

**AN INVESTIGATION INTO THE RISK BEHAVIOUR REGARDING HIV
TRANSMISSION AMONG YOUTH IN BULAWAYO**

by

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DECLARATION

I declare that **AN INVESTIGATION INTO THE RISK BEHAVIOUR REGARDING HIV TRANSMISSION AMONG YOUTH IN BULAWAYO** is my own work and that all the sources used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any other institution.

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AN INVESTIGATION INTO THE RISK BEHAVIOUR REGARDING HIV TRANSMISSION AMONG YOUTH IN BULAWAYO

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ABSTRACT

The study sought to explore and describe the risk behaviour regarding HIV transmission among youth in Bulawayo, their knowledge of HIV transmission and the sources of information on HIV transmission accessible to them. A quantitative, descriptive exploratory design was used and 238 youth from three secondary schools in Bulawayo, the second largest city in Zimbabwe were the respondents. The Health Belief Model (HBM) was used to facilitate and acquire insight into the risk behaviour among the youth.

The inferences drawn from the study were that youth have inadequate knowledge about HIV transmission and therefore do not fully understand their risk of infection. Youth also find shyness and fear of rejection serious barriers to communicating openly about sexuality, sexual and HIV/AIDS issues. The findings of the study have implications for programmes to limit HIV transmission among youth and should assist policymakers and educators in developing and implementing such programmes in order to improve the health of youth in Zimbabwe.

Key concepts

Knowledge; Health Belief Model (HBM); HIV transmission; risk behaviour; sources of information; youth.

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Dedication

To my family and friends, and nurses everywhere

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List of abbreviations

AIDS	Acquired Immune Deficiency Syndrome
CDC	Centre for Disease Control
HBM	Health Belief Model
HIV	Human Immune-deficiency Virus
NGO	Non-governmental organization
PSI	Population Services International
SAFAIDS	Southern Africa HIV/AIDS Action
STI	Sexually transmitted infection
STIs	Sexually transmitted infections
TV	Television
UNAIDS	United Nations Agency for International Development
USA	United States of America
VCT	Voluntary counselling and testing
WHO	World Health Organization
ZNAC	Zimbabwe National AIDS Council

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CHAPTER 1

Orientation to the study

1.1 INTRODUCTION

The Human Immune-deficiency Virus (HIV)/Acquired Immune Deficiency Syndrome (AIDS) pandemic is a worldwide problem and Zimbabwe faces a serious challenge in the fight against this incurable disease. Sub-Saharan Africa, of which Zimbabwe is part, has the highest prevalence of HIV in the world and 83% of deaths from HIV/AIDS occur in this region (WHO 2001:2-3). Zimbabwe has an estimated population of 11.6 million, with 24, 6% HIV prevalence in the age group between 15 and 49, which translates to 1.8 million people infected with the HIV virus. Moreover, it should be noted that more than 50% of those infected with HIV in Zimbabwe are women and children (Zimbabwe National AIDS Council [ZNAC] 2003:5). Zimbabwe has the third highest HIV infection rate in the world, which in turn has seriously affected the economy due to reduced productivity, since the most economically active and productive age groups are affected (Mataure, Ray, Foreman & Scalway 2001:1).

Due to the gravity of the HIV/AIDS pandemic, the Zimbabwe government established the ZNAC (2003:1) through the *Zimbabwe National AIDS Act* (1999). ZNAC is a multi-sectoral body that has the mandate to mobilise and manage resources, financial or otherwise, in the response to HIV/AIDS in the country. The government also introduced an AIDS levy of 3% of taxable income in the same year (ZNAC 2003:2). HIV/AIDS prevention strategies target the youth who are particularly vulnerable to HIV infection as they are not mature enough yet to comprehend the risk and lack the knowledge and skills to protect themselves from the infection. The sexual behaviour of the current population of youth in Zimbabwe will determine the course of the AIDS epidemic (Youth and HIV/AIDS: Can ... 2001:4). This study set out to investigate the risk behaviour regarding HIV transmission among youth in Bulawayo, their knowledge of HIV transmission and the sources of information on HIV transmission accessible to them in order to identify knowledge gaps and improve on future HIV prevention programmes.

1.2 BACKGROUND TO THE PROBLEM

Of the 34 million people in the world infected with HIV, one third are aged between 10 and 24 years (Finger 2002:20). The pandemic is not apparent in this age group because of the prolonged incubation period of ten years on average (Ministry of Health and Child Welfare 2004a:6).

The HIV/AIDS pandemic in Zimbabwe has reduced life expectancy from 58 years to about 35 years for both men and women (Ministry of Health and Child Welfare 2004a:32). In the age group 25 to 45 years, 80% of deaths are due to HIV/AIDS and over 100 000 people die every week from HIV/AIDS. The commonest mode of transmission of HIV in the country is through sexual intercourse between men and women and that accounts for 92% of cases (Mataure et al 2001:1).

In Zimbabwe, young people aged 10 to 24 years comprise 37% of the population while 22% is composed of young people aged 15 to 24 years. Although young people in Zimbabwe are aware of the existence of HIV/AIDS, they still practise unprotected sex because of gender stereotypes such as encouraging young men to enhance their manhood by having sex. Young people also engage in risk behaviour due to peer pressure and lack of knowledge regarding HIV transmission (Zimbabwe National Family Planning Council 2002:2-4).

The country's health system is overextended because opportunistic infections are on the increase and drugs are difficult to procure. Anti-retroviral drugs are too expensive for many people, including the Government (Mataure et al 2001:1-3). Children have been orphaned or abandoned or live in the streets because their parents either died from HIV/AIDS or are too sick to look after them. Child-headed families have emerged largely as a result of HIV/AIDS. Orphans are at risk because they can be abused or forced into commercial sex for survival (SAFAIDS 2004:1-2). In 2004, Zimbabwe was estimated to have 760 000 children who were orphans as a result of HIV/AIDS and this number was expected to increase to 1.1 million by the end of 2005 (Ministry of Health and Child Welfare 2004b:81).

Factors that contribute to the spread of HIV in Zimbabwe as in other developing countries include multiple sexual relationships, high incidence of sexually transmitted

infections (STIs), unprotected sex, alcohol and drug abuse and the practice of commercial sex (Ministry of Health and Child Welfare 1998:9). Youth are at increased risk of HIV transmission due to poverty and unemployment, which forces them to indulge in sexual relationships with older adults in exchange for money, food and clothing among other favours (Youth and HIV/AIDS: Can ... 2001:13).

In Zimbabwe, society expects women to have sex to increase the opportunity for marriage or financial support. Men, however, are expected to have many sexual partners and to have sex whenever they feel like it (Kim, Kols, Nyakauru, Marangwanda & Chibatamoto 2001:11; Mataure et al 2001:10). Such societal beliefs and practices reflect inadequate knowledge about HIV transmission. Consequently, youth engage in risky behaviour. Creating awareness of cultural practices that contribute to the transmission of HIV is important. Women in Zimbabwe have a low socio-economic status, have little or no education and are socialised to be submissive to men who are also socialised to believe that their sexual desire is uncontrollable. In Ghana, adolescent girls are coerced into sexual intercourse and may agree out of fear of rape. Such cultural practices expose young women to the risk of HIV transmission (Karim, Magnani, Morgan & Bond 2003:14). Zimbabwe and other developing countries have about 13 million births annually to women aged between 15 and 19 years, many of whom are unmarried (Finger 2002:20).

Sibanda (2004:1) reports concern among rural communities in the Matabeleland South province of Zimbabwe (where illegal gold panning is practised), over the HIV risk behaviour of youth. Gold panners reportedly have relationships with secondary school girls in which unprotected sex and partner exchange are common practices. Some gold panners entice the schoolgirls with money and gifts. Furthermore, the *Chronicle Reporter* (2004:3) carried a report on lecturers from a Bulawayo college having sexual relationships with students in exchange for better grades and information on examination questions.

Between 1994 and 1999, demographic and health surveys in Zimbabwe found that 8% of adolescent males and 17% of females did not know of any way to protect themselves against HIV/AIDS (Kim et al 2001:11). Youth do not understand their vulnerability to HIV transmission due to their physical, psychological and social characteristics. They do not view themselves as at risk of HIV transmission and some have low self-esteem or believe they cannot control their sexual behaviour. Many young people feel anxious or

embarrassed about sex and find it difficult to use condoms or initiate their use. Refusal to have sex is usually ridiculed and if their peers believe themselves not to be at risk, they also follow suit. Furthermore, many young people do not even know that a healthy-looking person could be infected with HIV (Mataure et al 2001:17; Youth and HIV/AIDS: Can ... 2001:10-11). Although both male and female condoms are available in Zimbabwe, young men and women do not consistently use them because condom use is associated with promiscuity and condoms are believed to interfere with sex. There is also a belief that condoms are coated with the HIV virus and this has increased reluctance to use them (Mataure et al 2001:19).

Apart from the above, most parents are unsure and uncomfortable about discussing sexuality with their children and youth obtain information, which is often incomplete or incorrect, from peers and friends. To fill this gap, however, school education programmes are a useful strategy to ensure that correct information is given about sexuality and STIs (Edelman & Mandle 2006:513).

While young people are regarded as “at risk” of HIV transmission, it is critical to attempt to understand the varying circumstances they face so as to equip them adequately to protect themselves against HIV transmission (Youth and HIV/AIDS: Can ... 2001:9). Young people need adequate reproductive health information to assist and enable them to make informed choices. They also need to develop self-esteem, peer resistance skills and respect for other people and to set healthy goals for themselves in the midst of the HIV/AIDS pandemic (Finger 2000:10; Kibel & Wagstaff 1995:116).

In 1999, Zimbabwe developed the National HIV/AIDS Policy, which stipulates that children and young people should have access to information and be assisted to protect themselves from early sex, unwanted pregnancy and HIV transmission. Promotion of abstinence and delay in sexual debut are important components of health education in order to prevent HIV transmission among the youth (Ministry of Health and Child Welfare 1999:22).

The ZNAC assists people living with HIV/AIDS as well as children in difficult circumstances, such as loss of parents through HIV/AIDS, and has improved home-based care services. Education of youth and the general population on HIV/AIDS has been revitalised through funding from ZNAC. A lot still needs to be done such as

training of health workers in the care and support of people with HIV/AIDS, promoting early treatment of STIs and improving the surveillance system to collect data on the magnitude, pattern and distribution of HIV/AIDS in the country (Piot & Seck 2001:1114-1115; UNAIDS 2001:4).

Through involvement in HIV/AIDS prevention programmes for young people as a community health nurse and as a projects officer in a non-governmental organisation (NGO) involved in HIV/AIDS prevention programmes for young people, the researcher became interested in the subject of this study.

1.3 AIM OF THE STUDY

The aim of the study was to improve the health of youth in Zimbabwe by improving their knowledge of HIV transmission and limiting risk behaviour regarding transmission of HIV through HIV/AIDS prevention programmes in the country.

1.4 STATEMENT OF THE PROBLEM

Although youth have some knowledge of HIV/AIDS, they do not fully understand their risk of HIV transmission and lack the skills to negotiate with their sexual partners on safe sexual practices (Mataure et al 2001:20; Youth and HIV/AIDS: Can ... 2001:12).

Among the age group 15-19 years, there is a high incidence (41%) of early sexual activity, unplanned pregnancies, abortion and STIs, including HIV. In the age group 20-24 years, the incidence of unplanned pregnancies is 35%. School dropouts are to a large extent a result of unplanned pregnancies (Zimbabwe National Family Planning Council 2002:7). The average age of sexual debut in Zimbabwe is 18 years for both males and females (Ministry of Health and Child Welfare 2004a:18). Preventing HIV transmission among the youth is an effective strategy for reducing the spread of HIV/AIDS because, unlike adults, youth have not yet developed fixed patterns of sexual behaviour and are therefore more likely to be receptive to healthy sexual practices (Best 2000:4; Kim et al 2001:12).

Since the first HIV/AIDS case in 1985, the Zimbabwe government and other stakeholders have introduced initiatives to create awareness of HIV/AIDS, but

behaviour change has remained inadequate despite high levels of knowledge of HIV/AIDS in general (Ministry of Health and Child Welfare 1999:iv). There is a need for effective reproductive health programmes to address the needs of young people. Before any improvements can be effected, however, the current knowledge of HIV transmission, the sources of information accessible to youth on HIV transmission and the risk behaviour regarding HIV transmission among the youth have to be explored.

Lollis, Johnson and Antoni (1997:551) point out that, in terms of the Health Belief Model (HBM), perceived susceptibility to a disease, perceived severity of the disease, perceived benefits of taking preventive action, perceived barriers to and perceived self efficacy of performing preventive measures are motivators for an individual to take measures to prevent a disease such as HIV/AIDS. If youth have incorrect knowledge about HIV transmission and the risk behaviour regarding HIV transmission, they may not take the necessary measures to prevent the transmission of HIV (Lollis et al 1997:551; ReCAPP 2004a).

1.5 PURPOSE OF THE STUDY

The purpose of the study was to explore and describe the knowledge of HIV transmission and the risk behaviour regarding transmission of HIV amongst youth in Bulawayo.

1.6 RESEARCH OBJECTIVES

The research objectives that guided the study were to

- determine the knowledge of youth in Bulawayo on HIV transmission
- identify the sources of information on HIV transmission accessible to youth
- explore and describe the risk behaviour of youth regarding HIV transmission

1.7 ASSUMPTIONS

According to Neuman (1997:41), assumptions are statements accepted as true without any scientific evidence and these assumptions provide the reason for research. The

assumption underlying this study was that youth engage in risk behaviour due to peer pressure, lack of knowledge, and certain environmental conditions, such as poverty.

1.8 SIGNIFICANCE OF THE STUDY

Youth need adequate information on HIV risk behaviour and also need help to develop decision-making skills to prevent the transmission of HIV. They need to develop assertiveness and self-esteem and to receive individual counselling in a friendly environment with someone trustworthy. The study should for that reason identify knowledge gaps on HIV transmission, sources of information accessible to youth on HIV transmission and determine their risk behaviour regarding HIV transmission. The findings of the study should guide specific education to limit HIV transmission and risk behaviour among youth. In addition to information, education and communication on HIV transmission, effective HIV prevention strategies could be proposed in order to change the risk behaviour of youth (Youth and HIV/AIDS: Can ... 2001:15).

1.9 THEORETICAL FRAMEWORK

The researcher used the Health Belief Model (HBM) to facilitate and acquire insight into the risk behaviour among youth (Dennill, King & Swanepoel 1999:157). The components of the HBM can be utilised in interventions to increase HIV risk awareness and reduce barriers to healthy sexual behaviour among the youth (see chapter 2).

1.10 RESEARCH DESIGN AND METHODOLOGY

A research design is a “plan for carrying out research in order to answer the research question” (Mouton 2001:55). The researcher adopted a quantitative approach and descriptive exploratory design (see chapter 3).

1.11 POPULATION

The target population refers to the total group of people who possess the characteristics that a researcher is interested in studying and to whom the findings of a study can be generalised. The accessible population is the population that is available for the study (Polit & Beck 2004:218). In this study, the target population consisted of all youth, aged 15 to 19 years, attending three selected high schools in the high-density suburbs of Bulawayo while the accessible population were all who were actually available for the study and met the eligibility criteria (see chapter 3).

1.12 SAMPLING AND SAMPLE

Sampling is the process of selecting elements or respondents representative of the population under study (Polit & Beck 2004:291). The proportion of the subjects selected from the accessible population from whom information for the study is obtained is referred to as the sample. A sample should be representative of the population from which it is selected to enable generalisation of findings to be made about that population (Babbie & Mouton 2001:124). Accordingly, the sample consisted of students who met the eligibility criteria.

In this study, proportional, stratified probability sampling was used. Probability sampling enables the researcher to use inferential statistics and findings of the study can be generalised to the population. Probability sampling was used in the study because it increased the likelihood that all elements in the population would have an equal chance of being included in the sample (Brink, Van der Walt & Van Rensburg 2006:126). To obtain the sample, the researcher used the school attendance register of the students as the sampling frame (see chapter 3). Neuman (1997:203) describes a sampling frame as “a list of all the elements in the accessible population”.

1.13 DATA COLLECTION

Data refers to the pieces of information gathered in research (Brink et al 2006:207). In this study, data collection was structured. In structured data collection a researcher records the possible responses in advance and allows the respondents to select the responses applicable to them. Quantitative research uses structured data collection (Polit & Beck 2004:318, 733). The data-collection instrument was a questionnaire (see chapter 3).

1.14 DATA ANALYSIS

Data analysis is a process whereby data collected through research is systematically organised, summarised, evaluated and interpreted (Polit & Beck 2004:451). A statistician analysed the data, using the SPSS version 13.0 computer program. Descriptive statistics were used and the findings presented in the form of pie charts, graphs and percentages.

1.15 RELIABILITY AND VALIDITY

The validity of an instrument relates to whether it measures what it is supposed to measure while reliability refers to whether it yields the same result each time it is used (Babbie & Mouton 2001:646). The measures to ensure reliability and validity are dealt with in chapter 3.

1.16 DEFINITION OF TERMS

For the purposes of this study, the following terms were used as defined below.

- **Adolescents**

Collins English Dictionary (1991:20) defines adolescence as “the period in human development that occurs between the beginning of puberty and adulthood” and adolescent as “of or relating to adolescence”. In this study, the terms “adolescents” and “young people” were used interchangeably and referred only to adolescents aged 15-19 years.

- **Youth**

Youth is “the quality or condition of being young, immature, or inexperienced; the period between childhood and maturity; young people collectively” (*Collins English Dictionary* 1991:1783). For purposes of this study, youth referred to young people aged 15-19 years.

- **Risk behaviour**

Risk is “the possibility of incurring misfortune or loss; hazard” and as a verb “to proceed in an action without regard to the possibility of danger involved in it” (*Collins English Dictionary* 1991:1336). In this study risk specifically referred to the danger of HIV transmission. *Collins English Dictionary* (1991:141) defines behaviour as “manner of behaving or conducting oneself”. In this study, risk behaviour referred specifically to behaviour that exposes youth to the possibility of HIV transmission.

1.17 SCOPE

The study was conducted in three high schools, situated in the high-density suburbs of Magwegwe, Njube and Lobengula in the city of Bulawayo, Zimbabwe.

1.18 LIMITATIONS

The study was limited to three schools only. The schools concerned were situated in the city and did not include youth from underdeveloped rural areas. The findings of the study can thus only be generalised to youth in a similar setting.

1.19 ETHICAL CONSIDERATIONS

Ethical issues were observed to protect the rights of the respondents. The principles of the Belmont Report (1978) guided the study, namely the principles of beneficence, respect for human dignity, and justice (Polit & Beck 2004:141-143). The researcher obtained permission from the Regional Director of Education and the parents and respondents consented prior to the study (see chapter 3).

1.20 OUTLINE OF THE STUDY

Chapter 1 outlines the research problem and the rationale for and the purpose, objectives and significance of the study. Chapter 2 covers the literature review for the study. Chapter 3 describes the research methodology. Chapter 4 discusses the data analysis and interpretation. Chapter 5 concludes the study, presents the findings and their relationship to the HBM, and makes recommendations for practice and further research.

1.21 CONCLUSION

This chapter described the research problem as well as the purpose and significance of the study in the fight against HIV transmission among the youth. The research methodology, scope and limitations of the study were dealt with briefly and key terms used defined. Chapter 2 discusses the literature review conducted for the study.

CHAPTER 2

Literature review

2.1 INTRODUCTION

This chapter discusses the literature review for the study. A literature review “lays the foundation of a study and enables the researcher to discover what is known or not known about the topic of interest in order to conduct research that adds to the body of knowledge” (Polit & Beck 2004:88). The researcher found limited sources on the risk behaviour regarding HIV transmission among youth in Zimbabwe and how these could be used to design HIV prevention programmes for youth in the country.

2.2 THE HEALTH BELIEF MODEL (HBM)

In order to acquire deeper insight into the risk behaviour among youth, the researcher used the health belief model (HBM) as the theoretical framework for the study. According to Dennill et al (1999:156) the HBM is a conceptual framework that can be useful in explaining a client’s behaviour in health promotion and disease prevention and describes a person’s health behaviour as an expression of health beliefs. The model was designed to predict a person’s health behaviour, including the use of health services, and to justify intervention to alter maladaptive health behaviour. Factors that influence an individual’s preventive behaviour include the person’s own perception of susceptibility to a disease or condition, the likelihood of contracting that disease or condition, the person’s perception of the severity of the consequences of contracting the condition or the disease, the perceived benefits of care, the barriers to preventive behaviour, and the modifying factors that result in appropriate health behaviour by the person.

In the researcher’s opinion, the components of the HBM could be used in interventions to increase HIV risk awareness and reduce barriers to healthy sexual behaviour among youth (see figure 2.1).

Modifying factors

Likelihood of action

INDIVIDUAL PERCEPTIONS

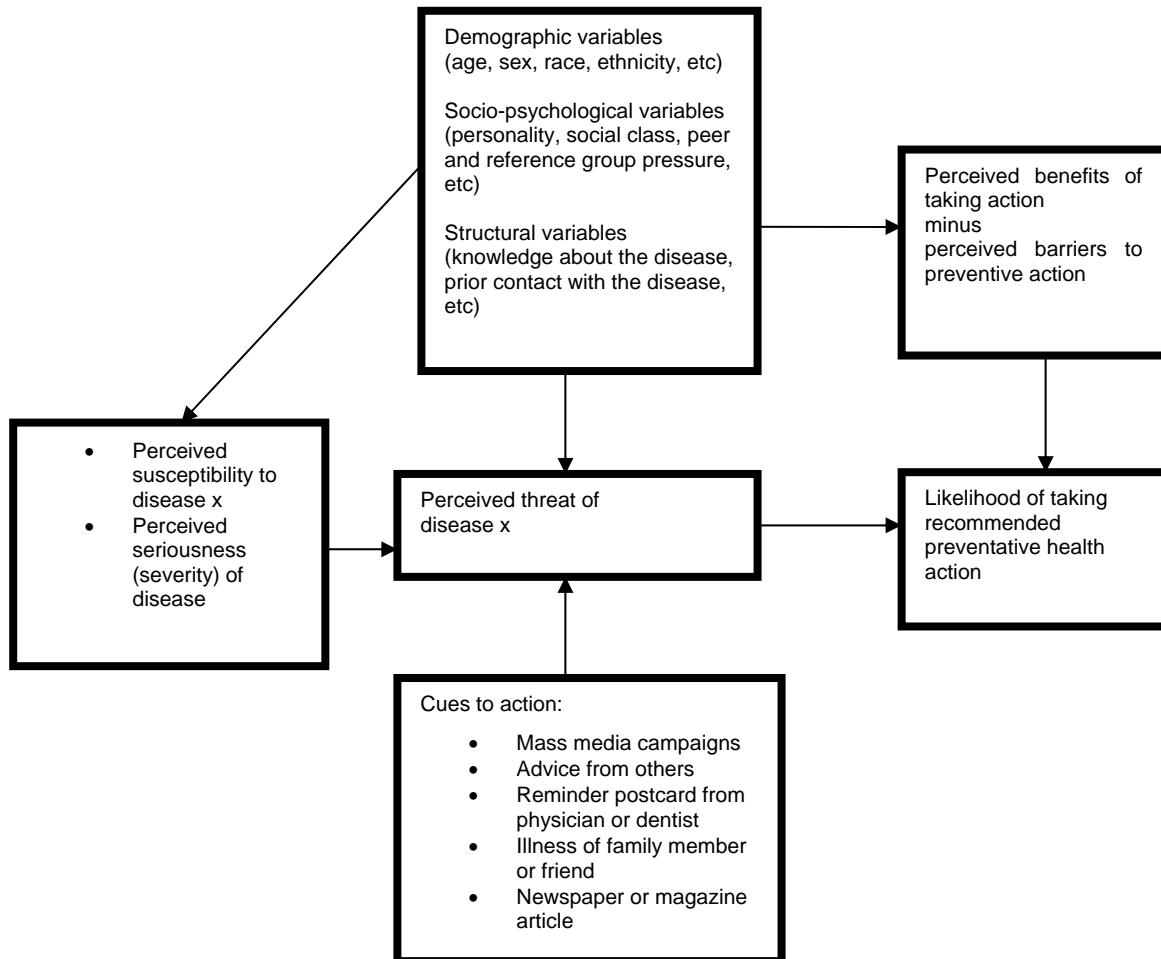


Figure 2.1
The Health Belief Model

Source: Dennill et al (1999:157)

The researcher used the HBM in the study to explain and describe the risk behaviour regarding HIV transmission among youth in Bulawayo, Zimbabwe. A model is “a symbolic depiction of reality and uses diagrams and symbols to represent ideas. The components of a model can also guide the researcher in the research tasks” (Brink et al 2006:23). The HBM is based on the desire to avoid a negative health consequence as the major motivation (Dennill et al 1999:156). For example, a negative consequence to be avoided could be HIV transmission. Youth can avoid engaging in risk behaviour in order to prevent HIV transmission. The major components of the HBM are, individual perceptions, modifying factors and variables affecting likelihood of taking action (see figure 2.1).

2.2.1 Individual perceptions

An individual's risk perception is "a mental process whereby the individual organises and interprets knowledge to determine the risk that he or she is exposed to" (Bergh & Theron 1999:116). Knowledge, therefore, has an influence on perception, which in turn enables an individual to recognise and interpret events in the environment. In order to explore and describe the risk behaviour of youth regarding HIV transmission, the three major components of the HBM were applied to the study (refer to figure 2.1). The adoption of healthy behaviour to prevent HIV transmission among the youth depends on the following:

- Perceived risk of HIV transmission
- Perceived severity of HIV transmission
- Perceived benefits of prevention of HIV transmission
- Perceived barriers to prevention of HIV transmission
- Perceived individual ability to prevent HIV transmission
- Cues to action

2.2.1.1 Perceived risk of HIV transmission

In the context of the HBM, perceived risk refers to a person's belief in the possibility of contracting a disease. Youth are a population "at risk", as one third of HIV-infected people are between 10 and 24 years old (Finger 2002:20). Where youth have a low perception of risk of HIV transmission, there is a need for adequate and correct information on HIV and how it is transmitted in order to increase their perception of vulnerability to transmission. The degree to which individuals perceive their vulnerability to HIV transmission influences their decision to engage in preventive behaviour.

2.2.1.2 *Perceived severity of HIV transmission*

Perceived severity of HIV transmission refers to how seriously individuals view the consequences of HIV transmission. Youth should be made aware of how serious the consequences of HIV transmission are and be helped to understand that HIV/AIDS is an incurable condition but can be prevented. Service providers could help youth to view HIV transmission seriously by showing them pictures of people suffering from HIV/AIDS and giving them opportunities to share information with people facing difficult circumstances as a result of HIV transmission. It is also important to give youth information on the statistics of HIV/AIDS prevalence in order to convince them of the severity of HIV transmission.

2.2.1.3 *Perceived benefits of preventing HIV transmission*

The perceived benefit of taking an action refers to “people’s belief in the efficacy of the advised action to reduce the risk or seriousness of impact” (Dennill et al 1999:157). Youth could benefit from information regarding *what* action to take to prevent HIV transmission, *how* to take the action, as well as *where* and *when* to take the advised action.

2.2.1.4 *Perceived barriers to prevent HIV transmission*

The perceived barriers refer to the cost and effort of taking measures to prevent HIV transmission. Health workers need to identify and reduce the barriers that prevent youth from taking measures to prevent HIV transmission. Youth encounter barriers such as inability to communicate with sexual partners on condom use; inability to use a condom, practise abstinence, and stick to one HIV-free sexual partner; fear of being seen in a health centre by someone they know, and facing the negative attitudes of health workers who are sometimes judgemental. Service providers need to be aware of possible barriers so that they can offer reassurance and explore ways to overcome the barriers experienced by youth. The perceived benefits of preventing HIV transmission are weighed against the perceived barriers to prevention of HIV transmission and the outcome of that cost-benefit analysis determines the likelihood of taking action to prevent HIV transmission (Dennill et al 1999:157). Youth who perceive the benefits of

taking measures to prevent the transmission of HIV as being more of value than the effect of the perceived barriers are more likely to avoid risk behaviour.

2.2.1.5 *Cues to action to prevent HIV transmission*

Youth should receive reminder cues that prompt them to take action to prevent HIV transmission in the form of short messages, newsletters, posters and incentives such as pens with messages encouraging them to take action. These messages could be related to condom use, refusal to have sex without a condom and saying “no” to sex. Youth would also benefit from reminder cues to go for HIV testing (ReCAPP 2004b).

2.2.1.6 *Self-efficacy to prevent HIV transmission*

Self-efficacy refers to confidence in one's ability to perform an action. Youth could receive some training on how to use a condom correctly. Information on where to obtain condoms, guidance on their use and where to go for HIV counselling and testing needs to be accessible to the youth (Dennill et al 1999:132).

2.2.2 *Modifying factors*

According to the HBM, demographic, socio-psychological and structural variables are modifying factors that impact on the perceived threat of a disease (Dennill et al 1999:157).

2.2.2.1 *Demographic variables*

Demographic variables such as age and gender have an effect on the perceived individual threat of an illness such as HIV/AIDS and the ability to avoid risk behaviour (Dennill et al 1999:157). The developmental stage of the individual influences their risk behaviour in relation to HIV transmission. Youth are among the “at risk” age groups as they may not have adequate information on HIV transmission and are vulnerable to peer pressure. According to Edelman and Mandle (2006:516), adolescents engage in risk behaviour, such as experimenting with sex and not using condoms, because they believe that no harm will come to them even though they may be exposed to HIV transmission.

Collins and Toure (2004:5) point out that gender may have an influence on individual perceptions about an illness, particularly where males and females do not receive the same information about health issues. For example, in Papua New Guinea young women had less knowledge on HIV transmission compared to their male counterparts. Girls and women in patriarchal societies may not be able to make decisions about sexual and reproductive life therefore even if they perceive HIV/AIDS as a severe disease and wish to prevent it, they may feel helpless to take preventive measures due to the negative effect of gender inequalities (Collins & Toure 2004:5).

2.2.2.2 *Socio-psychological variables*

Socio-psychological variables such as personality, social class and peer pressure have an influence on an individual's perception of an illness and the likelihood of taking preventive action (Dennill et al 1999:156). Sexual behaviour is also greatly influenced by cultural and religious beliefs (Smith 2002:9). Many adolescents experience peer pressure and would rather shame their parents than be ridiculed by their peers (Edelman & Mandle 2006:512). Consequently, if their peers engage in risky behaviour, they might conform to that kind of behaviour to promote a sense of belonging, despite being at risk of HIV transmission.

Zimbabwe is one of the countries where women are socialised to be submissive to men and not to discuss sex with their sexual partners (Kim et al 2001:11). Such cultural practices render them unable to refuse sex and protect themselves from STIs and they face difficulties in accessing reproductive health services. Shears (2002:12-17) adds that gender stereotypes of submissive females and dominant males promote HIV-risk behaviour, sexual exploitation of women and the belief that risk behaviour is unavoidable.

Finger (2000:27) found that male youth engage more in risk behaviour than females because adolescent boys use alcohol and drugs more often compared to girls, thereby leading to a higher likelihood of HIV transmission. In addition to risk behaviour, young men are discouraged from showing emotions such as affection and are prompted to act in an aggressive manner, which promotes rape and violent or disrespectful treatment of women. Finger (2000:27) emphasises further that abusive behaviour towards women

and girls is modelled in some families and youth grow up believing that they are expected to do the same when they are adults.

In a study on HIV risk behaviours among Namibian youth, Stanton, Fitzgerald, Li, Shipena, Ricardo, Galbraith, Terreri, Strijdom, Hangula-Ndlovu and Kahihuata (1999:138) found that social influence plays a significant role in the risk behaviour of youth. One seventh of the male respondents had beaten up their girlfriends, and carried a knife or razor on their last sexual intercourse. Best (2000:8-10) found that in some countries many youth face grim STI risks. For example, among students in Tanzania 30% reported coerced sex while in India and Mali 26% and 22%, respectively, reported coerced sex and the perpetrators were teachers and fellow students. Such risk behaviour can expose youth to HIV transmission.

In South Africa, Kaufman and Stavrou (2002:6) found that urban adolescent males engage in sexual relationships with older women ("sugar mummies") for gifts and luxuries while females also engage in sexual relationships with older men ("sugar daddies") for financial benefits. Youth in such relationships face the risk of HIV transmission, as they may not be able to protect themselves.

Keller (1997:21) points out that certain cultural and social barriers make youth reluctant to seek reproductive health services, particularly at health centres. In Senegal, for example, the cultural and social expectation is that young unmarried women should not have sexual intercourse. Going to a health centre for reproductive health services implies that young women are indulging in sexual activity, consequently youth do not seek the help they need for fear of being seen by people who know them. Another social barrier is that often youth do not obtain the required service, such as condom supplies at health centres, because the health providers do not approve of it. Such barriers expose youth to HIV and other STI transmission. In Zimbabwe, societal norms and peer pressure encourage young men to prove their manhood and enrich their social status by having sex (Kim et al 2001:11).

2.2.2.3 Structural variables

Individual perceptions and the likelihood of taking action can be influenced by structural variables like knowledge about and previous contact with a disease (Dennill et al 1999:156). Risk perception of HIV/AIDS can be influenced by personal knowledge of someone who has HIV/AIDS. This knowledge can make youth feel vulnerable to HIV transmission and avoid them engaging in risk behaviour. Nevertheless, fear of HIV/AIDS does not necessarily lead to a high perception of risk of HIV transmission (Macintyre, Rutenberg, Brown & Karim 2003:7). In a study of perceptions of HIV risk among adolescents in KwaZulu-Natal, Macintyre et al (2003:7) found that they were afraid of HIV/AIDS but perceived themselves to be at low risk of HIV transmission. Focus group discussions with the respondents revealed that the perceived low risk of HIV transmission was due to the fact that they had not seen anyone with HIV/AIDS.

2.2.2.3.1 Knowledge of HIV transmission

Alhassan (2003:26) explored the perception of risk as related to the action taken to avoid HIV/AIDS infection among students in a high-risk state, and found that those who were more knowledgeable about HIV transmission were less likely to have sexual intercourse. It would thus appear that increasing knowledge results in safer sexual behaviour.

In Zambia, Population Services International (PSI) (2003:1) found that misconceptions, folk beliefs, and denial hinder risk perception among Zambian men. For example, although the respondents had a broad knowledge of HIV and STIs, they confused accurate information with misconceptions such as that HIV can be transmitted through kissing and mosquito bites. Moreover, they believed that women shed off the virus during menstruation and therefore take longer to show symptoms of HIV infection and that HIV can be spread through witchcraft.

In Papua New Guinea, secondary school learners in the tenth grade were found to have inadequate knowledge about HIV transmission as 33% thought that HIV could be transmitted by mosquito bites while 15% thought that sharing a glass could lead to HIV transmission. When asked how they could protect themselves from HIV transmission, 27% indicated that it was enough to be acquainted with one's partner and to make sure

that the partner had not had sexual intercourse in the six months prior to their relationship. In Trinidad, 16% of secondary school students thought that HIV could be transmitted from toilet seats (Youth and HIV/AIDS: Can ... 2001:10-12).

Regarding sexual and reproductive health among primary and secondary school pupils in Tanzania, Matasha, Ntembelea, Mayaud, Saidi, Todd, Mujaya and Tendo-Wambua (1998:571-582) found a general lack of knowledge about the implications of sexual activity, transmission and prevention of STIs, including HIV/AIDS, among school pupils. Knowledge of prevention of HIV transmission was higher in secondary schools, however, and this was attributed to HIV/AIDS campaigns that had been conducted. The study revealed the importance of dissemination of accurate information on HIV transmission in reproductive health education for adolescents at school.

While young people may be aware that they are at risk of HIV transmission, the quality and depth of their knowledge differ and gaps in knowledge and misconceptions still persist (Amuyunzu-Nyamongo, Biddlecom, Ouderaogo & Woog 2005:6). Kim et al (2001:14-15) stress that youth have a general awareness of HIV transmission yet nevertheless engage in unprotected sex because they do not understand the personal risk of unprotected sex and have difficulty negotiating on sexual decisions. A campaign that was conducted to promote sexual responsibility in Zimbabwe, intended to increase reproductive health knowledge among the youth, to encourage youth to adopt safer sexual behaviour and to promote utilisation of service facilities. The campaign used the mass media and interpersonal communication and significantly increased accurate reproductive health knowledge among youth (Kim et al 2001:14-15).

In Zimbabwe, Phiri and Erulkar (2000:5-6) found that youth were more knowledgeable about HIV transmission than about family planning methods and 80% viewed condoms as useful in the prevention of STIs, including HIV/AIDS.

2.2.3 Variables affecting likelihood of taking action to avoid risk behaviour

Variables affecting the likelihood of taking action to prevent a disease are influenced by the degree of individual perceptions of the severity of the disease and to what level the individual feels at risk of contracting the disease. This is viewed together with the cost-benefit analysis of taking preventive action and the perceived ability to

take preventive action (Dennill et al 1999:157). The importance of addressing adolescent reproductive health issues to prevent the transmission of HIV among the youth cannot be overemphasised. Youth may not be aware of the consequences of risk behaviour and thus may not take the necessary steps to prevent HIV transmission (Alhassan 2003:27).

2.2.3.1 Sources of information on HIV transmission accessible to youth

Youth need to obtain adequate information on HIV transmission before initiating sexual activity and they have access to a variety of sources of information. Bakker (1999:152) maintains that dissemination of information on HIV/AIDS should aim to increase knowledge of HIV transmission and to promote safe sexual practices such as condom use. In addition, HIV/AIDS education should aim at instilling and developing personal values to empower them to make the right decisions to prevent HIV transmission. The available sources of information on HIV transmission are discussed below.

2.2.3.1.1 Television (TV)

Mass media messages can influence the sexual behaviour of youth. HIV/AIDS prevention programmes using television soap operas, radio spots, songs and other methods to teach youth about HIV transmission in Zaire and Ghana were successful in effecting sexual behaviour change among the youth (Best 2000:6). Buseh, Glass, McElmurry, Mkhabela and Sukati (2002:534) found the printed and mass media popular and rated highest as the primary source of information on HIV transmission among youth.

Television (TV) is a valuable source of information. A study among Chinese college students to determine the sources accessed for information on HIV transmission revealed that TV was a valuable source of information on HIV/AIDS although not easily accessible at college because of limited TV sets. However, many students watched TV when they were at home on holiday (Walsh-Childers, Treise, Swain & Dai 1997:564). With regard to the primary and preferred sources for HIV/AIDS and sexual risk behaviour information among adolescents in Swaziland, Buseh et al (2002:529) revealed that the majority (62%) of respondents indicated the printed and broadcast

media as their primary sources of information. In South Africa, Strydom (2003:64) found that the majority (85,2%) of the respondents felt that there should be more TV programmes on HIV transmission.

2.2.3.1.2 *Radio*

The radio is a prime source of information in Zimbabwe. In a baseline survey, Phiri and Erulkar (2000:18-22) found that 73% to 83% of youth listen to the radio. Walsh-Childers et al (1997:564) reported that all the students owned radios and spent not less than thirty minutes a day listening to the radio. Buseh et al (2002:534) indicated that the radio was among the primary sources of information on HIV transmission and was widely available in most of the respondents' homes. The radio is therefore a very popular source of information on HIV transmission.

2.2.3.1.3 *Newspapers*

Newspapers are popular sources of information on HIV transmission among youth in Zimbabwe as 73% of urban youth read them (UNAIDS 2001:22). In China, most students read the newspaper regularly although some students indicated that they did not have adequate time to read the paper (Walsh-Childers et al 1997:564). According to Ayumunzu-Nyamongo et al (2005:33), in sub-Saharan Africa, poverty prevents most people from buying newspapers. In Swaziland, Buseh et al (2002:529) found that 62% of the students reported that the printed and broadcast media were their primary sources of information on HIV transmission.

2.2.3.1.4 *Magazines*

General interest magazines can be used to disseminate information on HIV transmission among the youth. Walsh-Childers et al (1997:564) found that in China, students reported magazines as a valuable source of information on HIV transmission although they could not be easily accessed because of their cost. Magazines were therefore read occasionally and shared with friends and classmates when available. Buseh et al (2002:534) indicate that magazines are important sources of information on HIV transmission although not always affordable to youth.

2.2.3.1.5 *Peer educators*

Youth share information with their peers and friends hence they should be equipped with information that is accurate. According to Best (2000:6), youth prefer to receive reproductive health information from peers. In Ghana and Nigeria, for example, youth adopted behaviour change such as abstinence, condom use and reduction in the number of sexual partners as a result of peer education (Karim et al 2003:14; Oboro & Taboweni 2003:17). Oboro and Taboweni (2003:17) found that 85% of the respondents discussed sexual matters with their peers and the majority had a high level of knowledge on HIV transmission. In Kenya, youth educated by their peers adopted safe sexual practices compared to others who did not. Buseh et al (2002:534) found that 13.9% of respondents had peers and friends as their primary source of information and 14.7% preferred peers and friends as a source of information on HIV transmission. Peer educators are among adolescents' preferred sources of information because they are more approachable and non-judgmental (Amuyunzu-Nyamongo et al 2005:35).

2.2.3.1.6 *School teachers*

In accordance with the Zimbabwe National HIV/AIDS Policy (1999:33) cited by Schatz and Dzvimbo (2001:135), HIV/AIDS education has been integrated into all education curricula and HIV/AIDS action programmes were introduced in schools to address issues on relationships, life skills and peer pressure, among others.

2.2.3.1.7 *Parents*

While HIV/AIDS education can be integrated into the school curriculum from primary school throughout formal education, parents should be involved in educating their children (Bakker 1999:151). In Swaziland, Buseh et al (2002:534) found parents were among the least reported sources of information on HIV/AIDS and urged them to play a pivotal role in educating their children on sexual issues and HIV transmission. Of the respondents, 42% preferred to receive information from health workers while parents were the least preferred source of information (Buseh et al 2002:534). According to Oboro and Taboweni (2003:17), 15% of the respondents discussed sexual issues with their mothers while only 2% discussed the same topic with their fathers. Youth viewed their mothers as more approachable than their fathers regarding sexuality and HIV/AIDS (Amuyunzu-Nyamongo et al 2005:34).

Youth in Zambia reported acquiring information about sexual matters, including HIV/AIDS, from friends, family members, overheard conversations and gossip. Such hearsay can result in the spread of inaccurate information leading to youth exposing themselves to the risk of HIV transmission out of ignorance (PSI 2003:2).

2.2.3.1.8 Other sources of information on HIV transmission

Other sources of information on HIV transmission, STIs and sexuality include health professionals, counsellors and relatives. Youth also obtain information on sexual health issues through workshops, debates, drama, and health campaigns (Shears 2002:16).

The above sources of information on HIV transmission and sexual health issues indicate that all people who are role players in the socialisation of youth to equip and empower them to make informed, responsible decisions about their health. Messages disseminated on HIV transmission should therefore be clear and accurate.

2.3 RISK BEHAVIOUR REGARDING HIV TRANSMISSION AMONG YOUTH

The biological and psychological changes that take place at adolescence affect the whole body and bring greater awareness of the adolescent's own sexuality. Adolescents seek adventure in dating, sexual activity and other risky behaviours (Edelman & Mandle 2006:518). Involvement in sexual activity from a young age places adolescents (youth) at risk of HIV transmission.

2.3.1 Specific behaviour that exposes youth to the risk of HIV transmission

Peer pressure is more pronounced in the adolescent stage of development and adolescents commonly turn away from their families. They become closer to peers with whom they share ideas and information about HIV transmission that may not be accurate (Edelman & Mandle 2006:512, 518). Steyn, Myburgh and Poggenpoel (2005:584-601) found that the chief motive for involvement in sexual activity among male adolescents was to impress females and friends with their sexual experience and gain popularity among peers. Peer influence in individual decision-making is the main reason for involvement in risk behaviour and some youth even lie about their sexual experience out of fear of rejection by peers. Karim et al (2003:16) found that most youth

thought that friends would laugh at them for not having engaged in sex and indicated that they attached great importance to what their friends thought about them. Parental influence on risk behaviour would likely be disregarded in favour of advice from friends and peers that may put youth at risk of HIV transmission.

Condoms are a recognised form of contraception that prevents transmission of HIV and other STIs. A significant number of adolescents engage in sexual intercourse with multiple partners without condoms and are exposed to HIV transmission and other STIs (Kirby 2002:2). Among sexually active unmarried youth in Ghana, 4% of females and 11% of males had more than one sexual partner in the three months prior to the study (Karim et al 2003:16).

Although youth are knowledgeable about condoms, they are not consistent in their use of condoms, which puts them at risk of HIV infection and transmission. Karim et al (2003:14) found that only 24% of sexually experienced males and 20% of females reported consistent condom use with their current or most recent sexual partners. Condom use has increased among youth in Zambia but consistent condom use remains low and there is a high frequency of STIs, which increase the risk of HIV transmission (PSI 2003:1). In the United States of America (USA), Kirby (2002:30) found that 58% of sexually active adolescents had used condoms in their last intercourse, which represented an increase in condom use as a result of campaigns to prevent HIV transmission through condom use.

The reasons given for non-use of condoms included trusting that their partner did not have HIV; loving their partner; forgetting to use a condom because they were anxious and excited about having sex, and the belief that sex is more enjoyable without a condom (Amuyunzu-Nyamongo et al 2005:6). Many adolescent males view negotiating and insisting on condom use as a female responsibility although young women expressed having no power or control to ensure that their male partners used condoms. Youth did not use condoms consistently in the belief that their partners were uninfected because they did not exhibit signs of AIDS. This shows that youth underestimate their vulnerability to HIV transmission (Amuyunzu-Nyamongo et al 2005:6, 24).

Both ulcerative and non-ulcerative STIs contribute significantly to increase HIV transmission by three- to fivefold. In the USA, one in eight young people aged 13-19

years acquire an STI and 25% of all young people are infected by an STI by the age of 21 years (Kirby 2002:3). According to Anarfi (2003:27), youth are reluctant to seek medical advice or treatment for STIs because of society's and health care workers' negative attitudes as well as inability to afford the services.

Anarfi (2003:39) emphasises that poverty is a serious obstacle to behaviour change among youth, as parents often do not educate girls because they see no benefit in doing so since girls would eventually marry. Consequently many girls are neglected and sell sex for a living, which exposes them to HIV transmission. In Malawi, Uganda, Burkina Faso and Ghana, for example, some parents reportedly encourage their daughters to engage in sexual relationships with older men in the hope that they will bring money and household goods home. Both males and females get involved in sexual relationships with older men and women in exchange for money or gifts (Amuyunzu-Nyamongo et al 2005:5, 18). In South Africa, Kaufman and Stavrou (2002:3, 22) found urban youth doing the same.

Alcohol and drug use play a significant role in risk behaviour regarding HIV transmission. Young men frequently take advantage of young women who are under the influence of drugs or alcohol in order to have sex, usually without a condom. Even if young people intend to use a condom, they often forget to do so when they are under the influence of drugs and alcohol (Amuyunzu-Nyamongo et al 2005:31). Some youth indicated that they engaged in forced sex after smoking marijuana (Amuyunzu-Nyamongo et al 2005:21). These patterns of risk behaviour regarding HIV transmission have important implications for programmes designed to prevent HIV transmission among the youth.

2.3.2 Characteristics of Zimbabwean youth

To a large extent, communication about sex in Zimbabwe covers mainly the dangers of sex and yet youth require more information on sexuality and HIV/AIDS to correctly perceive their risk of HIV transmission (Youth and HIV/AIDS: Can ... 2001:24). In Zimbabwe, 46% of girls between 15 and 19 years old fall pregnant. A large percentage of these pregnancies (41%) are unplanned and occur because of unprotected sex, as well as forced or coerced sex (Zimbabwe National Family Planning Council 2002:9-13). The average age when youth begin dating in Zimbabwe is 16.5 years and sexual

intercourse frequently occurs during a date. Condom use is low (30%), indicating that the majority (70%) of sexually active youth are exposed to the risk of HIV transmission and other STIs. Nonetheless, youth do not change their sexual behaviour since they do not perceive themselves to be at risk of HIV transmission (Zimbabwe National Family Planning Council 2002:5-10).

Although alcohol consumption under the age of 18 years is illegal in Zimbabwe, Mataure, McFarland, Fritz, Kim, Woelk, Ray and Rutherford (2002:20) found that nightclubs did not refuse to serve alcohol to youth below the legal age of alcohol consumption. Furthermore, 42% of the females and 32% of the males reported that they had indulged in sex under the influence of alcohol. Such risky behaviour exposes youth to the risk of HIV transmission.

2.4 STRATEGIES FOR PREVENTION OF HIV TRANSMISSION AMONG YOUTH

HIV transmission occurs through three mechanisms: sexual intercourse, blood and blood products, and perinatal transmission, including breast-feeding (Bertozzi, Padian, Wegbreit, De Maria, Feldman, Gayle, Gold, Grant & Isbell 2006:333). Prevention of transmission of HIV is an important strategy in the fight against HIV/AIDS and relies heavily on education. Zimbabwe employs a multi-sectoral approach to HIV/AIDS, involving all sectors and communities in the fight against HIV/AIDS focusing on prevention of HIV transmission among the youth as the key strategy. The principles of the National HIV/AIDS policy (Ministry of Health and Child Welfare 2004a:46) include:

- Promoting delay in the onset of sexual activity among the youth.
- Making safe sex normal behaviour in all sexual relations that pose a risk for HIV transmission.
- Promoting early treatment of STIs.
- Promoting abstinence outside marriage and faithfulness in marriage or other stable relationships.
- Making condoms available, accessible and affordable to all sexually active individuals.
- Changing certain cultural practices that increase the risk of HIV transmission, such as child abuse.

2.4.1 School-based education

Education is the only viable tool to prevent or at least slow the spread of HIV/AIDS (Youth and HIV/AIDS: Can ... 2002:1). A significant number of young people go through formal school education and HIV/AIDS prevention strategies could be implemented at this stage. School-based education on HIV transmission ensures that adequate and correct information is disseminated among school youth to reinforce healthy behaviour norms. Studies in Zambia and Uganda revealed that school-based education on HIV transmission was related to reduction in infection rates in the 15-19 year old girls in secondary schools (Bertozzi et al 2006:344; Kelly 2002:2).

2.4.2 Early treatment of STIs

Sexual intercourse is the predominant mode of HIV transmission and accounts for 80% of all cases, while in Southern Africa sexual transmission accounts for 90% of all cases (Bertozzi et al 2006:336). Untreated STIs increase the risk of HIV transmission seven-fold. Early treatment of STIs among youth should therefore be encouraged.

2.4.3 Education of parents, teachers and adults

Education of parents, teachers and adults is essential in addressing HIV/AIDS. Communities need to realise that a greater understanding of the risk of HIV transmission among the youth and adults is essential for the success of HIV/AIDS prevention programmes. Adults, teachers and parents should be targeted by

programmes to help them understand their roles in the sexual development of children and the prevention of HIV transmission among the youth (Macintyre et al 2003:24).

2.4.4 Provision of youth-friendly services

Provision of youth-friendly reproductive health services, which includes effective management of STIs, provision of condoms and counselling services, can reduce the transmission of HIV among the youth (Youth and HIV/AIDS: Can ... 2001:33). For successful provision of youth-friendly services, educators' professional and personal skills need to be enhanced to enable them to handle youth. Parents', educators' and youth's own communication skills also need to be developed to ensure that youth obtain the help they need (Schatz & Dzvimbo 2001:133).

2.4.5 Peer education

Peer education involves using members of the same group to disseminate information and can be a successful strategy in the prevention of HIV transmission because peers educate and support each other for behaviour change. As integral part of peer education school-based HIV/AIDS education, debates and other activities should be introduced and encouraged. Peer education should target HIV risk behaviour and peer pressure, and promote open communication and safe sex negotiation skills among youth (Youth and HIV/AIDS: Can ... 2001:15). Peer education should focus on the importance of delaying sexual debut, use of condoms, and promote effective HIV prevention (Grassly, Garnett, Schwartlander, Gregson & Anderson 2001:1121).

2.4.6 Cultural sensitivity

HIV prevention programmes need to be sensitive to community beliefs and practices. Undesirable practices such as child abuse have to be challenged (WHO 2001:12-10).

In Nicaragua, Rani et al (2003:176) found that fathers, siblings and friends encouraged young men to have sex, while mothers and fathers discouraged young women from indulging in sexual activity. Society would thus appear to approve of premarital sex for men but not for women. Young men therefore felt under social pressure to engage in premarital sex and could be exposed to HIV transmission if they did not protect

themselves. Culturally sensitive HIV/AIDS prevention programmes involving all groups of society should target and discourage sexual coercion, sexual activity to enhance social status, and other cultural practices that promote HIV transmission.

2.4.7 Mass media

Radio, TV and the press are influential media sources of information. Appropriate messages can be conveyed through the media (Youth and HIV/AIDS: Can ... 2001:21). Kim et al (2001:16) emphasise that increased knowledge of HIV transmission leads people to realise that behaviour change can meet their personal needs. Consequently, individuals can adopt new healthy practices. Mass media and interpersonal communication complement each other in promoting behaviour change, therefore, programmes for the prevention of HIV transmission among the youth should utilise them.

2.4.8 Voluntary counselling and testing (VCT)

Voluntary counselling and testing (VCT) are essential elements in HIV/AIDS prevention programmes, and need to be accessible to youth (Youth and HIV/AIDS: Can ... 2001:15). Counselling enables individuals to make informed decisions that could help to prevent further transmission of HIV (WHO 2001:7-1). Knowledge of HIV statistics can lead youth to avoid engaging in risk behaviour (Bertozzi et al 2006:344). Youth are interested in VCT services, but experience shyness and shame, unwelcoming health care providers, lack of confidentiality, lack of money and the distances to the VCT centres as barriers to utilising the services (Amuyunzu-Nyamongo et al 2005:39-40).

2.5 CONCLUSION

This chapter discussed the literature review conducted for the study. The literature included the HBM, the knowledge of youth on HIV transmission, sources of information accessible to youth, the risk behaviour regarding HIV transmission among youth, characteristics of Zimbabwean youth, and strategies to prevent HIV transmission.

Chapter 3 describes the research methodology.

CHAPTER 3

Research methodology

3.1 INTRODUCTION

This chapter describes the research methodology, including the design, purpose and research objectives, setting, population and sample, data collection and analysis, measures to ensure reliability and validity, and ethical considerations.

The purpose of the study was to explore and describe the knowledge of HIV transmission and the risk behaviour regarding transmission of HIV amongst youth in Bulawayo.

The research objectives that guided the study were to

- determine the knowledge of youth in Bulawayo on HIV transmission
- identify the sources of information on HIV transmission accessible to youth
- explore and describe the risk behaviour of youth regarding HIV transmission

3.2 RESEARCH APPROACH

The researcher adopted a quantitative research approach in this study. Quantitative research involves measurement and quantification of data obtained in a study and is often done in a controlled setting (experimental). It can also be non-experimental where the setting is natural and there is no manipulation of the independent variable. Manipulation refers to treatment that is introduced by the researcher to find out its effect on the dependent variable (Brink et al 2006:93). The youth, who were the independent variable, were not subjected to any form of manipulation. A quantitative , non-experimental approach was selected because the study was conducted in a natural setting. The study sought to explore and describe the phenomenon of interest, namely, knowledge of youth on HIV transmission, sources of information on HIV transmission accessible to youth and risk behaviour regarding HIV transmission among the youth.

3.3 RESEARCH DESIGN

A non-experimental, descriptive exploratory survey design was used in the study. A research design is “a plan for approaching a research question” (Polit & Beck 2004:730). An explorative descriptive study can generate valuable information about the phenomenon of interest. The study design allowed the researcher to remain objective as the study focused on measurable variables such as knowledge, sources of information and risk behaviour among the youth.

3.3.1 Descriptive

According to Neuman (1997:19), a descriptive study “seeks to give details about characteristics of a phenomenon of interest”. The researcher sought to describe the knowledge of youth on HIV transmission, the sources of information accessible to the youth on HIV transmission and the risk behaviour regarding HIV transmission among the youth.

3.3.2 Exploratory

Exploratory research “searches for information about a topic in order to gain more knowledge about it” (Neuman 1997:19). The researcher sought to explore the respondents’ knowledge of HIV transmission, sources of information accessible to them, and their risk behaviour regarding HIV transmission in order to gain information and a better understanding of youth in an era of HIV/AIDS. Youth are at risk of HIV transmission and Zimbabwe has the third highest rate of HIV infection in the world (Mataure et al 2001:1).

3.3.3 Survey

A survey refers to non-experimental research whereby information is gathered from a portion of the population and focuses on people’s intentions, behaviour, knowledge, beliefs and values. Data in a survey is collected by way of self-report and information on a person’s background is collected for analysis, comparison and explanation (Polit & Beck 2004:234). In this study, the researcher sought information in order to explore and

describe the knowledge of youth on HIV transmission, the sources of information on HIV transmission accessible to youth and the risk behaviour regarding transmission of HIV among the youth in Bulawayo, Zimbabwe.

3.4 RESEARCH SETTING

The research setting refers to “the surrounding environment in which the research takes place” (De Vos 2001:301). The study was conducted in the classroom setting of three high schools situated in high density suburbs of Bulawayo, the second largest city in Zimbabwe, and the high school students were the respondents.

3.5 ELIGIBILITY CRITERIA

Eligibility criteria are the criteria used to select the respondents for a study (Brink et al 2006:124). To be eligible to participate in this study, the respondents could be male or female and had to be students

- between 15 and 19 years of age
- whose names appeared on the school attendance register
- willing to participate and with their parents or guardians’ consent
- present on the day the study was conducted

3.6 POPULATION

A target population is “the total group of people who possess the characteristics that the researcher is interested in studying and to whom the findings of a study can be generalised. The accessible population is the population that is available for the study” (Polit & Beck 2004:218). The target population in the study was all youth aged 15 to19 years attending the three selected high schools in Bulawayo’s high density suburbs while the accessible population was all youth aged 15 to19 years attending those schools and actually available and accessible for the study.

3.7 SAMPLE AND SAMPLING

3.7.1 Sampling

Sampling is “the process of selecting elements or respondents who are representative of the population under study” (Polit & Beck 2004:291). This study used proportional, stratified probability sampling.

- **Proportional**

Proportional sampling is “the selection of a sample according to proportions of subgroups in a population” (Polit & Beck 2004:297). In this study, it referred to the proportion of male and female students in the three schools. A proportional number of respondents were included from each school to ensure that all three schools were represented proportionately.

- **Stratified**

Strata refer to subgroups in a population and stratified sampling is the selection of participants from two or more subgroups or strata in a population (Brink et al 2006:130). In the study, strata referred to the subgroups of male and female students who were included to ensure gender representativeness.

- **Probability/random**

Probability or random sampling refers to “the selection of a sample in such a way that every individual in the accessible population has an equal chance of being selected for the study. Random sampling is done from a list of all the members of the population” (Brink et al 2006:126). The school attendance registers were used and participants were randomly selected from the register.

Probability sampling enables researchers to use inferential statistics. Probability sampling was used in the study because it increased the likelihood that all elements in the population would have an equal chance of being included in the sample. In probability sampling, the sample is more likely to be representative of the population and the findings of the study can be generalised to the study population. Probability sampling reduces the sampling bias and the sampling error can be ascertained (Brink et al 2006:126).

3.7.2 Sampling frame

A sampling frame is “a list of all the elements in the accessible population” (Neuman 1997:203). The school attendance registers were used as the sampling frame.

3.7.3 Sampling procedure

The researcher sought the assistance of the school headmasters and class teachers to obtain the daily attendance registers and identify students according to the eligibility criteria. The class teachers were requested to provide the name lists of students with their ages and gender. The researcher made a list of those students who met the eligibility criteria and assigned a number to each student. Two-digit random numbers were used to select respondents from each subgroup of male and female students. The population was drawn proportionately from the three high schools.

3.7.4 Sample

A sample is the proportion of subjects selected from the accessible population from whom information for the study is obtained. A sample should be representative of the population from which it is selected to enable generalisation of findings to be made about that population (Babbie & Mouton 2001:124). In the study, the sample consisted of students who met the eligibility criteria.

Magwegwe High School (24.8%; 265), Njube High School (23.8%; 255) and Sikhulile High School (51.4%; 550) making up a total of 1 070 students from which the sample was selected. The following sample was then selected: 24.8% (59) from Magwegwe High School, 23.9% (57) from Njube High School and 51.3% (122) from Sikhulile High School making a total of 238 respondents. The gender composition of the sample was as follows: 49.2% (29) females and 50.8% (30) males from Magwegwe High School; 45.6% (26) females and 54.4% (31) males from Njube High School, and 58.2% (71) females and 41.8% (51) males from Sikhulile High School.

3.7.5 Sample size

The size of a sample is “the total number of the respondents who actually participate in a study in relation to the accessible population” (Brink et al 2006:135). Furthermore, there are no strict rules to determine the sample size. Too large a sample may be viewed as unnecessary while too small a sample may not be as effective. In determining a sample size, the precision of the data-collection instrument should be considered. Less precision requires a larger sample than that required when an instrument with more precision is used. Heterogeneity of the population should also be assessed. Heterogeneity of the sample relates to the degree of differences of an attribute from one person to another in that sample. When demographic variables increase, the sample size should also increase (Polit & Beck 2004:422). In this study, the researcher considered the number of students per school and per gender. From a population of 1 070 youth in the three schools, consisting of 510 males and 560 females, 238 respondents were selected. The respondents consisted of 112 males and 126 females.

3.8 DATA COLLECTION

Data refers to the pieces of information gathered in a research (Brink et al 2006:201). The researcher used a structured data-collection approach in this study. In structured data collection the researcher records the possible responses in advance and allows the respondents to select the responses applicable to them. Quantitative research uses the structured data collection approach (Polit & Beck 2004:318, 733).

3.8.1 Characteristics of structured data collection

Polit and Beck (2004:318) point out that in structured data collection:

- The wording used is pre-determined and standardised and the same method or instrument is used for all respondents.
- An indication is given beforehand as to what information will be collected and how it will be collected.
- The researcher develops the data-collection instrument beforehand.
- Data collected can be quantified with ease.
- Data collection is unobtrusive to a certain extent because the respondents are allowed to respond without interference.

- The researcher is required to have some knowledge of the expected behaviour.

In this study the questionnaire was developed beforehand and the respondents were given the same questionnaire to respond to. The information collected addressed the objectives of the study which were stated beforehand. The researcher did a literature review to gain some knowledge on the expected behaviour of the youth.

3.8.2 Rationale for using structured data collection

Structured data collection allows for wide content coverage; for example, beliefs and attitudes that may not be easy to determine can be included as well as the respondents' personal background. Although a lot of effort is required in the preparation of the data-collection instrument, it can be used with ease and retrospective events or information can be included (Polit & Beck 2004:320). In the study the respondents were required to answer questions related to their personal background, knowledge of HIV transmission, sources of information on HIV transmission accessible to them, and their risk behaviour regarding HIV transmission.

3.8.3 Data-collection technique

The self-report technique was used in the study to collect data. In the self-report technique, specific questions developed and written down beforehand are asked in the same order for all respondents. Questions should be unambiguous, understandable, simple and short. Questions should also range from general to specific and sensitive information should be asked last and the questionnaire should not be too long. The researcher designs and records the range of possible responses and the content is carefully worded. Both open-ended and closed questions are included. The self-report technique is direct and adaptable when seeking information about what people think, feel or believe (Polit & Beck 2004:320). The self-report technique was therefore suitable for use in this study and enabled the researcher to collect data related to the objectives of the study.

3.8.4 Data-collection instrument

A data-collection instrument is a tool that is used to collect data and elicits the same information from each respondent. A questionnaire was used as the data-collection instrument. A questionnaire is a method of data collection through self-administration of written questions (Polit & Beck 2004:720, 729). The questionnaire was divided into four sections to cover demographic information; the respondents' knowledge of HIV transmission; sources of information on HIV transmission accessible to them, and their risk behaviour regarding HIV transmission.

3.8.5 Rationale for selecting the instrument

A questionnaire offers direct questioning to elicit information concerning what people think, feel or believe. Information about retrospective events and future behavioural intentions can be elicited (Polit & Beck 2004:720, 729). In order to save time, the researcher recorded the range of possible responses so that the respondents could tick or circle the appropriate responses. This enabled the students to return to their classes within a reasonably short time. The topic was a sensitive one as it probed the respondents' private lives. It was therefore important to ensure anonymity. Anonymity encourages respondents to respond openly although the responses available may be restrictive where they do not exactly fit the respondents' circumstances. The option of "other" was made available for the respondents so that they could specify the responses applicable to them. Questionnaires are less expensive as they save time and money because a lot of information can be gathered from a large number of people within a short time. Questionnaires also make it possible to test for validity and reliability. The researcher can be assisted by other researchers to ensure content validity (De Vos 2001:167; Polit & Beck 2004:153, 320). In this study the questionnaire was assessed for content validity and approved by the supervisors.

3.9 PRE-TESTING THE INSTRUMENT

A pre-test of the instrument refers to conducting a trial administration of the data-collection instrument to make sure that the instrument can be clearly understood by the respondents and that it captures the required data (Polit & Beck 2004:328). The instrument can be refined if necessary after pre-testing to ensure that it captures the appropriate data. Conducting a pre-test also enables the researcher to determine how long it takes to complete the questionnaire. Pre-testing the instrument also provides information that reveals to the researcher if there are any offensive, ambiguous or inadequately worded questions so that adjustments can be made where necessary (Polit & Beck 2004:328). The researcher conducted a pre-test with ten respondents from Lobengula Secondary School. These respondents did not participate in the actual study. No changes were made after the pre-test, as the respondents understood the questions. The questionnaire was also given to expert researchers, including the researcher's study supervisors, to scrutinise for validity and reliability.

3.10 MEASURES TO ENSURE RELIABILITY AND VALIDITY

Reliability and validity are important attributes to be ensured in any research.

3.10.1 Reliability

Reliability refers to the consistency with which the instrument repeatedly measures what it is supposed to measure and yields the same results if used by other researchers. The quality and adequacy of an instrument determines its reliability (Polit & Beck 2004:416). The researcher obtained the supervisor's assistance to ensure that the instrument was reliable. In addition, pre-testing of the instrument was also conducted before the study.

3.10.2 Validity

The validity of an instrument is the degree to which the instrument measures what it is supposed to measure (Polit & Beck 2004:422). It refers to the accuracy and truthfulness of the findings (Brink et al 2006:118). There are four types of validity, namely external, internal, content, and face validity.

- **External validity**

External validity refers to “the extent to which the findings of a study can be generalised to similar settings” (Brink et al 2006:119). To ensure external validity, the researcher minimised the Hawthorne effect, which is a threat to external validity. The Hawthorne effect occurs when the subjects of a study behave in a certain way because they are aware that they are involved in the study. When subjects are aware that they are involved in a study, they may give responses that they believe are socially acceptable but do not reflect their true experiences (Brink et al 2006:101). In the study the respondents may have given desirable responses because of fear of lack of confidentiality leading to exposure of their risk behaviour and the ramifications that may have followed. To minimise the Hawthorne effect, the researcher explained the nature, purpose and significance of the study and assured the respondents that their identities would be protected. The respondents were therefore asked to give honest responses, as they would not be prejudiced because of their responses, which were anonymous and could in no way be linked to their names. In addition, the respondents were also asked not to record their names on the questionnaire sheets. Data was collected in a normal classroom setting to ensure minimal disturbance to the respondents.

- **Internal validity**

Internal validity refers to the degree to which the results of a study illustrate characteristics of the independent variable rather than extraneous factors. The results of this study should be a true reflection of the risk behaviour among the youth and not be attributable to extraneous factors such as use of complicated language or lack of confidentiality. Selection bias which is a threat to internal validity was reduced by using the random sampling design. Selection bias refers to a situation where the researcher does not use random sampling and subtle differences between individuals participating in a study, such as personality and attitudes may influence the outcome of the study. The questionnaire was constructed in simple language and was short to avoid boredom and tiredness, which can also be a threat to internal validity. Sensitive questions were asked at the end of the questionnaire to ensure that they do not affect any other responses (Brink et al 2006:150).

- **Content validity**

Content validity refers to whether an instrument measures what it is supposed to measure, looking at the items it contains (De Vos 2001:168). In this study the questionnaire contained items that measured the aspects under study appropriately and adequately.

- **Face validity**

Face validity refers to “whether an instrument appears to measure the construct appropriately” (De Vos 2001:167). The instrument has to appear to be a relevant measure of the attributes of interest to the study even to the respondents. The supervisors’ guidance was sought to ensure face validity.

3.11 DATA ANALYSIS

In data analysis the data collected through research is systematically organised, summarised, evaluated and interpreted (Polit & Beck 2004:451). The data was analysed using the SPSS version 13.0 statistical computer software package, and the results presented in descriptive statistics such as frequencies and percentages. The Fisher’s Exact Test was used for inferential statistics. According to Brink (1987:127), Fisher’s Exact Test is used for hypothesis testing when the sample is small, and is an alternative to the chi-square test, which is used for large samples. The Fisher’s Exact Test is used with data in a two by two contingency table where two variables, each with two categories, are compared. If the p-value or significance is less than 0.05 then the difference is statistically significant. This means that the null hypothesis is rejected and the alternative hypothesis is accepted. In this study the gender variable was cross-tabulated with some HIV-related variable and a test of significance was performed in each case. The null hypothesis was that there is no difference in the views of males and females on a selected HIV-related variable and the alternative hypothesis was that there is a difference in the views of males and females on the selected HIV-related variable.

3.12 ETHICAL CONSIDERATIONS

Research that involves human beings as subjects, in particular, should be conducted in an ethical manner to protect the rights of the subjects. The researcher followed the

ethical guidelines of the Belmont Report (1978). The Belmont Report was issued in 1978 in the USA by the National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research and is based on three ethical principles: beneficence, respect for human dignity, and justice (Polit & Beck 2004:141-43).

3.12.1 Beneficence

According to the principle of beneficence, ethical research should protect subjects of research from any harm whether physical, psychological, economic or otherwise (Babbie & Mouton 2001:529). The researcher ensured that no harm came to the respondents by seeking permission to conduct the study from the school authorities and the respondents' parents or guardians. The researcher explained the nature, purpose and significance of the study to the respondents beforehand to allay any anxieties. They were assured that confidentiality and anonymity would be maintained and that no harm or loss to their person or reputation would result from participating in the study. The researcher emphasised that participation was voluntary and that they could withdraw from the study at any time without fear of any repercussions. The study was conducted in a natural setting in the classroom to ensure minimal disturbance to the respondents' daily routine. The questionnaire was worded clearly and simply for ease of understanding. It took a reasonably short time (40-50 minutes) to complete the questionnaire and this enabled the students to return to their routine class work.

3.12.2 Respect for human dignity

The principle of respect for human dignity encompasses the right to self-determination, respect and full disclosure about the study (Polit & Beck 2004:147-149). The right to self-determination and informed consent were observed as the respondents participated voluntarily and could withdraw from the study at any time. The respondents were granted freedom to ask questions to clarify issues not clear to them. The researcher explained her role in the study and provided them with a contact telephone number. The respondents were not deceived and their contribution was acknowledged.

3.12.3 Justice

The principle of justice encompasses the right to fair treatment and privacy for subjects of research.

Data gathered from the study was kept and treated as strictly confidential and anonymity was observed by ensuring that the respondents did not write their names on the questionnaires. All agreements made during the study were honoured, including the freedom to ask questions at any time. Information gathered from the study was used only for the intended purpose and findings were reported as accurately as possible (Polit & Beck 2004:149-150). No personal beliefs or convictions about the study were included.

3.13 CONCLUSION

This chapter covered the research methodology, including the design, purpose, research objectives, research setting, population, sample, sampling method, data collection, measures to ensure reliability and validity, and ethical considerations. Chapter 4 discusses the data analysis and interpretation.

CHAPTER 4

Data analysis and discussion

4.1 INTRODUCTION

In this chapter the data analysis and interpretation thereof are discussed. The purpose of the study was to explore and describe the knowledge of HIV transmission and the risk behaviour regarding transmission of HIV amongst youth in Bulawayo. This study attempted to determine the knowledge of youth in Bulawayo on HIV transmission and the sources of information on HIV transmission accessible to youth, and to explore the risk behaviour regarding HIV transmission among the youth.

The researcher selected an explorative descriptive survey for the study. The data-collection instrument was a 45-item questionnaire (see Annexure C) divided into four sections. Data was collected over a period of three days and 238 respondents participated in the study. The data was analysed by a statistician using the SPSS version 13.0 computer program and the results presented in terms of frequencies and percentages.

4.2 DATA PRESENTATION AND DISCUSSION

The data was presented in descriptive statistics using frequency counts and percentages, illustrated in pie charts, tables and bar graphs. A total of 238 respondents returned completed questionnaires. In some instances, for example sections 4.2.1.1 and 4.2.2.4 the total percentage of frequencies adds up to 99.9% or 100.1 % due to rounding off to one decimal point. These were rounded off to 100.0%.

The questionnaire was divided into four sections to cover demographic information; the respondents' knowledge of HIV transmission; sources of information on HIV transmission accessible to them, and their risk behaviour regarding HIV transmission.

4.2.1 Section 1: Demographic data

The demographic data covered the respondents' age, gender, level of education, high school attended and whom they lived with in terms of guardianship.

4.2.1.1 Item 1.1: Respondents' age

All the respondents (100%; N=238) answered this question. The respondents' ages ranged from 15 to 19 years. Of the respondents, 21.8% (n=52) were 15; 33.6% (n=80) were 16 years old; 16.8% (n=40) were 17; 18.5% (n=44) were 18 and 9.2% (n=22) were 19 years (see figure 4.1).

The age group of 15-19 years was selected to address the objectives of the study since the reviewed literature indicated 16.5 years as the average age when youth begin dating and sexual intercourse is among the activities performed during a date (Zimbabwe National Family Planning Council 2002:5).

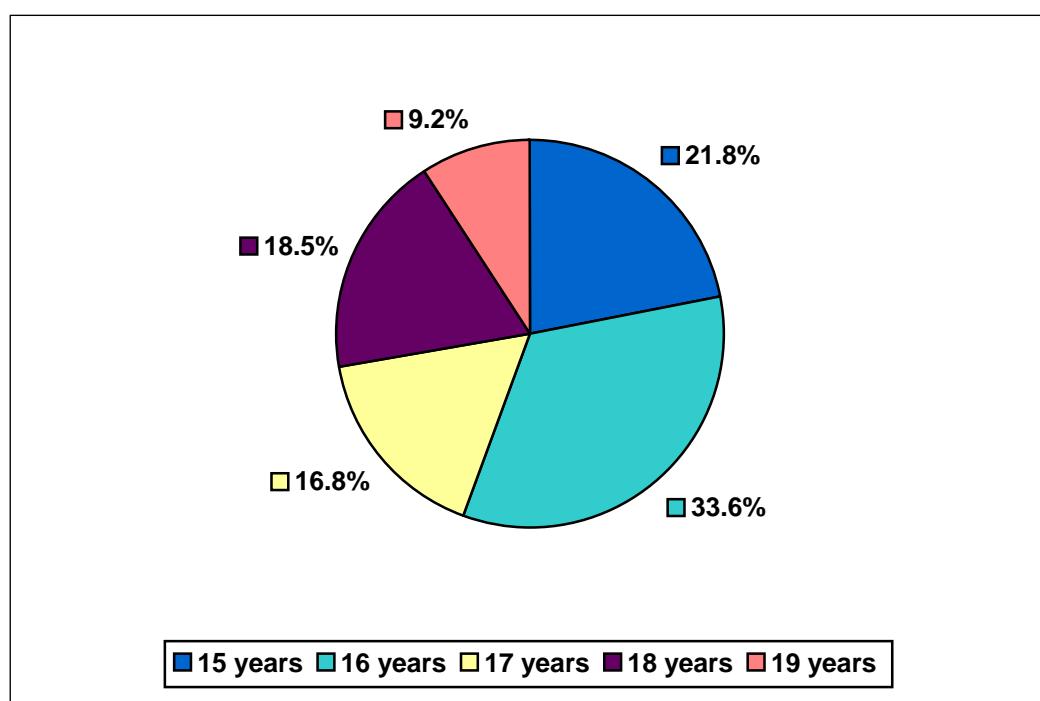


Figure 4.1
Respondents' age (N=238)

4.2.1.2 Item 1.2: Respondents' gender

All the respondents (100%; N=238) answered this item. Of the respondents, 52.9% (n=126) were females and 47.1% (n=112) males (see table 4.1). The females slightly outnumbered the males. This reflected the proportion of male and female students registered in the selected schools. However, in Zimbabwe women generally have a low socio-economic status with little or no education (Karim et al 2003:14).

Table 4.1 Gender statistics (N=238)

Gender	Frequency	Percent
Female	126	52.9
Male	112	47.1
Total	238	100.0

4.2.1.3 Item 1.3: Respondents' present level of education

All the respondents (100%; N=238) answered the item. Of the respondents, 62.2% (n=148) were in Form 3 and 37.8% (n=90) were in the Lower sixth form (see table 4.2). One of the inclusion criteria for respondents was that of age, namely 15-19 years. The specific ages usually correlate with the forms the students are in. In this study only students from Form 3 and Lower sixth form (formerly Form 5) were available. Although the Form 4 and Upper sixth form (formerly Form 6) students were eligible for inclusion in the study, they were not available at the time of the study as they had closed soon after the end-of-year national examinations.

Education can empower youth to understand HIV issues better and to make informed choices. At secondary school level, youth could be expected to have adequate knowledge of the risk of HIV transmission as HIV/AIDS issues are taught from primary school level in Zimbabwe.

Table 4.2 Respondents' present level of education (N=238)

Present level of education	Frequency	Percent
Form 3	148	62.2
Lower 6 th form	90	37.8
Total	238	100.0

4.2.1.4 Item 1.4: Respondents' guardianship

All the respondents (100%; N=238) answered this item. Of the respondents, 42.4% (n=101) lived with both their parents; 7.1% (n=17) lived with their fathers only; 18.5% (n=44) lived with their mothers only, and 31.9% (n=76) lived with a guardian (see table 4.3). The data indicated that of the respondents, 42.4% lived with both parents and 60.9% (n=145) lived with their mothers, with or without their fathers. Thus more of the respondents lived with a parent or guardian, which should provide an opportunity of discussing HIV transmission and other issues with them. At this stage of their development youth need to be equipped with accurate information on HIV transmission and risk behaviour that can expose them to HIV transmission, and parents or guardians have an important role in this regard.

Table 4.3 Respondents' guardianship (N=238)

Respondents' guardianship	Frequency	Percent
Both parents	101	42.4
Father only	17	7.1
Guardian	76	31.9
Mother only	44	18.5
Total	238	100.0

4.2.1.5 Item 1.5: School attended

All the respondents (100%; N=238) answered this item. Of the respondents, 51.3% (n=122) attended Sikhulile High School; 23.9% (n=57) attended Njube High School, and 24.8% (n=57) attended Magwegwe High School (see figure 4.2). The number of respondents was proportionate to the enrolment in each school. These high schools were also easily accessible to the researcher.

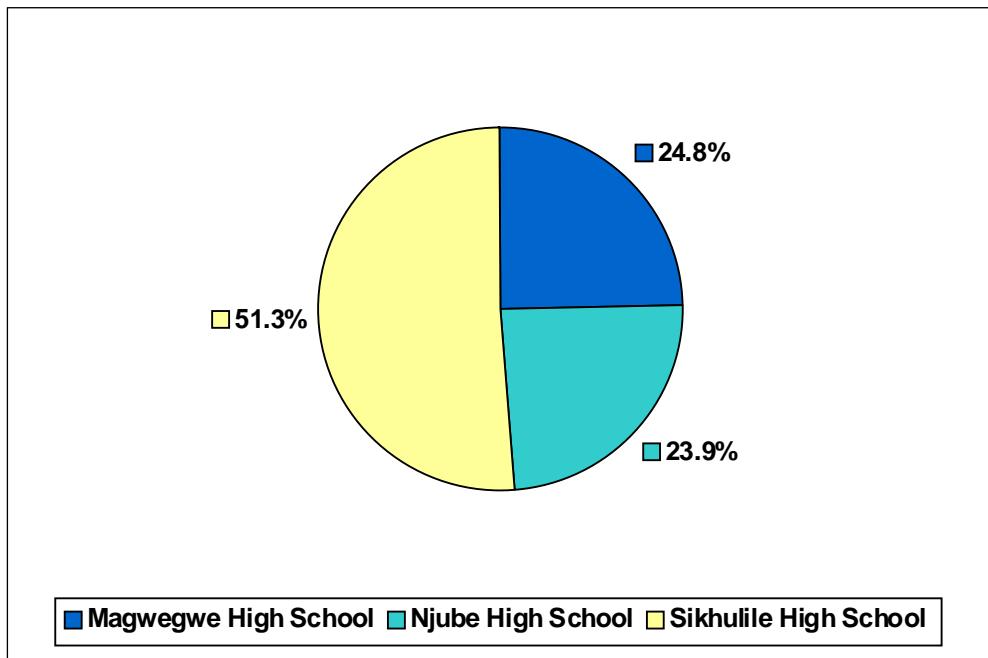


Figure 4.2
Respondents' schools (N=238)

4.2.2 Section 2: Knowledge of HIV transmission

This section of the questionnaire examined the respondents' knowledge of HIV transmission.

4.2.2.1 Item 2.1: Knowledge about HIV

All the respondents (100%; N=238) answered this item. Six options with possible explanations on what HIV is were listed and the respondents could select more than one option. Of the respondents, 99.2% (n=236) indicated that HIV is the Human Immunodeficiency Virus; 0.4% (n=1) indicated that HIV is a curse from ancestors; 0.8 % (n=2) indicated it as a disease caused by witchcraft; 0.8% (n=2) said HIV is a virus that affected prostitutes only; 9.7% (n=23) indicated HIV as an incurable disease from the West, and 2.5% (n=6) selected the option of "other", but did not give any explanation (see figure 4.3). It was noted that a few respondents had misconceptions about the origin of HIV, namely as a curse from ancestors, a disease caused by witchcraft, or an incurable disease from the West. The findings of misconceptions on HIV/AIDS among respondents in this study are similar to the findings of misconceptions among

adolescents according to a study by Strydom (2003:64) who found that 35.1% of respondents among high school youth viewed HIV/AIDS as God's punishment for human sin. Sharing such inaccurate information with peers and friends could lead to misperceptions of risk and feelings of helplessness, and failure to take preventive measures against the risk of HIV transmission.

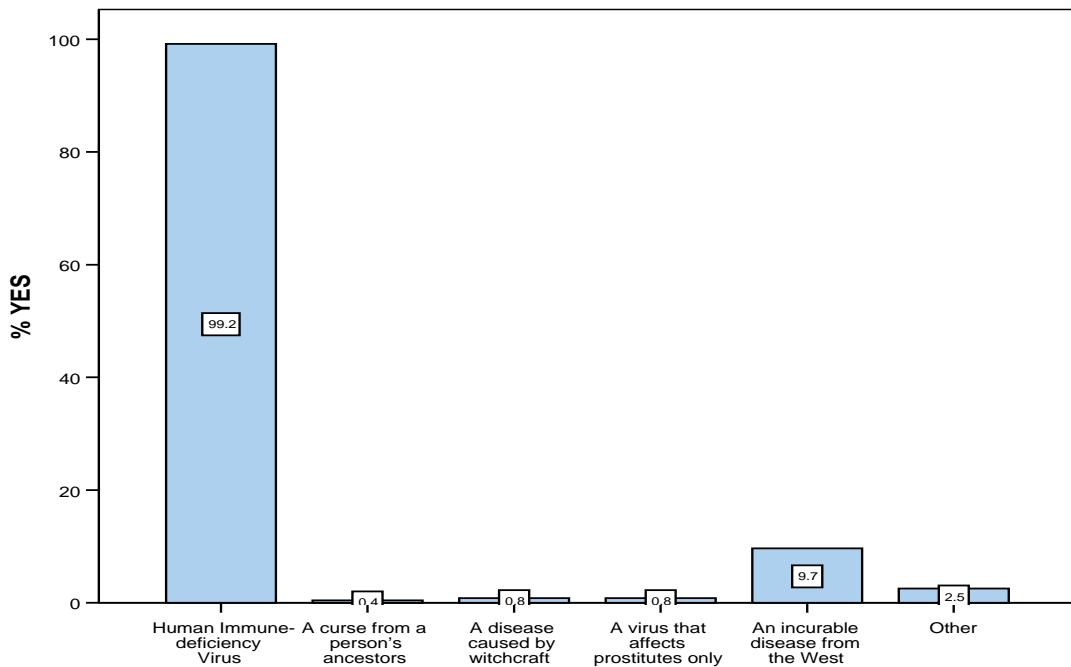


Figure 4.3
Respondents' knowledge about HIV (N=238)

4.2.2.2 Item 2.2: Ways of HIV transmission

All the respondents (100%; N=238) answered this item. Of the respondents, 98.7% (n=235) indicated that HIV could be transmitted through sexual intercourse; 64.7% (n=154) indicated through blood transfusion; 68.5% (n=163) indicated through breastfeeding; 96.2% (n=229) indicated through sharp objects such as syringes, needles or razor blades; 83.2% (n=198) indicated during birth; 10.1% (n=24) indicated through kissing; 9.2% (n=22) indicated by sharing utensils; 6.3% (n=15) indicated through mosquito bites; 3.8% (n=9) indicated through toilet seats; 0.8% (n=2) indicated by hugging, and 1.3% (n=3) selected the option "other", indicating through handling sores with unprotected hands and through contact with infected blood (see figure 4.4). From this data a number of respondents reveal a gap in knowledge about how HIV is

transmitted. HIV can be transmitted through sexual contact and contact with infected blood. Mothers can infect their babies before or during birth and through breast-feeding after birth. HIV is not spread by sharing utensils, toilet seats, shaking hands, hugging, casual kissing or mosquito bites (CDC 2007c). Not only can inaccurate information expose the respondents and others to the risk of HIV transmission, but it also promotes stigma and discrimination of HIV-infected people.

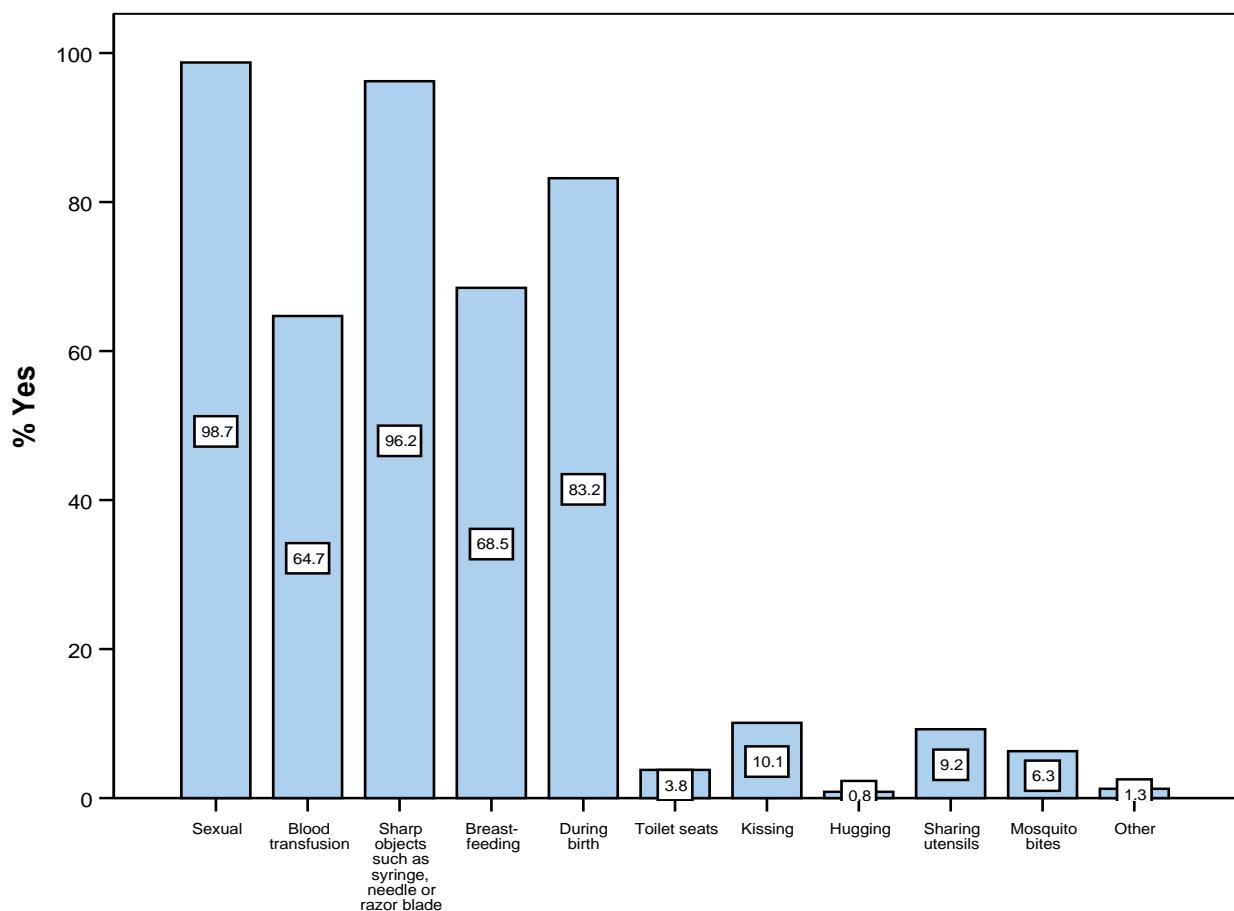


Figure 4.4
Ways of HIV transmission (N=238)

4.2.2.3 Item 2.3: Measures to limit the risk of contracting HIV

The respondents were asked to rank the most effective measure to prevent contracting HIV among eight listed measures. All the respondents (100%; N=238) answered this item. The respondents ranked the measures in order of importance as follows:

- abstinence
- delaying sexual intercourse until a permanent partner is found
- condom use during vaginal sex
- condom use during anal sex
- avoiding use of the same razor
- treatment of sexually transmitted infections
- avoiding deep kissing
- washing of hands

Of the respondents, 79.8% (n=190) viewed abstinence as the most effective measure in preventing HIV transmission; 60.5% (n=144) indicated delaying sexual intercourse; 38.2% (n=91) indicated condom use during vaginal sex; 31.1% (n=74) indicated condom use during anal sex; 22.2% (n=60) selected avoiding use of the same razor; 23.9% (n=57) indicated treatment of sexually transmitted infections; 49.6% (n=118) selected avoiding deep kissing, and 71.4% (n=170) indicated washing of hands. This denoted that the respondents appeared to be aware of the effective preventive measures to limit the risk of HIV transmission. The perceived benefits of preventing HIV and the perceived barriers to taking the preventive action have a bearing on whether individuals will actually take steps to prevent HIV transmission. According to the Ministry of Health and Child Welfare (2005:7), abstinence and delayed sexual debut among youth are some of the desired behaviour outcomes in HIV prevention among the youth.

4.2.2.4 Item 2.4: Effectiveness of condoms

All the respondents (100%; N=238) answered this item. Of the respondents, 76.1% (n=181) indicated that condoms were partially effective against HIV transmission. This could be attributed to awareness that although a condom provides a highly effective barrier against HIV, it can be defective and is therefore not 100% effective in preventing

HIV (CDC 2007c). However, 12.2% (n=29) indicated that condoms were not at all effective; 6.3% (n=15) did not know whether condoms were effective or not, and 5.5% (n=13) indicated that condoms were 100% effective (see figure 4.5). Youth who lack awareness that condoms are effective in preventing HIV are less likely to use them (Bankole, Singh, Woog & Wulf 2004:13). In addition to awareness that a condom can prevent HIV transmission, youth need to know how to use a condom effectively.

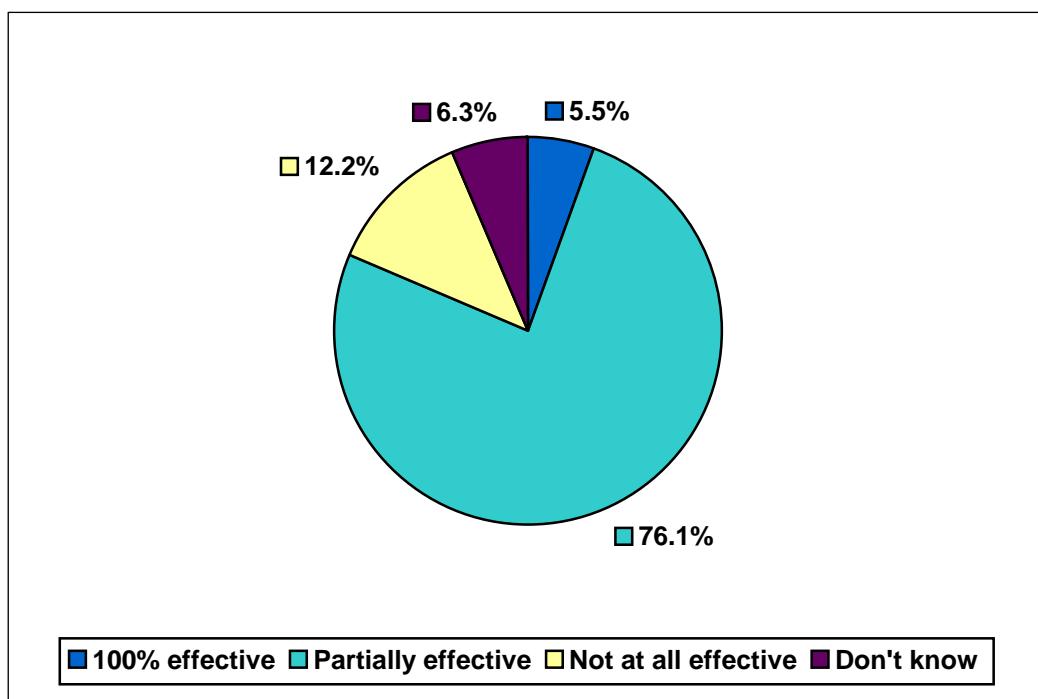


Figure 4.5
Effectiveness of condoms (N=238)

4.2.2.5 Item 2.5: Transmission of HIV by a healthy-looking person

All the respondents (100%; N=238) answered this item. Of the respondents, 95.0% (n=226) indicated that a healthy-looking person who was infected with HIV could transmit the virus to others; 4.2% (n=10) answered "No", revealing that they were not aware of this fact, and 0.8% (n=2) did not know whether HIV transmission was possible even when an infected person looked healthy. This finding indicated a knowledge gap among some of the respondents, which could lead to exposure to HIV transmission. A person who is infected with HIV may look and feel healthy for many years but can transmit the virus in the meantime (CDC 2007a). Youth need to be aware of this fact so that they do not expose themselves to the risk of HIV transmission. Although the

respondents were asked to give an explanation for their answer to this question, no explanations were offered.

4.2.2.6 Item 2.6 and Item 2.7: The window period

All the respondents (100%; N=238) answered these items. Of the respondents, 48.3% (n=115) indicated that they knew what the window period was; 26.9% (n=64) did not know what the window period was, and 24.8% (n=59) were not sure. Consequently, a considerable number of respondents did not know about the window period and that HIV transmission could take place during this period. However, in item 2.7, 59.2% (n=141) indicated that HIV could be transmitted during the window period, which could have been guesswork on their part, as almost one third did not know what the window period was (item 2.6). Further, 37.4% (n=89) did not know whether HIV could be transmitted during this period and 3.4% (n=8) indicated that HIV could not be transmitted during the window period. The window period is the time it takes the body's immune system to develop antibodies against the HIV that can be detected by an antibody test. This period varies from person to person, but is 25 days on average. A HIV test done within the first three months after exposure to the infection may give a false negative result and a repeat test is recommended more than three months after exposure (CDC 2007b). Youth unaware of this fact could unknowingly expose themselves to the risk of HIV transmission.

4.2.2.7 Item 2.8: Transmission of HIV if a person has sex for a short time

All the respondents (100%; N=238) answered this item. The respondents were asked to select an option of "Agree", "Disagree" and "Other" to the statement: *HIV cannot be transmitted if a person has sex for a short time, say, 2 minutes, with someone who is infected with HIV*. Of the respondents, 65.5% (n=156) disagreed, indicating that they were aware that having sex even for a short time with an HIV-positive person could lead to HIV infection. However, 32.8% (n=78) indicated that quick sex prevented infection, and 1.7% (n=4) selected the option of "other" (see table 4.4). The respondents were also asked to give explanations for their answers. Of the respondents, 79 gave explanations for their answers. Of these, 65.8% (n=52) stated "time does not matter"; 30.4% (n=24) stated "as long as there is contact with body fluids HIV can be transmitted", and 3.8% (n=3) indicated "Don't know". Quick sex with a HIV-infected

person does not protect an individual from transmission of the virus. Individuals who think that HIV transmission cannot occur in quick sex with an infected person can expose themselves to the infection in the false belief that they are safe. Adequate and accurate information on HIV transmission helps youth to take measures to prevent HIV transmission.

Table 4.4 Transmission of HIV in quick or short sex (N=238)

HIV can not be transmitted if a person has sex for a short time	Frequency	Percent
Disagree	156	65.5
Agree	78	32.8
Other	4	1.7
Total	238	100.0

4.2.2.8 Item 2.9: Gender more at risk of contracting HIV

All the respondents (100%; N=238) answered this item. Of the respondents, 80.3% (n=191) stated that boys and girls were equally at risk of HIV transmission; 13.4% (n=32) indicated that girls were at greater risk, and 6.3% (n=15) stated that boys were at greater risk (see figure 4.6). According to Alhassan (2003:19), girls are at greater risk than boys because of biological, socio-economic and other factors.

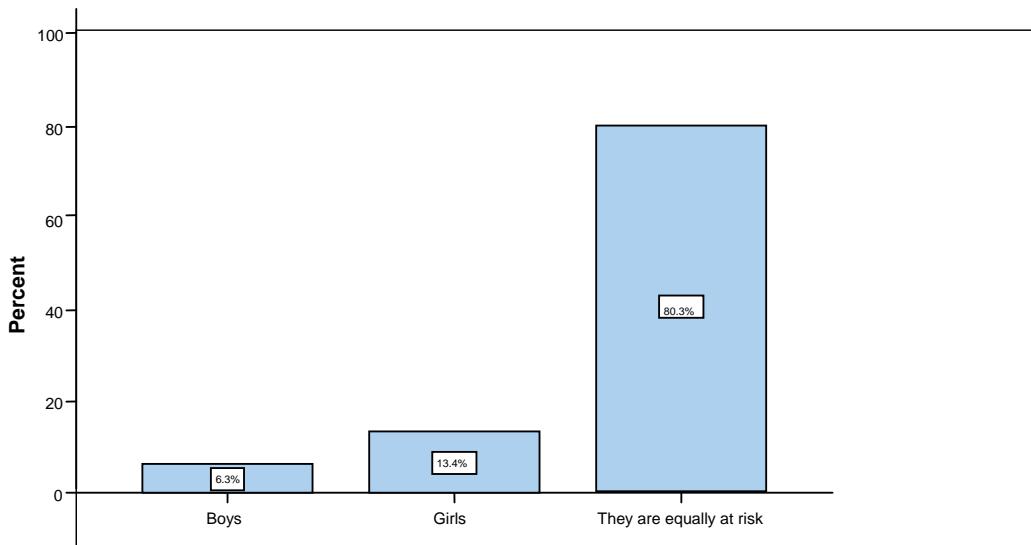


Figure 4.6
Gender more at risk of contracting HIV (N=238)

4.2.2.9 Item 2.10: Factors that increase the risk for boys

All the respondents (100%; N=238) answered this item. Figure 4.7 illustrates the factors that increase the risk of HIV transmission for boys compared to girls. Of the respondents, 85.3% (n=203) indicated that boys like experimenting with sex and this is a risk factor; 71.4% (n=170) agreed that boys cheat on girls; 67.6% (n=161) agreed that boys do not like using a condom; 69.7% (n=166) stated that boys take alcohol and drugs; 63.9% (n=152) indicated that boys culturally have power over girls; 18.1% (n=43) agreed that boys have older partners; 5.5% (n=13) indicated “peer pressure”, “boys have many partners” and “boys are cheated by girls” as other factors that increase the risk for boys. Rani et al (2003:176) found that some young males consider themselves under pressure socially to engage in premarital sex and society seems to condone this risk behaviour by not disapproving of it. According to Steyn et al (2005:5), young males also engage in sexual activity to show off their sexual experience to their female partners as well as because of pressure from their peers. Alcohol and drugs can impair individuals’ ability to reason and youth who take drugs and alcohol are at risk of HIV transmission as they may engage in unprotected sex.

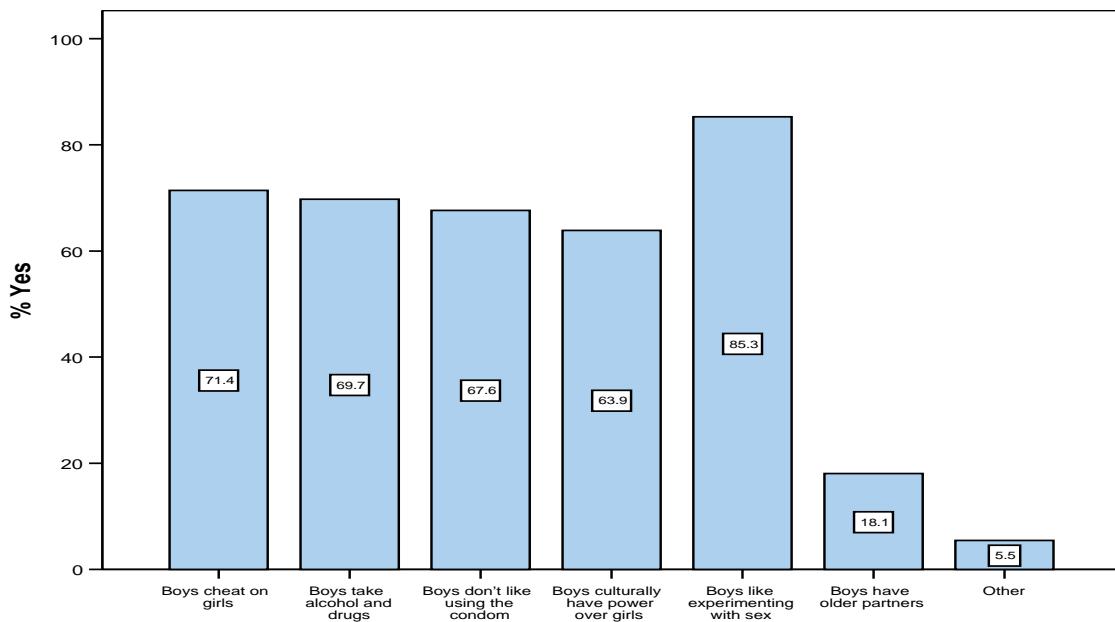


Figure 4.7
Factors that increase the risk for boys (N=238)

4.2.2.10 Item 2.11: Factors that decrease the risk for boys

All the respondents (100%; N=238) answered this item. Of the respondents, 66.8% (n=159) indicated that boys are able to initiate condom use; 72.3% (n=172) said boys are less shy about discussing sexual issues; 21.8 % (n=52) said the biological structure of the penis reduces the risk for boys, and 52.9% (n=126) said that boys have power over girls culturally. This variable (item 2.11.5) was cross tabulated to compare the girls' views with those of the boys, using Fisher's exact test. The "p-value" for Fisher's exact test is considered significant if it is less than 0.05. This means that the null hypothesis is rejected and the alternative hypothesis is accepted. In this case the null hypothesis was that the views of males and females about boys having power over girls culturally was the same. The alternative hypothesis was that the males' views differed from those of the females. Of the 126 female respondents, 62.7% (n=79) agreed with this statement compared to 42% (n=47) of the 112 male respondents (see figure 4.8). More of the girls than the boys agreed that boys had power over girls culturally. The difference in their views was statistically significant according to Fisher's exact test ($p=.002$). The girls' views could be influenced by the way they are socialised culturally, as women in Zimbabwe have a low socio-cultural position, which may hinder them from negotiating for safe sex and preventing HIV transmission (Karim et al 2003:14; Smith 2002:8).

Of the respondents, 19.3% (n=46) agreed that boys had more knowledge about HIV transmission compared to girls and that this was a risk-reducing factor for boys. This variable (Item 2.11.1) was cross-tabulated to compare the females' views with those of the males. Of the 112 males, 30.4% (n=34) agreed while only 9.5% (n=12) of the 126 females agreed with this statement. The difference in their views was statistically significant according to Fisher's exact test ($p=.00006$). Of the 3.8% (n=9) respondents who indicated "Other", 8 specified "boys avoid alcohol", "boys are less abused than girls", "boys have one partner at a time" and that "boys abstain from sex" as factors that decreased the risk for boys. According to Zimbabwean culture, men are expected to initiate sexual activity and this empowers them to initiate condom use to prevent HIV transmission (Karim et al 2003:14).

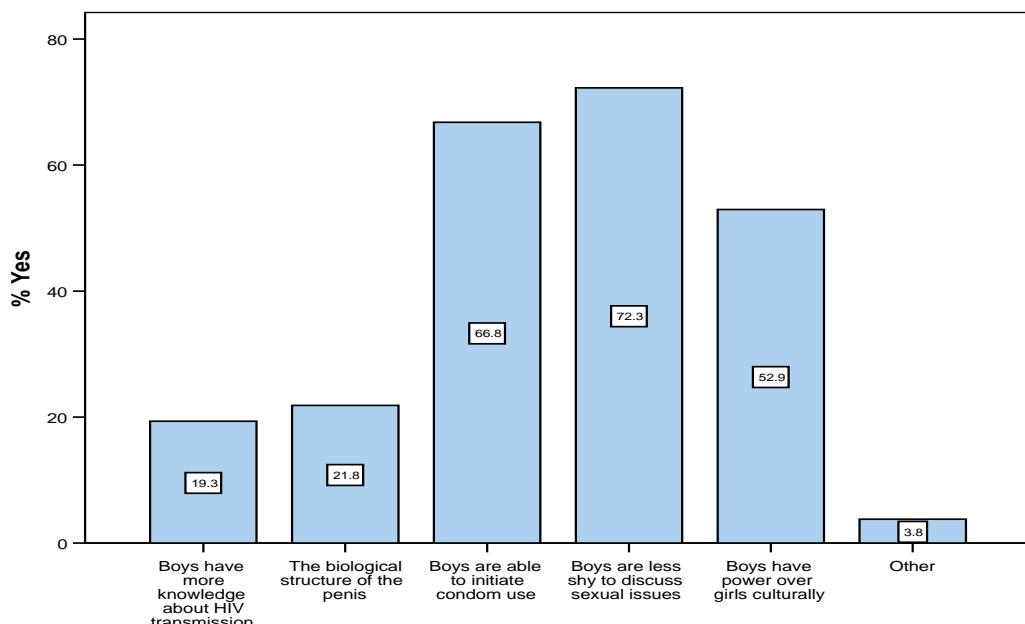


Figure 4.8
Factors that decrease the risk for boys (N=238)

4.2.2.11 Item 2.12: Factors that increase the risk for girls

All the respondents (100%; N=238) answered this item. Of the respondents, 72.7% (n=173) indicated that girls are coerced to have sex; 71.4% (n=170) said that girls have older partners; 66.8% (n=159) said that girls cheat on boys and have many partners; 65.1% (n=155) agreed that girls are more fragile; 62.6% (n=149) indicated that girls culturally have no power over boys, which increases the risk for girls; 18.9% (n=45)

agreed that girls are not able to use the condom; 17.6% (n=42) indicated that girls have limited knowledge about HIV; 26.5% (n=63) said the vagina's biological structure increases the risk for girls, and 12.6% (n=30) indicated peer pressure, prostitution, sexual abuse or rape and alcohol abuse as other factors that increase the risk for girls (see figure 4.9). According to Lary, Maman, Katebalila and Mbwambo (2004:201), gender inequalities limit young women's power to negotiate for safe sex. Alhassan (2003:23) states that the vagina's biological structure increases the risk of HIV transmission for females. The study found that not all the respondents were aware of the factors that increase the risk for girls compared to boys.

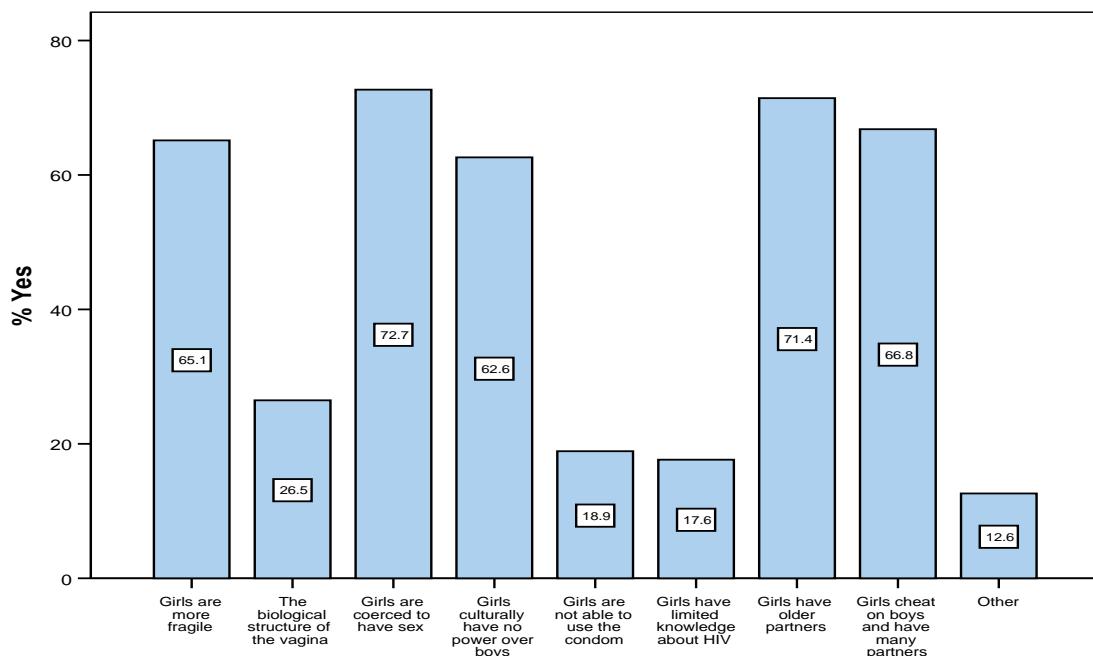


Figure 4.9
Factors that increase the risk for girls (N=238)

4.2.2.12 Item 2.13: Factors that decrease the risk for girls

All the respondents (100%; N=238) answered this item. Of the respondents, 79% (n=188) indicated that girls could refuse to have sex without a condom; 40.3% (n=96) agreed that girls were responsible for condom use; 33.6% (n=80) indicated that girls had sex with boys they trusted; 21.0% (n=50) agreed that girls had fewer sexual partners, and 16.0% (n=38) indicated that the virus could be washed off during menstruation (see figure 4.10). Of the 5.9% (n=14) respondents who selected the "Other" option, 13 specified that "abstinence", "girls have sex while standing" and "girls

have one partner at a time" reduced the risk for girls. The main factor in risk reduction appeared to be that girls could refuse to have sex without a condom. Trusting their partners does not protect people from HIV transmission therefore youth who believe this could expose themselves to the risk of infection.

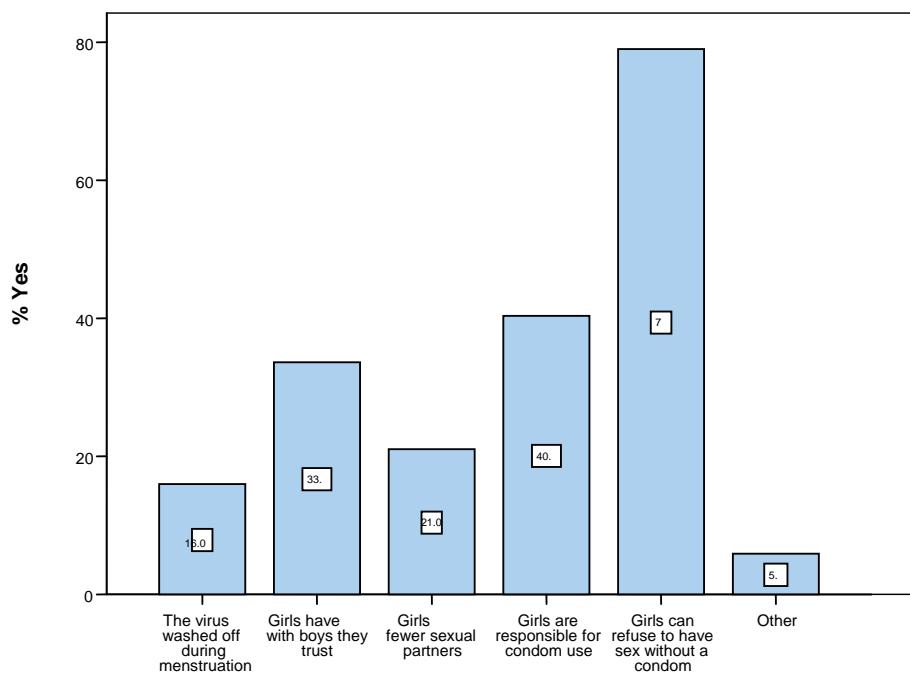


Figure 4.10
Factors that decrease the risk for girls (N=238)

4.2.3 Section 3: Sources of information on HIV transmission

This section covered the sources of information on HIV transmission accessible to the respondents as well as the most preferred sources of information on HIV transmission.

4.2.3.1 Item 3.1: Most easily accessible source of information

All the respondents (100%; N=238) answered this item. The respondents were asked to select the most easily accessible source of information on HIV transmission from a given list (see table 4.5). Of the respondents, 29.8% (n=71) indicated health care workers; 26.1% (n=62) selected TV; 20.2% (n=48) indicated parents/guardians; 7.6% (n=18) indicated peers; 6.7% (n=16) selected teachers; 4.6% (n=11) selected the radio as the most easily accessible sources of information on HIV transmission. Of the respondents 2.9% (n=7) selected magazines; 1.3% (n=3) selected newspapers, and 0.8% (n=2) did not select any option. It could thus be concluded that the five most easily accessible sources of information were health care workers, television, parents or guardians, peers and teachers. All the respondents lived with either a parent or guardian, therefore accessibility to this source of information was easy. Television sets are also available in most urban homes and they are influential in dissemination of information on HIV transmission. Health care workers in the VCT centres are trained to offer youth-friendly services and are accessible and readily available at any time when youth approach them for information regarding HIV transmission. Teachers were placed fifth among the most easily accessible sources of information although they spend the greater part of the day with youth during the week and are expected to teach them about HIV/AIDS. It is possible that although teachers are accessible, they may not always be available as they teach other subjects or may be busy in other classes.

Table 4.5 Most easily accessible source of information (N=238)

Most easily accessible source of information on HIV	Frequency	Percent
Health workers	71	29.8
Television	62	26.1
Parents/guardians	48	20.2
Peers	18	7.6
Teachers	16	6.7
Radio	11	4.6
Magazines	7	2.9
Newspapers	3	1.3
No reply	2	0.8
Total	238	100.0

4.2.3.2 Item 3.2: The last time you obtained information on HIV transmission

The respondents were asked to indicate in weeks when they last received information on HIV transmission from the following sources: radio, newspapers, magazines, television, teachers, peers or friends, parents or guardians, and health worker. Those who had not accessed information from the sources were asked to indicate with a "zero". For the purposes of this study, sources accessed in the previous 1 to 3 weeks were regarded as "frequent" while those accessed in the previous 4 weeks or more were regarded as "infrequent". The frequencies for respondents who had not obtained any information from the listed sources were grouped together with the infrequent sources to generate a table for easy comparison of the "frequent" and "infrequent" sources of information. All the respondents (100%; N=238) answered this item. Of the respondents, 85.3% (n=203) indicated the television as a frequent source and 14.7% (n=35) indicated it as an infrequent source; 74.8% (n=178) indicated peers as a frequent source and 25.2% (n=60) indicated peers as an infrequent source; 69.7% (n=166) indicated the radio as a frequent source and 30.3 % (n=72) indicated it as an infrequent source; 61.8% (n=147) indicated newspapers as a frequent source and 38.2% (n=91) indicated them as an infrequent source; 52.1% (n=124) indicated parents as a frequent source and 47.9% (n=114) indicated them as an infrequent source; 44.1% (n=105) indicated teachers as a frequent source of information and 55.9% (n=133) indicated them as an infrequent source; 42.9% (n=102) indicated magazines as a frequent source and 57.1% (n=136) indicated them as an infrequent source; 27.3% (n=65) indicated health care workers as a frequent source and 72.7% (n=173) indicated them as an infrequent source. Of the respondents, 5.5% (n=13) indicated books, pamphlets, relatives, HIV prevention programmes, church, police and youth centres as frequent sources of information. The findings indicated that these were important sources of information for the youth and there was wide coverage of HIV/AIDS issues in these sources during the period prior to the study.

Table 4.6 Sources of information accessed (N=238)

Sources of information accessed	Period 1-3 weeks		Period 4 weeks or more and "not at all"		Total frequencies	Total percent
	Frequency	Percent	Frequency	Percent		
Television	203	85.3	35	14.7	238	100.0
Peers	178	74.8	60	25.2	238	100.0
Radio	166	69.7	72	30.3	238	100.0
Newspapers	147	61.8	91	38.2	238	100.0
Parents	124	52.1	114	47.9	238	100.0
Teachers	105	44.1	133	55.9	238	100.0
Magazines	102	42.9	136	57.1	238	100.0
Health workers	65	27.3	173	72.7	238	100.0

4.2.3.3 Item 3.3: Sources of information on HIV transmission accessible at home

All the respondents (100%; N=238) answered this item. Of the respondents, 96.2% (n=229) indicated that they had access to television as a source of information at home; 81.5% (n=194) had access to the radio; 69.7% (n=166) had access to newspapers; 60.5% (n=144) had access to magazines, and 15.5% (n=37) gave books and pamphlets, parents/guardians, the Internet and health workers as other sources of information (see figure 4.11). Walsh, Mitchell and Smith (2002:107) found that 80% of youth obtain information from television and radio. The findings of the current study revealed that television sets and radios were available in most of the respondents' homes and the majority of the respondents had access to the newspapers and magazines. The respondents could, therefore, easily access information on HIV transmission presented in these sources.

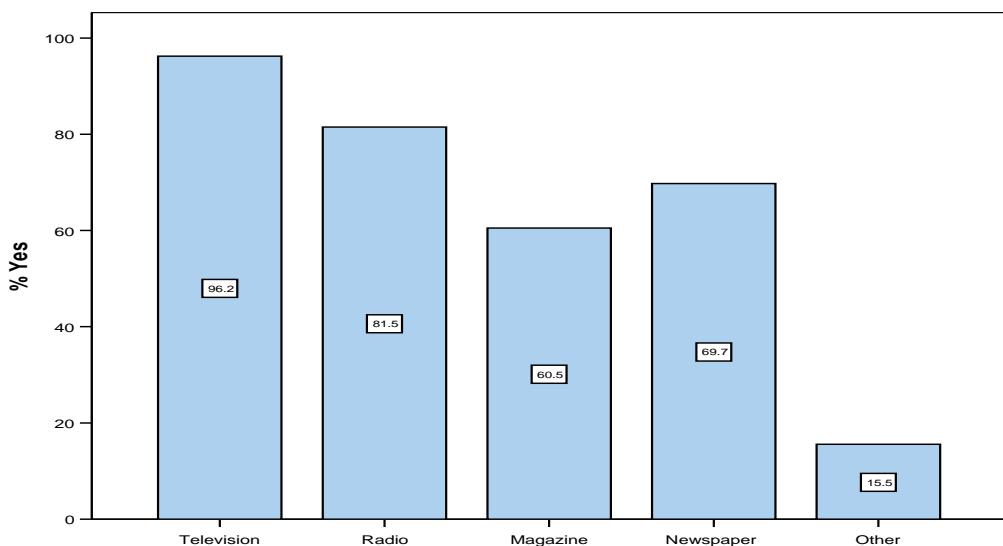


Figure 4.11
Sources of information accessible at home (N=238)

4.2.3.4 Item 3.4: Most preferred source of information

Table 4.7 illustrates the respondents' preferred sources of information. Of the respondents, 30.7% (n=73) chose health workers as their most preferred source of information on HIV transmission; 30.3% (n=72) chose television; 10.9% (n=26) selected parents or guardians; 8.8% (n=21) indicated teachers; 7.6% (n=18) indicated magazines; 5.9% (n=14) selected peers; 4.2% (n=10) selected the radio, and 1.3% (n=3) selected the newspapers. Buseh et al (2002:534) found that youth preferred health workers for information on HIV issues. The findings indicated that health workers, television, parents/guardians, teachers and magazines were the five most preferred sources of information and the respondents had accessed these sources in the four weeks prior to the study (see section 4.2.3.2). According to the respondents, the most easily accessible source was also the most preferred source of information on HIV transmission (see section 4.2.3.1). Establishing more VCT centres would enable youth to obtain counselling on HIV issues and be tested for HIV, as the respondents indicated that knowledge of their HIV status could influence their behaviour to prevent HIV transmission (see section 4.2.4.11).

Table 4.7 Most preferred source of information (N=238)

Most preferred source of information on HIV transmission	Frequency	Percent
Health care workers	73	30.7
Television	72	30.3
Parents/guardians	26	10.9
Teachers	21	8.8
Magazines	18	7.6
Peers	14	5.9
Radio	10	4.2
Newspapers	3	1.3
Other	1	0.4
Total	238	100.0

4.2.3.5 Item 3.5 and Item 3.7: Discussion of sexual issues and HIV transmission with parent/guardian

The respondents were asked to indicate in weeks when they had last discussed matters of sex and HIV transmission with their mothers, fathers and guardians. All the respondents (100%; N=238) answered this item. Of the respondents, 59.2% (n=141) indicated that they had discussed matters of sex and HIV transmission with their mothers in the preceding one to four weeks; 32.8% (n=78) had discussed these matters with their fathers, and 38.2% (n=91) had discussed them with their guardians. The majority of the respondents lived with their parents but fewer respondents discussed sexual matters and HIV transmission with their fathers than with their mothers. In their study among secondary school adolescents, Oboro and Taboweni (2003:17) found that 15% discussed sexual issues with their mothers compared to 2% who discussed the same with their fathers. In this study, it was not apparent why 91 (n=38.2%) of the respondents indicated that they discussed sexual matters and HIV transmission with their guardians, as only 76 (n=31.9%) indicated that they lived with a guardian (see section 4.2.1.4).

Figure 4.12 illustrates what issues the respondents would like to discuss with their parents/guardians. All the respondents (100%; N=238) answered this item. Of the respondents, 83.2% (n=198) indicated they would like to discuss HIV transmission; 82.4% (n=196) would like to discuss risk factors for HIV transmission; 65.5% (n=156) would like to discuss cultural issues related to HIV transmission, and 55.5% (n=132)

would like to discuss safe sex. The respondents also indicated “when to start having a boyfriend or girlfriend”, “when to start having sex and “prevention of HIV as other topics they would like to discuss with their parents/guardians. Of the respondents, 13.4% (n=32) said they did not discuss HIV/AIDS issues with their parents/guardians. According to Wilbraham (2002:7), parents find it difficult to talk about sexual issues with their children as a result of their own sexual socialisation, which inhibits such discussions with children.

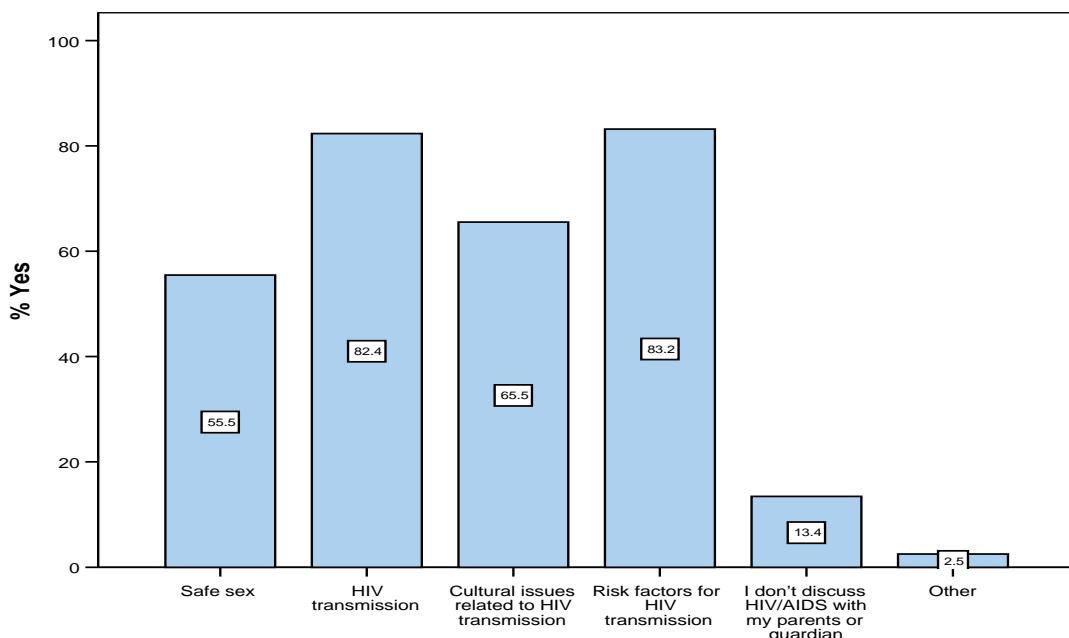


Figure 4.12
Information you want to discuss with your parent/guardian (N=238)

4.2.3.6 Item 3.6: What you do when you obtain information about HIV?

All the respondents (100%; N=238) answered this item. The respondents were asked to indicate what they did when they obtained information on HIV transmission. Of the respondents, 95.0% (n=226) discussed such information with peers and friends; 55.5% (n=132) discussed it with parents or guardians; 60.5% (n=144) discussed it with another relative rather than a parent or guardian; 51.3% (n=122) discussed it with a health worker; 41.6% (n=99) discussed it with a teacher, and 6.3% (n=15) kept such information to themselves (see table 4.8). The majority of the respondents discussed information about HIV preferably with a friend or peer. Amuyunzu-Nyamongo et al (2005:35) maintain this could be because peers are approachable and non-judgmental.

The majority of respondents indicated (see table 4.5) that health workers were the most easily accessible source of information on HIV/AIDS and yet when they receive information on HIV/AIDS, according to this item, they discuss it with peers and friends. It can be assumed that although the respondents discuss information with their friends and peers who are immediately available they do not regard them as a reliable source of information on HIV/AIDS. They would probably proceed to verify the information with the most accessible source, the health worker where they receive interpersonal communication.

Table 4.8 What you do when you obtain information about HIV (N=238)

What you do when you obtain information about HIV	Frequency	Percent
Discuss information with peers and friends	226	95.0
Discuss information with some other relative	144	60.5
Discuss information with parent or guardian	132	55.5
Discuss information with health worker	122	51.3
Discuss information with teacher	99	41.6
Keep information to self	15	6.3

4.2.3.7 Item 3.8 and Item 3.9: What you and your partner talk about

The respondents were asked to state whether they had a partner (boyfriend or girlfriend). The question was intended to elicit information on what discussions took place between partners regarding HIV transmission. All the respondents (100%; N=238) answered this item. Of the respondents, 40.8% (n=97) had partners. Of those (N=97) who had partners, 64.9% (n=63) discussed the possibility of HIV infection with their partners; 49.5% (n=48) discussed safe sex; 48.5% (n=47) discussed going for HIV tests; 23.7% (n=23) did not discuss HIV issues with their partners, and 4.1% (n=4) discussed other topics such as “abstinence”, “faithfulness to each other” and “each other’s background and love life” (see figure 4.13).

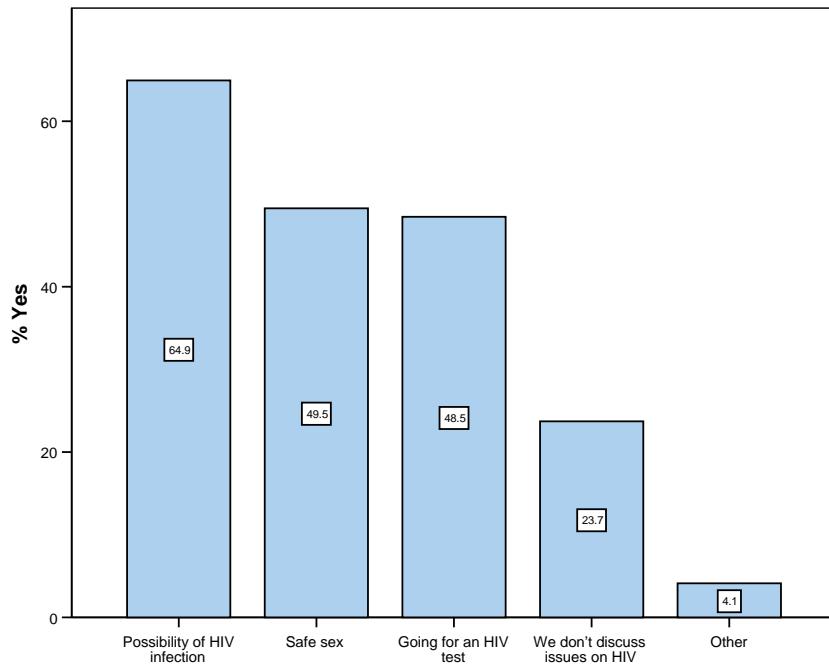


Figure 4.13
What you and your partner talk about (N=97)

4.2.3.8 Item 3.10: Reasons for not discussing HIV issues

The respondents were asked to give reasons for not discussing HIV issues with their partners. Of the respondents, 22 answered this item (see figure 4.14). Of those (N=22), 77.3% (n=17) were too shy to talk about the topic; 31.8% (n=7) did not think their partners had HIV; 18.2% (n=4) were afraid of losing their partners, and 9.1% (n=2) indicated that their partners were older than them. No respondent selected the option “other”. The main reason why respondents did not discuss HIV issues appeared to be shyness.

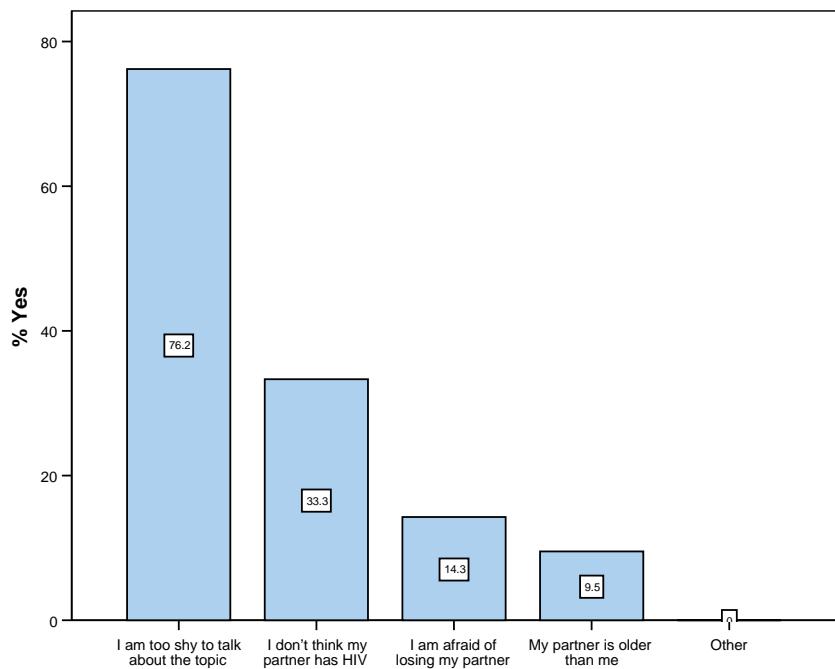


Figure 4.14
Reasons for not discussing HIV issues (N=22)

4.2.4 Section 4: Risk behaviour regarding HIV transmission

This section wished to explore the respondents' risk behaviour regarding HIV transmission.

4.2.4.1 Item 4.1: School children's risk to HIV transmission

The respondents were asked to give their own opinion on whether young people such as schoolchildren were at risk of HIV transmission and to give reasons for their answers. All the respondents (100%; N=238) answered this item. Of the respondents, 88.7% (n=211) indicated that schoolchildren were at risk of HIV transmission. Of the respondents, 212 gave reasons why schoolchildren were at risk (see table 4.9). Of those (N=212), 47.2% (n=100) said that schoolchildren were at risk because they engaged in casual sex; 18.4% (n=39) indicated that schoolchildren had older partners; 10.8% (n=23) indicated the possibility of rape or abuse by older people; 9.4% (n=20) indicated that schoolchildren shared sharp instruments such as razors; 5.2% (n=11) said schoolchildren did not have knowledge of HIV transmission; 3.8% (n=8) said schoolchildren were too young to have sex; 0.5% (n=1) indicated that schoolchildren

were at risk because of taking alcohol and drugs, and 4.7% (n=10) indicated that schoolchildren were not at risk because “they were taught about HIV at school”. These findings revealed that the respondents were aware that schoolchildren in general were at risk of HIV transmission and regarded casual sex as the main reason for the risk.

Table 4.9 Reasons why schoolchildren are at risk (N=212)

Reasons why schoolchildren are at risk of HIV	Frequency	Percent
They engage in casual sex	100	47.2
They have older partners	39	18.4
They may be raped or abused by older people	23	10.8
They share sharp objects and instruments like razors	20	9.4
They do not have knowledge of HIV	11	5.2
They are taught about HIV at school therefore they are not at risk	10	4.7
They are still too young to have sex therefore they are not at risk	8	3.8
They take drugs and alcohol	1	0.5
Total	212	100.0

4.2.4.2 Item 4.2: HIV carriers in the class

The respondents were asked to indicate whether they thought there were HIV carriers in their class and to give reasons for their answers. All the respondents (100%; N=238) answered this item. Of the respondents, 51.7% (n=123) indicated that there were HIV carriers in their class; 28.4% (n=55) indicated that they could not tell by appearance; 23.7% (n=46) indicated peer pressure as the reason why they thought there were HIV carriers in their class; 9.3% (n=18) indicated that some were born with HIV; 8.2% (n=16) indicated there could be victims of rape and abuse; 3.1% (n=6) said some classmates had older partners; 2.1% (n=4) indicated that some were on ARVs or were always sick and 1.0% (n=2) indicated that they shared sharp objects. A total of 48.3% (N=115) of respondents in the study indicated that there were no HIV carriers in the class. A variety of reasons were given and because respondents could give more than one reason more responses were obtained compared to the number of respondents. A total of 17.0% (n=33) of respondents stated that they were too young to have sex, and 6.2% (n=12) stated that schoolchildren knew about HIV (see table 4.10). According to Steyn et al (2005:10), the influence of peers on individual decision-making is the main reason why youth engage in risky behaviour, as they may be afraid of rejection by their peers if they do not conform to the peer group norms. The respondents seemed to be aware that

appearances could be misleading in determining whether a person was infected with HIV or not.

Table 4.10 Reason for HIV carriers in class (N=194)

Reason for HIV carriers in class	Frequency	Percent
One cannot tell by their appearance	55	28.4
Peer pressure	46	23.7
They are too young to have HIV	33	17.0
Some are born with HIV	18	9.3
They can be victims of rape	16	8.2
They know about HIV therefore there are no carriers	12	6.2
They have older partners	6	3.1
They are on ARVS and always sick	4	2.1
They lack knowledge	2	1.0
They share sharp objects like razors	2	1.0
Total	194	100.0

4.2.4.3 Item 4.3: Any risk in having an HIV-positive friend/classmate

The respondents were asked to indicate whether there was any risk in having an HIV-positive friend or classmate under a list of given circumstances. All the respondents (100%; N=238) answered this item. Of the respondents, 57.4% (n=136) indicated that there was no risk; 81.1% (n=193) indicated that if the friend sustained a bleeding injury there would be a risk of spreading the virus; 78.2% (n=186) indicated that there would be a risk if the friend or classmate used an injection needle; 5.9% (n=14) indicated that the friend or classmate could spread the virus by coughing in class; 2.9% (n=7) stated the friend or classmate could spread the virus by sharing food with someone in class; 1.7% (n=4) indicated that the friend or classmate could spread the virus by washing hands with classmates; 1.3% (n=3) indicated that the friend or classmate could spread the virus by sharing the toilet with classmates; 0.4% (n=1) stated the friend or classmate could spread the virus by sharing someone's pen in class, and 0.4% (n=1) stated the friend or classmate could spread the virus by touching someone in class. Of the respondents, 3.8% (n=9) selected the option "other" and eight indicated that the virus could be spread by sharing a razor blade; through kissing, and sexually. These responses revealed that the majority of the respondents maintained that there was no risk in having HIV-positive friends and that the risk only stemmed from the possibility of fighting, using needles and sustaining a bleeding injury. Nevertheless, some respondents had inaccurate knowledge about HIV transmission as they indicated that

HIV could be spread by coughing, kissing, touching, sharing food, washing hands, sharing a toilet and sharing a pen. These misconceptions could lead to stigma and discrimination of HIV-positive people.

4.2.4.4 Item 4.4: Number of partners you have

The respondents were asked to indicate how many partners they had. All the respondents (100%; N=238) answered this item. Of the respondents, 63.0% (n=150) indicated that they had no partners; 33.6% (n=80) had one partner; 1.7% (n=4) had two partners, and 1.7% (n=4) had three or more partners (see table 4.11). This finding revealed that the majority of the respondents had no partner.

Table 4.11 Number of partners you have (N=238)

How many partners do you have?	Frequency	Percent
0 partners	150	63.0
1 partner	80	33.6
2 partners	4	1.7
3 or more partners	4	1.7
Total	238	100.0

4.2.4.5 Item 4.5 and Item 4.6: Discussion of HIV transmission with partner

The respondents were asked the question, “If you have a partner have you ever discussed the risk for HIV transmission?” All the respondents who had partners (100%; N=88) answered this item. Of those, 71.6% (n=63) discussed HIV transmission with their partners while 28.4% (n=25) did not discuss this issue. This finding could indicate that some of the respondents did not openly talk about HIV transmission with their partners. The reason for lack of open communication could be shyness or fear of rejection (see section 4.2.3.8).

The respondents were also asked whether they had discussed what they would do as partners if one of them tested positive for HIV and to give a reason for their answer. This question was asked to elicit information on preparedness to discuss an HIV-positive result with a partner. All the respondents (100%; N=88) who had partners answered this item. Of those, 42.0% (n=37) indicated that they had discussed the issue

while 58.0% (n=51) had not discussed it. Of the respondents, 39.8% (n=35) gave reasons for either discussing or not discussing the possibility of one partner testing positive for HIV. Of those (N=35), 65.7% (n=23) indicated that they discussed the issue to keep each other safe; 25.7% (n=9) did not discuss the issue due to fear of upsetting their partner, and 8.6% (n=3) did not discuss the topic due to shyness. Fear of upsetting one's partner could arise from the possibility of rejection if the topic of HIV was brought up. Therefore, to protect the relationship the respondents might not discuss these issues. While over half of the respondents (71.6%; n=63) with partners indicated that they discuss the risk of HIV transmission in general, it appears they are not all ready to openly discuss the implications of having an HIV positive partner. These findings revealed lack of open communication among some of the respondents due the barrier of fear of rejection and shyness. According to Futterman (2004:381), adolescents have a great fear of rejection and loss of confidentiality if they disclose their HIV-positive status to their partners.

4.2.4.6 Item 4.7: How HIV status influences behaviour towards partner

The respondents were asked how their HIV status influenced their behaviour towards their partner. All the respondents who had partners (100%; N=88) answered this item. Of those, 81.8% (n=72) indicated they abstained from sexual intercourse; 63.6% (n=56) talked about their HIV status with their partners; 52.3% (n=46) used precautionary measures, and 10.2% (n=9) were too scared to talk about HIV (see figure 4.15). The main change in the respondents' behaviour towards their partners was abstinence followed by the use of precautionary measures. None of the respondents indicated accessing health services. According to Amuyenzu-Nyamongo et al (2005:39), shyness is one of the barriers faced by youth in accessing health services.

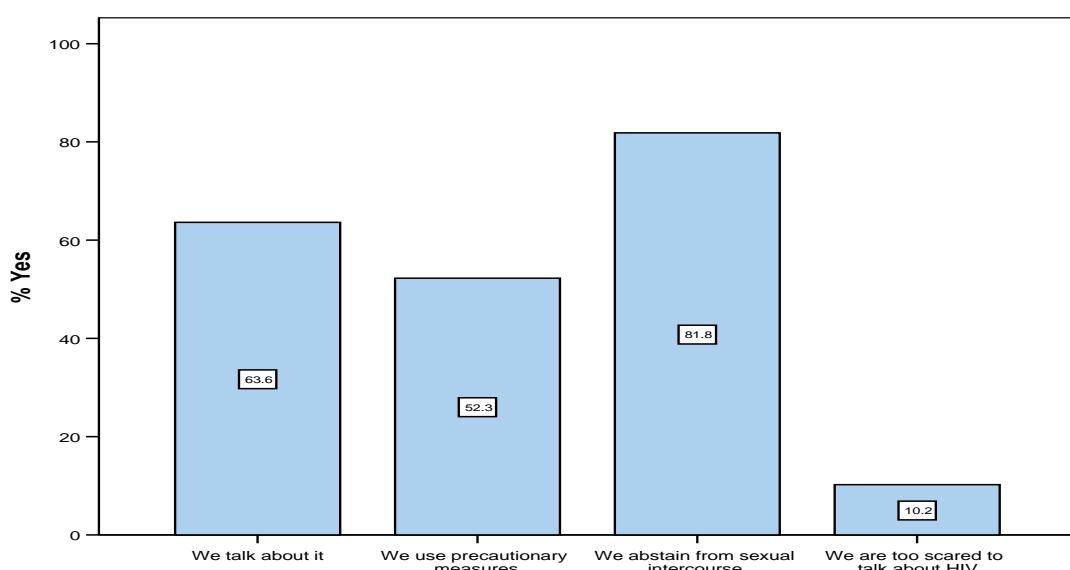


Figure 4.15
How HIV status influences behaviour towards partner (N=88)

4.2.4.7 Item 4.8 to Item 4.10: Respondents' individual risk of HIV transmission

The respondents were asked whether they were at risk of HIV transmission as individuals. All the respondents (100%; N=238) answered this item. Of the respondents, 86.1% (n=205) stated they were not at risk and 13.9% (n=33) indicated that they were at risk of HIV transmission as individuals. This finding suggested that most of the respondents viewed their peers as at risk of HIV transmission (see section 4.2.4.1), but the same risk did not apply to them as individuals. A possible reason for this confidence could be the prevalence of abstinence as expressed in the following paragraphs in this section. In a study among Zambian youth, Joffe and Bettega (2003:626) found that the majority of the respondents indicated that they were not personally at risk of HIV transmission mainly due to the practice of abstinence.

The respondents who said they were at risk (13.9%; n=33) were asked to indicate why they were at risk of HIV transmission from a list of given responses. The option of "other" was provided for any responses that did not fit those provided. The respondents could select more than one response and therefore the responses add up to more than the number of the respondents. A total of 54 responses were received and these will be analysed (100%; N=54). A total of 40.7% (n=22) of the responses indicated that the respondents were at risk because they did not know their partners' HIV status; 37.0% (n=20) indicated that their partners could be cheating on them, and 22.2% (n=12) gave "other" reasons, namely "I shared sharp objects with other people" and "I may be raped". These findings revealed that the respondents were aware of the importance of knowing their partners' HIV status and the risk of being cheated by a partner, which increases the risk of HIV transmission.

The respondents who indicated that they were not at risk (n=205) were asked to give reasons for their views and could select more than one option from the list provided and

thus 210 responses were obtained for this item (100%; N=210). Of these responses, 93.3% (n=196) indicated that the respondents were not at risk because they abstained from sex; 21.9% (n=46) stated they had one uninfected partner; 12.9% (n=27) indicated that they always had sex using a condom, and 3.3% (n=7) indicated that they either had no partner or that their partner was trustworthy. These findings revealed abstinence, having one partner and using a condom as the most frequent reasons why the respondents viewed themselves as not at risk of HIV transmission.

4.2.4.8 Item 4.11: *What you do for protection against HIV transmission during sex*

Only those respondents who were sexually active were required to answer this item. This item asked information that was personal and sensitive and only 17 respondents answered it. Of those (N=17), 70.6% (n=12) indicated that they used a condom for protection against HIV transmission; 47.1% (n=8) had sex with one uninfected partner; 23.5% (n=4) avoided deep kissing, and 5.9% (n=1) used traditional medicines. The respondents thus appeared to view condom use as the best protection against HIV transmission during sex followed by having sex with one uninfected partner. Strydom (2003:66) found that the majority of the respondents supported condom use followed by having one permanent sexual partner to combat HIV transmission.

4.2.4.9 Item 4.12 to Item 4.14: *Condom use*

To elicit information on the possible motivation for condom use, the respondents were asked whether they had ever used a condom (item 4.12). Items 4.13 and 4.14 were included to determine why condoms were not used among sexually active respondents. These were sensitive and personal questions. Of the respondents who were sexually active, 22 answered item 4.12. Of those (N=22), 36.4% (n=8) indicated that they had used a condom and 63.6% (n=14) answered "No", indicating that they had never used a condom. In section 4.2.4.7, a similar question was asked in a different way and 12.9% (n=27) respondents indicated that they had sex using a condom. It is possible that some respondents did not answer this question, as it was sensitive.

All the respondents (N=8) who indicated that they had used a condom (n=8) answered this item. Of those, 100% (N=8) stated they used a condom to prevent HIV

transmission, and 50% (n=4) also indicated that they used a condom because their partners insisted on its use. Prevention of pregnancy did not seem to be a reason for using a condom among these respondents.

The respondents (N=14) who had never used a condom were asked to specify the reasons for not using condoms. Of those (N=14), 42.9% (n=6) gave the following reasons: 7.1% (n=1) indicated that condoms were not available; 7.1% (n=1) had been forced to have sex without a condom; 14.3% (n=2) did not know how to use a condom and 14.3% (n=2) wanted natural sex and sometimes forgot to use the condom, respectively. Of the respondents, a further 57.1% (n=8) did not specify their reasons.

This section revealed that the majority of the sexually active respondents had never used a condom and may thus have been exposed to HIV transmission. The respondents also seemed to be unaware of the other advantage of using a condom, namely prevention of pregnancy. The findings also revealed the barriers the sexually active respondents encountered regarding condom use, which could expose them to the risk of HIV transmission.

4.2.4.10 Item 4.15: What you consider as risk behaviour

All the respondents (100%; N=238) answered this item and the respondents could select more than one response (see figure 4.16). Of the respondents, 86.6% (n=206) regarded having many sexual partners as risk behaviour; 84.5% (n=201) indicated having sex without a condom; 81.9% (n=195) indicated having sex for money; 72.7% (n=173) indicated having untreated STIs as risk behaviour, and 4.6% (n=11) sharing sharp objects, forcing someone to have sex, having casual sex, and taking alcohol and drugs. The data revealed that the majority of the respondents were aware of what constituted risk behaviour regarding HIV transmission.

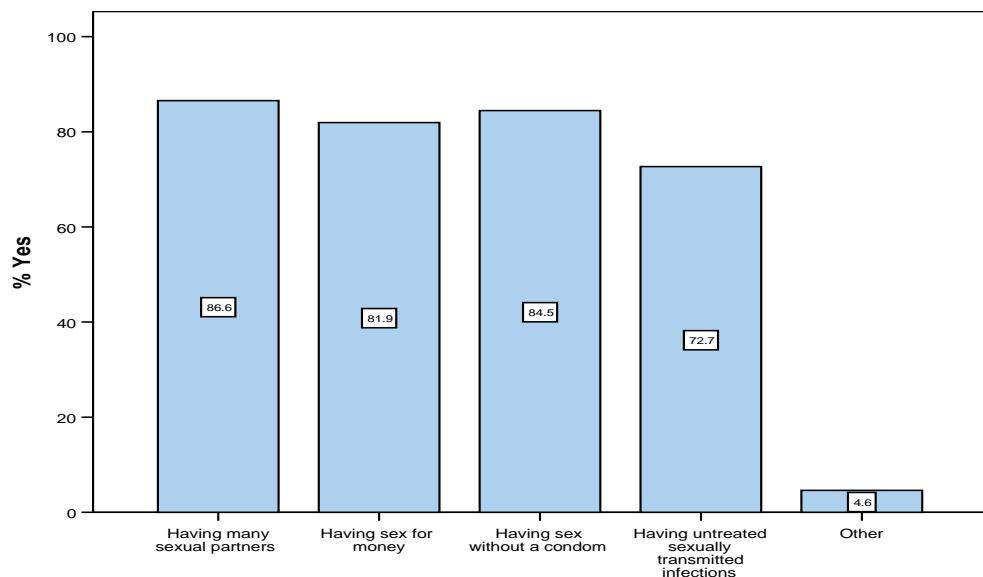


Figure 4.16
What you consider risk behaviour (N=238)

4.2.4.11 Item 4.16: How one can change his/her behaviour

All the respondents (100%; N=238) answered this item (see figure 4.17). Of the respondents, 95.8% (n=228) indicated abstinence as risk-reducing behaviour and 84% (n=200) indicated having one sexual partner as risk-reducing behaviour. The variable "having one sexual partner" was cross-tabulated to compare the female respondents' (100%; N=126) and the male respondents' (100%; N=112) views. In this case the null hypothesis was that there was no difference in the males' and the females' views on whether having one sexual partner reduced the risk of HIV transmission. The alternative hypothesis was that there was a difference in the males' and females' views on whether having one sexual partner reduced the risk of HIV transmission. Of the female respondents (N=126), 92.1% (n=116) indicated that having one sexual partner was risk-reducing behaviour while only 75% (n= 84) of the males (N=112) agreed with this statement. The difference in views was statistically significant according to Fisher's exact test ($p=0.004$). The null hypothesis was therefore rejected and the alternative hypothesis accepted. This finding revealed an increased likelihood of the females having one partner compared to the males. Of the respondents, 78.2% (n=186) indicated always using a condom as risk-reducing behaviour; 62.6% (n=149) indicated avoiding alcohol and drugs, and 4.6% (n=11) indicated having one's own personal

sharps for example a razor or needle, avoiding older partners, getting tested for HIV before indulging in sex, and having no sex before marriage. The data revealed a high awareness of risk behaviour among the respondents although some regarded younger partners as less likely to be HIV positive. This could lead them to expose themselves to the risk of HIV transmission. According to Finger (2002:20), one third of the people infected with HIV worldwide are 10 to 24 years old. The disease is not apparent in this age group because of the long incubation period of about 10 years (Ministry of Health and Child Welfare 2004a:6).

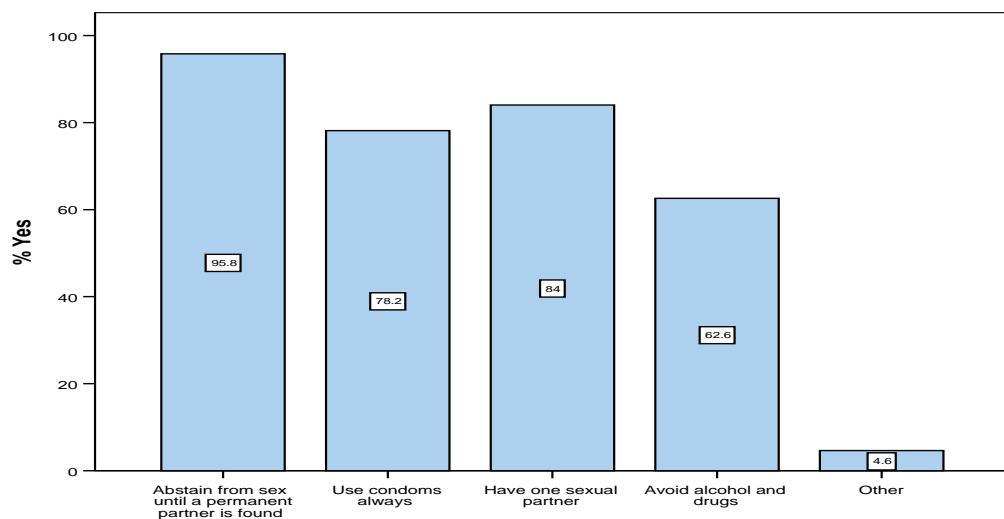


Figure 4.17
How one can change behaviour (N=238)

4.3 CONCLUSION

This chapter discussed the data analysis systematically according to the items in the questionnaire. The data was analysed using the SPSS version 13.0 software program and the frequency distributions and percentages were presented in pie charts, tables and bar graphs. Reference was made to the literature reviewed, where applicable. Chapter 5 summarises the findings, briefly discusses the conclusions and limitations of the study, and makes recommendations for practice and further research.

CHAPTER 5

Findings, conclusions, limitations and recommendations

5.1 INTRODUCTION

Chapter 4 discussed the results of the study with reference to the literature review. This chapter briefly outlines the purpose of the study, discusses the findings and limitations of the study, and makes recommendations for practice and further research.

5.2 PURPOSE OF THE STUDY

The purpose of the study was to explore and describe the knowledge of HIV transmission and the risk behaviour regarding transmission of HIV amongst youth in Bulawayo. The objectives of the study were to

- determine the knowledge of youth in Bulawayo on HIV transmission
- identify the sources of information on HIV transmission accessible to youth
- explore and describe the risk behaviour of youth regarding HIV transmission

A quantitative explorative descriptive design was used. Data was collected from youth attending three selected high schools by means of a questionnaire, consisting of both closed and open-ended questions. The sample consisted of 238 youth attending the high schools (Form 3 and Lower 6th form) and data was gathered over a period of three days.

5.3 FINDINGS

The findings are presented according to the respondents' demographic data, knowledge of HIV transmission, sources of information on HIV transmission accessible to them, and their risk behaviour regarding HIV transmission.

5.3.1 Respondents' demographic data

Demographic variables such as age, level of education and gender have an influence on the perceived individual threat of an illness such as HIV/AIDS (Dennill et al 1999:157). The demographic data revealed that the respondents were 15 to19 years old, with most being in Form 3 and 16 years old, the age at which most youth begin dating. Sexual intercourse is among the activities that the youth engage in during a date (Zimbabwe National Family Planning 2002:10). The respondents' developmental stage had an influence on their knowledge of and risk behaviour regarding HIV transmission as they were vulnerable to peer pressure and might not have adequate information on the transmission of HIV. Youth engage in risk behaviour such as experimenting with sex and non-utilisation of condoms in the belief that no harm will befall them (Edelman & Mandle 2006:516). The majority of the respondents lived with their parents or guardians. Parents or guardians have an influential role in the socialisation of youth and need to be empowered to communicate openly with the youth on HIV/AIDS issues.

5.3.2 Respondents' knowledge of HIV transmission

In the context of the HBM, knowledge has an influence on risk perception as it enables an individual to recognise the risk of an illness and thus take steps to adopt healthy behaviour and prevent the illness (Dennill et al 1999:157; Lolis et al 1997:551). The majority of respondents were knowledgeable about how HIV transmission takes place, yet many were not aware that it could be transmitted through blood transfusion and breastfeeding. There were also some misconceptions as some respondents thought HIV could be transmitted by kissing, sharing utensils and toilet seats (see chapter 4, section 4.2.2.2). Amuyunzu-Nyamongo et al (2005:6) found that although young people were aware of the risk of HIV transmission, the quality and depth of their knowledge differed and knowledge gaps were identified. Inaccurate information can result in exposure to risk and promotes stigma and discrimination of those who are HIV infected.

Most of the respondents were aware that abstinence and delaying sexual intercourse were the most effective measures to prevent transmission of HIV. The majority of the respondents were of the opinion that condoms were partially effective against HIV (see chapter 4, section 4.2.2.4). Although condoms are not 100% effective they are a highly effective means of preventing HIV transmission if used consistently and correctly. The

promotion of abstinence and delaying sexual debut are among the strategies adopted to curb the spread of HIV in the country (Ministry of Health and Child Welfare 2004a:23).

Less than half of the respondents were aware of what the window period was and a significant number were not aware of the risk of HIV transmission associated with this period. This would suggest that a negative HIV result during the window period and looking healthy could give the respondents a false sense of security (see chapter 4, section 4.2.2.6).

The majority of the respondents believed that cheating on girls, dislike of the condom, taking alcohol and drugs, and their cultural power over girls increased the risk of HIV transmission for boys (see chapter 4, section 4.2.2.9). Rani et al (2003:179) stress that cultural practices such as sexual coercion and engaging in sexual activity to enhance young men's social status, promote HIV transmission.

Most of the respondents indicated that girls were more at risk of HIV transmission due to gender and cultural inequalities, coercion to have sex, having older partners and cheating on boys (see chapter 4, section 4.2.2.11). The majority stated that boys and girls were equally at risk of HIV transmission, and were not aware of the increased risk for girls due to the biological structure of the vagina (see chapter 4, section 4.2.2.8).

A significant number of respondents (32.8%) did not know that HIV transmission could take place if a person had quick sexual intercourse with an infected individual (see chapter 4, section 4.2.2.8). This finding indicated a knowledge gap on the transmission of HIV because any unprotected sex exposes the individual to the risk of HIV transmission. Youth sometimes underestimate their vulnerability to HIV and engage in risk behaviour (Amuyunzu-Nyamongo et al 2005:24).

5.3.3 Respondents' sources of information on HIV transmission

In the context of the HBM, access to information equips individuals with knowledge to take measures to prevent an illness such as HIV/AIDS. This study revealed that the majority of the respondents had access at home to the radio, television, magazines and newspapers as sources of information on HIV transmission. The respondents indicated health care workers, television, parents/guardians, teachers and magazines, respectively as the five most preferred sources of information on HIV transmission (see chapter 4, sections 4.2.3.3 and 4.2.3.4). This was consistent with Buseh et al's (2002:534) finding that youth preferred health workers for information on HIV. Since mainly health care workers trained in communication and counselling skills as well as in the provision of youth-friendly services run VCT centres, it could be that the majority of the respondents preferred them because of this. Most of the respondents lived with their parents and spent a good part of the day with the teachers at school therefore these sources of information were among the five most preferred sources of information.

More of the respondents discussed HIV issues with their mothers than with their fathers (see chapter 4, section 4.2.3.5). This was consistent with Oboro and Taboweni's (2003:17) findings. These findings could indicate that mothers are more approachable compared to fathers. Most of the respondents discussed HIV with their peers and friends, which emphasises that it is important to ensure that youth share accurate information.

While the majority of the respondents who had partners discussed HIV transmission with their partners, due to shyness and fear of losing their partners fewer respondents discussed what they would do if one of the partners tested positive for HIV (see chapter 4, sections 4.2.3.9 and 4.2.3.10). This finding revealed a lack of open communication between the respondents and their partners. A communication barrier could lead youth to expose themselves to the risk of HIV transmission in order to protect the relationship.

5.3.4 Respondents' risk behaviour regarding HIV transmission

In the context of the HBM, accurate perception of the risk of HIV transmission and avoidance of risk behaviour depend on adequate and accurate information on the behaviour that exposes an individual to the risk of acquiring HIV. This study found that the majority of the respondents were aware of the risk to schoolchildren, based mainly on casual sex (see chapter 4, section 4.2.4.1).

The majority of the respondents were also aware that there was no risk in having an HIV-positive friend or classmate and that the risk only arose if there was fighting, a bleeding injury and sharing of sharps such as needles. Nevertheless, some respondents did not regard these circumstances as risky. A few respondents indicated that an HIV-positive friend could spread the virus by sharing food with a classmate, coughing, sharing toilets, sharing a pen and touching (see chapter 4, section 4.2.4.3). This revealed a knowledge gap and such misconceptions could lead to stigma and discrimination of HIV-positive people.

The majority of the respondents discussed HIV issues with their partners, mainly "to keep each other safe". Those who did not discuss HIV issues with their partners were either afraid of upsetting their partners or too shy to do so (see chapter 4, sections 4.2.4.5 and 4.2.4.6). Youth should be encouraged to communicate openly about HIV issues without fear and to go for HIV testing together with their partners.

Most of the respondents were aware of risk behaviour such as having several sexual partners, having sex without a condom, taking alcohol and drugs, and having untreated STIs. Most of the respondents abstained from sex to prevent HIV transmission, which gave them the confidence that they were not at risk of HIV (see chapter 4, section 4.2.4.7). The respondents indicated that risk behaviour such as sharing sharp objects with others, rape and having forced sex without a condom put youth at risk of HIV transmission. More than half of the respondents indicated that they did not know their partners' HIV status and also indicated that their partners could be cheating on them (see chapter 4, section 4.2.4.7). The majority of youth in Zimbabwe do not know their HIV status and the main reason for not being tested was lack of awareness of the risk of HIV transmission (Ministry of Health and Child Welfare 2004a:16). Of the 22 respondents who were sexually active, 47.1% revealed that they had sex with one

uninfected partner, but it was not clear whether they themselves had been tested for HIV. Only 36% of the sexually active respondents indicated that they used a condom (see chapter 4, section 4.2.4.8). It could therefore be assumed that over half of the sexually active respondents did not use condoms and thus engaged in risk behaviour that could result in HIV transmission. Amuyenzu-Nyamongo et al (2005:24) found that youth did not use condoms consistently in the belief that their partners were uninfected, as they did not exhibit signs of AIDS.

The majority of the respondents indicated that it was possible to change one's behaviour to prevent HIV transmission by abstaining from sex until a permanent partner was found, always using condoms, having one sexual partner and avoiding drugs and alcohol (see chapter 4, section 4.2.4.11). In the context of the HBM, the likelihood of taking action to prevent disease is influenced by the degree to which the individual perceives the disease to be severe and the cost-benefit analysis of taking the preventive measure.

5.4 CONCLUSIONS

The following conclusions were drawn from the data:

5.4.1 Knowledge of HIV transmission

Some of the respondents indicated that HIV was an incurable disease from the West while others regarded it as a curse from the ancestors or a disease caused by witchcraft (see chapter 4, section 4.2.2.1). These inaccurate perceptions could lead to feelings of helplessness, leading to lack of action to take preventive measures against HIV transmission. These perceptions could also be shared with peers and friends thereby promoting the spread of HIV.

The respondents reflected a lack of knowledge about the transmission of HIV through breast-feeding and blood transfusion. Some of the respondents reflected inadequate knowledge about HIV transmission by indicating that HIV could be spread through kissing and sharing utensils (see chapter 4, section 4.2.2.2). Inaccurate knowledge could expose the respondents to the risk of HIV transmission and promote stigma and discrimination of HIV-positive people.

Most of the respondents reflected awareness of the preventive measures to limit the risk of HIV transmission (see chapter 4, section 4.2.2.3). However, the perceived benefits of preventing HIV and the perceived barriers to taking preventive measures determine whether or not an individual will actually take the steps to prevent HIV transmission.

The respondents were aware that condoms could prevent HIV transmission. At the same time, a few indicated that condoms were not effective while some did not know whether they were effective or not (see chapter 4, section 4.2.2.4). In the context of the HBM, even if youth are aware of the effectiveness of condoms, they may not know how to use them, which could be a barrier to condom use. Condoms should be available and easily accessible and youth need to be taught how to use them correctly.

Some respondents did not know about the window period and that during it an infected person might look and feel healthy and yet transmit the virus in the meantime (see chapter 4, sections 4.2.2.5 and 4.2.2.6). Youth need to know about the window period so that they fully understand the risk of HIV transmission associated with it and take measures to protect themselves.

The majority of the respondents were not aware that girls were biologically and culturally at greater risk of HIV transmission than boys (see chapter 4, section 4.2.2.8). Girls are at higher risk of HIV as they are socialised to be submissive to men and may be forced to have sex without a condom (Ministry of Health and Child Welfare 2004a:24). It is important for girls to be empowered equally to boys so that they can protect themselves from HIV transmission. This can be achieved through education and discouraging cultural norms that deprive girls of their rights as human beings.

The respondents were aware of the factors that increase the risk of HIV transmission, including experimenting with sex, dislike of the condom, abuse of alcohol and drugs, sexual coercion of girls and other cultural gender inequalities (see chapter 4, sections 4.2.2.9 and 4.2.2.11). Abuse of alcohol and drugs should be discouraged as it interferes with reasoning and can lead to exposure to the risk of HIV transmission. Although youth may be aware of the factors that increase the risk of HIV transmission, they may nevertheless feel helpless to avoid the risk, particularly where cultural factors are

concerned. Youth need to be empowered with knowledge and encouraged to prevent HIV transmission.

5.4.2 Sources of information on HIV transmission available to youth

The study found that television sets were available in most urban homes and were influential in dissemination of information on HIV transmission (see chapter 4, section 4.2.3.1). Health care workers in the VCT centres are trained to offer youth-friendly services and are easily accessible for information on HIV transmission. The study was done close to World AIDS Day when the services of health care workers are especially marketed. Although teachers spend a greater part of the day with the respondents during the week, they may not always be available, as they have other commitments.

Although indicated as easily accessible, the lowest number of respondents accessed health care workers in the four weeks prior to the study (see chapter 4, sections 4.2.3.1 and 4.2.3.2). This could have been because the study was done during the end-of-year examination period and the respondents had been studying for the examinations therefore had not visited the health care centres. Health prevention programmes for youth can make use of this information to ensure accessibility to information on HIV transmission at all times. If HIV prevention programmes are regularly presented on television and the radio, and in the newspapers, youth can obtain information that prompts them to take action.

Youth could benefit if given an opportunity to choose the preferred sources of information and the topics that are discussed as an entry point. Parents and guardians play a significant role in the socialisation of youth and need to be empowered to communicate openly with them on sexuality and HIV/AIDS.

It is concluded that the respondents shared information on HIV transmission with their peers. It is important that they share accurate information. Although half of the respondents had received information from teachers in the four weeks prior to the study, teachers may not always be available at the time youth need them due to other commitments.

Some of the respondents indicated a lack of open communication on HIV transmission with their sexual partners (see chapter 4, section 4.2.3.7). Sexual partners need to talk about HIV and other STIs before engaging in sexual intercourse, and should learn as much as possible about each other's past behaviour in relation to HIV transmission. This knowledge could help youth to assess their risk of HIV transmission in order to take preventive measures.

5.4.3 Respondents' risk behaviour regarding HIV transmission

The majority of the respondents indicated that they were aware that schoolchildren in general are at risk of HIV transmission and gave casual sex as the main reason. Those respondents who did not perceive themselves as at risk might not take the necessary steps to protect themselves from HIV transmission.

The respondents indicated that there was a risk in having an HIV-positive friend or classmate if the friend or classmate sustained a bleeding injury, coughed in class, shared a pen, shared the toilet, or kissed someone. This finding revealed misconceptions about the risk of having an HIV-positive friend. These misconceptions could lead to stigma and discrimination of HIV-positive people.

The respondents revealed a lack of open communication about HIV transmission with their partners due to shyness or fear of rejection. Openly discussing HIV helps individuals to steps such as condom use to avoid the risk of HIV transmission. People who have difficulty in openly discussing HIV/AIDS with their partners may equally fail to negotiate for safe sex and expose themselves to the risk of HIV transmission.

Some of the sexually active respondents indicated that they did not use condoms because condoms were not available, they disliked condoms, they forgot to use a condom, and did not know how to use one. The availability of condoms, ability to use them, and confidence to negotiate for their use could influence whether or not they are used.

The majority of the respondents revealed awareness of what constituted risk behaviour regarding HIV transmission. Youth who are aware of what constitutes risk behaviour are more likely to take action to prevent HIV transmission.

5.5 FINDINGS IN RELATION TO THE HBM

The findings are discussed in relation to the three parts of the HBM (see figure 2.1) namely, individual perceptions, modifying factors, and variables affecting likelihood of taking action.

5.5.1 Individual perceptions

Knowledge has an influence on an individual's perception about an illness such as HIV/AIDS and determines the adoption of healthy behaviour (Dennill et al 1999:156). Youth who are aware of their risk of HIV transmission are more likely to make an effort to prevent infection. Some of the respondents indicated inaccurate perceptions of what HIV/AIDS was (see chapter 4, section 4.2.2.1). These inaccurate perceptions could be shared with peers and friends and lead to lack of action to take measures to protect themselves from HIV transmission.

Many of the respondents were not aware that HIV could be transmitted through breast-feeding and blood transfusion, and could therefore expose themselves to the risk of HIV transmission. Some of the respondents indicated that HIV could be spread through kissing and sharing of utensils. In the context of the HBM, incorrect perceptions about the risk of HIV could lead to exposure to the risk of HIV transmission.

The respondents revealed an awareness of the preventive measures to limit the risk of HIV transmission, including abstinence, condom use and delaying sexual activity until a permanent partner was found (see chapter 4, sections 4.2.2.3 and 4.2.2.4). The perceived benefits of engaging in preventive measures and the perceived barriers determine whether an individual will take steps to prevent the transmission of HIV. The perceived barriers such as inability to negotiate for safe sex, inability to use the condom and lack of availability of the condom including shyness and fear of rejection by a partner can prevent the respondents from protecting themselves from HIV transmission. The respondents who perceived condoms as not effective in preventing HIV transmission or did not know whether they were effective or not may expose themselves to the risk of HIV transmission (see chapter 4, section 4.2.2.4).

The findings indicate that more than half of the respondents did not know about the window period and the risk of HIV transmission associated with this period. In the context of the HBM, accurate knowledge helps individuals to protect themselves from the risk of HIV transmission associated with this period.

5.5.2 Modifying factors

Modifying factors that influence the perceived threat of a disease include demographic, socio-psychological and structural variables (Dennill et al 1999:156).

5.5.2.1 Demographic variables

In this study, the demographic variables that could influence the respondents in taking steps to prevent HIV transmission included age, level of education, gender and guardianship.

The respondents in the study were between 15 and 19 years old. In this adolescent stage of development youth are vulnerable to peer pressure and sexual experimentation. Inaccurate information may be shared with peers and friends and negotiating for safe sex may be difficult at this stage due to immaturity and lack of experience in sexual matters. In this study, out of a total of 88 respondents who had partners, 28% (n=25) indicated that they did not discuss HIV transmission with their partners due to shyness (see chapter 4, section 4.2.4.5). Of the respondents who indicated that they were sexually active more than half indicated that they used a condom for protection from HIV transmission (see chapter 4, section 4.2.4.9).

The respondents were at secondary school and at this level they could be expected to have adequate knowledge to take preventive measures against HIV transmission (see chapter 4, section 4.2.1.3).

More than half of the respondents lived with a parent or guardian. In the context of the HBM, this is a modifying factor that can influence youth's perception of HIV transmission as parents or guardians have an important role in youth's socialisation and provide guidance on issues related to HIV transmission.

Gender has an influence on an individual's perception and ability to take preventive measures, particularly where there are gender inequalities related to culture. In the study, the respondents were composed of 52.9% (n=126) females and 47.1% (n=112) males. The respondents indicated that boys faced increased risk of HIV transmission due to experimenting with sex, dislike of condoms, abuse of alcohol and drugs, and the cultural power they have over girls. The factors that increased the risk for girls included sexual coercion, having older partners and lack of power culturally (see chapter 4, sections 4.2.2.9 and 4.2.2.11). Of the female respondents, 92.1% (n=116) indicated that having one sexual partner was risk-reducing behaviour compared to only 75% (n=84) of the males who agreed with this statement. This finding reveals an increased likelihood of girls having one partner compared to boys.

5.5.2.2 *Socio psychological variables*

Social class and peer pressure influence perception about HIV transmission and whether or not preventive measures to limit the risk are taken. Of the respondents, 47.1% (n=8) indicated that youth, who engage in sex without a condom, are likely to influence their peers and friends to adopt the risk behaviour that exposes them to the risk of HIV transmission (see chapter 4, section 4.2.4.8). More than half of the respondents (62.6%; n=149) stated that girls culturally had no power over boys and that this increased the risk of HIV transmission for girls. Female youth may fail to negotiate for safe sex due to the overpowering influence of the male partner.

5.5.2.3 *Structural variables*

Structural variables such as knowledge and previous contact with a person suffering from HIV/AIDS influence the perception of risk of HIV transmission, the severity of HIV/AIDS, and the likelihood of taking preventive measures. The respondents indicated that there were HIV carriers in their class, which could indicate that they had some knowledge of a person with HIV in their class (see chapter 4, section 4.2.4.2). In the context of the HBM, individuals who know what HIV is, how HIV is transmitted as well as the risk of HIV transmission and know someone who has HIV are less likely to engage in risk behaviour.

5.5.3 *Variables affecting likelihood of taking action*

The degree of severity of HIV/AIDS and the individual's perceived risk of HIV transmission determines the likelihood of taking preventive measures (Dennill et al 1999:157). This study found that sources of information available at home included television, the radio, newspapers and magazines (see chapter 4, section 4.2.3.3). Adequate and correct information can be disseminated through these sources of information to prompt youth to take action.

5.6 LIMITATIONS

The study was limited to three selected high schools in the high-density suburbs of Bulawayo consequently the findings cannot be generalised to youth in the whole province or the whole country.

Students in Upper 6th Form and Form 4 could not participate in this study as their school year had ended when the study was carried out therefore only Form 3 and Lower 6th Form students were included in the study.

Under-reporting might have occurred as a result of the sensitive nature of the questions on sexual issues.

5.7 RECOMMENDATIONS

The following recommendations are made based on the findings of this study.

5.7.1 Knowledge of HIV transmission

The researcher recommends that more VCT centres be established in the high-density suburbs and all rural health centres to ensure easy access to all youth at no cost. Health workers should be enabled to visit schools at regular intervals to disseminate and discuss HIV/AIDS-related issues with the youth. Regular programmes to disseminate information on HIV/AIDS and HIV transmission should be broadcast on television and radio, which are accessible in many homes. The Ministry of Health and Child Welfare and the Ministry of Education should develop and distribute posters, pamphlets and educational material to clinics, schools and community centres for display and distribution.

5.7.2 Sources of information on HIV transmission

The researcher recommends that the Ministry of Health and Child Welfare and the Ministry of Education develop and introduce training programmes and workshops for teachers and parents to change judgemental attitudes towards the sexual behaviour of youth as well as to motivate and equip them to teach youth about sexuality and HIV/AIDS.

In addition to the above, it is also recommended that more programmes on HIV/AIDS be presented on television as the majority of youth had access to this source of information at home and it was among the most preferred sources of information. Involvement of youth in these programmes is essential to ensure that their information needs are met.

More peer educators should be trained and all schools should have adequate numbers of these educators to ensure that they share accurate information with their peers. Education programmes for the youth should include regular HIV/AIDS campaigns conducted countrywide to disseminate accurate information and to reach as many youth as possible, particularly in the rural areas where available services are limited.

A magazine with articles specifically for youth should be developed and youth encouraged to actively participate in its production so that topics of interest to the youth

could be published, and the cost of the magazine could be subsidised to ensure it is affordable.

5.7.3 Risk behaviour regarding HIV transmission

The researcher recommends that the Ministry of Health and Child Welfare and the Ministry of Education develop and introduce programmes to address societal norms that prevent parents from playing an effective role in the prevention of HIV among the youth. These programmes should include regular countrywide campaigns to address issues related to HIV transmission, gender inequalities and cultural practices that promote the spread of HIV.

Schools should promote open communication about HIV/AIDS issues among the youth by means of drama and debates. Community discussion and workshops should be held (say, in church halls and community centres) to encourage acceptance of the existence of this disease and to reduce the stigma and discrimination against HIV-positive people.

Mass media campaigns to promote abstinence and delay in sexual debut and condom use should be conducted countrywide to motivate youth to adopt healthy sexual practices and these campaigns should not be restricted to the period around the World AIDS Day.

More voluntary counselling and testing services should be established especially in the high-density suburbs to ensure accessibility to the youth as the cost of transport can be a barrier to the youth many of whom are unemployed.

5.7.4 Further research

The researcher recommends further research on the following topics:

- The knowledge of HIV transmission and the risk behaviour regarding HIV transmission among the youth in more districts and provinces of Zimbabwe.
- Information needs of youth on sexuality and HIV/AIDS.
- Difficulties encountered by youth in behaviour change to prevent HIV transmission.

- Adequacy of knowledge and skills among teachers to give guidance to youth on sexuality and HIV/AIDS issues.
- Skills and information needs of parents to help them to communicate effectively with youth.
- How gender and cultural issues can be addressed to empower youth in the fight against HIV.

5.8 CONCLUSION

The prevention of HIV transmission is the key strategy to fight the spread of HIV. Sexual transmission is the most prevalent mode of transmission of HIV in Zimbabwe and worldwide. Youth are particularly at risk of HIV transmission due to immaturity, unemployment, poverty and engagement in risk behaviour. Abstinence, being faithful to one uninfected partner, correct and consistent condom use, and delaying sexual activity are among the strategies adopted to combat the spread of HIV in Zimbabwe. Youth need to be equipped with adequate and accurate information on HIV transmission so that they can accurately perceive their risk of infection and be helped to adopt healthy life styles. The establishment of more accessible youth-friendly services countrywide is essential. The findings and recommendations of this study should contribute significantly to controlling and ultimately preventing the spread of HIV/AIDS.

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ANNEXURE A

Christian Health Care Services
PO Box 3443
Bulawayo

24 August 2004

The Regional Director
Ministry of Education and Culture
Matabeleland North Region
PO Box 553
Bulawayo

Dear Sir/Madam

REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN YOUR SCHOOLS

I write to request for permission to conduct a study entitled "Perceptions on HIV risk among youth in Bulawayo" in your schools. I am a student studying for a Master's Degree in Health Studies with the University of South Africa. The study is required as a project in partial fulfillment of my studies.

I am currently working as a project officer in the above stated organisation which is running an HIV prevention project in your schools. With your permission the study will be conducted in the following high schools; Magwegwe High School, Njube High School, Sikhulile High School and Lobengula High School.

Your assistance in the matter would be greatly appreciated.

Yours faithfully



Mrs Cathrine Banana

**PARENTAL/GUARDIAN'S CONSENT FOR CHILD TO BE RESEARCH
PARTICIPANT**

Dear parent/guardian

My name is Cathrine Banana. I am a registered nurse and midwife pursuing a Master of Arts degree in Health Studies with the University of South Africa. I am carrying out a study entitled "An investigation into the risk behaviour regarding HIV transmission among youth in Bulawayo".

I am requesting you to allow your child to participate in the above mentioned study. The information obtained from this study may be useful in designing HIV/AIDS prevention programmes for youth in the country. Information gathered from this study will be kept confidential and will be utilised only for purposes of the study.

Please indicate that you agree for your child to participate in this study by signing below.

Parent/ guardian's signature: _____

Date _____

Mrs. Cathrine Banana: Contact telephone number: 202829

Banana, Cell phone number: 0912 424 333

ANNEXURE B

Consent to be a research participant

Dear Respondent

My name is Cathrine Banana. I am a registered nurse and midwife pursuing a Masters degree in Community Health Nursing with the University of South Africa. I am carrying out a study entitled "An investigation into the risk behaviour regarding HIV transmission among youth in Bulawayo".

The study may generate information that would be useful in designing HIV/AIDS prevention programmes for youth.

I am requesting you to answer the following questions as honestly as possible. All information gathered in this study will be kept confidential. Your participation in this study is on a voluntary basis and you are free to withdraw at any stage should you wish to.

Please be informed that there will be no payment for being a respondent in this study.

PLEASE DO NOT WRITE YOUR NAME ON THE QUESTIONNAIRE SHEETS.

C Banana

Contact number: (09) 202829

ANNEXURE C

Data collection instrument

PART 1 Demographic Data

For office use

1.1 How old are you? (Please write your age in the boxes provided)

Your age	Answer
1.1.1	<input type="text"/> <input type="text"/> Years

4	5
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1.2 What is your gender? (Please tick your answer)

Gender	Answer
1.2.1 Male	1
1.2.2 Female	2

6

1.3 What is your present level of education? (Please tick your answer)

Level of education	Answer
1.3.1 Form 3	1
1.3.2 Form 4	2
1.3.3 Lower 6 th	3
1.3.4 Upper 6 th	4

7

1.4 Who do you live with? (Please tick your answer)

Who do you live with?	Answer
1.4.1 Both parents	1
1.4.2 Father only	2
1.4.3 Mother only	3
1.4.4 Guardian	4
1.4.5 Other (please specify)	5

8

For office use

1.5 Which school do you attend?

School you attend	Answer
1.5.1 Magwegwe Secondary	1
1.5.2 Njube Secondary	2
1.5.3 Sikhulile Secondary	3

9

PART 2 Knowledge on HIV transmission

Please tick the appropriate answer and explain where requested.

For office use

2.1 What is HIV?

What is HIV?	Answer	
	Yes	No
2.1.1 Human Immune-deficiency Virus	1	2
2.1.2 A curse from a person's ancestors	1	2
2.1.3 A disease caused by witchcraft	1	2
2.1.4 A virus that affects prostitutes only	1	2
2.1.5 An incurable disease from the West	1	2
2.1.6 Other (please specify).....	1	2

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2.2 HIV can be transmitted through the following ways (please tick Yes/No)

Ways of HIV transmission	Answer	
	Yes	No
2.2.1 Sexual intercourse	1	2
2.2.2 Blood transfusion	1	2
2.2.3 Sharp objects such as syringe, needle or razor blade	1	2
2.2.4 Breast-feeding	1	2
2.2.5 During birth	1	2
2.2.6 Toilet seats	1	2
2.2.7 Kissing	1	2
2.2.8 Hugging	1	2
2.2.9 Sharing utensils	1	2
2.2.10 Mosquito bites	1	2
2.2.11 Other (please specify).....	1	2

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2.3 The following are preventive measures to limit the risk of contracting HIV.

For office use

(Mark the most effective measure with 1 and thereafter 2, 3, 4 etc up to 8. Please mark each item and do not use the same ranking twice)

Preventive measures to limit HIV infection	Answer
2.3.1 Condom use during vaginal sex	
2.3.2 Condom use during anal sex	
2.3.3 Avoiding use of the same razor	
2.3.4 Avoiding deep kissing	
2.3.5 Washing of hands	
2.3.6 Abstinence	
2.3.7 Delaying sexual intercourse until a permanent partner is found	
2.3.8 Treatment of sexually transmitted infections	

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2.4 How effective are condoms as barriers to viruses including HIV?

Effectiveness of condoms	Answer
2.4.1 100% effective	1
2.4.2 Partially effective	2
2.4.3 Not at all effective	3
2.4.4 Don't know	4

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2.5 In your own view do you think a healthy looking person who is infected with HIV can transmit the infection to others?

Transmission of HIV from a healthy looking person?	Answer		
	Yes	No	Don't know
2.5.1	1	2	3
(Please explain your answer).....			

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2.6 Do you know what the window period is?

Knowledge of window Period	Answer		
	Yes	No	Not sure
2.6.1	1	2	3

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For office use

- 2.7** During the window period a person who has HIV can infect other people without knowing.

HIV transmission during window period	Answer		
	Yes	No	Don't Know
2.7.1	1	2	3

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- 2.8** HIV **cannot** be transmitted if a person has sex for a short time, say two minutes, with someone who is infected with HIV.

Transmission of HIV in a short period of having sex	Answer		
	Agree	Disagree	Other
2.8.1	1	2	3
Other (please explain).....			

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- 2.9** Who is more at risk to contract HIV? (**Please tick one answer**)

Who is more at risk for HIV?	Answer
2.9.1 Boys	1
2.9.2 Girls	2
2.9.3 They are equally at risk	3

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- 2.10** Which factors increase the risk of HIV transmission for boys compared to girls?

(**Please tick Yes or No**)

Factors that increase risk for boys	Answer	
	Yes	No
2.10.1 Boys cheat on girls	1	2
2.10.2 Boys take alcohol and drugs	1	2
2.10.3 Boys don't like using the condom	1	2
2.10.4 Boys culturally have power over girls	1	2
2.10.5 Boys like experimenting with sex	1	2
2.10.6 Boys have older partners	1	2
2.10.7 Other (please explain).....	1	2

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For office use

2.11 Which factors decrease the risk of HIV transmission for boys compared to girls?

Factors which decrease risk for boys	Answer	
	Yes	No
2.11.1 Boys have more knowledge about HIV transmission	1	2
2.11.2 The biological structure of the penis	1	2
2.11.3 Boys are able to initiate condom use	1	2
2.11.4 Boys are less shy to discuss sexual issues	1	2
2.11.5 Boys have power over girls culturally	1	2
2.11.6 Other (please specify).....	1	2

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2.12 Which factors increase the risk of HIV transmission for girls compared to boys?

Factors that increase risk for girls	Answer	
	Yes	No
2.12.1 Girls are more fragile	1	2
2.12.2 The biological structure of the vagina	1	2
2.12.3 Girls are coerced to have sex	1	2
2.12.4 Girls culturally have no power over boys	1	2
2.12.5 Girls are not able to use the condom	1	2
2.12.6 Girls have limited knowledge about HIV	1	2
2.12.7 Girls have older partners	1	2
2.12.8 Girls cheat on boys and have many partners	1	2
2.12.9 Other (please specify).....	1	2

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2.13 Which factors decrease the risk of HIV transmission for girls compared to boys?

Factors that decrease risk for girls	Answer	
	Yes	No
2.13.1 The virus is washed off during menstruation	1	2
2.13.2 Girls have sex with boys they trust	1	2
2.13.3 Girls have fewer sexual partners	1	2
2.13.4 Girls are responsible for condom use	1	2
2.13.5 Girls can refuse to have sex without a condom	1	2
2.13.6 Other (please explain).....	1	2

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PART 3 Sources of Information on HIV transmission

For office use

- 3.1 Which is the most easily accessible source of information on HIV transmission for you?
(Please select one answer)

Most easily accessible source of information on HIV	Answer
3.1.1 Radio	1
3.1.2 Newspaper	2
3.1.3 Television	3
3.1.4 Magazine	4
3.1.5 Peers	5
3.1.6 Teachers	6
3.1.7 Parents/Guardian	7
3.1.8 Health care worker	8
3.1.9 Other (please specify).....	9

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- 3.2 When was the last time you obtained information on HIV transmission from each of the listed sources? **(Please indicate your answer to the nearest number of weeks e.g. 1, 2, 3 and 4 for four weeks or more. If “not at all” please mark with a zero and for 4 weeks or more mark with 4)**

Last time information obtained from source (Answer in weeks)	Answer
3.2.1 Radio	<input type="checkbox"/> weeks
3.2.2 Newspaper	<input type="checkbox"/> weeks
3.2.3 Magazine	<input type="checkbox"/> weeks
3.2.4 Television	<input type="checkbox"/> weeks
3.2.5 Teachers	<input type="checkbox"/> weeks
3.2.6 Peers/Friends	<input type="checkbox"/> weeks
3.2.7 Parents/Guardian	<input type="checkbox"/> weeks
3.2.8 Health worker	<input type="checkbox"/> weeks
3.2.9 Other (please specify)	<input type="checkbox"/> weeks

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For office use

- 3.3** Which of the following sources of information on HIV transmission do you have access to at home?

Sources of information you have access to at home Answer Yes/No	Answer	
	Yes	No
3.3.1 Television	1	2
3.3.2 Radio	1	2
3.3.3 Magazine	1	2
3.3.4 Newspaper	1	2
3.3.5 Other (please specify).....	1	2

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- 3.4** Which is your **most preferred** source of information on HIV transmission?
(Please mark one most preferred option)

Most preferred source of information on HIV Transmission	Answer
3.4.1 Radio	1
3.4.2 Newspaper	2
3.4.3 Television	3
3.4.4 Magazine	4
3.4.5 Peers	5
3.4.6 Teachers	6
3.4.7 Parents/Guardian	7
3.4.8 Health care worker	8
3.4.9 Other (please specify).....	9

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- 3.5** When was the last time you discussed matters of sex and HIV transmission with the following people? **(Please indicate your answer to the nearest number of weeks, for example, 1, 2, 3and 4 for four weeks or more. If “not at all” please mark with a zero)**

Last time matters of sex discussed (Answer in weeks)	Answer
3.5.1 Mother	<input type="checkbox"/> weeks
3.5.2 Father	<input type="checkbox"/> weeks
3.5.3 Guardian	<input type="checkbox"/> weeks

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For office use

- 3.5** When you obtain information about HIV transmission which of the following do you do?

What do you do with information on HIV?	Answer	
(Answer Yes/No)	Yes	No
3.6.1 Discuss information with peers and friends?	1	2
3.6.2 Discuss information with parent or guardian?	1	2
3.6.3 Discuss information with other relative?	1	2
3.6.4 Discuss information with your teacher?	1	2
3.6.5 Discuss information with a health care worker?	1	2
3.6.6 Keep information to yourself?	1	2

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- 3.7** What information would you want to discuss with your parent or guardian regarding HIV transmission?

What information would you want to discuss with parent/guardian? (Answer Yes/No)	Answer	
	Yes	No
3.7.1 Safe sex	1	2
3.7.2 HIV transmission	1	2
3.7.3 Cultural issues related to HIV transmission	1	2
3.7.4 Risk factors for HIV transmission	1	2
3.7.5 I don't discuss HIV/AIDS with my parents or guardian	1	2
3.7.6 Other (please specify).....	1	2

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- 3.8** Do you have a partner? (Boyfriend or girlfriend)

Do you have a boyfriend or girlfriend?	Answer	
(Answer Yes/No)	Yes	No
3.8.1 Answer	1	2

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- 3.9 If yes:** What do you and your partner talk about in relation to HIV transmission?

What you and your partner talk about regarding HIV (Answer Yes/No)	Answer	
	Yes	No
3.9.1. Possibility of HIV infection	1	2
3.9.2 Safe sex	1	2
3.9.3 Going for an HIV test	1	2
3.9.4 We don't discuss issues on HIV	1	2
3.9.5 Other (please specify).....	1	2

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For office use

3.10 If you don't discuss issues on HIV what is your reason?

Reason for not discussing HIV (Answer Yes/No)	Answer		
	Yes	No	
3.10.1 I am too shy to talk about the topic	1	2	106
3.10.2 I don't think my partner has HIV	1	2	107
3.10.3 I am afraid of losing my partner	1	2	108
3.10.4 My partner is older than me	1	2	109
3.10.5 Other (please explain).....	1	2	110

PART 4 Risk behaviour regarding HIV transmission**For office use****(Please tick the answer that you agree with or is applicable to you)**

- 4.1 In your own opinion are young people such as school children at risk to HIV transmission? (Please tick your answer and give reasons)**

Are school children at risk to HIV (Answer Yes/No)	Answer			
	Yes	No		
4.1.1 (Give reasons for your answer)	1	2		111

- 4.2 Do you think there could be carriers of HIV in your class?**

Do you think there are HIV carriers in your class? (Answer Yes/No)	Answer			
	Yes	No		
4.2.1 (Give reasons for your answer)	1	2		112

- 4.3 What is the risk of having a HIV positive friend /classmate? (Please tick Yes or No)**

Risk of a HIV positive friend or classmate (Answer Yes/No)	Answer			
	Yes	No		
4.3.1 No risk	1	2		113
4.3.2 He/ she can spread the virus by touching someone in class	1	2		114
4.3.3 He/she can spread the virus by coughing in class	1	2		115
4.3.4 He/she can spread the virus by using someone's pen in class	1	2		116
4.3.5 He/she can spread the virus by sharing food with someone in class	1	2		117
4.3.6 He/she can spread the virus by sharing the toilet with classmates	1	2		118
4.3.7 He/she can spread the virus by washing hands with classmates	1	2		119
4.3.8 He/ she could sustain a bleeding injury	1	2		120
4.3.9 He/she could use an injection needle	1	2		121
4.3.10 He/she could spread the virus if we fight	1	2		122
4.3.11 Other (please explain)	1	2		123

For office use

4.4 How many partners do you have? (Please tick the response applicable to you)

How many partners (Answer Yes/No)	Answer	
4.4.1 One partner	1	
4.4.2 Two partners	2	
4.4.3 Three or more partners	3	
4.4.4 No partner	4	
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4.5 If you have a partner have you ever discussed the risk for HIV transmission?

Ever discussed HIV transmission with partner? (Answer Yes/ No)	Answer		
	Yes	No	
4.5.1	1	2	125

4.6 Have you discussed what you as partners would do if one of you tested positive for HIV?

Ever discussed what you would do if you tested positive for HIV?	Answer		
	Yes	No	
4.6.1 Answer (Give reasons for your answer).....	1	2	126

4.7 How does your HIV status influence your behaviour towards your partner?

How your HIV status influences your behaviour (Answer Yes/No)	Answer		
	Yes	No	
4.7.1 We talk about it	1	2	127
4.7.2 We use precautionary measures	1	2	128
4.7.3 We abstain from sexual intercourse	1	2	129
4.7.4 We are too scared to talk about HIV	1	2	130

4.8 Are you as an individual at risk to HIV transmission?

Individual risk to HIV transmission	Answer		
	Yes	No	
4.8.1 (Answer yes or no)	1	2	131

For office use**4.9 Why are you at risk to HIV transmission?**

Why you are at risk to HIV?	Answer	
	Yes	No
4.9.1 I do not always use a condom	1	2
4.9.2 I have been forced to have sex without a condom	1	2
4.9.3 My partner could be cheating on me	1	2
4.9.4 I do not know the HIV status of my partner	1	2
4.9.5 Other (please explain).....	1	2

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4.10 Why are you not at risk to HIV transmission?

Why you are not at risk to HIV (Answer Yes or No)	Answer	
	Yes	No
4.10.1 I am abstaining from sex	1	2
4.10.2 I always have sex using a condom	1	2
4.10.3 I have one uninfected partner	1	2
4.10.4 Other (please explain).....	1	2

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(Only if you are sexually active, answer items 4.11 - 4.14)**4.11 What do you do for protection against HIV transmission during sex?**

How you protect yourself against HIV during sex (Answer Yes or No)	Answer	
	Yes	No
4.11.1 Use a condom	1	2
4.11.2 Have sex while standing	1	2
4.11.3 Have sex with one uninfected partner	1	2
4.11.4 Avoid deep kissing	1	2
4.11.5 Use traditional medicines	1	2
4.11.6 I don't engage in sex	1	2
4.11.7 Other (please specify)	1	2

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4.12 Have you ever used a condom? (Give reasons for your answer)

Ever used a condom? (Answer Yes or No)	Answer	
	Yes	No
4.12.1 Answer	1	2

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For office use**4.13 If yes:** What is your reason for using a condom?

Reason for using a condom (Answer yes or No)	Answer		
	Yes	No	
4.13.1 To prevent HIV transmission	1	2	149
4.13.2 My partner insisted on using a condom	1	2	150
4.13.3 To prevent pregnancy	1	2	151

4.14 If no: What is your reason for not using a condom?

Reason for not using a condom (Answer Yes or No)	Answer		
	Yes	No	
4.14.1 Condoms not available	1	2	152
4.14.2 Forced into sex without a condom	1	2	153
4.14.3 Don't know how to use it	1	2	154
4.14.4 Other (please specify).....	1	2	155

4.15 What do you consider as risk behaviour regarding HIV transmission?

What do you consider as risk behaviour? (Answer Yes or No)	Answer		
	Yes	No	
4.15.1 Having many sexual partners	1	2	156
4.15.2 Having sex for money	1	2	157
4.15.3 Having sex without a condom	1	2	158
4.15.4 Having untreated sexually transmitted infections	1	2	159
4.15.5 Other (please specify).....	1	2	160

4.16 How can one change his/her behaviour to reduce the risk of HIV transmission?

How one can change His/Her behaviour? (Answer Yes or No)	Answer		
	Yes	No	
4.16. 1 Abstain from sex until a permanent partner is found	1	2	161
4.16.2 Use condoms always	1	2	162
4.16.3 Have one sexual partner	1	2	163
4.16.4 Avoid alcohol and drugs	1	2	164
4.16.5 Other (please specify).....	1	2	165

THANK YOU FOR TAKING PART IN THIS STUDY