PERCEPTIONS OF ADOLESCENT HIGH SCHOOL LEARNERS OF HIV COUNSELLING AND TESTING IN MADIBENG SUB-DISTRICT, NORTH WEST PROVINCE

by

SEKGERO AKISA MOKABA

submitted in accordance with the requirements for the degree of

MASTER OF ARTS

in the subject

HEALTH STUDIES

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROF GB THUPAYAGALE-TSHWENEAGAE

NOVEMBER 2013
CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) has been the fastest growing epidemic globally. South Africa is one of the African countries that is highly affected by HIV/AIDS pandemics especially among young people (National Department of Health 2010c:1). South Africa has a generalised, hyper endemic HIV epidemic with prevalence exceeding 18% (National Department of Health 2010c:1). HIV prevalence among pregnant women is estimated at 29.3% (National Department of Health 2011:3). The country has an estimated 5.7 million people living with HIV (UNAIDS 2008:13). Within the infected population, 90 000 are babies born with HIV, and 85% of infections occur through heterosexual sex in the general population (National Department of Health 2010c:11).

The National Sexual Assault Policy (2008:3), specifically targets the 15-49 age groups, and subsumed under these two broad categories are “young people” who fall in between 10-24 years age group. There are many risk factors that young people are facing that expose them to HIV such as, peer pressure, early sexual debut, substance and drug abuse leading to unprotected sex, teenage pregnancy, sex with multiple partners, high risk of sexual coercion abuse and high frequency of sex. Other sex patterns associated with this pandemic are age differences in relationships, peer pressure and a need for young people to belong (National Department of Health 2010c:40).

The National Strategic Plan for HIV/AIDS and STIs, 2007-2011 outline four key priority areas for the country which are: prevention; treatment; quality health care and support; research, monitoring and surveillance.

Two primary goals of the National Strategic Plan for HIV/AIDS are to reduce the number of new infections by 50% by 2015, and to reduce the impact of HIV and AIDS on individuals, families, communities and society by expanding access to an appropriate
package of treatment, care and support to 80% of all people diagnosed with HIV (National Department of Health 2010c:2).

In South Africa, the first diagnosis of AIDS was reported in 1993 (Walker, Reid & Cornwell 2004:12). Now the country is approaching 30 years since HIV and AIDS was discovered in South Africa but still there is no cure, and the infection is increasing at an alarming rate. This may be the reason why the government of South Africa suggested that school learners be tested for HIV at school (e-TV, 2011: The news at seven. 29 January 2011, 19:00).

Therefore, the current study focuses on exploring the perception of adolescent high school learners towards HIV testing at school. HIV voluntary testing includes among others pre-test, post-test and ongoing counseling that need time depending on the understanding of the individual learner. A quantitative explorative, descriptive and contextual research will be undertaken to investigate the perception, attitude views and ideas that high school learners have about voluntary HIV counseling and testing at school.

1.2 THE RESEARCH PROBLEM

A research problem is an enigmatic, perplexing, or troubling condition (Polit & Beck 2008:81). Both qualitative and quantitative researchers identify a research problem within a broad topic area of interest. The purpose of this research is to answer a research question by collecting and analysing data on phenomena (Polit & Beck 2008:81).

1.2.1 Source and the background to the research problem

1.2.1.1 Source of the problem

The researcher has had an opportunity of working in the Department of Health clinic where HIV testing is offered to the clients as one of the departmental programmes. When listening to news on television (e-TV, 2011: The news at seven. 29 January 2011, 19:00). The South African Government through its Minister of Education announced that the school learners should be tested for HIV at school. The Department of Health (2005:3, 40) is guided by HIV counseling and testing guidelines.
The following question needs to be empirically answered:

“Will it be possible to do HIV voluntary counseling and testing at high school”?

Polit and Beck (2008:81) indicated that explicit sources that might fuel researchers’ curiosity include clinical experience, the nursing literature, social issues, theories and suggestion from others.

1.2.1.2 Background to the problem

HIV and AIDS is a major health problem in almost every province of South Africa. Many young people seem not to believe that HIV and AIDS exist or they think they are immune from the disease. Most of the school learners are in denial until they are tested and found to be HIV positive, some of the young people do not understand the meaning of HIV positive results due to denial and disbelief. According to Kalichman (2009:8), denial is the outright rejection of science and medicine, a refusal to accept that something unpleasant or painful is true. The learners have the belief that a person who is infected with HIV is sick and will be seen by having signs and symptoms defining HIV like weight loss, coughing, fever, rash, diarrhea and others. They do not understand that there are stages of HIV, of which stage 1 is asymptomatic as classified by the World Health Organization (WHO) (National Department of Health 2010b:7, 76).

In a 2011 study done by the Centers for Disease Control and Prevention (CDC) reported an uneven burden of HIV/AIDS to be greater among the adolescents aged 13-19 years. Most of the adolescents who are HIV infected had been found to have been involved in risky behaviours such as substance use and the majority of them are were not even aware of their HIV positive status (CDC 2011:1).

Practicing unprotected sex makes people to be prone to HIV infection and sexually transmitted infections (Simpson 2009:46).

Muvumba and Pharoah (2008:149) in their study showed that the illness and death of caregivers because of AIDS reduce the wellbeing of children in several ways. It is suggested that the educational, social, economic and psychological problems encountered by children may be most severe prior to a parent’s death. It is the
researchers’ assertion that if high school going adolescents are tested their well-being may be further compromised, especially if their HIV results are positive?

1.3 STATEMENT OF THE RESEARCH PROBLEM

Adolescent high school learners usually come to the health facility mainly for family planning especially girls. What is most intriguing is that, they do not ask for HIV test unless referred by the health professional if there is indication for HIV test. Given all the health education on HIV and AIDS and the importance of testing very few adolescents, attending high schools voluntarily ask for HIV testing. Strategies such as the HCT programme have been introduced in schools to allow adolescents attending high schools and other learners to test without censure of adults. However, this strategy does not seem to be effective as its usage is very low (Gatta & Thupayagale-Tshweneagae 2012:29).

Previous studies (Gatta 2012:103; Trump & Hugo 2005:5) alluded to the attitude of health care workers and the ignorance of the public as a major factor that impedes people including school learners to utilise health care programmes effectively.

According to HIV Counseling and Testing (HCT) Policy Guidelines (National Department of Health 2010c:32), a child is considered to be sufficiently mature if they can demonstrate that they understand information on HIV testing and can act in accordance with that appreciation. In deciding whether a child is sufficiently mature factors that should be taken into account include:

- Age: the older the child the more likely it is that they will have sufficient maturity.
- Knowledge: children with knowledge of HIV/AIDS and its implications are more likely to understand its consequences.
- Views: children who are able to articulate their views on HIV testing and whether it is in their best interest are likely to meet the maturity requirements
- Personal circumstances: an assessment of the child’s personal situation and their motivations for HIV testing may help in assessing their maturity.
As a community member and a clinical nurse practitioner in Madibeng sub-district, the researcher observed that there is a great concern to educate school learners about HIV counseling and voluntary testing.

Therefore, the statement of the research problem for this study is:

What are the perceptions, attitudes, opinions and fears of adolescent high school learners towards HIV counseling and voluntary testing in Madibeng sub-district, North West Province?

1.4 THE STUDY PURPOSE

The purpose of the study is to investigate the perceptions, attitudes, and opinions of adolescent high school learners towards HIV counseling and voluntary testing at school.

1.4.1 Research question

In order to achieve the purpose of, the study aimed at answering the following research question:

What are the perceptions, attitudes and opinions and of adolescent high school learners towards HIV counseling and voluntary testing in Madibeng sub-district of the North West Province in South Africa?

1.4.2 Research objectives

The research objectives of this study are to:

- Explore and describe the perceptions of adolescent high school learners towards HIV counseling and voluntary testing at school.
- Recommend to health care authorities strategies that could be used to encourage HIV testing and counseling among school going adolescents.
1.5 **SIGNIFICANCE OF THE STUDY**

A crucial factor in selecting a research problem to be investigated is its significance to nursing’s body of knowledge. Evidence from the study should have the potential of contributing meaningfully to nursing practice (Polit & Beck 2008:86). Knowing school going adolescent perceptions will assist health care managers to tailor-make health education and promotion strategies that will encourage their consent to HIV testing and counseling. The results of this study can also be used as a basis for a larger study on what needs to be done to encourage HIV testing among school going adolescents.

1.6 **DEFINITION OF KEY CONCEPTS**

For the purpose of the study, the following terms are conceptually and operationally defined as follows:

1.6.1 **Adolescent**

Adolescent is a young person who is developing from a child into an adult: between the ages of 13 and 18 and the problems they face (*Advanced Learners Dictionary* 2010:19). For the purpose of the study adolescents will mean high school learners aged 12-18 years.

1.6.2 **Counseling**

Counseling is giving information about HIV testing which includes group information session and individual information session offered by a counselor or health care provider (Clinical Guidelines: Prevention of Mother-to-Child Transmission (PMTCT) 2010:9).

The act or process of assisting and guiding client by a trained person on a professional basis, to solve personal, social or psychological problems and difficulties (Oxford Concise Dictionary 1995:305). A professional advice about a problem (*Oxford Advanced Learner’s Dictionary* 2010:332).

**Counseling** is a facilitative process in which the counselor, working within the framework of a special helping relationship, uses specific skills to assist clients to develop
self-knowledge, emotional growth, emotional acceptance and personal resources (Van Dyk 2008:219). In this study counseling means giving information about HIV counseling and voluntary testing to the adolescent learners to combat the spread of HIV infections.

1.6.3 High school

According to Concise Oxford Dictionary (1995:1248), high school is defined as education for those who have had primary education usually from 11-18 years.

A school for young people between the ages of 14 and 18 years (Oxford Advanced Learner’s Dictionary 2010:708).

In this study, high school is the institution where adolescent learners receive secondary education from grade 8-12 who are under the age of 18 years, irrespective of gender.

1.6.4 Human immunodeficiency virus (HIV)

HIV is one of the viruses that contain RNA instead of DNA in their cores, and these are called retroviruses. Retroviruses are the only living organisms with RNA in their nuclei (Van Dyk 2008:9).

Is an acronym for Human immunodeficiency virus. HIV is a virus that causes suppression of white blood cells, which leads to destruction of human immune system (National Department of Health 2010c:65).

HIV as stated in WHO Guidelines Health Topics 2012. World Health Organization is a retrovirus that infects cells of the immune system, destroying or impairing their function, as the infection progresses, the immune system become weaker and the person becomes susceptible to infections.

Collins English Dictionary and Thesaurus (1995:713) defines HIV as a kind of virus that gets into your body through body fluids such as semen or vaginal secretions, infected blood and mother to child transmission causing AIDS. HIV is a retrovirus, which causes AIDS (Concise Oxford Dictionary 1995:644).
1.6.5 Learner

Leaner is a person who is learning a subject or skill (Concise Oxford Dictionary 1995:774). The *Oxford Advanced Learner’s Dictionary* (2010:846) defines learner as a person who is finding out about a subject or how to do something.

In this study, learners are all individuals under the age of 18 years attending the same high school from grade 8-12.

1.6.6 Perception

The process of using the senses to acquire and understand information about the surrounding environment or situation (The *World English Dictionary* 2009 [SA]).

*The Oxford Advanced Learner’s Dictionary* (2010:1087) defines perception as the ability to understand the true nature of something; an idea, a belief or an image you have as a result of how you see or understand something.

In the study, perception refers to the ability of adolescent high school learners to self-report opinions, attitudes, and fears and to understand positively value HIV counseling and voluntary testing as a necessary behaviour to combat the spread of HIV infection.

Perception is the process by which people translate sensory impressions into a coherent and unified view of the world around them, though necessarily based on incomplete and unverified or unreliable information, perception is equated with reality for most practical purposes and guides human behaviour in general

1.6.7 Voluntary testing

Voluntary testing is defined as HIV counseling and testing that involves individuals and couples actively seeking out these services. The process is voluntary, and informed consent counseling and confidentiality must be observed (National Department of Health 2010c:63).
Testing is an umbrella term used to describe the services that combine HIV counseling and voluntary testing. The HIV policy precisely distinguishes between two types of counseling and testing services, which are those that are client initiated and those that are provider initiated.

In this study HIV voluntary testing refers to HIV testing services that involves high adolescent high school learners who are in grade 8-12, under the age of 18 years with the consent of their parents.

1.7 METHODOLOGY

1.7.1 Research design

A quantitative descriptive cross-sectional design was used to investigate the perceptions and opinions of adolescents attending high schools in Madibeng District of the North West Province of South Africa.

1.7.2 Setting

The study was carried out in the two villages of Madibeng District for their accessibility to the researcher. The two villages are Majakaneng and Bapong. Each of these villages has one high school each and both schools were used.

1.7.3 Population and sample

The study population in this study consisted of all adolescent high school learners from grade 8 to 12 registered as learners at high schools in Madibeng District of the North West Province of South Africa. The respondents in the study were aged between 12 and 18 years in the two schools selected for the study in the Madibeng District.

1.8 OUTLINE OF THE DISSERTATION

The study will be divided according to chapters for easy reading as outlined in table 1.1:
Table 1.1 Outline of the dissertation

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<th>Description</th>
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<td>Introduced the study, overview of the research problem, purpose and significance of the study, and the research design and methodology</td>
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<td>2</td>
<td>Literature review</td>
<td>In depth review of the literature related to the topic under investigation</td>
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<td>3</td>
<td>Research design and methodology</td>
<td>The plan on how to address the research question, objectives including collection of data, validating and ensuring reliability of data, and ethical considerations</td>
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<td>Conclusion, limitations and recommendations</td>
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1.9 CONCLUSION

In chapter 1, the researcher gave the orientation of the study. The background, problem statement, purpose, objectives, significance, methodology and the sequence of chapters are presented as an overview. Conceptual and operational definitions of terms are also presented. An outline of structure of chapters of the dissertation is also presented on a table format.

Chapter 2 will discuss the literature review conducted on the phenomenon under the study and the theoretical framework suggested as basis for the study.
CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The purpose of this chapter is to provide an overview of literature relevant to the study of high school going adolescents' perception towards HIV counseling and testing. A literature review is a critical summary of research on a topic of interest, often prepared to put a research problem in context (Polit & Beck 2008:757).

In this study, the purpose of the literature review is to obtain information on knowledge and perception towards HIV counseling and testing by high school going adolescents. The information will assist the researcher's understanding of the existing situation high school going adolescents are facing with regard to HIV counseling and testing and identify areas requiring further interventions and investigations. Identification of what is already known in the area of the study ensures that the researcher does not duplicate the study, which was done but concentrates on areas that can contribute to new knowledge. The literature review focused on HIV/AIDS in South Africa, HIV and AIDS among adolescents; the sexual attitudes and behaviour and health services available for school learners, lastly the chapter will discuss the health belief model as a framework used to guide the study. The study first discusses the adolescent phase.

2.1.1 The adolescent phase

The term ‘adolescence’ describes the transition from childhood to adulthood that is marked by distinct biological, cognitive and socio-cultural changes (Ajdukovic 1998:209). Adolescence is a period when individuals become increasingly aware of themselves as social beings. It involves the establishment of an adult identity, which is a complex and demanding process. This means that adolescents will face key development issues (Li et al 2008:150).
For the purpose of this research ‘adolescence’ will refer to late adolescents. During this phase of development, intimate relationships take precedence to parental guidance and although there is increased concern for the future, how to evaluate life choices remains a blur for most late adolescents (Murphy 2010:3).

2.2 HIV/AIDS IN SOUTH AFRICA

South Africa is one of the African countries that are highly affected by HIV/AIDS pandemics with prevalence especially among young people (Harrison, Newell, Imrie & Hoddinott 2010:2). HIV prevalence among pregnant women is estimated at 29.3% (South African 2008 National HIV and Syphilis Prevalence Survey). The country has an estimated 5.7 million people living with HIV (UNAIDS 2008:13). Within the infected population, 90 000 are babies born with HIV, and 85% of infections occur through heterosexual sex in general population (National Department of Health 2010c:11).

HCT has become increasingly available in South Africa in recent years. Over 4500 public health facilities are offering routine HIV testing routine HIV testing and client-initiated counseling and testing (CICT) also known as VCT. HCT is also offered through mobile services, as well as non-medical sites.

In South Africa the first diagnosis of HIV infected person was reported in 1993 (Walker et al 2004:12). It is about 30 years since HIV/AIDS was discovered in South Africa but still there is no cure, and the infection is increasing at an alarming rate.

The National Strategic Plan for HIV and AIDS and STIs, 2007-2011 (NSP) is a concerted and coordinated response to the epidemic in South Africa. The NSPs two primary goals are to reduce the incidence of new HIV infection in South Africa by half, and to ensure that at least 80% of those who are already HIV positive have access to treatment by 2011(National Department of Health 2010c:11).

Adolescents at school are part of this program but it seems they do not go to the health facilities for HIV counseling and testing – Young boys engage in sexual activities at the age of 15 years. A boy from Limpopo said: "When you are fifteen years old, your blood may start working and you will fail to control it. Even if your blood wants sex while you don't have anything [a sexual partner] it is no use to resist. What I am saying is that when
you are fifteen your feelings rise up and you will be ready to sleep with a girl. You cannot wait until you are 20 years old. It may be possible but it will be very difficult, your blood rises and you go and look for a girl to drain this from your body. You can use a condom; you just want to drain something from your body” (Walker et al 2004:29).

This statement reveals that adolescents can be controlled by feelings and indulge themselves into sexual activities without thinking about HIV infection and without using protection.

2.2.1 HIV among adolescents in South Africa

Adolescents in the sub-Saharan Africa experience the highest incidence of HIV in the world (UNAIDS 2010:5). The highest incidence is in Southern Africa, and the majority of these adolescents are in South Africa (Harrison, Newell, Imrie & Hoddinott 2010:2). The National Sexual Assault Policy (2008:3) specifically targets the 15-49 age groups, and subsumed under these two broad categories are "young people" who fall in between 10-24 years age group.

Some of the risk factors that expose young people to HIV and AIDS are facing that expose them to HIV such as early sexual debut, sex with multiple partners, unprotected sex, high risk of sexual coercion abuse and high frequency of sex. Other sex patterns associated with this pandemic are age differences in relationships, peer pressure and a need for young people to belong (National Department of Health 2010c:40).

2.2.2 HIV/AIDS risk perception among adolescents

Published studies in sub-Saharan Africa denotes the youth as perceiving themselves to be at low risk for contracting HIV infection even where they do not use any protection (Camlin & Chimbwete 2003:232; Barden-O’Fall, Graft-Johnson, Bisika, Sulzbach, Benson & Tsui 2004:132). According to Maughan-Brown (2006:166), HIV/AIDS risk perception among adolescents is minimised because of the stigma associated with HIV and AIDS (Thuppyagal-Tshweneagae & Mokomane 2012:137). It is because of the stigma that adolescents do not want to associate themselves with being at risk to acquiring HIV and ultimately diagnosed with AIDS related conditions.
Studies report that the perception among adolescents on their low rate for contracting disease place them in danger of indulging in unprotected sexual relations and consequently getting pregnant (Anderson, Beutal & Maughan-Brown 2007:3; Gatta & Thupayagale-Tshweneagae 2013:3). This assertion is further supported in literature by Eaton, Flisher and Aaro (2003:150) who reported that individuals who do not think are at risk of HIV infection have reduced perceived vulnerability. It was further noted that adolescents may perceive themselves as not being at risk of HIV infection even when they know someone who has died of AIDS and someone who has contracted it. The perception that adolescents are not at risk of contracting HIV encourages risky sexual behaviours (Ross, Dick & Ferguson 2006:2). Lack of scientific consensus on how to assist improve adolescents’ perception about the risk to contacting the HIV prompted this study.

2.2.3 HIV/AIDS and HCT information needs of adolescents

Adolescents would like to be provided with adequate information when they go for HIV testing. This is done through pre, post and ongoing counseling sessions. It is clear that young people value opportunities for counseling and that more than one session is required to adequately explore their needs (Boswell & Baggaley 2002:7). In order for adolescents to make decision to be tested, adequate time should be available to provide information before and after the test. This will be done during pre- and posttest counseling sessions.

2.2.3.1 Pre-test counseling session

During pre-test counseling, the following need to be done:

**Group information pre-test session**

- Information about HIV acquisition and transmission.
- Information about effective HIV prevention measures, including consistent correct use of condoms, partner reduction and other options.
- Emphasis on the importance and advantages of early HIV testing to facilitate diagnosis, positive living, and healthy lifestyle.
- Discussion on confidentiality and shared confidentiality.
• Discussion on the option not to take the test.
• Offer opportunity to test later should the client decline the test.
• The importance of TB symptomatic screening during pre and post test counseling.
• Referral to HIV and AIDS related services such as nutrition, TB screening, STI screening, CD4 cell count, opportunistic infection management and clinical staging.

2.2.3.1.1 Pre-test individual counseling session

• Assessment to determine whether the information provided in the group session has been absorbed.
• Opportunity to respond to unanswered questions, and attempt to clarify any misunderstandings.
• Discussion of specific issues for individual and assessment of individual risk, including determining whether there is a history of domestic violence.
• Discussion on risk reduction and the window period should the client test HIV negative.
• Discussion of prevention strategies including delayed sexual debut, abstinence and regular use of condoms.
• Discussion on the way forward and management options including TB screening, clinical staging, CD4 count, pre-antiretroviral treatment (ART) management and healthy lifestyle, should the client test HIV positive.
• Discussion on partner involvement and referral for testing.
• Discussion of the option to refuse to test.
• Obtaining written or verbal informed consent for HIV testing.

2.2.3.2 Post-test counseling session

All clients should receive post-test and on-going counseling regardless of the outcome of the results.

HIV negative clients should be counseled on TB screening, risk reduction, correct and regular use of condoms. Window period should be explained.
HIV positive clients must be counseled about their HIV status after the second confirmatory test is also positive. They need counseling about possible emotional responses, risk reduction of transmission, healthy lifestyles and nutrition, ongoing positive living and psychosocial support. They need to be referred for ART assessment and on-going counseling sessions.

### 2.2.4 Models for provision of services to adolescents

There are various models for adolescents to access HCT services this include integration into the primary health care as youth user friendly venues or corners, integration into school and college health care services, youth centers and mobile services (Boswell & Baggaley 2002:8).

Adolescents are more concerned about their privacy and are fearful of others finding out about their HIV status. They prefer to have their testing in the facility where they will not be seen by neighbours, relatives or parents and places where they where it will be not easy for people to notice that one had undergone testing.

### 2.2.5 Service points

At service points the following must be highlighted:

- Encouraging everyone to take up HIV counseling and testing.
- Strengthening integration of HCT services into the primary health care package by promoting communication about HIV testing to all clients accessing services, and especially clients accessing services such as FP, ANC, TB, PEP, IMCI and STI.
- Promoting messages targeting health care workers to maximise HCT service delivery.
- Strengthening counseling on HIV prevention including condom use, partner reduction and family planning.
- Developing and disseminating messages at health facilities to encourage referral to relevant prevention, treatment, care and support services.
- Strengthening awareness of HCT services among clients at health care facilities through signage placed prominently next to service points and within the health facility (National Department of Health 2010c:49).
2.2.6 HIV counseling and testing of adolescents

- HCT services should be enabling the youth to take up HIV counseling and testing. This is important for establishing a youth friendly environment where young people can be at ease during the interaction and can comfortably communicate their needs, questions and personal concerns.
- As far as possible, HCT services should attempt to provide service to young people in a "one-stop-shop" fashion: wherever young people are sent to a further location for another service there is an increased risk that they will not actually show up.
- Where comprehensive, "one-stop-shop" service provision is not possible, it is important that HCT staff refer and link young people to responsible agencies that provide appropriate, youth-friendly support.
- Service provider training should include the following: a sound understanding of youth-friendly pre- and post-test counseling approaches, understanding adolescent development, and appropriate medical, psychosocial and developmental options according to age and maturity (National Department of Health 2010c:41).

When HCT is done at school adolescents may feel comfortable and at easy as the test will happen away from their parents, relatives and neighbours and at the environment they are used to it.

2.3 THE HEALTH BELIEF MODEL

The model postulates that health-seeking behaviour is influenced by a person's perception of a threat posed by a health problem and the value associated with actions aimed at reducing the threat. The major components of the HBM include perceived susceptibility, perceived severity, perceived benefits and costs, motivation, and enabling or modifying factors (Polit & Beck 2008:150).

The HBM was used in tuberculosis programs, cervical cancer screening, seat belt use, and family planning programs. It is believed that people will take action either to prevent, screen for, or to control ill health conditions if they consider themselves as susceptible to
the condition and believe that the condition would lead to potential serious consequences (severity), if they believe that a course of action available to them would be beneficial in reducing either susceptibility for the condition, and if they believe that the anticipated barrier to (or cost of) taking action are outweighed by its benefits.

In the study the theoretical variables of the HBM which are perceived susceptibility, perceived severity, perceived benefits, perceived barriers and self-efficacy.

2.3.1 Perceived susceptibility

Perceived susceptibility is a person's perception that a health problem is personally relevant or diagnosis is accurate (Polit & Beck 2008:150). People should recognise that they are susceptible to a certain problem or condition that would have serious implications to their health.

2.3.2 Perceived severity

Perceived severity is one's opinion about how bad a problem or condition can be for one's health. Even when one recognises personal susceptibility, action will not occur unless the individual perceives the severity to be high enough to have serious organic or social implication (Polit & Beck 2008:150).

2.3.3 Perceived benefits

Perceived benefits are the patients' beliefs that a given treatment will cure the illness or help to prevent it (Polit & Beck 2008:150). The person has to believe that other conditions can be prevented if one takes care of one's health by taking certain actions.

2.3.4 Perceived barriers

These are perceived costs are the complexity, duration, and accessibility of the treatment (Polit & Beck 2008:150). These could be several barriers that can affect one's decision making to take a particular action. It is when a person realises that one has the ability to deal with the barriers that one would be able to take the necessary action.
2.3.5 Motivation

This is the desire to comply with a treatment. Among the modifying factors that have been identified are personality variables, patient satisfaction, and sociodemographic factors (Polit & Beck 2008:150).

![Health Belief Model Diagram]

Figure 2.1 The Health Belief Model

2.4 CONCLUSION

This chapter discussed the HBM and literature relevant to HCT and perceptions of high school adolescents. Assumptions are embedded (unrecognised) in thinking and behaviour, and uncovering these assumptions require introspection and knowledge base in the particular field of study (Burns & Grove 2005:39). Adolescents need more information regarding all matters around HIV testing.

Chapter 3 discusses the research method used in this study including research design, sampling, data collection and data analysis.
CHAPTER 3

RESEARCH DESIGN AND METHOD

3.1 INTRODUCTION

This chapter focuses on the method used in gathering data from the sampled participants and provides a detailed description of the rationale behind the research methodology. The chosen research design, sampling procedures, data collection procedures, data analysis and ethical consideration are discussed.

3.2 RESEARCH DESIGN

Research design is a blueprint for conducting a study that maximises control over factors that could interfere with the validity of the findings (Burns & Grove 2005:211). Polit and Beck (2008:765) define research design as the overall plan for addressing a research question, including specifications for enhancing the study’s integrity. Research design is the structured approach which allows for the researcher to answer a particular research question (Joubert & Enrich 2007:77). The research design involves a plan, structure and strategy of the study. These three research design concepts guide a researcher in writing the research questions, conducting the project, and in analysing and evaluating the data (Haber & Lobiondo-Wood 2006:202). A research design refers to those “groups of small, worked-out formulas from which prospective quantitative researchers can select one that is suitable to their specific research questions and objectives” (Fouché & De Vos 2005:133). The quantitative approach was used to conduct a survey on the phenomenon of interest.

The current study employs a quantitative, descriptive cross-sectional study design in chosen high schools under the administration of Madibeng sub-district, North West Province.

In the study, a quantitative approach allowed the researcher to gain in depth understanding of the respondents’ perceptions of adolescent high school learners
towards HCT at school. The quantitative approach provided a method to collect statistical data for analysis and reporting. The main purpose of scientific research is to explore the association among primary variables in an effort to gain a better understanding of the phenomena under the study (Haber & LoBiondo-Wood 2006:206). This study therefore used a non-experimental, descriptive and quantitative research design.

A cross-sectional school-based design using quantitative methods was employed in this study to assess perception, attitudes, knowledge and understanding towards HCT services, and factors influencing the use of these services by adolescent high school students in Madibeng sub-district, North West Province.

3.2.1 The rationale for choosing a descriptive, exploratory design

A descriptive, exploratory design was chosen for this study so that the status of the research variables could be assessed at one point in time. The study aims at producing information that would provide answers to questions as to whether there are perception and attitude gaps about HIV counseling and testing, as well as factors influencing use of HCT services by adolescent high school learners in high schools.

LoBiondo-Wood and Haber (2006:240) describe exploratory, descriptive, and comparative surveys as designs where there is collection of detailed descriptions of existing variables. Data is used to justify and assess current conditions and practices or to make more plans for improving health care practices.

3.2.1.1 Quantitative design

Quantitative research is numeric information that results from some type formal measurement and that is analysed with statistical procedures. Quantitative research is also defined as the investigation of phenomena that lend themselves to precise measurement and quantification, often involving a rigorous and controlled design (Polit & Beck 2008:16, 763).

According to Burns and Grove (2011:34), quantitative research is a formal, objective, rigorous, systematic process for generating numerical information about the world. Quantitative research is conducted to describe new situations, events, or concepts;
examine relationships among variables; and determine the effectiveness of treatment in the world.

Quantitative researchers use scientific methods referring to a general set of orderly, disciplined procedures used to acquire information. They use deductive reasoning to generate predictions that are tested in the real world. By systematic, the investigator progresses logically through a series of steps, according to a pre-specified plan of action. Control involves imposing conditions on the research situation so that biases are minimised and precision and validity are maximised. Empirical evidence - evidence that is rooted in objective reality and and gathered directly or indirectly through senses. Generalisation of the research is the degree to which research findings can be generalised to individuals other than those who participated in the study, it is widely used criterion for assessing the quality of quantitative studies.

In this study the data is gathered from a population that is too large to observe, information obtained is about the prevalence, distribution and interrelations of variables within a population. Information obtained from respondents by means of self-report. Self-report means that the respondents reply to a set of structured questions in a questionnaire (Annexure D).

### 3.2.1.2 Descriptive design

Descriptive studies are considered an essential phase in the development of nursing knowledge because they form the basis for future research by generating questions and hypotheses for subsequent experimental studies (Streubert & Carpenter 1995:36). The focus of descriptive studies is on the situation as it is, that is, conditions that exist, practices that prevail, beliefs, attitudes and ongoing processes (Babbie 2001:93). The descriptive design was most appropriate for this study because it investigate factors that were not known. The detailed information on the topic is collected that require a thorough description of the situations and events that are influencing the perceptions and attitudes of adolescent high school learners towards HCT in the North West Province, South Africa.

A descriptive design was chosen for this study to assess the status of the research variables at one point at one time. The aims of the study is produce information that would
provide answers to questions as to whether there is knowledge and attitude gaps about HIV and HCT utilisation, including factors influencing HCT uptake by adolescents high school learners.

3.2.1.3 Explorative design

Exploratory research aims at understanding the phenomenon of interest (Polit & Hungler 1999:19). Exploratory studies addresses the issues that have not previously been studied and attempt to identify new knowledge, new sights, new understandings, and new meanings and to explore factors related to the study.

Polit and Beck (2008:20) outlined that explorative research design begins with a phenomenon of interest, but rather than simply observing and describing it, exploratory research investigates the full nature of the phenomenon, the manner in which it is related.

Explorative design is relevant in this study, as the researcher will explore the perceptions and attitudes of adolescent high school learners towards HIV counseling and voluntary testing.

3.2.1.4 Non-experimental research

According to Polit and Hungler (1999:178) a non-experimental designs are conducted to explain phenomena and test the theoretical proposition to predict the occurrence and magnitude of the phenomena and to describe various characteristics and conditions. There are many variables in the study, but the primary purpose of the study was to describe the perceptions and attitudes of each learner and not to relate them to one another. A non-experimental research design was used in the study because it allowed the researcher to collect data without introducing any new treatment or changes to the subjects.

By using non-experimental research, it ensured that social processes occurring in natural social settings were observed which might not be the case with experimental research (Babbie 2001:235). The non-experimental design used in the study was descriptive. The intent of descriptive research is neither to explain nor to understand the underlying
causes of variables of interest (Polit & Hungler 1999:175). The experimental design was not deemed appropriate for this particular study.

A non-experimental research design is furthermore appropriate because a vast number of characteristics associated with individuals are inherent and subject to experimental research (Polit & Hungler 1999:177). It is therefore a non-experimental research design that would facilitate the collection of the required information in the natural settings of the respondents.

3.3 RESEARCH METHODOLOGY

Research methods are “the steps, procedures, and strategies for gathering and analysing data in the study” (Polit & Beck 2008:758). Research methodology is “the process or plan for conducting the specific steps of the study” (Burns & Grove 2009:719). The research methodology includes the population, sampling and technique, sample, and data collection and analysis (Brink, Van der Walt & Van Rensburg 2006:191).

Research methods are the techniques used to structure a study and to gather and analyse information in a systematic fashion (Polit & Beck 2008:765).

Research methodology refers to the steps, procedures and strategies for gathering and analysing the data (Polit & Beck 2004:723). This section discusses the study setting, population and sample selection.

3.3.1 Quantitative research approach

Quantitative research refers to a formal, objective, systematic process to describe and test relationships and examine cause-and-effect interactions between variables (Burns & Grove 2005:747).

The approach used in this study involves the systematic collection of quantifiable information. The data entry and analysis was done using the Statistical Package for Social Sciences (SPSS) Version 20. This approach was chosen because the study aimed at quantifying factors identified as motivating adolescent high school learners to for HCT in the Madibeng sub-district, North West Province.
3.3.2 Characteristics of quantitative research

This study complied with the characteristics of quantitative research stipulated by Polit and Hungler (1999:24) including:

- Quantitative research focuses on a relatively small number of specific concepts, which in this case are HCT and adolescent high school learners in the North West.
- Quantitative research begins with preconceived ideas about how the concepts are interrelated. In this study, there was an indication that adolescent high school learners seem not to participate in HIV counseling and testing meaning that there is an interrelationship between adolescents and their uptake of HCT.
- Quantitative research uses structured procedures and formal instruments. A structured interview schedule in the form of questionnaire was used to collect data from adolescent high school learners.
- Quantitative research methods emphasise objectivity in the collection and analysis of the data. Objectivity was achieved in the study using a structured interview scheduled and approved statistical methods and procedures for data analysis.

Polit and Beck (2008:758) define research methods as the steps, procedures and strategies for gathering information and analysing data in the study. Research methodology is the process or a plan for conducting the specific steps of the study (Burns & Grove 2009:719). The research methodology includes the population, sampling and sampling technique, sample, data collection and data analysis (Brink et al 2006:191).

3.4 RESEARCH POPULATION AND SAMPLE

Polit and Beck (2008:761) defined population as the entire set of individuals or objects having some common characteristics. A population is the totality of all subjects that conform to a set of specifications, comprising the entire group of people that are of the interest of the researcher and to whom the research results can be generalised (Polit & Hungler 1999:654).
3.4.1 Population

A study population is an aggregate of elements sharing some common set of criteria (Burns & Grove 2001:336). The population is described in terms of the population, inclusion criteria and sampling method. The research population in this study consists of all day adolescent high school learners in grade 8-12, boys and girls within the age group of 12 and 18 years registered as learners for the academic year of 2013 at the school identified as the research site.

3.4.2 Inclusion criteria

Inclusion criteria are a set of conditions that must be met for a participant to be included in the sample (Polit & Beck 2004:290). Determining the criteria is essential for the delineation of the study sample (Polit & Beck 2004:290). The inclusion criteria for the research participants were the following:

- Day time high school students attending high school (grades 8-12).
- Age 12-18 years, adolescent high school learners because this age group’s knowledge and attitudes are believed to be under continuous change (Griesel-Roux 2004:51).
- Public high schools are in the majority and hence admit many more students than the private schools under the city administration.

3.4.3 Sample size, sampling and sampling procedure

Sample is a subset of the population that is selected for a study (Burns & Grove 2011:548).

3.4.3.1 Sample size

Sample size is the number of subjects participating in the study. When critically appraising quantitative study in which no significance was found for at least one of the hypothesis or research questions, be sure to evaluate the adequacy of the sample size (Burns & Grove 2011:308). Power analysis can be used to estimate the sample size.
needs, but some statistical knowledge is needed before this procedure can be explained (Polit & Beck 2008:348).

For this study an attendance register in each grade was used to draw the list and select the number of respondents using the kth approach until the desired sample size is obtained. The total sample for this study were 120 respondents from grade 8 to 12.

### 3.4.3.2 Sampling

Sampling is a process of selecting a portion of the designated population to represent the entire population (Polit & Beck 2008:339). Similarly, a sample is a set of elements that make up the population. An element is the most basic unit about which information is collected (Haber & Lobiondo-Wood 2006:263). For the purpose of this study, systematic random sampling technique was used.

Random sampling is a specific selection technique, which can ensure that the sample is representative of the population (Joubert & Ehrlich 2007:95). The purpose of sampling is to study a sub-group of a population in order to make generalisations of the population from which the group was drawn (Joubert & Ehrlich 2007:104). For the current study, a sampling procedure was designed to ensure it represented of the study population.

### 3.4.3.3 Sampling procedures

The sampling selection composed of 150 grades 8-12 day time adolescent high school learners from the same high school, boys and girls ranging from age 12-18 years. Systematic random sampling – respondents are included in the sample are chosen at random from the same population. The accessible population for this study is the adolescent high school learners of the chosen high school in Madibeng sub-district, Bojanala district in the North West province.

### 3.4.3 Recruitment of the participants in the study

Participants for the study were recruited using convenience sampling. The researcher as part of the quality learning and teaching campaign in one of the high schools and as part of community health service provider in the primary health care clinic offering HCT in the
Madibeng sub-district, identified that school learners often visit the primary health care clinic mostly for contraception methods and do not visit the HCT/VCT facility. The participants were identified from the nearby two high schools which uses the health care facility where the researcher works. A deliberate effort was made to interview adolescents of all age groups (12-18) and both sexes to ensure that all categories of adolescent high school learners were represented.

3.5 DATA COLLECTION

Polit and Beck (2008:751) define data as the pieces of information obtained in a study. Data collection protocols are the formal procedures researchers develop to guide the collection of data in a standardised fashion.

In a cross-sectional study, data is collected on each study respondent at a single point in time (Bailey, Chandramohan, Langham & Vardulaki 2005:50). For this study, the students completed pre-developed structured self-administered questionnaires. The researcher visited the selected schools, and explained the process to the respondents. All information filled was anonymous; there was no personal identification of the participants to ensure anonymity of the responses.

3.5.1 The research instrument

The researcher developed a structured questionnaire with mostly close-ended questions but a few open-ended questions were included. The questionnaire was structured to give demographic data, knowledge of HIV and AIDS, knowledge of HCT services and attitudes.

According to Polit and Beck (2008:324), structured questionnaires allow for the exploration of patterns and trends, which help to describe what is happening and provide a measure of respondents’ attitudes and knowledge. Questionnaires are objective because information is gathered in a standard way and participants feel a greater sense of anonymity than with interviews.
3.5.1.1 Questionnaire

Questionnaire is a document used to gather self-report data via self-administration of questions (Polit & Beck 2008:763). Self-report, that is the study participants respond to a series of questions posed by investigators (Polit & Beck 2008:324).

Questionnaires differ from interviews in that they are self-administered. Respondents read the questions on a written form and give their answers in writing. Because respondents differ in their reading levels and in their ability to communicate in writing, questionnaires are not merely a printed form of an interview schedule. Care must be taken in a questionnaire to word questions clearly and simply. Self-administered questionnaires are economical but are not appropriate for surveying certain populations e.g. the elderly, children (Polit & Beck 2008:324).

In the study questionnaire is relevant because adolescent high school learners are able to read and write with understanding and the researcher explained the contents of the questionnaire with clear instructions on how to fill the questionnaire.

3.5.2 Reliability of the research instrument

The reliability of the research instrument is the extent to which the instrument yields the same results on repeated measures (Haber & Lobiondo-Wood 2006:345).

Reliability is the degree of consistency or dependability with which the instrument measures the attribute it is designed to measure. If the instrument is reliable, the results will be the same each time the test is repeated (Polit & Hungler 1997:308). Cronbach’s alpha co-efficient was used to establish the reliability of the instrument. The scale of reliability testing and Cronbach alpha values were in the region of greater than 0.65 which, according to the statistician, can be regarded as indicators of internal reliability.

Reliability is then concerned with consistency, accuracy, precision, stability, equivalence, and homogeneity (Haber & Lobiondo-Wood 2006:345). The following steps were taken to ensure reliability of these research instruments:
• The purpose of the study was explained to the participants in order to obtain their cooperation and participation in the study.
• The pilot study was carried out and the necessary adjustments made to the study.
• The researcher was available throughout the data collection process to answer and explain any aspects of the instruments that were unclear.
• Questions were made clear and no medical terms were used to enable participants to understand what the researcher needed.

3.5.2.1 Pre-testing of the instrument

The questionnaires were pretested using the same procedure and with a similar target group. The participants involved in pre-testing did not participate in the actual study.

The pre-tested findings showed that the questionnaires were well developed, except for a few modifications in structuring the questionnaire where headings such as demographic data, sexual history were made.

3.5.3 Validity of the research instrument

Validity is the degree to which an instrument measures what it is supposed to measure (Polit & Beck 2008:457). Validity means an instrument that accurately measures what it is supposed to measure (Haber & Lobiondo-Wood 2006:338). When an instrument is valid, it truly reflects the concept it is supposed to measure (Haber & Lobiondo-Wood 2006:238). The study validity is the measure of truth or accuracy of a claim (Burns & Grove 2001:226). Validity is an important concern throughout the research process.

The validity of the questionnaire was ensured by focusing on face, content, construct, internal, and external validity. The questionnaire was submitted to the study supervisor as well as experienced school health nurse working with the local schools to ensure that the content of the questionnaire represented the study phenomenon (LoBiondo-Wood & Haber 2006:338).
3.5.3.1 Content and face validity

Content validity is the degree to which the items in an instrument adequately represent the universe of content being measured (Polit & Beck 2008:750). Content validity represents the universe of content, or the domain of a given construct (Haber & Lobiondo-Wood 2006:338). The universe of content provides the framework and basis for formulating the items that will adequately represent the content (Haber & Lobiondo-Wood 2006:338). When an investigator is developing a tool and issues of content validity arise, the concern is whether the measurement tool and the items it contains are representative of the content domain that the researcher intends to measure (Haber & Lobiondo-Wood 2006:338). The researcher begins by defining the concept and identifying the dimensions that are the components of the concept (Haber & Lobiondo-Wood 2006:338).

For face and content validity of the research instrument, the researcher requested assistance from the study supervisor as well as from colleagues working in the area of HIV and AIDS in relation to youths. By doing this, the researcher relied on their individual judgements to evaluate content validity. The study supervisor reviewed the structured questionnaire.

To guarantee content validity of the structured questions, the researcher attempted to determine whether the content of the instrument adequately addressed the research topic. The sources from which evidence was obtained were the literature, and content experts who were colleagues working in the area of HIV/AIDS. According to Polit and Beck (2004:423), an instrument’s content validity is based on judgement and there is no objective method of ensuring the adequate content coverage of the instrument.

3.6 DATA COLLECTION PROCEDURE

After selection of the respondents by random sampling, participants were first given a consent form to sign and once completed the forms were placed in a box provided by the researcher, which was sealed once all the forms had been placed in the box. The consent forms were not attached to the questionnaires thereby preserving anonymity. Additional boxes were provided for questionnaires for each grade. The researcher handed the participants the questionnaire after a thorough explanation and after informed consent was obtained. The participants then filled in the questionnaire and dropped them in the
box provided. When all participants had filled out the questionnaires, the researcher then sealed the box and took it to the researcher’s office.

### 3.7 ETHICAL CONSIDERATIONS

Ethics deals with matters of right and wrong. The *Collins English Dictionary and Thesaurus* (1991:533) defines ethics as “a social, religious, or civil code of behaviour considered correct, esp. that of a particular group, profession, or individual”.

The rights of the participants in a research process are of immense important. Ethics is a system of moral values that is concerned with the degree to which research procedures adhere to professional, legal, and social obligations to the study participants (Polit & Beck 2008:753).

The ethical protection of adolescents was maintained throughout this study. Before the study began, ethical clearance was obtained from Research and Ethics Committee of the Department of Health Studies at UNISA (Annexure A). Institutional consent was gained from the Department of Education, the principal at one of the high schools in Madibeng sub-district in the North West Province after communicating through a formal letter from UNISA (Annexure B). The following ethical principles were observed:

#### 3.7.1 Permission

The researcher obtained written permission from the Research and Ethics Committee, Department of Health Studies, University of South Africa (Unisa) and the Department of Education, the Principal of the School at Madibeng sub-district in the North West Province (Annexure A and Annexure C).

The school administration of high school concerned gave permission to the researcher to conduct the study. The researcher further requested that the heads of the schools be present at the beginning of the data collection. The teachers in the different grades were notified orally before data collection.

The Research and Ethics Committee of the Department of Health Studies gave permission that this study could be collected (Annexure A).
3.7.2 Protecting the rights of the participants

The researcher protected the participants’ right to confidentiality, anonymity, privacy and informed consent (Annexure E). There are three primary ethical principles to be considered in research according to Pilot & Beck (2008:170). All the three aspects of ethical principles were looked. The principle of self-determination where the respondents have the right to decide voluntarily whether to participate in the study or to withdraw without risking any penalty or prejudicial treatment. They have the right to ask questions, to refuse to give information, the right to privacy, no names will be used or any information that may invade the privacy of the respondents or what so ever, privacy will be maintained throughout the study. Both the respondents and their parents/guardians signed informed consent (Annexure E).

The respondents were made aware that they were not forced to answer any questions if they felt that, that question violated their privacy and that they are allowed to withdraw from participating anytime without penalty.

3.7.2.1 Confidentiality

Confidentiality is the researcher's management of private information shared by a subject or participant (Burns & Grove 2011:117). The protection of study participants so that data provided are never publicly divulged (Polit & Beck 2008:750). The researcher must refrain from sharing that information without the authorisation of the subject.

Confidentiality is grounded in the following premises:

- Individuals can share personal information to the extent they wish and are entitled to have secrets.
- One can choose with whom to share personal information.
- Those accepting information in confidence have an obligation to maintain confidentiality.
- Professionals, such as researchers, have a duty to maintain confidentiality that goes beyond ordinary loyalty (Levine 1986:164 cited in Burns & Grove 2011:117).
In the study the participants' personal information like names, identity numbers and their addresses were not revealed to maintain confidentiality and the consent forms were separated from the questionnaires.

3.7.2.2 Anonymity

Complete anonymity exists when the subject’s identity cannot be linked, even by the researcher, with his or her individual responses (American Nurses Association 2001 cited in Burns & Grove 2011:117). Anonymity, the most secure means of protected confidentiality, occurs when even the researcher cannot link the participants to their data (Burn & Grove 2011:181).

The researcher used codes and not participant’s names, so that the participants would not be identifiable. Two boxes were provided in each grade. One for the signed the consent forms, which was sealed once all the forms had been placed in the box. Another box was provided for questionnaires, which was also sealed after the participants had completed all the questionnaires.

3.7.2.3 Privacy

Privacy is the freedom people have to determine the time, extent, and general circumstances under which their private information will be shared with or withheld from others. Private information includes that concerning a person's attitude, beliefs, behaviours, opinions, and records. The research subject's privacy is protected if the subject is informed, consents to participate in a study, and voluntarily shares private information with the researcher (Burns & Grove 2011:114).

3.7.2.4 Voluntary participation

Participants in any study should enjoy the choice of whether or not to participate in a study. Any form of coercion should be avoided. Where payment or other incentives are offered, there should be strict procedures ensuring that participation is by individuals who qualify according to the study protocol. In all cases, participation should be voluntary. If participation is confined to a particular group of people this may reduce generalisability of findings.
Voluntary participation is linked to disclosure of adequate factual information to potential participants on details of the study, including the risks and benefits. It is expected that people are able to make informed decisions regarding their participation when sufficient information has been provided to them.

To ensure autonomy in this study, a written statement explaining the purpose of the study and procedure for data collection was developed. This was done to ensure consistency in information provided to all potential participants. They were informed of the purpose of the study and its implications to counseling and testing. Participants were given a choice to participate either in the study or to decline.

3.7.2.5 Informed consent

Informed consent means that participants have adequate information regarding the research, are capable of comprehending the information, and have the power of free choice, enabling them to consent to or decline participation voluntarily (Polit & Beck 2008:176). Informed consent is an ethical principle that requires researchers to obtain the voluntary participation of subjects, after informing them of possible risks and benefits (Polit & Beck 2008:755).

Informed consent includes four elements:

- Disclosure of essential study information to the study participant or subject.
- Comprehension of this of this information by the subject.
- Competence of the subject to give consent.
- Voluntary consent of the subject to participate in the study (Burns & Grove 2011:12).

Consent form is a written agreement signed by a study participant and a researcher concerning the terms and conditions of voluntary participation in a study (Polit & Beck 2008:750).
Informed consent was obtained from respondents before they filled in the questionnaires. Specifically, respondents were informed in writing about the objectives of the study and its benefits in the prevention of HIV and AIDS.

3.7.4 Maintaining privacy and anonymity

The researcher used codes and not participant’s names, so that the participants would not be identifiable. Two boxes were provided in each grade. One for the signed the consent forms, which was sealed once all the forms had been placed in the box. Another box was provided for questionnaires, which was also sealed after the participants had completed all the questionnaires.

3.7.5 Consent to do the study

The school administration of high school concerned gave permission to the researcher to conduct the study. The researcher further requested that the heads of the schools be present at the beginning of the data collection. The teachers in the different grades were notified orally before data collection.

3.8 DATA ENTRY AND ANALYSIS

Data analysis is the systematic organisation and synthesis of research data and in quantitative studies, the testing of hypotheses using those data (Polit & Beck 2008:751). The researcher, to ensure that each one had been fully answered, manually checked the questionnaires. The questionnaires were then coded and the data entered and processed by using the Statistical Package for Social Sciences (SPSS) for windows Version 17. The results are illustrated in the form of frequency tables and depicted graphically in order to provide an overview of the findings in chapter 4.

3.9 CONCLUSION

Chapter 3 outlined the research methods used to answer the research question. The population sampling, data collection, instrument, ethical considerations, and data analysis were also discussed. Chapter 4 will present the results of the study.
CHAPTER 4

RESEARCH RESULTS

4.1 INTRODUCTION

The findings from the study are presented according to the sequence in the questionnaire and are presented according to the headings as follows: personal information, sexual attitudes and behaviour, health and HIV related issues and health services available for adolescent high school learners. Tables, graphs, figures and descriptions were used to present the findings.

4.2 PERSONAL INFORMATION

Personal information of the respondents refers to their age, gender, school grade and the people that they the respondents live with.

4.2.1 Age of respondents

One hundred and fifty (150) questionnaires were distributed to adolescent high school learners to respond; only one hundred and twenty (120=80%) adolescent high school learners between the age of 12 and 18 years completed the self-administered questionnaires with the assistance of a trained research assistant and supervisor. Table 4.1 illustrates age distribution of respondents.

Table 4.1 Age of respondents (N=120)

<table>
<thead>
<tr>
<th>Age of respondents</th>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-15</td>
<td>13</td>
<td>10.8</td>
<td>10.8</td>
<td></td>
</tr>
<tr>
<td>16-18</td>
<td>90</td>
<td>75.0</td>
<td>75.0</td>
<td></td>
</tr>
<tr>
<td>Above 18</td>
<td>15</td>
<td>12.5</td>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
<td>1.7</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
4.2.2 Gender of respondents

Seventy percent (n=85) of respondents were females and twenty-one percent (n=35) were males, as indicated in figure 4.1.

![Figure 4.1 Gender of learners (N=120)](image)

4.2.3 School grade of respondents

All respondents for the study were literate, as the study included learners from grade 8 to 12. Nine percent (n=11) were sampled from grade 8-9. Sixty-five percent (n=79) from grade 10-11 and twenty percent (n=24) from grade 12, and only five percent of respondents (n=6) did not specify. Table 4.2 shows tabulation by grade and gender.

Table 4.2 Grade and gender of respondents (N=120)

<table>
<thead>
<tr>
<th>Grade of learners</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 8-9</td>
<td>5 (4.2%)</td>
<td>6 (5%)</td>
<td>11 (9.2%)</td>
</tr>
<tr>
<td>Grade 10-11</td>
<td>17 (14.2%)</td>
<td>62 (55.8%)</td>
<td>79 (65.8%)</td>
</tr>
<tr>
<td>Grade 12</td>
<td>4 (3.3%)</td>
<td>15 (12.5%)</td>
<td>24 (20%)</td>
</tr>
<tr>
<td>Other</td>
<td>2 (1.2%)</td>
<td>15 (12.5%)</td>
<td>17 (14.2%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35 (29.2%)</strong></td>
<td><strong>85 (70.8%)</strong></td>
<td><strong>120 (100%)</strong></td>
</tr>
</tbody>
</table>
4.2.4 Household components of respondents

All respondents (adolescent high school learners) stay with a family member. More than fifty-two percent of the respondents (n=63) are staying with 2-5 members of their families. Forty-eight percent of the respondents (n=48) did not specify which family member they lived with. Thirty-five percent (n=42) stay with both parents. Twenty-five percent (n=31) stay with single parent. Nine percent (n=11) stay with grandparents. Six percent (n=8) stay with a relative. Four percent (n=5) stay with siblings and nineteen percent (n=23) did not specify. This is presented in tables 4.3 (a) and (b) respectively.

Table 4.3 (a) Members of the families (N=120)

<table>
<thead>
<tr>
<th>Family members staying with individual learner</th>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>2-5</td>
<td>63</td>
<td>52.5</td>
<td>52.5</td>
<td></td>
</tr>
<tr>
<td>Above 5</td>
<td>52</td>
<td>43.3</td>
<td>43.3</td>
<td></td>
</tr>
<tr>
<td>No response</td>
<td>5</td>
<td>4.2</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.3 (b) Household components (N=120)

<table>
<thead>
<tr>
<th>Staying with</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both parents</td>
<td>42</td>
<td>35.0</td>
</tr>
<tr>
<td>Single parent</td>
<td>31</td>
<td>25.8</td>
</tr>
<tr>
<td>Grandparent</td>
<td>11</td>
<td>9.2</td>
</tr>
<tr>
<td>Relative</td>
<td>8</td>
<td>6.7</td>
</tr>
<tr>
<td>Sibling</td>
<td>5</td>
<td>4.2</td>
</tr>
<tr>
<td>Alone</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>19.2</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4.3 SEXUAL ATTITUDE AND BEHAVIOUR

4.3.1 Sexual activity at early age

Adolescent high school learners engage in sexual activities at early age below 18 years, Sixty-eight percent (n=82) agreed with the statement, twenty-nine percent (n=35) did not agree only two percent (n=3) did not specify.

![Figure 4.2 Sexual activity (N=120)](image)

4.3.2 Exposure to HIV and AIDS

Early sexual activities exposes adolescent high school learners to HIV and AIDS, seventy-five percent (n=91) respondents agree to the statement, twenty-two percent (n=27) did not agree and only one percent (n=2) did not give their responses. This is illustrated in figure 4.3.
4.3.3 Sexual needs and sexual behaviour

Most adolescent agree that adolescents satisfy their needs by engaging in sexual intercourse. Eighty-two percent (n=99) said yes. Fifteen percent (n=19) said no, and one percent (n=2) did not respond. Eighty percent (n=97) said adolescents often experiment sexual intercourse as part of growth and development. Seventeen percent (n=21) did not agree, and only one percent (n=2) did not respond. Sexual behaviour such as kissing an opposite sex person leads to sexual intercourse, seventy-five percent (n=91) agreed to the statement. Twenty percent (n=24) did not agree and only four percent (n=5) did not respond. Adolescents prove their love to their opposite sex partner by engaging in sexual intercourse. Seventy-eight percent (n=94) agreed with the statement. Twenty-one (n=26) did not agree. Figure 4.4 illustrates sexual behaviour.
4.4 HEALTH AND HIV RELATED ISSUES

4.4.1 Knowledge about HIV/AIDS

Among learners who responded in the study, ninety percent (n=109) had heard about HIV and AIDS. Seven percent (n=9) did not have knowledge about HIV/AIDS. One percent (n=2) did not respond. Eighty-one percent (n=98) knew that HIV is one of the sexually transmitted infections (STI's). Nineteen percent (n=23) of learners who responded in the study did not know. Seven percent (n=9) did not respond. Among the learners who responded in this study, eighty-two percent (n=99) admitted that condom can be used to prevent HIV. Twelve percent (n=15) did not and only five percent (n=6) did not know. The finding indicated that the learners got information about HIV.
Table 4.4  Knowledge about HIV/AIDS (N=120)

<table>
<thead>
<tr>
<th>Knowledge about HIV/AIDS</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have you ever heard about HIV/AIDS?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>109</td>
<td>90.8</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>7.5</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
<td><strong>100.0</strong></td>
</tr>
<tr>
<td>2. Is HIV one of sexually transmitted diseases (STIs)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>98</td>
<td>81.7</td>
</tr>
<tr>
<td>No</td>
<td>23</td>
<td>19.2</td>
</tr>
<tr>
<td>No response</td>
<td>9</td>
<td>7.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
<td><strong>100.0</strong></td>
</tr>
<tr>
<td>3. Can one use condom to prevent HIV?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>99</td>
<td>82.5</td>
</tr>
<tr>
<td>No</td>
<td>15</td>
<td>12.5</td>
</tr>
<tr>
<td>No response</td>
<td>6</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.4.2 Condom use

Pertaining to the sources of information, forty-three percent (n=52) of respondent said they always use condom. Ten percent (n=13) said they use condom sometimes. Fifteen percent (n=19) said they are not sleeping around. Twenty-nine (n=35) did not respond and less than one percent (n=1) said had never used condom.
According to the response in this study, fifty-one percent (n=62) had never tested for HIV. Forty-six percent (n=56) have tested and only one percent (n=2) had no answer.

4.4.3.1 Why adolescent high school learners did not test for HIV

Out of those who had never get tested gave the reasons such as: (i) I did not get chance (ii) It is not easy (iii) I am afraid/scared (iv) I never thought of it (v) I never thought it is serious.
4.4.4 HCT at school

Out of 120 learners 87 (72.5%) will be happy to be tested at school, 29 (24.2%) will not be happy to be tested at school and 4 (3.3%) gave no answer. Some of the reasons given were: (i) To know my status (ii) I know my status (iii) To save time to go to the clinic.
4.4.4.1 Reasons for adolescent high school learners who do not like HCT at school

There were numerous reasons given by the respondents on why they do not like the HIC counseling and testing at school. These reasons are as follows:

- Others learners will lose focus
- They are at school to learn
- They prefer being tested at clinic than school
- They will be laughed at by other learners
- Other learners will know their HIV status
- Other learners will discriminate them if they know their status

![Figure 4.8 Like HCT at school (N=120)](image)

4.4.4.2 Reasons for adolescent high school learners who like HCT at school

Reasons given by participants on why they like the HCT at school were:

- It will save time of going to the clinic
- They will know their HIV status
- It will be easy to test with a friend
• The fear of going to the clinic will be removed
• It encourages others to test
• It is within an individual right to their one’s status

4.4.4.3 Preference of counselor

Regarding who can carry out counseling and testing procedure at school 36 (30%) preferred trained health personnel, 28 (23.3%) prefer trained educators and 16 (13.3%) preferred trained peer group and 40 (33.3%) preferred anybody.

![Preference of counselor](image)

**Figure 4.9 Preference of counselor (N=120)**

4.5 REDUCTION OF HIV TRANSMISSION AT HIGH SCHOOL

4.5.1 HCT at school will reduce HIV infection

Among those who responded fifty-nine percent (n=71) agreed that HCT at school will reduce HIV transmission and infection. Thirty-two percent (n=39) did not agree and only eight percent (n=10) did not give their response.
Table 4.5  Reduction of HIV infection (N=120)

<table>
<thead>
<tr>
<th>Reduction of HIV infection</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>71</td>
<td>59.2</td>
</tr>
<tr>
<td>No</td>
<td>39</td>
<td>32.5</td>
</tr>
<tr>
<td>No response</td>
<td>10</td>
<td>8.3</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.5.2 Reasons for HIV reduced by HCT at school

Some the reasons given by learners are: (i) learners will know their status, (ii) for protection (iii) learners will know it is dangerous (iv) they will get information (v) they will be afraid or scared of HIV (vi) for early treatment (vii) they will abstain or use condom.

4.5.3 Reasons for HIV not reduced by HCT at school

For a question that asked respondents on whether HCT reduces the chances of HV, the respondents who answered on the negative gave the following reasons:

- They will think they will not get ill
- Other learners are ignorant
- Learners will always have unprotected sex
- It will increase because many learners have sex but do not transmit
- HIV cannot be cured
- Those happen to be HIV positive will infect others deliberately, (vii) they will think they can now have sex

4.5.4 Contribution from government

Out of 120 learners who responded in the study, fifty percent (n=60) of learners responded that the government should educate the learners about HIV at school. Twenty percent (n=24) said that condoms should be provided at high schools. Ten percent (n=12) said adolescent high school learners should be tested at school. Two percent (n=3) said there is nothing that the government can do and twenty-one percent (n=26) did not respond. From these results, it shows that the respondents believed that
government has more do about educating adolescent high school learners about HIV/AIDS. Figure 4.6 shows their responses.

![Pie chart showing contributions from government (N=120)]

**Figure 4.10  Contribution from government (N=120)**

### 4.5.5 Reasons for learners who said government can do nothing

- Other learners are ignorant
- Learners will always have unprotected sex
- Government cannot stop them
- They will think that they can now they can have sex
- Many learners have sex but are not infected
- Those happen to be HIV positive will infect others deliberately

### 4.6 AVAILABILITY OF HCT SERVICES FOR ADOLESCENT HIGH SCHOOL LEARNERS

There are youth services for adolescent high school learners according to fifty-two percent (n=63) of respondents in this study. Forty percent (n=49) said the youth services for high school learners are not available. Six percent (n=8) did not respond. Fifty-nine percent (n=71) said HCT services for adolescent learners are available. Thirty-five percent (n=42) did not agree and only five percent (n=7) did not respond. HCT service
offered any time for adolescents, forty percent (n=49) said yes to the statement. Fifty percent (n=61) said no and only eight percent (n=10) did not respond. Fifty percent (n=60) said HCT is offered with variety of services, where as thirty-nine percent (n=47) did not agree and ten percent (n=13) did not respond. Regarding accessibility to HCT services fifty-three (n=64) say services are accessible for adolescent high school learners. Thirty-nine percent (n=47) did not agree and only seven percent (n=9) did not respond. HIV/AIDS awareness campaigns not done at school according to sixty-six percent (n=80). Twenty-four percent (n=29) did not agree and nine percent (n=11) did not respond. Figure 4.11 shows the results in percentages.

![Figure 4.11 Availability of HCT services for adolescent high school learners (N=120)](image)

**4.7 CONCLUSION**

The contents included in this chapter are as follows: personal information, sexual attitudes and behaviour, health and HIV related issues, health services available for adolescent high school learners and conclusion about this chapter.
CHAPTER 5

DISCUSSIONS OF THE STUDY

5.1 INTRODUCTION

This chapter presents a discussion based on the major findings presented in chapter 4. Findings that are discussed include personal information, sexual attitudes and behaviour, health and HIV related issues and health services available for adolescent high school learners and lastly conclusion of this chapter.

5.2 DISCUSSION ON PERSONAL INFORMATION

There were more females than males in this study. Seventy percent of the total number of respondents was females and this shows that more females registered in this school than males.

The respondents who participated in the study were between ages twelve to eighteen years. The age was chosen because the adolescents who fall between ten to twenty-four age groups face a particular risk of HIV (National Department of Health 2010b:7, 76). The adolescent high school learners are in a particular way at risk of HIV infection due to the strong influence of peer group peer pressure and a need for adolescent to belong (National Department of Health 2010c:11). The adolescent high school learners should receive counseling and education to delay early sexual debut and practice abstinence, to focus on school lesson until they graduate at tertiary institution.

According to the study it shows that, most response were from adolescent high school learners aged between sixteen and eighteen years old. Seventy-five percent of the total number were aged sixteen and eighteen years, this indicates that most of the learners at this school at the time of the study were between the sixteen and eighteen years age group.
Seventy-nine percent of the learners were in grade ten to twelve, this indicates that the learners were literate and less percent of five percent did not respond. At least there is no adolescent high school learners who were staying alone and less amount of four percent learners were staying with siblings and more than ninety-five percent were staying with parents and guardian. Out those who stay with parents and guardian, thirty-five percent of learners were staying with both parents, more than twenty-five percent were staying with single parent. Nine percent were staying with grandparents, more than six percent were staying with a relative, and nineteen percent did not specify. Adolescent high school learners who were staying with siblings were fewer amounts to four percent. According to the findings, most of the adolescent high school learners were under the care of an adult at the time of the study.

5.3 SEXUAL ATTITUDE AND BEHAVIOUR

Sixty-eight percent of learners agreed with that statement that adolescent high school learners engage in sexual activities at an early age before turning eighteen years. Seventy-five percent of respondents to the study agreed to the statement that early sexual activities expose adolescent high school learners to HIV and AIDS. This shows that to keep those adolescent high school learners in school for a quality time until they graduate, their sexual attitude and behaviour requires modification. Eighty-two percent of adolescent high school learners who responded to the study said most adolescents satisfy their sexual needs by engaging in sexual intercourse. Eighty percent said adolescents often experiment sexual intercourse as part of growth and development and also confirmed that sexual behaviour such as kissing and hugging an opposite sex person leads to sexual intercourse, seventy-five percent of respondents agreed to the statement.

According to the study, adolescent high school learners seem to believe that there will be no intimate relationship without sexual intercourse as their proof of love to the opposite sex person. Adolescent high school learners forget that there is time for schooling and time to engage in love situations at a particular age. They pose themselves into adulthood at their teenage years.
5.4 HEALTH AND HIV RELATED ISSUES

In response to knowledge about HIV and AIDS, according to the study ninety percent of the adolescent high school learners had heard about HIV and AIDS. Eighty-one percent of the adolescent high school learners, who responded, had knowledge that HIV is classified as one of the sexually transmitted infections (STIs) and eighty-two percent admitted that condom could be used to prevent HIV transmission. According to the findings adolescent high school learners had knowledge about HIV as a less than twenty percent of respondents did not have knowledge about HIV transmission.

Forty-three percent of respondents, with regards to the use of condom to prevent HIV transmission, said they use condom always, ten percent said they use condom sometimes and fifteen percent said they are not sleeping around and less than one percent never used a condom. Fifteen percent said they are not sleeping around. These results show that out of sixty-eight percent of adolescent high school learners who engage in sexual activities at an early age. Ninety percent of them had knowledge about HIV, only forty-three percent use condom always to prevent HIV transmission where as 85% of infections occur through heterosexual sex in the general population (National Department of Health 2010c:11), there is still a lot to be done. Regardless of knowledge they had, condom is not used.

In the study, forty-six percent of adolescent high school learners who participated had tested for HIV and fifty-one percent had never tested for HIV in the past months. The following are some the reasons they give for not testing for HIV: (i) I did not get chance (ii) It is not easy (iii) I am afraid/scared (iv) I never thought of it (v) I never thought it is serious.

About testing for HIV at school, seventy-two percent of learners will be happy to be tested at school, giving the following reasons: (i) it will save time to go to the clinic, (ii) they will know their status (iii) it is safe at school (iv) it will be easy to test with a friend (v) they know their status (vi) most have fear to go to the clinic (vii) they want everyone to know their status (viii) to encourage others to test (ix) others are breastfeeding (x) it is important. Twenty-four percent will not be happy to test HIV at school with the following reasons: (i) other learners will lose focus (ii) they are at school to learn (iii) they prefer clinic than school (iv) they will be bored (v) they will be laughed at by other learners (vi) other learners will know their status (vii) they will be uncontrollable if they found to be HIV
positive and it will be a scandal and they are afraid of discrimination. According to the results, most of adolescent high school learners like to have the HIV test done at school.

Regarding the preference of the counselor at school, thirty percent of respondents preferred a trained health personnel, thirty-three percent of adolescent high school learners who participated in the study preferred anybody to perform the HCT. Twenty-three percent of respondents preferred trained educators and thirteen percent of adolescent high school learners preferred trained peer group counselors.

5.5 REDUCTION OF HIV TRANSMISSION IN HIGH SCHOOL

Fifty-nine percent of respondents said HCT at school will reduce the spread of HIV infection at school. Thirty-two percent said it will not reduce HIV infection and only eight percent did not respond. Some of the reasons given by those who said HCT will reduce HIV infection rate are: they will get information, they will get treatment early if diagnosed HIV positive and that they will be afraid or scared of HIV.

Thirty-two percent of respondents said government cannot stop adolescent high school learners to sleep around and those who happen to be HIV positive during the test will infect others deliberately. According to these statements it shows that adolescent high learners believe that to be found to be HIV positive means that the is no more future for those who find themselves in such a situation.

5.6 AVAILABILITY OF HCT SERVICES FOR ADOLESCENT HIGH SCHOOL LEARNERS

Fifty-two percent of respondents in the study said youth services are available. Forty percent did not agree. Fifty-nine percent said HCT is available for adolescents. Forty percent said the services are offered at any time for adolescents. Fifty percent get HCT with variety of youth services. Fifty-three percent found the services to be accessible and eighty percent acknowledged that HIV/AIDS awareness campaigns are done at school. This findings reveals that the services for adolescents are only available and accessible to about fifty percent of adolescents, there is still a lot to be done about making adolescent aware of HIV.
5.7 CONCLUSION

The chapter presented discussion of study findings by using different literatures. The subheadings used under this chapter were introduction, discussion of results regarding personal information, sexual attitudes and behaviour, health and HIV related issues, health services available for adolescent high school learners and conclusion about this chapter.
CHAPTER 6

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The aim of the study was to investigate the perceptions, attitudes, opinions and fears of adolescent high school learners towards HIV counseling and voluntary testing at school. This chapter presented conclusions based on results of a study to answer objectives formulated in chapter 1.

The chapter also presented some possible limitations for generalisations of findings on adolescent high school learners in Madibeng sub-district, North West province. The findings sited in chapter four served as a basis for recommendations in this chapter to bring about better access to HCT services in the future, especially for adolescents, by tackling the factors affecting sexual attitude and behaviour, knowledge about HIV/AIDS, exposure to HIV and access to HCT services for adolescent high school learners.

6.2 CONCLUSIONS DERIVED FROM THIS STUDY

Adolescents in this study got information about HIV transmission. They have their reasons not to be tested for HIV.

Some of the learners responded that condom use was the best option for them to prevent them from HIV infection. This indicated that adolescent high school learners engage in high-risk behaviour that could expose them to HIV infection, so it is advisable to improve adolescents' knowledge for those who still lack the correct knowledge to protect themselves. This is particularly important for health and education managers, when it comes to planning for better access to youth friendly information sources for adolescents.

Findings from this study showed that adolescents in Madibeng sub-district, North West province had better awareness regarding HIV and HCT among adolescent high school learners, even though there were still gaps and confusion on some issues.
This indicated that young people engage in high-risk behaviour that could expose them to HIV infection, so it is advisable to improve adolescents’ knowledge for those who still lack the correct knowledge to protect themselves. This is particularly important for health managers, when it comes to planning for better access to youth friendly information sources for adolescents.

On the other hand, some students were unaware as to who needed to be tested, they stated conditional reasons like high-risk groups, those to be married, everybody sexually active and others said only those suspected by medical personnel to be HIV positive.

6.3 LIMITATIONS OF THE STUDY

Madibeng sub-district is mainly farm areas and schools are more than 120 kilometres apart, this was a limitation as the researcher had to choose schools that are within reach of her work area. As a result, the study was carried out in two schools, which makes the sample size too small to can make generalisation of the results. The results will therefore not be representative of all the schools in Madibeng sub-district. The study will not give the general picture of the research problem.

Possible threats to the generalisability of the study:

- The study was carried out in the age range of 12-18 year’s population so this might limit the generalisability of study findings to the youth in.
- The study population was chosen from government owned high-school only so this might limit the study findings from generalisability for all high schools.
- Only daytime students were included in the study, this might affect the generalisation for night-time students.
- Only literate adolescents participated in the study, this limits the findings from generalising to illiterate adolescents.

6.4 RECOMMENDATIONS FOR IMPROVING ACCESS TO HCT SERVICES BY ADOLESCENTS HIGH SCHOOL LEARNERS IN MADIBENG SUB-DISTRICT

- The Health Department should provide education material related to HCT to the high schools and provide youth user-friendly services at local clinics at all times.
• Adolescent high school learners should be provided with HCT services at school, with trained peer educators and trained community health workers to increase access to HCT services.
• The schools should organise HIV awareness at school focusing on HCT information delivery and provision of HIV counseling and testing.
• Including educators and parents in awareness regarding HIV/AIDS and HCT could be helpful, since adolescents can be impressionable when it comes to making decisions like HIV awareness and testing for HIV at schools.
• Adolescent high school learners should be taught about the correct precautions that need to be taken when living with HIV positive individuals. As this could improve the interaction between adolescents and HIV positive individuals.

6.5 RECOMMENDATIONS FOR FURTHER STUDIES

• Duplication of this study in other geographic areas prior to generalisation of these research results to all adolescents in Madibeng sub-district.
• Conducting same study on out of school adolescents before generalising current finding to all adolescents in Madibeng sub-district.
• Investigating barriers, which critically affect adolescents’ access to HCT service.
• Further investigating the perceptions of adolescent high school learners towards accessing HCT services from the health facility versus youth centres and school services.
• Explore the impact of HCT on behavioural changes among adolescents.

6.6 CONCLUSIONS

The findings of the study show that adolescent high school learners know about the HIV awareness information. All the participants were aware of HIV prevention and the benefits of delaying sexual activities; early diagnosis, treatment and access to HCT services. The students also had the benefit of having HCT peer educators in high schools.
LIST OF REFERENCES


e-TV, 2011: The news at seven. 29 January 2011, 19:00.


Date of meeting: 14 March 2012

Project Title: Perceptions of school children towards voluntary HIV counselling and testing in a high school in the North West Province.

Researcher: Mokaba Sekgero Akisah

Degree: MA in Health

Supervisor: Dr LV Monareng

Qualification: D Litt et Phil

Joint Supervisor: -

DECISION OF COMMITTEE

Approved ☑️ Conditionally Approved ☐

Prof E Potgieter
CHAIRPERSON: HEALTH STUDIES HIGHER DEGREES COMMITTEE

Dr MM Moleki
ACTING ACADEMIC CHAIRPERSON: DEPARTMENT OF HEALTH STUDIES

PLEASE QUOTE THE PROJECT NUMBER IN ALL ENQUIRES
RE: APPLICATION FOR PERMISSION TO COLLECT DATA

I am a student number: 34342915 at the University of South Africa (UNISA) pursuing MA in Health Studies. I hereby request permission to conduct a research study at one of the high schools at Madibeng sub district. I intend to collect data from high school children from grade 9-12. Permission to collect data from those who are minors will be sought appropriately.

The research under study seeks to explore and describe the perception of high school children towards HIV testing. The research findings will be helpful in guiding the department in policy making for continuous health care of schoolchildren with regards to HIV/AIDS.

The research findings will be shared with the participating institution after the submission of the completed dissertation to UNISA, Department of Health Studies for examination purposes.

Attached is the research proposal for your attention.

I look forward for your positive response.

Yours Sincerely,

Mokaba Sekgero Akisa
To: whom it may concern

From: Michael Modisakeng Secondary School

Subject: Permission to collect data

This serves to inform you that permission is been granted to you to collect data from the learners of our school.

You are further assured of total support from our staff and learners.

Hope you find this in order.

Yours in education

Mogomotsi TP
Deputy Principal
ANNEXURE  D

QUESTIONNAIRE ON PERCEPTIONS OF HIGH SCHOOL CHILDREN TOWARDS HIV TESTING IN THE NORTH WEST PROVINCE

Serial no: __________________________

INSTRUCTIONS

All information herewith provided will be treated as confidential. It is not necessary to write your name on this questionnaire.

1. Answer all questions by marking the appropriate box with an 'X'.
2. Answer all questions frankly and with honesty.
3. There is no right or wrong answer, therefore answer according to your own opinion, knowledge and experience.
4. You are most welcome to add more comments.
5. Please hand in the questionnaire to the researcher on completion.

SECTION A: SOCIO-DEMOGRAPHIC DATA

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>12-15</th>
<th>16-18</th>
<th>Above 18</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>How old are you in years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Indicate your gender</td>
<td>male</td>
<td>female</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>What grade are you in this year</td>
<td>8-9</td>
<td>10-11</td>
<td>12</td>
</tr>
<tr>
<td>4.</td>
<td>How many people living in your house including yourself</td>
<td>alone</td>
<td>2-5</td>
<td>Above 5</td>
</tr>
<tr>
<td>5.</td>
<td>How many school learners are there in your house including yourself</td>
<td>alone</td>
<td>2-5</td>
<td>Above 5</td>
</tr>
<tr>
<td>6.</td>
<td>How many school learners are at primary school in your house</td>
<td>1-2</td>
<td>3-5</td>
<td>Above 5</td>
</tr>
<tr>
<td>7.</td>
<td>How many are at high school in your house including yourself</td>
<td>1-2</td>
<td>3-5</td>
<td>Above 5</td>
</tr>
<tr>
<td>8.</td>
<td>Who are you staying with</td>
<td>Both parents</td>
<td>Father/ mother</td>
<td>Grand parent/s</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alone</td>
<td>relative</td>
<td>siblings</td>
</tr>
</tbody>
</table>

SECTION B: SEXUAL ATTITUDES AND BEHAVIOUR

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Adolescent high school learners engage in sexual activities at an early age below 18 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Early sexual activities exposes adolescents to HIV and AIDS</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
3. Adolescents satisfy their sexual needs by engaging in sexual intercourse  | Yes | No
4. Adolescents often experiment with sexual intercourse as part of growth and development | Yes | No
5. Sexual behavior such as kissing an opposite sex person leads to sexual intercourse | Yes | No
6. Adolescents prove their love to their boy/girlfriends by engaging in sexual intercourse | Yes | No

SECTION C: HEALTH AND HIV RELATED ISSUES

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have you ever heard of HIV and AIDS?</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Is HIV one of the sexually transmitted infections (STI's)?</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Can one prevent HIV transmission by using a condom?</td>
<td>Yes</td>
</tr>
<tr>
<td>4. How often do you use condom</td>
<td>Always</td>
</tr>
<tr>
<td>5. Have you ever tested for HIV? If yes, when was it, if no, give reason/s.</td>
<td>Yes</td>
</tr>
<tr>
<td>6. Would you like to be tested for HIV at your school? Give reason/s</td>
<td>Yes</td>
</tr>
<tr>
<td>7. Do you think there are professional people who can do the testing procedure at your school? If yes who are they?</td>
<td>Yes</td>
</tr>
<tr>
<td>8. Do you think that testing adolescent high school learners for HIV at school will reduce the rate of HIV infections? Give reason/s.</td>
<td>Yes</td>
</tr>
<tr>
<td>9. Have you ever thought of going to the nearest health facility for HIV testing?</td>
<td>Yes</td>
</tr>
<tr>
<td>10. What do you think the government should do to reduce the spread of HIV transmission at high schools?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

SECTION D: HEALTH SERVICES AVAILABLE FOR ADOLESCENT HIGH SCHOOL LEARNERS

<table>
<thead>
<tr>
<th>Question</th>
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<td>1. Is there a youth clinic at your nearest health facility?</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Are there health services such as HIV counseling and</td>
<td>Yes</td>
</tr>
<tr>
<td>Question</td>
<td>Yes</td>
</tr>
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<td>3. Is HIV counseling available at any time during the day for adolescent high school learners at the nearest health facility?</td>
<td>Yes</td>
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<tr>
<td>4. Is there variety of health services offered to adolescents in a single visit at the nearest health facility?</td>
<td>Yes</td>
</tr>
<tr>
<td>5. Is HIV counseling accessible to adolescents at all times at the nearest health facility?</td>
<td>Yes</td>
</tr>
<tr>
<td>6. Are health service providers at the health facilities provide health education about matters related to HIV and AIDS?</td>
<td>Yes</td>
</tr>
<tr>
<td>7. Is there HIV/AIDS awareness at your school?</td>
<td>Yes</td>
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ANNEXURE E

Study title: PERCEPTION OF HIGH SCHOOL LEARNERS TOWARDS HIV COUNSELLING AND TESTING IN MADIBENG

Institution: University of South Africa (UNISA), department of health studies

Researcher: Seikgare Akisa Mokaba  Supervisor: PROF T.G. TSHWENEAGAE

I willingly participate in the research as indicated above.

Participation in this study is voluntary and I would like to assure you that everything you write would be kept confidential. Your identity will not be revealed to anyone. Your views are very important and your honest participation will greatly assist in achieving the goals of the study.

The information will help the government to formulate policies about HIV testing. The completion of the questionnaire will take 20-30 minutes.

There will be no monetary compensation for your participation in the study. Your participation in the study will be highly appreciated.

By signing this form, I agree to participate and I understand the conditions to complete the questionnaire given to me by the researcher.

Signature: __________________________ Date: __________________________
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1.2.1.1 Source of the problem

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1.3 STATEMENT OF THE RESEARCH PROBLEM

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1.6 DEFINITION OF KEY CONCEPTS

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1.6.2 Counseling

1.6.3 High school

1.6.4 Human immunodeficiency virus (HIV)

1.6.5 Learner

1.6.6 Perception

1.6.7 Voluntary testing

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1.7.2 Setting

1.7.3 Population and sample

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<td>Acquired Immune Deficiency Syndrome</td>
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<td>ANC</td>
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<td>ART</td>
<td>Antiretroviral treatment</td>
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<td>CICT</td>
<td>Client Initiated Counseling and Testing</td>
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<td>Human Immunodeficiency Virus</td>
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<td>IMCI</td>
<td>Integrated management of childhood illness</td>
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<td>NSP</td>
<td>National Strategic Plan</td>
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<td>Post exposure prophylaxis</td>
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<td>PMTCT</td>
<td>Prevention of Mother to Child Transmission</td>
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<td>SAS</td>
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<td>Statistical Package for Social Sciences</td>
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<td>STAT</td>
<td>Statistics</td>
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<td>Sexually transmitted infections</td>
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<td>Tuberculosis</td>
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<td>TV</td>
<td>Television</td>
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<td>UNAIDS</td>
<td>United Nations Programme on AIDS</td>
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<td>UNISA</td>
<td>University of South Africa</td>
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<td>VCT</td>
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