack of understanding that day-to-day contact with an AIDS sufferer is without risk (Moller, 2003). Appropriate interventions to reassure these students, and to develop greater tolerance, could be planned. There were also positive attitudes; most students were prepared to have friendships with infected persons 67(55.8%). We should not be willing to look after a relative who is having AIDS, 57(47.5%), disagreed with such a statement.

The highest positive responses were also observed on the following items:

- We should be happy to be in the same room with someone with AIDS, 67(55.8%).
- We should visit someone with HIV/AIDS, 62(51.6%).

The highest negative responses were on the following items:

- We should be willing to take an AIDS test, 65(54.1%).
- In case the test is HIV+, we should be willing to tell our families the results, 60(50%).
- A person with AIDS should attend his/her nearest school, 55(45.8%).

Only one response had high level of neutral responses: AIDS is a God's punishment to homosexuals and drug users, 65(53.25%).

Respondents had a rather low response in neutral categories for the following items:

- We should not take care of an infected person, 19(16%).
- We should keep HIV infected person's status confidential, 18(15%).
- HIV/AIDS patients should live freely in the community, 16(13.3%).
- We should be willing to take an AIDS test, 17(14%).
- A person with should attend his/her nearest school, 15(13%).
- We should visit someone with HIV/AIDS, 18(15%).
- HIV infected persons should be allowed to keep working, 24(20%).
- Women who transmit HIV to their unborn babies should have their babies taken away.

One other most interesting attitude that emerged was 'Women who transmit HIV to their unborn babies should have their babies taken away from them', 49 (40.8%) disagreed, 46 (38.3%) agreed, while 25 (21%) were neutral.

In summary, it can be concluded that learners in this school have both positive and negative attitudes towards AIDS. With respect to the item, "AIDS is God's punishment to homosexuals", 28(23.3%) out of 120 had negative attitudes towards homosexuals and drug users, while 26(21.6%) had positive attitudes, and 65(53.2%) were uncertain about the statement. Some students had negative attitudes towards people living with the virus: 29(24.1%) indicated that they would not be happy to be in the same room with someone with AIDS.



However, 67(55.8%) showed positive attitudes by indicating that they would be happy to be in the same room with someone with AIDS. A small group 15 (13%) were uncertain whether a person who has AIDS should attend his/her nearest school.

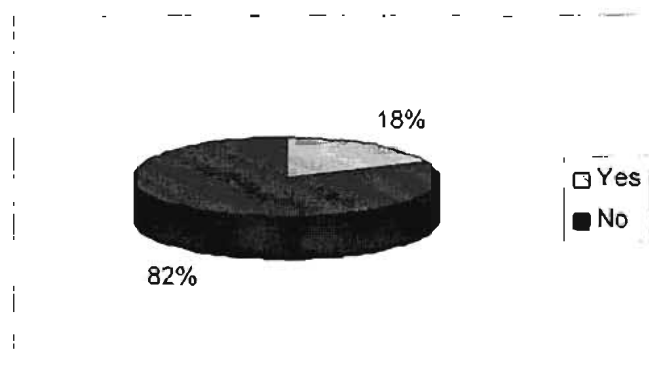
### 6.3. Reported sexual behavior's of learners

As explained, part 4 of the questionnaire involved responses to a set of open-ended questions that aimed at exploring sexual behaviour of the students.

#### 6.3.1 *The issue of premarital sex*

Of the learners, only 22(18.3%) reported that premarital sex is acceptable as shown in figure 9 below. The following were some of the responses: they reported that they like it and have seen others doing it; they reported that when you are in love it is right; and when you trust one another it is right. A large group 98(81.6%) responded with a 'no' to premarital sex. They identified the following as the reasons: fear of the diseases, pregnancy, and that they are still young.

Figure 9: *Question – Is premarital sex acceptable?*



One of the questions examined to what extent were the learners sexually active.

### *6.3.2 Involvement in sexual relationship*

The issue of whether students were involved in sexual relationships was explored through the open-ended questions.

Of the total sample, 29(24.1%) reported that they are involved in a sexual relationship. These learners identified the following as the reasons: ‘happiness; there is a need to have someone to help and love’. They also mentioned that it was ‘nature’; they were at the right age; it helped to take away loneliness, and there was a need to have someone to share your problems with. A total of 81(67.5%) explained that they are not involved in any sexual relationship, while 8,4% did not indicate whether they are involved or not.

They gave the following responses to support their statements: the fear of diseases; pregnancy; HIV, and fear of not completing studies. They also mentioned: church restrictions; parents are watching them; they hate opposite sex; they fear problems caused by opposite sex; partners are not honest; sexual relationships are not important; and therefore there is no need for relationships.

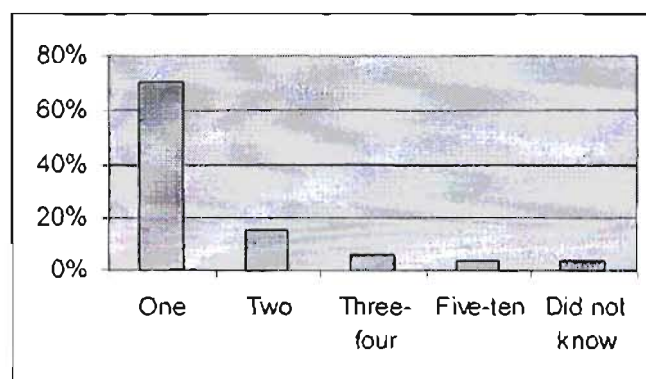
### *6.3.3 Exploring the number of sexual partners?*

Through an open-ended question, learners were questioned about the number of sexual partners they would choose to have. In as far as the number of partners is concerned, 84(70%) respondents identified 1 partner.

They explained that they chose to have just one partner for the following reasons: 'to avoid fights and misunderstandings, and to be aware who is responsible when one is pregnant'. These statements indicate that students know that more than one partner is not acceptable behaviour; and it has implications for their future lives.

Out of 120 learners 19(15.6%) respondents indicated that it is right to have two partners. Reasons provided were: 'when one is not available the other one will be available; the second one will help'. 7(5.8%) respondents preferred to have 3-4 partners. They justified this by stating that, 'if there is only one, you might think she is honest to you that is why more substitutes are needed'. Another reason given was, 'when rejected by the one, the next one is there to get sex and be happy'. 5(4.1%) mentioned 5-10 partners are ideal. Reasons related to support when faced with problems. Five learners did not know (4.1%).

*Figure 10: Question – How many partners should a person have?*

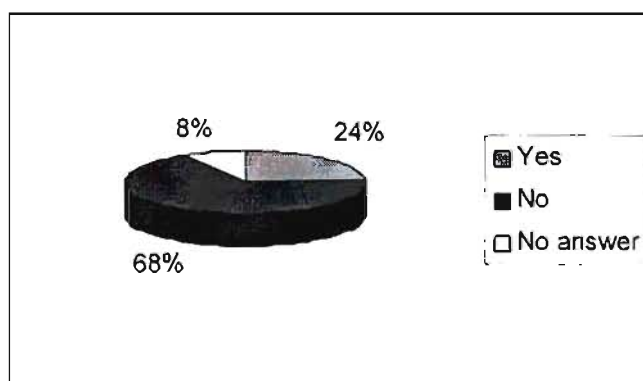


#### 6.3.4 Sex before high school?

Students gave their views on whether it was likely that they would have sex before completing high school.

- 48(40%) of the total sample ( $n=120$ ) respondents clearly reported that it is possible that they might have sex before completing high school. These were the reasons given: they would not wait for a longer time cause they are in love. They would not wait because they are in love; it is natural; 'others are doing it too, so must I'. They further reported that sometimes they 'become on and feel like having sex', as an adult one is free; 'it makes brains feel right'. 69(57.5%) indicated that they would not have sex before completing high school because they want a bright future. Some claimed that they were still young, and their parents are very strict. 3(2.5%) respondents said 'I don't know as no one knows what life brings for her'.

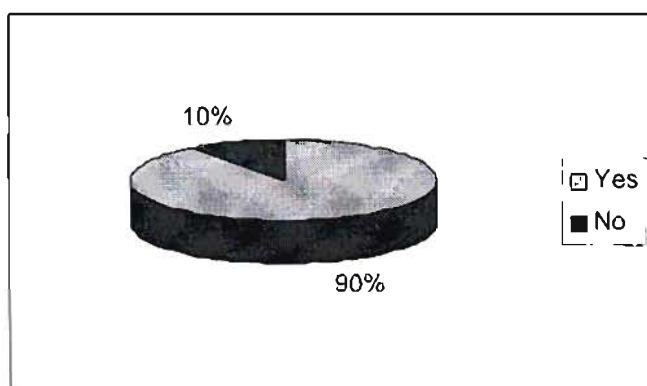
Figure 11: Question – Would you have sex before completing high school?



### 6.3.5. The issue of condom use

Students were asked whether they would use condoms. A large number, 108(90%) reported that they would use a condom. They gave these reasons to support their responses: 'fear of HIV/AIDS, to avoid the spread of the diseases, and pregnancy'. A small group 10% did not approve the use of condoms, the reasons being the following: 'condoms can be dangerous and not safe as they slip out sometimes', the problem is 'there is no satisfaction'. They mentioned that they are 'too old to use condoms'.

Figure 12: Question – Would you use a condom?



Jammott & Jammott (1991) tested the applicability of the theory of reasoned action to condom use among women, and hypothesed that (a) women who express more favourable attitudes towards condoms will report stronger intentions to use condoms than will women who express less favourable attitudes, and (b) women who perceive subjective norms more supportive of condom use will report stronger intentions to use condoms than those who perceive subjective norms less supportive of condom use.

The results in this study support the theory of reasoned action, as females in this study expressed more favourable attitudes towards condom use with the stronger intentions to use condoms (such as to avoid the spread of the diseases and to prevent pregnancy).

#### *6.3.6 Situations that might put learners at risk in this school*

When asked about situations that might put them at risk at school they mentioned the following reasons,

- ‘They have sex with many partners without using condoms’ (58.3%),
- ‘Learners do not behave and are not controllable’ (12.5%),
- ‘They help bleeding students without using gloves’ (10.8%),
- ‘Eating sweets eaten by others, dirty water from the tanks’ (10%),
- ‘Girls like playing with boys and staying with them’ (4%),
- ‘There are insects in our dirty toilets’ (4.4%).

#### *6.3.7. Safer types of behaviour*

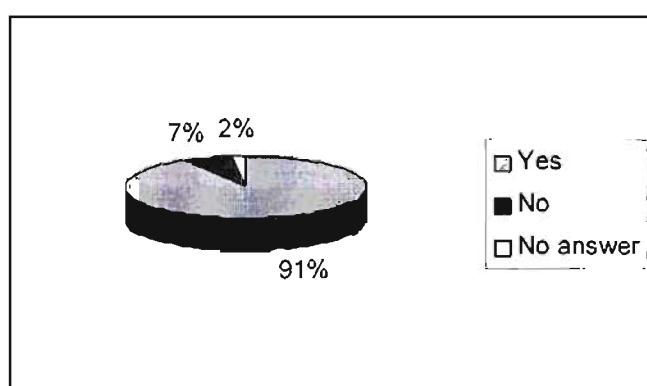
They mentioned the following as the safer types of behavior that could minimize the risks of catching HIV/AIDS:

- ‘Do not have an affair’, (12.2%),
- ‘Avoid sleeping with someone you do not trust’ (22.3%),
- ‘Don’t have sex without a condom’ (35, %),
- ‘Avoid sleeping with many partners’ (27%),
- ‘Eating fruit and vegetables’ (4%).

### 6.3.8. Behaviour change in the face of HIV/AIDS

The questions also raised the issue of whether students felt that they had undergone any behaviour change with respect to their sexual behaviours in recent years. 110(91.6%) of the students indicated that they had changed their behavior to protect themselves against HIV infection. A small number 8(6.6%) reported that they had not changed, while 2(1.6%) did not answer at all.

Figure 13: Question – Has your behaviour changed since knowing about AIDS?



Most of those who reported that they had changed their behaviors indicate that they have done so to protect themselves from HIV. They reported that they are no more in love and having sex (47.5%). The second major reason was the use of condom to avoid the spread of infections (15.8%). The third change was having one partner (2.5%).

The following were some answers given, which indicated misunderstanding of the question by the learners, instead of giving behavior changes since knowing about HIV, they mentioned ordinary changes: 'no more eating unhealthy foods (4%); no more washing late as I used to do (5.6%), has changed my body, face and work' (1.3%).

In summary, the pattern of change emerged among respondents as most learners reported behaviours that will keep them away from catching HIV. Of the total sample ( $n=120$ ), 91% indicated that they have changed their behaviours with 47.5% of learners who specifically mentioned that 'by not having sex'. 90% indicated that they would use a condom when having sex and 69% mentioned that they would not have sex before finishing high school. 73.3% respondents who indicated that they are involved with only one partner, while 67.5% mentioned that they are not involved in any relationship at all made another alarming change. The majority (81%) clearly stated 'no' to premarital sex. This shows that they are aware of the danger of HIV/AIDS, and trying to use preventative measures to protect themselves from contracting the HIV.

It also seems as if sexual activity is becoming part of the group norm, as 47.8% of respondents indicated that they are doing it as they see that their friends as being sexually active. These issues need to be addressed by schools to prevent the high-risk behaviour patterns that can become more serious as these learners develop. The fact that learners feel the need to have more than one partner at a time is an indication that they lack an understanding of the risks involved in that type of behaviour. One high-risk behaviour that should be addressed urgently is unprotected sexual behaviour.



## CHAPTER SEVEN: CONCLUSIONS AND IMPLICATIONS

In this chapter the findings of the research will be summarised and the key conclusions which inform the main aim of the study will be drawn.

### 7.1. Knowledge about AIDS

According to Richter (1996) the key finding is that, most young people in South Africa have heard of AIDS. The second key finding is that despite an overall high awareness of AIDS, the youth show highly variable knowledge about the illness itself.

In this study, knowledge levels about the existence of HIV/AIDS appear to be high among adolescents in the sample. However, misconceptions about HIV/AIDS levels also seem to exist although at a lower rate, these lead to high-risk sexual behaviours.

Knowledge about the basics of HIV-transmission is relatively high, the following statement illustrates this: 'Any person with HIV/AIDS can pass it to someone else through sexual intercourse', 81% were correct about this statement. Knowledge about prevention measures also seem high among students, this is supported by 'The most effective way of preventing HIV/AIDS is not to have sex', (84% had correct responses), and, "97 % knew that using condoms when having sex can reduce the risks of catching HIV/AIDS'. Misconceptions about the transmission of HIV/AIDS appeared although at a lower level. The following statement illustrates this: 'You can get AIDS by giving blood' (14%). This misconception needs to be acknowledged and rectified to promote health among our adolescents who are at risk of the pandemic.

This can only be achieved through increasing detailed knowledge about HIV/AIDS and safe sex, with special emphasis on clarifying modes of transmission and misconceptions about the transmission of HIV/AIDS. There must also be an emphasis on how casual contacts do not transmit HIV. The importance of AIDS information will need to be emphasised to adolescents. Such basic information will need to be accurate and precise, yet simple for even 12 to 14 years old to understand. More emphasis will need to be placed on how everyone is susceptible to the infection, and how it is therefore, the responsibility of all individuals to prevent its spread. While talking about sexuality issues, developmental stages should be taken into consideration as older adults (16-19 year olds) are at the stage of forming intimate relationships and topics should be made more relevant to the particular target group.

Regarding the statement 'There is cure for AIDS', only (15.6%) were correct, 55(45.1%) were incorrect and 44(36.1%) did not know. The highest number of students who responded with 'Don't know' to 'You can get the virus and spread it without being sick' (45%) and 'Most people catch AIDS from the toilet seat' (41.8%), indicate lack of knowledge to students about HIV transmission. Visser & Moleko (1995) explain that the most common prevention approach utilised in schools relies on teaching students the factual information about high-risk behaviour and the dangers thereof. Preventive programs should rather focus personal on development (self-esteem development, life skills) and the provision of social support.

## 7.2. Attitudes about AIDS

The second objective of the study was to investigate the kind of attitudes adolescents hold towards HIV/AIDS patients and the virus itself. Respondents displayed both negative and positive attitudes towards people living with AIDS, and the virus itself. The present study was found to have many similarities to findings reported in other studies done in South Africa, and internationally (Heunis, 1994 & Strydom, 2003). Kaiser Foundation Family (2002) explains that in determining how vulnerable South African youth are to HIV infection or unwanted pregnancy, it is important to consider not only what youth know about sex, but also what they are doing, and what kinds of attitudes they hold related to sex and sexuality. Learners showed negative attitudes, to AIDS sufferers, this statement is supported by: 'HIV/AIDS patients should live freely in the community', 57(47.5) did not accept that these people should live freely in their communities. These learners do not want to have friends with the virus as if it will automatically infect them. A group of 39(32.5%) disagreed that people with the infection should be allowed to keep working. 44% of the respondents indicated that HIV/AIDS patients should live freely in the community. The findings correspond to those of Sheehan (1999) as cited in (Heunis, 1994) that students are unwilling to interact with AIDS suffers, as well as with Landfeld (1988) cited in Heunis (1994) who found that many university students in Ohio felt that AIDS suffers should not be allowed to live in dormitories (26%), and should be isolated from the public (12%). Similarly, students from the Universities in Northern Ireland felt that AIDS patients should be treated in special hospitals and not in general hospitals.

Research has not yet been conclusive as to the factors that determine attitudes towards AIDS sufferers (Heunis, 1994). The findings in this study suggests that, the fear of AIDS is the result of ignorance, and that education would relieve the anxiety caused by having to deal with the unknown. One is drawn to the conclusion that AIDS education programs are essential in fight against AIDS (Jameson & Glover, 1993). Just like myths about AIDS transmission, attitudes need to be addressed. The advantage with adolescents is that, they are young and the programs made have far greater chance for success than for adults who already have acquired stereotypes and reversing such these will not be easy.

Overall, adolescents in the study showed a more positive attitude with regard to 'We should visit someone with HIV/AIDS', 62(51.6%) agreed with that statement while a small number 40 (33.3%) did not agree. Of the total number ( $n=120$ ), 49(40.8%) indicated that they don't agree with this statement "Women who transmits HIV to their babies should have their babies taken away from them'. Similar findings are reported by Heunis (1994) who found that, the majority of University of Orange Free State students held positive attitudes towards AIDS sufferers and HIV carriers and were willing to study with them, and they do not believe that AIDS sufferers lacked moral values. The subjects in the study conducted by Uwalaka & Matsuo (2002) their sample reported positive attitudes towards AIDS patients, and beliefs of low susceptibility to getting AIDS.

However, there is no suggestion that having accurate knowledge influences people's attitude toward AIDS and AIDS patients. People may be aware of the of the AIDS epidemic, but do not care about AIDS patients. In terms of the theory of reasoned action, the balance between attitudes, norms self- efficacy and contextual variables in predicting intention may vary in terms of some or all of these variables. The theory of reasoned action proposes that actions are largely determined by relevant intentions, which in turn are influenced by attitudes and subjective norms specific to the intentions. Education on safe sex, positive attitudes, and methods of preventing the transmission of the disease are needed for adolescents to be well informed of HIV/AIDS. These should be special emphases.

### 7.3. Change in sexual behaviours

Terry et al. (1993) described four HIV-related strategies adopted by active men and by heterosexuals, as follows:

- Changes to sexual practice: 'condom use, as a safer form of sexual expression'
- Changes by nature/type of sexual relationships: reduction in the number of casual partners, reliance on 'regular' partner/s.
- Negotiated safety: reliance on partners sexual and drug use history, reliance on concordance of negative HIV-antibody status.
- Avoidance: avoidance of certain sorts of partners.

Respondents in this study seem to have adopted most of the changes described by the theory of reasoned action. A large group (90%) of respondents indicated that they would use condom when involved in a sexual intercourse. This is promising as it is making them aware of the dangers of unsafe sex practices and the protective measures that are available, in this way the infection rates will decrease. In applying the theory of reasoned action, cognitive processes are also involved: the belief, norm, attitude and intention, as playing a crucial role (Terry et al, 1993). Respondents believed that a person should have one partner (73.3%). These findings are encouraging with regard to future prospects in controlling the epidemic. Increased efforts need to be put into implementation sustainable control measures as opposed to merely raising awareness.

It is recommended that a programme be developed to educate adolescents about sexuality and HIV/AIDS in an objective manner (Strydom, 2003). This programme should encompass aspects like sexuality, sexual functioning, the correct use of condoms, the immune system, ways in which HIV transmission can take place, knowledge on HIV and attitudes towards a problem and attitudes towards people living with it. According to Campbell (2002) these programs should be designed in such a way as to encourage condom use in urban as well as in the rural areas, but abstinence remains the best method of preventing the transmission of HIV/AIDS.

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## APPENDIX A : STUDENT QUESTIONNAIRE

Dear student,

Please read each of the following statements carefully, and tick the column that suits you most. You are free to answer the way you feel. Do not write your name.

---

### PART 1: DEMOGRAPHIC CHARACTERISTICS

Read each question carefully. Put a circle around your correct answer.

1. What grade are you in? a 7<sup>th</sup>    b 8<sup>th</sup>    c 9<sup>th</sup>
  
2. What is your sex?            a. Female            b. Male
  
3. How old are you?            a. 12 years old or younger  
   b. 13-14 years old.  
   c. 15-16 years old.  
   d. 17-18 years old.  
   e. 19 years old.
  
5. Do you have?                    a. Both parents.  
   b. One parent.  
   c. No parents.
  
6. What is your home language? a. Xhosa  
   b. Sotho  
   c. Other

## PART 2: KNOWLEDGE ABOUT AIDS

Read each question carefully, place a cross (x) against each statement in the correct column.

	True	Don't know	False
1.Eating healthy foods can keep you away from getting AIDS.			
2.You can get AIDS by shaking hands with someone with AIDS.			
3.You can get AIDS by giving blood.			
4.An infected pregnant woman can give AIDS to her child.			
5.AIDS is so contagious that you can get it by being in the same room with someone with AIDS.			
6.People with AIDS can seem and look healthy.			
7.AIDS is a disease that affects the immune system.			
8.AIDS cannot be caught by casual contact.			
9.You can have the AIDS virus and spread it without being sick.			
10.AIDS can be caught by sharing dirty needles.			
11.Using condoms when having sex reduce the risks of catching AIDS.			
12. The most effective way of preventing AIDS is not to have sex.			
13.Intra-Venous (IV) drug users who share needles have a high risk of catching AIDS.			
14. Any person with the AIDS virus can pass it to someone else through sexual intercourse.			
15. There is cure for AIDS.			

16. People with AIDS will die from it.			
17. Most people catch AIDS from toilet seats.			
18. Abstain, be faithful and condomise are best methods of avoiding HIV/AIDS.			
19. Infected person will eventually get sick.			
20. People with many partners are at high risk of getting AIDS.			
21. AIDS is caused by an HIV			



### PART 3: ATTITUDES ABOUT AIDS

Read carefully the statements below. Respond to them by placing a cross (x) in the correct column.

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

	1	2	3	4	5
1.AIDS is God's punishment to homosexuals drug users.					
2.Doctors should not be required to see AIDS patients.					
3.AIDS patients deserve illness because of their behaviour.					
4.HIV infected persons should not be allowed to work with others.					
5.We should not take care of an HIV infected person.					
6.We should continue friendship with an infected person.					
7. We should not be willing to look after a relative who is having AIDS.					
8. HIV-infected persons should be allowed to keep working.					
9.We should keep HIV-infected person's status confidential.					
10. HIV/AIDS patients should live freely in the community.					

11. We should be willing to take AIDS test.					
12. In case the test is HIV positive we should be willing to tell our families the results.					
13. Women who transmit HIV to their unborn babies should have their babies taken away from them.					
14. We should be happy to be in the same with someone with AIDS.					
15. A person who has AIDS should attend his/her nearest school.					
16. We should visit someone with HIV/AIDS.					

## PART 4

Read the following questions and answer in the spaces provided.

1. Is premarital sex acceptable?

.....

Why .....

.....

2. Are you involved in any sexual relationship?

.....

Why?.....

.....

3. How many partners should a person have?

.....

Why?.....

.....

4. Is it possible that you might have sexual intercourse before you finish high school?

.....

Why?.....

.....

.....

5. If it might happen would you use a condom?

.....

Why?.....

.....

6. Name some situations that might put young people in this school at risk of HIV/

infection/transmission.....

.....

.....

7. What are the safer types of behavior that could minimize the risks?

.....

.....

.....

8. Has your behavior changed since knowing about HIV/AIDS?.....

9. If it has changed what sort of changes did you experience?.....

.....

.....

# APPENDIX B



# PROVINCE OF THE EASTERN CAPE

## DEPARTMENT OF EDUCATION

### ISEBE LEZEMFUNDO

### DEPARTEMENT VAN ONDERWYS

MALUTI DISTRICT, P.O. BOX 1835, MATATIELE 4730, SOUTH AFRICA

Reference:	Enquiries: B.L Mzimkulu	Tel: 039 256 0111	Date: 10.09.03
Isazi:	Umbuzo:	Fax: 039-256 0866	Umhla:

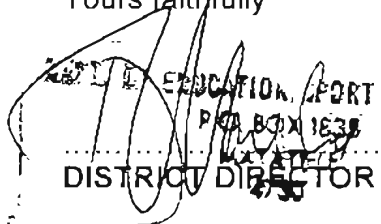
M.T Kwili  
Elukholweni J.S.S  
P.O Box 405  
Matatiele  
4730

Sir/ Madam

**RE: Request for permission to conduct Research.**

The Department of Education, Maluti District Office, highly welcome the request made by Ms M.T Kwili to conduct the research on HIV-AIDS at Elukholweni JSS and the surrounding area. It is hoped that the school will give her the necessary support.

Thanking you in advance  
Yours faithfully

  
DISTRICT OF EDUCATION, SPORT & CULTURE  
P.O. BOX 1835  
MATATIELE  
DISTRICT DIRECTOR  
DATE: 10-09-03