CHAPTER 1

INTRODUCTION

1.1 Background to the Study.

An estimated 22.9 million people in Sub-Saharan Africa is living with the virus that causes AIDS, which is about 2/3 of the global total (UNAIDS, 2011). When the HIV enters the body for a period of time, which maybe several years, the body will keep HIV under control. During this period, the person infected with the HIV may appear absolutely healthy and may not feel sick. This is normally referred to as the asymptomatic period (Chanda et al, 2007). However, when a person is afflicted with various opportunistic infections, as a result of the immune deficiency caused by HIV, he is diagnosed as suffering from AIDS (G.R.Z., 2004, and Sahu, 2004).

Zambia, with a population of about 12.8 million people, is among the seven countries that are greatest hit by the HIV and AIDS pandemic in Sub-Saharan Africa. The first case of AIDS in Zambia was diagnosed in 1984. About 1 million Zambians are infected with HIV and over 200,000 are in need of anti-retroviral therapy. Since the first case of AIDS was diagnosed, the prevalence of HIV and deaths from HIV and AIDS and related illness have been rising steadily. The HIV and AIDS have impacted negatively on Zambia, for example, life expectancy has dropped to 46 years; the dependency ratio has increased, and that the number of orphans due to AIDS has increased tremendously. Unlike other diseases which have plagued the country in the past, the problem with HIV and AIDS is that it is claiming the lives of young and economically productive men and women and deprives the industry of the human resource that it needs, and which subsequently drives Zambia's economy (G.R.Z., 2004). The level of the economic development that Zambia has achieved thus far depends on the good health status of the citizens and this explains why the Government of Zambia, in conjunction with the donor community, is implementing intervention programmes that aim to protect Zambians against contracting HIV.

Over the years, a number of strategies have been implemented by the Government and donor agencies to ensure that Zambians know the modes of transmission and prevention of HIV and AIDS. They include the formation of anti – Aids youth clubs in schools, the promotion of the prevention of mother to child transmission of HIV, voluntary counseling and testing, TV, radio, bill board posters campaign and print advertising.
Because of the intensive information, education and communication activities conducted over the years, knowledge about HIV and AIDS in the general population is very high. HIV and AIDS prevalence rates also dropped to 19.9% in 1999, 16% in 2001/2002 and 14% in 2007/2009 (Chanda et al, 2007). While it is acknowledged and recognized that knowledge about HIV and AIDS in the general population is very high, many writers for example, (Philander and Swartz, 2006) have questioned the levels of awareness concerning HIV and AIDS among the upper basic school visually impaired learners. Therefore, this study sought to investigate visually impaired pupils’ awareness of HIV and AIDS in upper basic schools of Zambia.

1.2 Statement of the Problem.

Literature shows that information on HIV and AIDS hardly reaches learners with visual impairments making them vulnerable to HIV infections. The above cited scenario calls for more comprehensive studies to find out factors that hinder visually impaired learners from achieving complete awareness of HIV and AIDS compared to their sighted peers. This study therefore, aimed at ascertaining the extent to which visually impaired upper basic school learners accessed information on HIV and AIDS in Zambia.

1.3 Purpose of the Study.

The purpose of the study was to find out how far visually impaired upper basic school learners in residential special schools at Magwero (Chipata), Ndola Lions (Ndola), Mporokoso (Mporokoso) and Sefula (Mongu) were aware of the HIV and AIDS pandemic.

1.4 Objectives of the Study.

1. To determine the extent of HIV and AIDS awareness among the visually impaired learners in upper basic schools of Zambia.

2. To find out how the visually impaired learners in upper basic schools acquire information on HIV and AIDS.

3. To establish ways by which information on HIV and AIDS among the visually impaired upper basic school learners could be increased if at all it was low.
1.5 Research Questions.
1. What is the extent of HIV and AIDS awareness among the visually impaired learners in upper basic schools of Zambia?
2. How do visually impaired upper basic school learners acquire information on HIV and AIDS?
3. How can HIV and AIDS awareness be increased among visually impaired upper basic school learners?

1.6 Significance of the Study.
The study is significant in that it has brought out information regarding the amount of awareness of HIV and AIDS among the visually impaired upper basic school learners in Zambia. It is also significant in that this information may help in extending HIV and AIDS awareness among the visually impaired learners in Zambian schools and thereby lessen their vulnerability to the scourge.

1.7 Limitations of the Study.
The study was limited to four residential special schools offering upper basic education to the visually impaired learners namely: Magwero school for the blind (Eastern Province), Ndola Lion school for the blind (Copperbelt Province), Mporokoso school for the blind (Northern Province) and Sefula school for the blind (Western Province). Extension of the study to other schools was not possible due to time and financial constraints. The findings might therefore, not be a reflection of a complete picture of HIV and AIDS awareness among visually impaired learners in upper basic school in country.

1.8 Operational Definitions of Terms.

*Visually impaired learner:* A child whose visual impairment interferes with his optimal learning achievement.

*Basic school:* A school with classes ranging from Grade 1 to Grade 9

*Upper basic:* Grades eight (8) and nine (9) classes of a Basic School.

*Awareness:* Conscious that something exists

*Braille:* Graphic representation of the alphabet using an embossed system.
**Ignorance:** Lack of information on some aspects of HIV and AIDS infection which may include information on the transmission, spread and preventive measures.

**Opportunistic infection:** Infections which attack the body when it is weak.

**Immune:** The body's fighting mechanism against disease.

**Immune system:** The body's natural way of fighting off infections and diseases.

**Deficiency:** Inadequacy of the fighting mechanism in the body.

**Virus:** A very small organism that destroys the immunity and has no cure.

**Pandemic:** A global epidemic occurring in several regions at the same time.
CHAPTER 2
LITERATURE REVIEW

2.1 Introduction.
This chapter reviews literature on visually impaired learners’ awareness of HIV and AIDS in upper basic schools of Zambia. The literature review will be presented using various sub-headings.

2.2 History of HIV and AIDS in the World.
Researchers estimate that sometime in the 1930s a form of simian immunodeficiency virus, SIV, jumped to humans in central Africa. The mutated virus became the first human immunodeficiency virus, HIV- I (Pickrell, 2006). The first known case of HIV in a human occurred in a person who died in the Congo, later confirmed as having HIV infection from his preserved blood samples (Pence, 2008 and Zhu, et al, 1998). AIDS patients began to appear in the late 1980s. No section of society was prepared to face an epidemic of this scale and having far-reaching consequences on people of all walks of life. People in the Healthcare sector were also in the similar plight and grouped themselves to find answers. Fear and denial were the initial responses that were encountered. Sahu (2004) citing Wayland (1994) postulated that there used to be instances of HIV patients being turned away from hospitals. This fear of treating in-patients pervaded many Healthcare settings with Healthcare personnel refusing to conduct the deliveries of HIV infected women. There was also the demand of knowing the HIV status of every patient before he/she was examined. These reactions stemmed from fear and were more or less predictable, given a situation wherein new fatal and infectious diseases always came up with little accompanying knowledge or skills to handle.

The AIDS epidemic officially began on 5 June 1981, when the United States Centre for Disease Control and prevention in Atlanta, Georgia, in its morbidity and mortality weekly report newsletter reported five young homosexuals in Los Angeles suffering from a rare lung infection due to a protozoan (single cell micro-organism) called pneumocystis carinii pneumonia (PCP) (CDC, 1981). In June 1982, a report of a group of cases
amongst gay men in New York and Southern California were discovered with a rare skin cancer called Kaposi's sarcoma and persistent, generalized lymphadenopathy, common in immune suppressed patients. These patients lost their resistance to infection which rendered them vulnerable to relatively docile micro-organisms ultimately making the infection overwhelming and fatal. Subsequently, Sahu (2004) asserts that the syndrome was found in Haitian immigrants on the east coast of the United States of America and some haemophiliacs who had received the factor VIII (a factor derived from blood) injection.

Health authorities soon realized that nearly half of people identified with the syndrome were not homosexual men (Cohen, 2006 and CDC, 1982). With the rapid increase in the number of patients detected in the United States, reports of similar cases were also received from other countries.

It was only in 1983 that it was discovered that the disease was caused by a virus which at that stage was known as LAV III (Lymphadenopathy – associated virus) and HTLV III (Human T-cell Lymphotropic Virus Type 111) (Clutterbuck, 2004). In May 1983 the virus causing this condition was renamed HIV (Human Immunodeficiency Virus). This is a virus that causes AIDS (G.R.Z., 2004 and Marx, 1982).

The definition of AIDS has changed over the years as a result of an increasing appreciation of the wide spectrum of clinical manifestations of infection with HIV. The acronym AIDS refers to the condition of Acquired Immune Deficiency Syndrome (Adler, 2001). As the name implies it is a disease caused by a deficiency in the body's immune system. It is a syndrome because there are a range of different symptoms that are not always found in each case. It is acquired because AIDS is an infectious disease caused by a virus that is spread from person to person through a variety of routes. This makes it different from immune deficiency from other causes such as treatment with anticancer drugs or immune system suppressing drugs given to persons receiving transplant operations (Hubley, 2002). AIDS is a condition, which results when the body can no longer fight off infections and other diseases. Chanda et al (2007) argued that a person is said to have AIDS when certain other illnesses appear and persist. These types of infections are known as "opportunistic" infections because
they take the opportunity on a weakened immune system and cause an illness. Currently, AIDS is defined as an illness characterized by one or more indicator diseases. In the absence of another cause of immune deficiency and without laboratory evidence of HIV infection (if the patient has not been tested or the results are inconclusive), certain diseases when definitively diagnosed are indicative of AIDS. Also, regardless of the presence of other causes of immune deficiency, if there is laboratory evidence of HIV infection, other indicator diseases that require a definitive, or in some cases only a presumptive, diagnosis also constitute a diagnosis of AIDS (Perelli, 1991 and Adler, 2001).

About 32 years now has elapsed since the first AIDS case in the world. Overall, globally, the HIV incidence rate (the annual number of new HIV infections as a proportion of previously uninfected persons) is believed to have peaked in the late 1990s and to have subsequently stabilized, notwithstanding its increased incidence in a number of countries (G.R.Z., 2004). However, the numbers of people living with HIV have continued to rise, due to population growth and more recently the life prolonging effects of antiretroviral therapy.

2.3 HIV and AIDS in Southern Africa.

In the mid 1980s, HIV and AIDS were virtually unheard of in Southern Africa. It is now the worst affected region in the world. HIV and AIDS is a major public health concern and cause of death in many parts of Africa. Although Africa is home to about 14.5% of the world's population, it is estimated to be a home to 69% of all people living with HIV and to 72% of all AIDS deaths in 2009 (UNAIDS, 2010). Southern Africa is the worst affected region of Africa, as well as the worst affected region in the world, with the epidemic reaching very high levels in Swaziland, Botswana, Lesotho, South Africa, Zimbabwe, Zambia and Namibia. By contrast, North Africa has low HIV and AIDS rates. Although AIDS is one of the most widely talked about illness, and many have heard about it, there is a lot of false information and misunderstanding about the cause, prevention and treatment of HIV and AIDS. For example, some sections of the society in Zambia believe that a man infected with an HIV virus that happen to have sex with a virgin can be cured. Similarly, although many governments in Sub-Saharan Africa denied that there was a problem for years, they have now begun to work toward solutions (UNAIDS, 2011).
2.4 HIV and AIDS in Zambia.
The first case of AIDS was diagnosed in 1984. HIV and AIDS in Zambia is a major public and social health issue that demands a multifaceted approach if it is to be tackled successfully. Government, non-Governmental organizations (NGOs) and communities are employing diverse but complementary strategies to mitigate the effects of the disease. The national adult HIV prevalence in Zambia is 14.3%, having reduced from 16% in the mid 1990s. More women (16.1%) are living with HIV and AIDS compared to men (12.3%). However, for women above 40 years, prevalence is lower than men in the same age bracket. HIV prevalence is higher (20%) in urban areas than in rural areas (10%). New infections in children aged 0-14 years have reduced from 21,189 in 1996 to 9,196 in 2009. In 2009, an estimated 82,681 adults were newly infected with (59% women, 41% men) with 226 new adult infections occurring each day with 25 new infections occurring among children. HIV prevalence in ante-natal clinic clients aged 15-19 years declined from 13.9% in 1994 to 8.5% in 2006/7 (G.R.Z., 2010).

Although the epidemic is showing signs of stabilization in urban areas, the rates continue to rise in some rural areas. Although the HIV and AIDS epidemic has spread throughout Zambia and to all parts of the society, some groups are especially vulnerable-most notably young women and girls who are visually impaired. AIDS, therefore, must be seen as a national calamity and can only be fought united by forging coordination and convergence in respect of AIDS awareness control strategies. There has to be a synergy between civil society, voluntary and government sectors in the fight against HIV and AIDS.

2.5 People with Disability.
Disability as defined in accordance with the World Health Organization (1994:345) is "a complex phenomenon that manifests itself at the body, person or social level. According to this model, these three dimensions of disability are outcomes of interactions between health conditions, other intrinsic features of the individual and extrinsic features of the social and physical environment"
According to the World Health Organization (WHO) (1994:34), "one person in every ten, 600 million individuals, lives with a disability significant enough to make a difference in their daily lives. Eighty percent live in the developing world, with a large population in rural rather than urban areas. People with disabilities are among the stigmatized, poorest and least educated of all the world’s citizens". It is important to note that poverty is country-specific. In this regard, and considering the poor quality of life and the visible misery among the disabled people in Zambia, poverty in this report will be perceived as insufficient access to food, education, health care, adequate shelter, adequate income, clean surrounding, sanitation and safe drinking water and lack of power. This kind of poverty is what is known as ‘absolute poverty’.

Robert McNamara, President of the World Bank in 1978, defines “Absolute poverty” as “a condition of life so limited by malnutrition, illiteracy, disease, high infant mortality, and low life expectancy as to be beneath any reasonable definition of human decency” (Oxfam, 1995). Even among the poor, those with disabilities are likely to be the poorest —according to the World Bank, they may account for as many as one in five of the world’s poorest people.

WHO (ibid:234) guidelines state that a person with "disability is one with physical, sensory, intellectual or mental health impairments with a significant and long lasting effect on the individual's daily life and activities". Most people with disability in African countries experience marginalization, stigma, discrimination and isolation. They are relegated to a lesser social and economic position in matters of employment, housing, health, education, transport and other services. In certain communities, people with disabilities may be shunned, hidden away and considered a curse. Different from others at birth, or since birth, their disability may be seen as a taboo (Owako, 2003).

Among the hundreds of programme activities available at the international AIDS conference in Toronto in August 2006, only one could be identified that referred directly to HIV/AIDS, disability and rehabilitation. Although HIV infection rates among disabled people may be similar to those among the non-disabled, they are missing from the UNAIDS 2005 policy paper, intensifying HIV prevention, and from the 2008 Global Report on the AIDS Epidemic, and (remarkably) are not mentioned in any of the WHO progress reports towards universal access. In general, the exclusion experienced by people with disabilities is extensive. They find themselves excluded from HIV and AIDS
programmes, in much the same way as they are excluded from numerous other social and economic programmes (Kelly, 2010).

This silence seems to be due in large measure to "an incorrect assumption among the general public, and within the HIV and AIDS research community as well, that people with disability are not sexually active" (Owako, 2003). Policymakers, in common with the public, do not always appreciate that disabled people are human beings who have a sexual life and therefore can be affected by HIV and AIDS. In an article titled "PANAFRICAN VOICES FOR FREEDOM AND JUSTICE" Jacque Mogisho, a young visually impaired person from Rwanda attempts to describe the severity of the issue:

"I once went to be tested for HIV at the Clinic. The female counselor I met there asked if I knew how to perform sex. I answered in amazement, "Would you like me to show you how it is done?"

Jacque Mogisho was sharing his own experience of how negative attitudes and misconceptions from service providers make visually impaired persons shun these services altogether.

The reality is that visually impaired learners in upper basic schools and adults with disability are likely to be as sexually active as their non-disabled peers. Since people with disabilities are seldom included, explicitly or implicitly, in HIV/ AIDS programmes, they are not likely to receive messages about AIDS or to have access to protective measures. Little is done to make sure that information is accessible to them. Radio campaigns, for example do not reach deaf people. Similarly, Billboards in Zambia and elsewhere in the world do not communicate anything to the visually impaired person.

Further-more, school enrolment rates of children with visual impairment are only a fraction of those of sighted peers, with estimates ranging from less than one percent to three percent; this means that visually impaired learners automatically miss out on school-based HIV/AIDS education programmes (AIDS CARE, 2008). As a result, the majority of persons living with a disability in Africa are not given an opportunity to develop their human capabilities to obtain and process information, including that relating to HIV and AIDS.
2.6 Causes of HIV and AIDS.

There is only one weapon against HIV infection and AIDS and that is behaviour change. It is unfortunately that, this is most difficult and complex weapon to use because people find it extremely difficult to change their sexual behavior. Connor and Kingman (1988:1) said: "The disease that spreads with the help of sex is a formidable foe, because it is transmitted during the most intimate and compulsive of human activities- sex".

Dyk (2001) states that sophisticated risk behaviours are the factors that fuel the spread of HIV among the visually impaired upper basic school learners in Zambia. Having multiple sexual partners, contribute to HIV and AIDS as it leads to having unprotected heterosexual activities. Most visually impaired learners in upper basic school are at high risk of sexually transmitted HIV for several reasons, including biological vulnerability, lack of recognition of their partners, and having sex with more than one partner who is likely to be infected with HIV. Learners with visual impairments are more vulnerable to HIV as they are thought to have lack of self-assertiveness, due to the nature of their disability.

Substance abuse is another factor fueling HIV and AIDS among upper basic school visually impaired learners. Studies in America show that young people aged between 12-24 use alcohol, tobacco and others at high rates (CDC, 2004). Both casual and chronic substance users are more likely to engage in high risk behaviours, such as unprotected sex, when they are under the influence of drugs and alcohol.

The presence of STIs greatly increases a person's likelihood of acquiring HIV. Studies by CDC (2004) show that, some of the highest STI rates in the world, Zambia inclusive are those from young people especially from minority status and ethnicities. Lack of awareness among young people is another contributing factor of high infection rates of HIV and AIDS. Research by CDC (2004) has shown that a large proportion of young people (upper basic school visually impaired learners' included) are not concerned about becoming infected with HIV.

UNICEF, (2000) observes that knowledge about HIV and AIDS transmission alone has not proven sufficient evidence to allow young people to protect themselves from the virus. This situation had led to the development of a curriculum that addresses the skills needed to apply the knowledge in a meaningful way. For example, role plays and other interactive teaching methods that have been introduced have left a gap between
the sighted learners and the visually impaired learners as most of this information is only through print and audio (USAID Africa Bureau Brief, 2002). Another factor that leads to contraction of HIV and AIDS is poverty. The economic and social consequences of the HIV directly affect the rural households. This is compounded by inadequate healthcare systems in rural areas making caring for sick family members a family affair. As a result, entire assets and savings of many families, which are generally meager before the onset of the disease, maybe completely spent leaving the surviving family members without the means of support. Studies in Zambia have revealed that Zambia's poverty levels have remained high since the last reporting period with the overall poverty incidence estimated at 64% though poverty levels among the visually impaired persons is not recorded. High levels of poverty directly or indirectly promote behaviour which creates vulnerability to HIV and AIDS (CDC, 2004).

2.7 Transmission of HIV and AIDS.
Scientists identified the means by which HIV was transmitted in the early days of the epidemic, well before the virus itself was discovered. No new modes of transmission have been discovered since (Ward, 1999). Throughout the world, people can contract HIV in three possible ways namely; sexual intercourse (either homosexual or heterosexual), contact with blood (blood products, or tissues of an infected person) and through transmission from mother to child.

Kelly, (2010) noted that the virus is not spread by casual or social contact. Furthermore, there is no evidence that the virus is spread by mosquitoes, lice, bed bugs, in swimming pools or by sharing cups, eating and cooking utensils, toilet and air space with an infected individual. Hence, HIV infection and AIDS are not contagious.

2.8 Awareness and Access to HIV and AIDS Information among the Visually Impaired Learners.
The HIV and AIDS epidemic as alluded to constitute a danger to the most fundamental aspect of human rights, the right to life. Studies done in (2008) by Association of Members Episcopal Conferences in Eastern Africa (AMECEA) reveal that statistics in HIV infection among the young generation is depressing. In Zambia, it is projected in view of the current levels of HIV prevalence that the young generation faces a 50% lifetime risk
of dying with AIDS (Siatontola, 2004). This is because this generation is exposed to sophisticated risky behavior. Visually impaired learners in upper basic schools of Zambia are no exception.

ZAFOD (2008) revealed that, the main problem is lack of money for carrying out effective HIV and AIDS information dissemination programmes. The currently available services and resources for disseminating information on radio, television or print media does not generally benefit the visually impaired learners in upper basic schools. The visually impaired learners are not reached through conventional HIV and AIDS outreach activities, first, because they often lack accessible public transport and have limited access to health services. They are disadvantaged in the sense that they cannot see the results wherever they are tested in Voluntary Counseling and Testing (VCT)

Secondly, a major challenge in sharing information on HIV and AIDS with visually impaired learners in upper basic schools is the failure by stakeholders such as teachers, parents and peers to understand how to communicate with them effectively. Communication barriers persist between the sighted and visually impaired children. For example, although there is a lot of information on the internet, visually impaired learners in upper basic schools rarely access it because they lack computer skills or transport to visit the centres.

2.9 Sources of HIV and AIDS Information among the Visually Impaired Learners.

Chola (2002) in a study on communication among the youth revealed that interpersonal communication channels should be considered as vital. Among others, radio is perceived as the most effective channel for disseminating various types of information including HIV and AIDS. This type of communication leaves learners with visual impairment disadvantaged as issues such as the practical use of condoms may not be fully explained. A study conducted in Nigeria by Sangowawa, Owaya and Fasern (2004) on HIV and AIDS knowledge and information sources among the visually impaired in Ibadan found that students' sources of information on HIV and AIDS were television, teachers, friends, family members and newspapers while in the Zambian situation, Siatontola (2004) found out that the sources of information a teacher would use for the visually impaired learners are Anti-AIDS Clubs, Education through entertainment or dramatization which include games for life and youth friendly health care service.
2.10 Reasons why the Visually Impaired need Information on HIV and AIDS.

Goss (1989) observed that key to preventing the spread of HIV and AIDS scourge is information. The United Nations Declaration of commitment on HIV and AIDS states that 90% of young people (aged 15-24) should have access to HIV and AIDS information to reduce vulnerability to (HIV) infection. Information plays a key role in influencing adolescent sexual behaviour (MoH, 2005).

Those who have access to adequate, relevant and timely information on HIV and AIDS are in a position to make appropriate informed choices and decisions in various aspects of their lives. Upper basic school learners with visual impairment are able to use the information given to them to fight HIV and AIDS if it is presented in the appropriate format of their disability. Sialumano (2009), revealed that non availability of information in Braille on HIV and AIDS has disadvantaged the blind that are also infected and affected by the pandemic, and yet there is a lot of information about the pandemic. Most upper basic schools in the country catering for the visually impaired do not have materials such as Braille for the Blind.

2.11 Braille as a Primary Literacy Medium.

A sighted child who is reading at a basic level should be able to understand common words and answer simple questions about the information presented. They should also have enough fluency to get through the material in a timely manner. Over the course of a child's education, these foundations are built on to teach higher levels of mathematics, science and comprehension skills. To the contrary, children who are visually impaired (Ruby, 2004) not only have the education disadvantage of not being able to see, they also miss out on the very fundamental parts of early and advanced skills if not provided with the necessary Braille literacy.

People who are visually impaired need to be able to obtain information in an effective and timely way, exchange information with others accurately and to a desired end, and, in general read and write with fluency. But when someone cannot use print with ease to perform these activities, alternatives need to be found. Braille, along with other options such as personal readers, and computers equipped with adaptive equipment, presents an effective alternative,
and its use can enable the individual who is visually impaired to be a fully literate participant in today's information driven society (Wormsley and D'andrea, 1997). A number of developments over recent years (Ruby, 2004) have made Braille literacy perhaps more important today than it has ever been. First, the significance of being literate is greater than ever in today's world, in which the quantity of information available to those who are print and computer literate continues to grow rapidly—while the availability of work not requiring literacy continues to diminish almost as rapidly. The availability of Braille as a tool for literacy provides a choice in making independent decisions for adults and pupils who are visually impaired.

2.12 Sex Education.

Human sexuality has biological, physical, emotional and spiritual aspects. The biological aspect of sexuality refers to the reproductive mechanism as well as the basic biological drive, libido, which exists in all species, which is strongly influenced by hormonal levels. The emotional or physical aspect of sexuality refers to the bond that arises between individuals, and is manifested physically or through emotions such as love, trust and caring. There is also a spiritual aspect of sexuality of an individual or as a connection with others. Experience has shown that visually impaired adolescents are curious about aspects of their sexuality as well as the nature of sexuality in general, and that many will seek to experience their sexuality in some way (Green, 1994).

Traditionally, adolescents were not given any information on sexual matters, with discussion of these issues being considered taboo. Such instruction as was given was traditionally left to a child's parents, and often this was put off until just before a child's marriage. Most of the information on sexual matters was obtained informally from friends and the media, and much of this information was of doubtful value. Much of such information was usually known to be deficient, especially during the period following puberty when curiosity of sexual matters was the most acute. This deficiency became increasingly evident by the increasing incidence of teenage pregnancies, especially in Western countries after the 1960s. As part of each country's efforts to reduce such pregnancies, programs of sex education were instituted, initially over strong opposition from parent and religious groups (Green, 1994).

Burt (2004) defines sex education as the study of the characteristics of beings; a male and
female. Such characteristics make up the person's sexuality. Sexuality is an important aspect of the life of a human being and almost all the people including children want to know about it. Sex education includes all the educational measures which in any way may help adolescents have knowledge about sex. He further says that sex education stands for protection, presentation extension, improvement and development of the family based on accepted ethical ideas.

Leepson (2009) go a step further and talk of sex education as instruction in various physiological, psychological and sociological aspects of sexual response and reproduction. Kearney (2010) also defines sex education as involving a comprehensive course of action by the school, calculated to bring about the socially desirable attitudes, practices and personal conduct on the part of children and adults, that will best protect the individual as a human being and the family as a social institution.

Thus, sex education may also be described as "sexuality education", which means that it encompasses education about all aspects of sexuality, including information about family planning, reproduction (fertilization, conception and development of the embryo and fetus, through to childbirth), plus information about all aspects of one's sexuality including: body image, sexual orientation, sexual pleasure, values, decision making, communication, dating, relationships, sexually transmitted infections (STIs) and how to avoid them, and birth control methods. Various aspect of sex education are considered appropriate in school depending on the age of the students or what the children are able to comprehend at a particular point in time. Rubin and Kindendall (2009:56) expressed that sex education;

"Is not merely a unit in reproduction and teaching how babies are conceived and born. It has a far richer scope and goal of helping the youngster incorporate sex most meaningfully into his present and future life, to provide him with some basic understanding on virtually every aspect of sex by the time he reaches full maturity".

2.12.1 Sources of Sex Education.

Sex education may be taught informally, such as when someone receives information from a conversation with a parent, friend, religious leader, or through the media. It may also be delivered through sex self-help authors, magazine advice columnists, sex columnists, or sex
education web sites. Formal sex education occurs when schools or health care providers offer sex education. Slyer (2008) stated that sex education teaches the young person what he or she should know for his or her personal conduct and relationship with others. Sex education is necessary to prepare the young for the task ahead. According to him, officials generally agree that some kind of planned sex education is necessary.

Sometimes formal sex education is taught as a full course as part of the curriculum in junior or high school in the United States of America (Slyer, 2008). Other times it is only one unit within a more broad biology class, health class, home economics class, or physical education class. Some schools, however, offer no sex education, since it remains a controversial issue in several countries, particularly the United States (especially with regard to the age at which children should start receiving such education, the amount of detail that is revealed, and topics dealing with human sexual behavior (for example, safe sex practices, masturbation, premarital sex, and sexual ethics).

Wilhelm (2009) commented that sex education of his time was a work of deception, focusing on biology while concealing excitement-arousal, which is what a pubescent individual, is mostly interested in. Reich (2010) added that this emphasis obscures what he believed to be a basic psychological principle; that all worries and difficulties originate from unsatisfied sexual impulses. Majority of people favors some sort of sex instruction in public schools, and this has become an intensely controversial issue because unlike most subjects, sex education is concerned with an especially sensitive and highly personal part of human life. He suggests that sex education should be taught in the classroom.

2.12.2 Sex Education for the Visually Impaired Learners.

Between one and half and three years of age, sighted toddlers have repeatedly compared and then contemplated, among other things, the anatomical features of their parents' bodies, those of their own bodies and those of siblings and peers. Kirkendall (1975) argued that, the visually impaired children have not received directed sexuality instruction during the early formative years, and when such children enter School, they are years behind their sighted peers in sexuality awareness and development. Scholl (1986) observes that the older the visually impaired children are before receiving
directed and intentional sexuality education, the more difficult, if not impossible, it becomes for them to comprehend even the most seemingly basic concepts. The researcher is of the opinion that young children are more likely to form accurate concepts because they have fewer established misconceptions and inaccuracies. Those in their late teens and older do not, apparently, disregard all that they have previously "learned" when given the facts; rather, the facts only add to the complexities of their misconceptions.

It is never too early to begin purposeful sexuality education of any child, especially that of a visually impaired child. It has been shown by writers such as Kirkendal (1975) that sex education of human infants begins at birth through involuntary non-verbal communication. Nevertheless, many adults express anxiety about telling children 'too much' about sex 'too early' and thus harming them. Research has shown that this fear is unfounded. Children absorb what they are intellectually and emotionally ready to absorb. They cannot be harmed by what they are not ready for or interested in. If given lengthy, detailed explanations, they will take in only the simple aspects, and then become bored and disregard the remainder, however, we do cause harm by withholding sexual information until after an individual has had a particular sexual experience. For example, not preparing a young female (especially the visually impaired) for the onset of menses instills fear and confusion that is not easily overcome.

In addition, defining sex in narrow terms implies that, the visually impaired individuals are kept from viewing, reading, or discussing the various aspects of sexuality in order to prevent the development of 'unsatisfiable aspirations.' Further, it is often felt that exposing them to such information will lead them to 'sexual misbehavior' and create 'uncontrollable overstimulation' which may be acted upon irresponsibly. Consequently, sexuality education is avoided whenever possible; it is only taken as disaster insurance, or as a way of alleviating any 'trouble' in the lives of children. This results in, visually impaired youngsters reaching adulthood, not only childlike, naive and dependent, but also as objects of sexual abuse and molestation. Parents and professionals who pursue this line of thought close their eyes to the fact that visually impaired children will one day be adolescents with all the biological urges of this age group. They are oblivious to the fact that sexuality education is a learning experience that enriches children's lives, making them more understanding of themselves, their families, their peers, and even society.
In view of the effects that all these factors have upon the sexual conditioning of visually impaired youngsters, it will be more advantageous to view 'sex' in a more expansive way than the traditional one. Many of the fears and anxieties can be eliminated by considering it as something all-encompassing, rather than in the usual narrow terms. The researcher regards it as something we are, not something we do; as a major aspect of personality rather than merely a physical expression. Kirkendall (ibid:40) argued out that "probably nothing so greatly influences one's life pattern as his sex membership". An individual's sense of identity, his ways of thinking and behaving, social activities, choice of associates, mode of dress, and many other important factors are strongly conditioned by being male or female.
CHAPTER 3
METHODOLOGY OF THE STUDY

3.1 Introduction.
This chapter discusses the methodology used in the study. Silvermann (2000:88) states that methodology is the "general approach to a research topic". It gives a description of the location, research design, target population and sample size, sampling procedure, research instruments and their validity, data collection procedures and methods of data analysis.

3.2 Location.
The location of this study was in Magwero school for the blind (Eastern Province), Ndola Lion school for the blind (Copperbelt Province), Mporokoso school for the blind (Northern Province) and Sefula school for the blind (Western Province). These schools were chosen because upper basic school learners with visual impairment are found in these institutions.

3.3 Research Design.
A research design can be thought of as the structure of research. It is the "glue" that holds all of the elements in a research project together. A design is used to structure the research, to show how all of the major parts of the research project work together to try to address the central research questions. Orodho (2003) defines it as a scheme, outline or plan that is used to generate answers to the research problems. A research design can be regarded as an arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance with research purpose. It is the conceptual structure within which research is conducted. It constitutes the blue-print for the collection, measurement and analysis of data.

This was a case study which specifically looked at the four named learning institutions of Magwero, Ndola Lion, Mporokoso, and Sefula schools for the blind. Qualitative and
Quantitative methods were used. Qualitative method used focus group discussion and tape
recorders. Qualitative methods involve giving detailed descriptions and explanations. Quantitative method mainly relied on questionnaires. Quantitative methods involve analyzing the statistics and expressing the data in numerical terms. A case study was chosen as a model for the research design because the researcher wanted to collect in depth information pertaining to the area of study.

3.4 Target Population.
The target population is the entire set of units for which the study sample is chosen. It is a particular group of people identified as the source for the intended respondents. (srmo.sagepub.com accessed on 4.06.2013). The target population for this study therefore comprised all pupils with visual impairments, head teachers and specialist classroom teachers in the four named learning institutions of Magwero, Ndola Lion, Mporokoso, and Sefula schools for the blind.

3.5 Study Sample.
The study sample implies a group of people or events drawn from the population. The goal is to be able to find out true facts about the sample that will also be true of the population (www.sahs.utmb.edu accessed on 4.06.2013). The study sample of this research comprised the four Schools for the Blind mentioned above. In terms of respondents, the sample included the four head-teachers of those schools, eight specialist classroom teachers, that is, two from each school and forty learners. The learners' population in the sample was made up of ten pupils from each of the above mentioned schools.

3.6 Sampling Procedure.
Sampling procedure according to Sidhu (2002) is a process of selecting a sample from the population. Informants in this study were selected from three population groups consisting of the learners with visual impairment, head teachers and specialist classroom teachers. At each school, purposive sampling was used to select head-teachers and simple random sampling to select the specialist teachers and visually impaired pupils who participated in the study. In addition, Focus Group Discussion (FGDs) was also held with pupils at each of the sampled schools.
Purposive sampling is a sample method in which the researcher purposely targets a group of people believed to be reliable for the study. On the other hand, simple random sampling means that every member of the sample is selected from the total population in such a manner that all members of the population have essentially the same probability of being selected. Focus Group Discussions may also be called group interviews. A number of people (learners) are asked to come together in a group to discuss a certain issue. For example, in market research this could be a discussion centred on new packaging for a breakfast cereal, in social research this could be to discuss adults’ experiences of school or in political research this could be to find out what people think about a particular political leader (Sidhu, 2002).

The researcher used purposive sampling for the head teachers because they were the only ones in that position. On the part of the specialist classroom teachers and pupils, simple random sampling was used to remove elements of biasness. The researcher used pieces of paper to select participants (teachers and pupils) of the study. All the specialist classroom teachers in the school were requested by the senior teacher to gather in the staffroom for this exercise. Similarly, all the visually impaired pupils were gathered in one classroom by the prefects for this study. 'Yes' and 'No' were written on small pieces of paper, put into a hat, shuffled and each teacher and each pupil was asked to pick one respectively. The researcher supervised the exercise in each case. Those who picked pieces of paper written 'Yes' participated in the study while those who picked 'No' were not involved. For example, where the researcher needed two respondents out of a total of five targeted people, he wrote 'Yes' on two and 'No' on three pieces of paper. Each person was asked to pick one piece of paper and the two who picked those written 'Yes' participated in the study.

3.7 Research Instruments.

Research instruments are tools that the researcher used to collect data during the study. The instruments used in this study were questionnaires for all the categories of respondents and Tape recorders and Focus Group Discussions (FGDs) with the visually impaired pupils (appendices A, B, and C). A questionnaire refers to a list of questions which a
researcher gives to respondent to answer. The questionnaires contained both closed and open ended questions. Anderson (1990) reveals that closed-form or structured questionnaires usually consist of prepared list of concrete questions and a choice of possible answers. To indicate his reply, a respondent marks "yes" or "no"; circles, or ranks a series of statements in the order of their importance (1, 2, 3......). Sometimes he is asked to insert some brief statements into blank spaces or on empty lines. On the other hand, open form questionnaire permits the respondents to answer freely and fully in their own words and their own frame of reference. This method of collecting data gives the subject an opportunity to reveal their motives or attitudes and specify the background or provisional conditions upon which their answers are based. According to Anderson (1990), a focused group discussion or interview is a group consisting of individuals with certain characteristics who focuses their discussion on a given topic (that is, visually impaired pupils' awareness of HIV and AIDS in upper basic schools of Zambia in the case of this study).

3.8 Data Collection Procedure.
The data were collected between July and December 2009. As regards the actual collection of data, the study used self-administered questionnaires as the main method and the Focus Group Discussion. A questionnaire was used to get data from head-teachers, specialist classroom teachers and visually impaired learners. Those learners that had difficulties in answering certain questions were assisted by using local language in their area to enhance their understanding. The reason for choosing different methods was that they might be complementary to each other, throwing light and information on various aspects of the research. For example, while questionnaires give a broad picture, a Focus Group Discussion provided a more in-depth view. Audiotape recordings were taken during Focus Group Discussions.

3.8.1 Administering the Head Teachers’ Questionnaire.
As a matter of protocol in any institution, the researcher visited the office of the head teacher, explained the purpose of his visit and handed the questionnaire to be answered (appendix A).

3.8.2 Administering the Specialist Classroom Teachers’ Questionnaire.
The head teacher called one of the senior teachers to his office and introduced the researcher
to him. He explained the purpose of the researcher's visit to the senior teacher and requested him to organize the other specialist classroom teachers in the staffroom for the exercise. All teachers gathered in the staffroom and the researcher personally distributed the questionnaires to be answered at their own pace (appendix A).

### 3.8.3 Administering the Visually Impaired Learners’ Questionnaire.

The visually impaired learners were gathered in one classroom by a senior teacher. The researcher was then introduced to the pupils and explained the purpose of his visit to them. As alluded to, questionnaires were used to collect data from respondents. In order to meet the needs of the respondents with visual impairment, the questionnaires which the researcher distributed to them to answer were transcribed into Braille (appendix B).

### 3.8.4 Holding Focus Group Discussions with Visually Impaired Learners.

Considering the limited time at my disposal, the researcher used focus group discussions to save time and collect enough data so as to get more insights into the study. According to Anderson (1990) a focus group discussion is a group consisting of individuals with certain characteristics who focused discussion on a given topic. In order to get access to all respondents especially learners, permission was sought from the head-teachers who in turn informed the senior teachers about the researcher's visit and told them to assist him (the researcher) in making the pupils available. The grade eight and nine pupils aged between 15 to 19 were grouped in one classroom for the discussion.

Though there are various ways of recording FGDs, interviews, tape recording was considered most appropriate for this study. Tape recording reduced the possibility of the researcher being biased in the selection of data by capturing the views wholly. This was helpful for data analysis since the tapes were re-played to establish the fact in the absence of the informants. Furthermore tape recording enabled me to pay more attention to the interview, probing and nonverbal language by the informants.

The researcher transcribed the views word-for-word the same day they were conducted. Gestures, pauses and sounds of expression such as ah! And laughter was also transcribed. The FGDs were conducted mainly in English although use of local language (Chewa at
Magwero School for the blind, Bemba at Mporokoso School for the blind and Ndola Lion School for the blind and Lozi at Sefula School for the blind) was also allowed. For instance, some pupils with visual impairment interviewed preferred to speak in one of the local languages mentioned above depending on the province.

3.9 Data Analysis.
According to Kvale (1996) analysis means to separate into parts or components. Data analysis refers to examining what has been collected in survey or experiment and making deductions and inferences. It involves uncovering underlying structures; extracting important variables, detecting any anomalies and testing any underlying assumptions for purposes of interpretation (Sidhu, 2002 and Kombo and Tromp, 2006).

Quantitative data from the questionnaires was analyzed using the statistical package for social sciences (SPSS). The SPSS was chosen because it helps to obtain frequencies and percentages in an accurate, precise, easier and fast way. In order to obtain the required information, numbers were assigned to response categories. For example "yes" and "no" responses were divided into categories. The number one (1) was assigned to "yes" and two (2) to "no". Scoring was done by counting the number of the respondents who said "yes" and "no" respectively. The qualitative data from the Focus Group Discussion was analyzed by grouping and coding the emerging themes.

3.10 Ethical Considerations.
Data collection in case study research poses various ethical problems (Gall et al, 1996). Consequently, before embarking on each interview or distributing the questionnaire, the purpose of the study was explained to the informants. The participants in this study were assured of confidentiality of the information they were to give. They were informed that their responses were simply for academic purposes and that they would be treated with the highest confidentiality they deserved. To assure them of this, they were neither required to write their names on the questionnaires nor were their names written down during the FGDs. Ethical Considerations also includes informed consent. An informed consent form was prepared and forwarded to the respondents for them to read and sign as a way of ensuring their assurance in providing the data (appendix D). The consent of the interviewees was requested before tape recording of the discussions.
CHAPTER 4
PRESENTATION OF FINDINGS

4.1 Introduction.
This chapter presents the findings of the study according to the objectives. The objectives of the study were: (1) to determine the extent of HIV and AIDS awareness among the visually impaired learners in upper basic schools of Zambia, (2) to find how the visually impaired learners in upper basic schools acquired information on HIV and AIDS and (3) to establish ways by which information on HIV and AIDS among the visually impaired upper basic schools learners could be increased if at all it was low.

4.2 Findings from Head Teachers and Specialist Classroom Teachers.

4.2.1 Availability of Library Facility in the School.
One of the objectives of this study was to determine the extent of HIV and AIDS awareness among the visually impaired learners in upper basic schools of Zambia. The library in any learning institution is the custodian of knowledge. To this effect, head teachers and specialist classroom teachers were asked to put a tick in the box marked either 'yes' or 'no' whether their respective schools had a school library. All the four head teachers and six specialist classroom teachers acknowledged having a school library while two specialist classroom teachers said they had 'no' school library in place. A total of eight specialist classroom teachers participated in this study.

4.2.2 Availability of Literature on HIV and AIDS in the School Library.
There must be information stored in the library about HIV and AIDS in order for the visually impaired learners to read and be aware of the pandemic. Head teachers and specialist classroom teacher respondents were further asked to say whether their respective school libraries had any literature on HIV and AIDS. All the four head teachers and six specialist classroom teachers said 'yes' while two specialist classroom teachers said 'no'.
4.2.3 Whether Available Literature on HIV and AIDS in The School Library as Transcribed in Braille.
For the respondents who answered in the affirmative, a further question was asked to them to indicate whether the available literature on HIV and AIDS in the school library was transcribed into Braille. The answer from one head-teacher and six specialist classroom teachers was 'yes' while that from three head-teachers and two specialist classroom teachers was 'no'.

4.2.4 Access to Information on HIV and AIDS by the Visually Impaired Learners.
Head teachers and specialist classroom teachers were asked to indicate whether the visually impaired learners had access to information on HIV and AIDS. All of them agreed that the visually impaired learners had access to information on HIV and AIDS.

4.2.5 How Visually Impaired Learners Accessed Information on HIV And AIDS.
For the respondents who answered in the affirmative, a further question was asked to indicate on how the learners with visual impairment accessed information on HIV and AIDS in their respective schools. One head teacher disclosed that learners with visual impairment accessed information on HIV and AIDS by making use of written literature in the library/clubs. Two specialist classroom teachers’ response was that visually impaired learners accessed information on HIV and AIDS through Drama. Furthermore, two head teachers and four specialist classroom teachers mentioned that teachers were the pupils' main source of information by explaining to them what was written in ink about HIV and AIDS. Another head teacher and two specialist classroom teachers mentioned sensitization talks and songs as a way in which learners with visual impairment accessed information on HIV and AIDS.

4.2.6 Programmes that enlighten the Visually Impaired Learners on HIV and AIDS Matters.
Head teachers and specialist classroom teachers were asked to indicate whether their respective schools had programmes aimed at enlightening the visually impaired learners on HIV and AIDS matters. All of them said 'yes', an indication that they had such programmes in
their schools.

The respondents were further asked to indicate the types of programmes that were available to enlighten the visually impaired learners on HIV and AIDS matters in their respective schools. Two head teachers and two classroom specialist teachers mentioned child to child, clubs/debate and drama (peer education) as programmes that were available to enlighten the visually impaired learners on HIV and AIDS matters. One head teacher pointed to school assembly while four classroom specialist teachers mentioned Anti Aids clubs as programmes available to enlighten the visually impaired learners on HIV and AIDS matters. Another head teacher mentioned the visitation by non government organization while two classroom teachers pointed quiz and drama as programmes available to enlighten the visually impaired learners on HIV and AIDS matters.

4.2.7 Sensitizing Learners with Visual Impairment on HIV and AIDS by Members of the Public.

The head teachers and classroom specialist teachers were also asked to say whether the general public came to sensitize pupils with visual impairment on HIV and AIDS in their schools. The responses from the Ndola head-teacher was 'yes' while those from all the other respondents (three head teachers and eight classroom specialist teachers) was 'no'.

4.2.8 Provision of Brailed HIV and AIDS material by the Ministry of Education.

Respondents were also asked to indicate whether the Ministry of Education provided learners with visual impairment Brailed HIV and AIDS material. The responses to this question were 'no' from all the respondents except for the Ndola head-teacher who said 'yes'. Most probably the head teacher from Ndola meant HIV and AIDS material written in ink being provided by the Ministry of Education.

4.2.9 Modes of Learning about HIV and AIDS by the Visually Impaired Learners.

Head teachers and specialist classroom teachers were asked to indicate how learners with visual impairment learnt about HIV and AIDS in their respective schools. One head teacher mentioned reading Brailed literature in the library and lessons taught by the teachers as modes of learning about HIV and AIDS matters while two classroom Specialist teachers pointed to debates, quizzes and Drama. Two head teachers and two classroom
specialist teachers mentioned anti-AIDS clubs and other people knowledgeable about HIV and AIDS as modes of learning about the scourge by the visually impaired learners. Another head teacher and two classroom specialist teachers revealed school assemblies and magazines though most of these are in ink print as a mode of learning about HIV and AIDS matters by the visually impaired learners. However, two classroom specialist teachers also revealed reading textbooks and visitations by members of the public who came to share information as modes of learning about HIV and AIDS by the visually impaired learners.

4.2.10 Ways in which Awareness of HIV/AIDS can be enhanced among the Visually Impaired Learners.

Head teachers and classroom specialist teachers were asked about the different ways in which awareness of HIV and AIDS can be enhanced among the visually impaired pupils. All of them said transcribing the available literature on HIV and AIDS into Braille is the major option that can enhance awareness among the visually impaired pupils.

While the first objective of this study was to determine the extent of HIV and AIDS awareness among the visually impaired pupils in upper basic schools of Zambia, objectives two and three of the study were to find how the visually impaired pupils in upper basic schools acquire information on HIV and AIDS and to establish ways by which information on HIV and AIDS among the visually impaired in upper basic schools pupils could be increased if at all it was low.

4.3 Findings from the Visually Impaired Learners.

4.3.1 Table 1. Visually Impaired Learners' Knowledge of the Condition known as HIV and AIDS.

<table>
<thead>
<tr>
<th>SCHOOL</th>
<th>RESPONSE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>NDOLA</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>SEFULA</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>MAGWERO</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>MPOROKOSO</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>37</td>
<td>3</td>
</tr>
</tbody>
</table>
Learners were asked to say whether they have ever heard of HIV and AIDS. Out of 40 respondents, majority of them, 93% i.e. 37 said 'yes' while, 7% i.e. 3 said 'no'. The large numbers of learners saying 'yes' is an indication that most of the learners had heard about the condition known as HIV and AIDS.

4.3.2 Types of Persons who normally talked about HIV and AIDS to Visually Impaired Learners.

As regards the question of who normally talked to learners about HIV and AIDS, most of them, twenty four visually impaired pupils said teachers, ten said parents, four said friends and two said friends and parents.

4.3.3. Whether the School had any books in Braille on HIV and AIDS.

Learners were asked to indicate whether there were any books written in Braille on HIV and AIDS at their school. Their responses were as shown in Table 2 below. At Magwero and Ndola Lion schools for the blind, five visually impaired learners said 'yes' and exactly the same number said 'no' respectively. At Sefula School for the blind all the ten respondents said 'no'. In Mporokoso, nine respondents said 'yes' while one said 'no'. The overall indication is that these schools had very few books written in Braille on HIV and AIDS.

**Table 2: Availability of books on HIV and AIDS in Braille.**

<table>
<thead>
<tr>
<th>SCHOOL</th>
<th>RESPONSE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>NDOLA</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>SEFULA</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>MAGWERO</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>MPOROKOSO</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>19</td>
<td>21</td>
</tr>
</tbody>
</table>
4.3.4 Whether Teachers help Visually Impaired Learners in explaining how HIV and AIDS is Contracted.

Learners were asked to state whether teachers helped them in explaining how HIV and AIDS is contracted. All the visually impaired learners acknowledged receiving explanation from the teachers how HIV and AIDS is contracted.

4.3.5 Whether Learners with Visual Impairment receive enough Information on HIV and AIDS.

Respondents were further asked to state whether they receive enough information on HIV and AIDS. All the visually impaired learners disagreed receiving enough information on HIV and AIDS.

4.3.5.1 What should be done to enable the Visually Impaired Learners have more Information on HIV and AIDS.

Learners were asked to state what should be done to enable them have more information on HIV and AIDS. All the visually impaired learners said that the information given should be in Braille. This is the format that they are able to read.

4.4 Findings from Focused Group Discussions with the Visually Impaired Learner

4.4.1 Whether Visually Impaired Learners understood what the letters HIV stood for.

Learners were asked to indicate what they understood by the letters HIV. The study showed that upper basic school visually impaired learners generally had an idea of what HIV was. One visually impaired girl in grade 9 at Ndola school for the blind said HIV stood for Human immunodeficiency Virus.

4.4.2 Whether Visually Impaired Learners understood what the letters AIDS stood for.

Learners were asked to indicate what they understood by the letters AIDS. As in the previous case, the learners who were involved in the Focus Group Discussion were able to say what AIDS was. One grade 8 learner from Ndola and three others from Sefula and Mporokoso schools for the Blind indicated that AIDS stood for Acquired Immune
4.4.3 Transmission of HIV and AIDS.

From the Focus Group Discussion with pupils at all the schools under study, visually impaired pupils mentioned unprotected sex as one method in which HIV and AIDS can be transmitted. Hubley, (2002) asserts that the main route for the spread of HIV is by sexual intercourse between two people when one person is carrying the virus. Vaginal intercourse (unprotected sex) where the penis of the male penetrates the vaginal of the female is a common route of transmission. Blood transfusion was also mentioned in the Focus Group Discussion with visually impaired pupils as a method in which HIV and AIDS can be transmitted. There is no risk of becoming infected with HIV by giving blood as the equipment used is normally sterile (Hubley, 2002). However, receiving blood contaminated with HIV will lead to infection. Another possible route of infection according to one visually impaired boy in the Focus Group Discussion held at Ndola Lion School for the blind is through injections by health workers when needles and syringes have not been properly sterilized.

Mother-to-child transmission was yet another method mentioned in the Focus Group Discussion with visually impaired pupils in which HIV and AIDS can be transmitted. One visually impaired girl at Sefula School for the blind in Western province mentioned in the Focus Group Discussion that a baby can become infected in three ways: *HIV can cross the placenta from the mother to the infant before birth- especially during the last three months of pregnancy.* The risk of infection depends on how much virus is in the mother. A mother with AIDS is more likely to give birth to an infected baby than a mother who is infected by HIV but has not yet developed symptoms. *HIV can also be transmitted from the mother when the baby travels down the birth canal during birth.* A drawn out labour and a long time between rupture of the membranes and delivery believed to increase risk of transmission. *Some transmission also takes place through breastfeeding.*

4.4.4 Symptoms of AIDS.

As regards symptoms of AIDS, the visually impaired learners in the Focus Group Discussion mentioned chronic diarrhea as the major sign. Chronic diarrhea leading to a
significant loss in weight is the most striking feature of AIDS. This led to the disease being called 'Slim' in Uganda (Hubley, 2002). This is often accompanied by persistent fever and night sweats. Another visually impaired learner mentioned enlarged lymph glands as a symptom of AIDS. The lymph nodes or glands are an important part of the body's immune system and are located in various parts of the body such as under the jaw, neck, armpits and groin. An early sign of AIDS is often painless bumps or swellings of at least one centimeter diameter in these lymph nodes. This is called 'persistent generalized lymphadenopathy' or PGL. Tuberculosis (TB) is another disease mentioned by a visually impaired pupil at Mporokoso School for the blind that can take advantage of a weakened immune system and develop in a patient. The symptoms are a persistent cough, weight loss and coughing up blood. In many developing countries such as Zambia, TB is the most common opportunistic infection associated with AIDS. It is also a very important cause of death in people with AIDS. Many people are experiencing a substantial increase in TB because of AIDS.

4.4.5 Ways of Preventing HIV infection.
As to ways of preventing HIV infection, the respondents who took part in the FGD cited condom use and abstinence as the common ways of preventing HIV infection. Condom distribution (Dyk, 2001) should be an important component of any HIV prevention programme. Condoms should be easily accessible to both men and women. They should be available and distributed in places where a sense of privacy is increased and embarrassment is reduced through self-service (i.e. where people can simply help themselves to however many they need) in clinics, hospitals, factories and mines. Condoms should be distributed free of charge if possible. Abstinence from sex (WHO, 2000a) is the only totally reliable way of preventing oneself from being infected by HIV. Abstaining (not having sex at all) is the only 100% effective way to prevent the sexual transmission of HIV. Young visually impaired people in particular should therefore be encouraged to abstain from sex or at least to delay their commencement of sexual relationships for as long as possible. Other ways mentioned were being faithful to one's sexual partner, not sharing sharp used instruments and avoiding getting into contact with contaminated blood.
4.4.6 Possibilities of Contracting HIV.

Respondents in the FGD were asked to indicate whether blood donation, unprotected sex, using a public toilet, caring for AIDS patients, having many sexual partners, going to school with an HIV infected person and not having sexual intercourse would be of high, low and no risk at all. Their views were that blood transfusion, unprotected sex and having many sexual partners were high risks of contracting HIV and AIDS while using a public toilet, caring for an HIV patient, going to school with an HIV infected person and not having sexual intercourse had no risk as far as HIV virus transmission was concerned. One pupil from Ndola Lion School for the blind said that: "as Jehovah's witness they do not accept any blood from another person" This pupil was reacting to high risk involved in blood transfusion.
CHAPTER 5
DISCUSSION OF THE FINDINGS

5.1 Introduction.
This chapter discusses the findings of the study which sought to investigate the visually impaired pupils' awareness of HIV and AIDS in upper basic schools of Zambia. The discussion is presented in line with the three objectives of the study namely; (1) to determine the extent of HIV and AIDS awareness among the visually impaired pupils in upper basic schools of Zambia; (2) to find out how the visually impaired learners in upper basic schools acquire information on HIV and AIDS; and (3) to establish ways by which information on HIV and AIDS among the visually impaired upper basic school learners could be increased if at all it was low.

5.2 Extent of HIV and AIDS Awareness among the Visually Impaired Learners in Upper Basic Schools of Zambia.
The findings were based on the first objective; to determine the extent of HIV and AIDS awareness among the visually impaired learners in upper basic schools of Zambia; Using three types of instruments namely questionnaires, focus group discussion and tape recorders, the researcher asked (i) Learners with visual impairment and (ii) head teachers and specialist classroom teachers on the extent of HIV and AIDS awareness among the visually impaired learners in upper basic schools of Zambia;

(i) Learners with Visual Impairment.
The Focus Group Discussion guide for the visually impaired learners was divided into various sections including stating what the acronyms HIV and AIDS meant, ways in which people get infected with the HIV, symptoms of AIDS, ways of preventing HIV infection, indicating whether the following (Blood donation, having unprotected sex with a sex worker, using a public toilet, caring for AIDS patient, having many sexual partners, going to school with an HIV infected and not having sexual partner) are high risk, low risk or no risk activities in terms of HIV infection.

At the beginning of each Focus Group Discussion, all the informants in this study were asked to share with the author the extent of their awareness of HIV and AIDS. This was done to put
the informants at ease and establish a good rapport. Upper basic visually impaired learners, judging by their responses, were generally aware of HIV and AIDS epidemic. They knew what it was, how it was transmitted and how to avoid it. For example, one Grade 8 pupil at Sefula School for the blind in Western province gave the following answer during FGDs:

You can prevent it by not sleeping around with many girls without using a condom. That is all. There is nothing more I can say. Even if trust your girlfriend, if can sleep with her you must use a condom because you do not know whether she slept with another man or what her HIV status is

Some learners with visual impairment during FGDs actually confirmed having a relative suffering from HIV and AIDS. The visually impaired learners attributed the reason for this awareness to the work of some Non Governmental Organizations (NGOs) involved in HIV and AIDS prevention campaigns. However, all the visually impaired learners conceded that even though they heard a lot about HIV and AIDS they never saw or felt (through the sense of touch) any AIDS patient. It seems as if the loss of vision may have had adverse consequence on their ability to see AIDS patient even though they heard a lot about AIDS patients and could say a lot about them.

(ii) Head teachers and Specialist Classroom Teachers.
School leadership also expressed the same view. According to a head teacher at Sefula School for the blind in Western province, visually impaired learners had much knowledge about HIV and AIDS due to the:

Responses they gave when people from Ministry of Health and Non-Government Organizations came to the school to give a talk on the subject”.

The implication here is that the pupils heard a lot of talks and lectures on HV and AIDS hence they have vast knowledge concerning the disease. Another teacher, at the same school was of the same thought and further added,

"The pupils have knowledge about HIV and AIDS but concerning the understanding there is much to be desired about because they still practice unsafe sex".
Another teacher at Magwero School for the blind in Eastern province put it this way:

"the visually impaired learners in the school know a lot about HIV and AIDS awareness because when questions were asked about it they said everything about the disease”

A teacher at Sefula School for the Blind said that the visually impaired learners knew much about HIV and AIDS because, “once they know a concept they keep it as a rule and any time they are asked they tell what it is.”

From the study, it can be deduced that the informants generally had an idea about HIV and AIDS. Some informants mentioned that HIV stood for Human Immunodeficiency Virus while AIDS stood for Acquired Immune Deficiency Syndrome. These definitions were consistent with those of the Chanda et al, (2007), G.R.Z., (2004), and Adler (2001).

5.3 Visually Impaired Learners' Knowledge of the Condition Known as HIV and AIDS.

In terms of the learners' knowledge of the condition known as HIV and AIDS, the study revealed that 37 out of 40 students indicated that they had knowledge of the condition. Furthermore, the study showed that most learners got such knowledge from teachers and parents and to a smaller extent from peers. Learners also indicated that they knew the symptoms (chronic diarrhea, enlarged lymph glands, tuberculosis, or pharyngeal candidiasis, chronic herpes simplex) of AIDS (Hubley, 2002). The study also revealed that the majority of the learners were aware of the methods of HIV and AIDS transmission. They also indicated that the most common ways in which a person can get infected with HIV and ultimately get AIDS is through unprotected sex, using unsterilized sharp instruments like razor blades and blood transfusion.

A grade nine pupil at Mporokoso School for the blind in Northern Province used the following words:

We have learnt about it at the church, we know how one gets it, You do not get it through shaking hands with infected persons. You Get it through unprotected sex. If you assist a person with wounds without using gloves, you
Similarly, Hubley, (2002) and Adler (2001) found that the commonest mode of transmission of the virus throughout the world is by sexual intercourse. Other methods of transmission are through the receipt of infected blood or blood products, donated organs and semen. Transmission also occurs through the sharing of contaminated needles by injecting drug users or for the therapeutic procedures, and from mother to child. However, Dyk (2001:20) go a step further and argue that "the risk of becoming infected with HIV during unprotected vaginal intercourse is two to four times higher for women than it is for men".

One of the reasons why women are more susceptible to HIV infection than men is that women as recipients of semen are exposed to semen for a long time. While semen remains in the body of a woman for a few hours, a man is exposed to the body fluid of a woman for only a short time. Because there may be a higher concentration of HIV present in semen than in vaginal fluids, transmission to a woman is more likely. Women also have a large surface area of mucosa (the thin lining of the vagina and cervix) which is exposed to their partner's secretions during sexual intercourse.

UNICEF (2000) had a different view. It argued that knowledge about HIV and AIDS transmission alone has not proven sufficient evidence to allow young people with visual impairment to protect themselves from the virus. This situation had led to the development of a curriculum that addresses the skills needed to apply the knowledge in a meaningful way. For example, role plays and other interactive teaching methods that have been introduced have left a gap between the sighted learners and the visually impaired learners as most of this information is only through print and audio (USAID Africa Bureau Brief, 2002).

5.4 Ways by which Visually Impaired Learners Acquired Information on HIV and AIDS.

The findings were based on the second objective--; to find out how the visually impaired learners in upper basic schools acquire information on HIV and AIDS.

Again using three types of instruments namely questionnaires, focus group discussion
and tape recorders the researcher asked (i) Learners with visual impairment and (ii) head teachers and specialist classroom teachers how the visually impaired learners in upper basic schools acquired information on HIV and AIDS.

(i) Learners with Visual Impairment.

For the learners to acquire knowledge on HIV and AIDS there must be sources of such information. To this extent visually impaired learners were asked to indicate whether their respective schools had a school library. Interestingly, all the visually impaired learners in the study acknowledged having a school library in place. However a check by the researcher revealed that there were no permanent structures for the library as portrayed by the visually impaired learners. In some cases a corner in the classroom would be considered a library as long as it contained a few books on HIV and AIDS written in ink. ZAFOD (2008) also argues that the main problem is not necessarily the sources of HIV and AIDS information, but lack of money for carrying out effective HIV and AIDS information dissemination programmes.

The current available services and resources for disseminating information on radios, television or print media does not generally benefit the visually impaired learners in upper basic schools. A good example is the use of posters, which the visually impaired cannot read. It is important, therefore, for teachers to continue their good work of enlightening their visually impaired pupils about this scourge. This is partially because they have been shown to be the main source of information to such pupils about HIV/AIDS matters in this study and also that their being a source of such information have been stated by Owaye and Fasern (2004). It is worth stating too, that the other revealed sources of information to visually impaired pupils on HIV/AIDS i.e. anti aids, clubs, drama debates, etc should continue to be utilized for this purpose.

(ii) Head teachers and Specialist Classroom Teachers.

According to the head teacher at Mporokoso School for the blind the sources of information included television; though the visually impaired could not see the pictures. She further explained that some of the learners in schools had low vision and could see a little bit. However, all the learners with visual impairment talked to during the focus group discussion said they could not see the pictures on the television even though some of
them stated that they had residual vision. The school leadership mentioned other sources of information as the radio, anti AIDS clubs organized by peer educators who are trained in that capacity and talks or lectures given by some health personnel.

One Specialist classroom teacher at Sefula School for the blind mentioned similar sources as school leadership and elaborated that the teachers taught lessons in the classrooms on HIV and AIDS and also they got information from different non Governmental organization (NGOs) through courses. Another male teacher at the same school presented a different view concerning the lessons on HIV and AIDS. Even though he agreed that lessons were taught in the classrooms, he differed on the grounds that HIV and AIDS was not on the school time table, it could be argued that it would not be taught in depth but superficially; thus the acquisition of the knowledge on the HIV and AIDS would be limited.

5.5 Ways by which Awareness of HIV and AIDS may be increased among Upper Basic School Visually Impaired Learners.

The third objective of this study was to establish ways by which information on HIV and AIDS among the visually impaired upper basic school learners could be increased if at all it was low.

Again using three types of instruments namely questionnaires, focus group discussion and tape recorders the researcher asked (i) learners with visual impairment and (ii) head teachers and specialist classroom teachers ways by which information on HIV and AIDS among the visually impaired upper basic school learners could be increased if at all it was low.

(i) **Learners with Visual Impairment**

Regarding ways by which information on HIV and AIDS among the visually impaired upper basic school leaners could be increased: the following were the responses; upper basic school pupils with visual impairment stated that they did not have the braille version about HIV and AIDS literature. A pupil at Ndola Lion School for the blind had this to say on the issue: ‘We do not have HIV and HIV in Braille in our textbook; it is the teachers who give us notes in Braille’. This was confirmed by another pupil at Mporokoso School for the blind in Northern province who said:

*Experts in HIV and AIDS from the Ministry of Health and different non*
government organizations come to the school occasionally to give talks to the pupils with visual impairment. The reading materials that they give to the pupils with visual impairment, after the talks and lecturers, are all in print. They do not have the Braille version.

A male pupil at Ndola Lion School for the blind on the Copperbelt province explained:

The disadvantage that the blind have is that they cannot read the print Version of literature on HIV and AIDS, even those learners with low Vision may be unable to the print in books and posters.

From the above quotes it stood to reason that the visually impaired learners were at a disadvantage as regards awareness of HIV and AIDS for not using braille as a tool, in comparison to their sighted counterparts who were able to read ink prints which were always available. One pupil at Sefula for the blind said, ‘I have never seen a person with HIV and AIDS but I heard that such a person is open to all kinds of diseases’. Both the totally blind and partially sighted that the author talked with said they never saw anybody suffering from AIDS even though they heard a lot about how the victim looked like. The implication was that the loss of vision served as a barrier for the visually impaired to see AIDS victims. This fact mentioned by the visually impaired is of considerate importance.

In the light of the above, provision of more Braille books and materials on HIV and AIDS to the visually impaired learners was one of the suggested ways of increasing their awareness of this scourge. Wormsley and D'andrea (1997) support this suggestion and state that people who are visually impaired need to be able to obtain information in an effective and timely way, exchange information with others accurately, and read and write with fluency. They argue that if someone cannot use print with ease to perform these activities, alternatives need to be found. Braille, along with other options such as personal readers and computers equipped with adaptive equipment, present effective alternatives, can enable the individual who is visually impaired to be a fully literate participant in today's information driven society. This is a very important suggestion in view of these people's inability to utilize various other sources of information such as posters, road side bill boards, television and cinema shows.

Other ways of increasing awareness cited were; the need to have lessons on HIV and
AIDS at least once in a week; the need to have radio recorders and tapes to record information on HIV and AIDS; and the training of more teachers specialized in Braille. It must be noted that experts in HIV and AIDS need to pronounce each word clearly. When recording information for the visually impaired, the use of colloquial English should be avoided.

In addition to these suggestions, there are other pertinent ones in available literature. Chola (2002) argues that interpersonal communication channels should be considered vital and argues that the radio is perceived as the most effective channel for disseminating various types of information including that HIV and AIDS. The author is in full support of Chola's observation and recommends that radios be provided to all institutions with visually impaired learners to foster their awareness of HIV and AIDS matters.

(ii) **Head teachers and Specialist Classroom Teachers.**

Another way to increase visually impaired pupils' awareness of information on HIV and AIDS is through sex education. One head teacher and a specialist classroom teacher talked to at Sefula School for the blind in Western province revealed that upper basic school visually impaired learners need to be taught sex education at least one day in week. Kearney (2008:56) defines sex education as "involving a comprehensive course of action by the school, calculated to bring about the socially desirable attitudes, practices and personal conduct on the part of children and adults, that will best protect the individual as a human-being and the family as a social institution”.

Thus, sex education may also be described as "sexuality education", which means that it encompasses education about all aspects of sexuality, including information about family planning, reproduction (fertilization, conception and development of the embryo and fetus, through to childbirth), plus information about all aspects of one’s sexuality including: body image, sexual orientation, sexual pleasure, values, decision making, communication, dating, relationships, sexually transmitted infections (STIs) and how to avoid them, and birth control methods.

According to a head teacher at Ndola Lion School for the blind, the guidance and counseling
teacher was responsible for organizing teachers to have lectures about HIV and AIDS and sex education in the school for the blind. He explained that "sometimes sex education take the form of drama; pupils are made to perform role plays to depict the consequences of acquiring the HIV". With reference to sex education, the head teacher said that the learners felt free to discuss sexual issues in the classroom. According to him: "if you feel that you are hiding sexual issues from the visually impaired learners, you are just fooling yourself, because they appear to know more". It is better to tell them the correct thing". Similar issues about sex education was explained by a class teacher at Sefula School for the blind but he put it in different way: "Sex education is full of excitements; the pupils laugh, hoot and shout at the top of their voices at the mere mention of sex ". Another teacher was of similar opinion as she expressed her view:

\[ \text{The Visually impaired learners enjoy sex education particularly when the teacher creates a conducive atmosphere for the lesson.} \]

\[ \text{The pupils contribute and discuss the subject very well.} \]

From indications, it seemed that the visually impaired learners were not used to sex education; hence the hooting and shouting because of the mere mention of the word sex. It seemed the visually impaired pupils enjoyed the sex education due to the conducive atmosphere in the school coupled with the fact that they are sexually active.
CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction.
This chapter presents the conclusions and recommendations of the study that aimed at investigating how far the visually impaired upper basic school pupils are aware of the HIV and HIV pandemic in Zambian schools.

6.2 Conclusions.
The Major Conclusions of this Study were that:
1. The extent of pupils' awareness of HIV and AIDS matters among the visually impaired learners was high;
2. There were libraries in the sampled schools although these were initially ordinary classrooms;
3. There was literature on HIV and AIDS in the libraries although such literature was not in Braille.
4. The visually impaired acquired information on HIV and AIDS matters mainly through drama and sensitization talks from the teachers and
5. Further awareness of HIV and AIDS issues by the visually impaired could be increased by transcribing HIV and AIDS materials and sending it into schools.

6.3 Recommendations.
On the basis of the study's findings, the following recommendations are suggested:
1. The Ministry of Education should ensure that all HIV and AIDS materials sent to schools for the visually impaired is transcribed into Braille in order to enable the learners to read it.
2. The Ministry of Education should send HIV and AIDS brailed material to all schools for the visually impaired in order to make it accessible to learners and thereby increase their awareness of the pandemic in those schools.
3. The Ministry of Education should train more teachers in braille in order to increase
literacy among the visually impaired and enable many of them to read and be aware of HIV/AIDS matters.

Recommendations for further study:
Below are suggested topics for further research

1. The suitability of brailed material for learners with low vision
2. A Study that would find out whether learners that have low vision would benefit learning fully from the totally blind teachers in accessing information on HIV and AIDS
3. A similar kind of study involving visually learners' awareness of cervical cancer in junior secondary schools of Zambia.
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APPENDICES

Appendix A: Questionnaire for Specialist Classroom Teachers and Head-Teachers.

Dear Respondent,

You have been selected to respond to a questionnaire on the visually impaired pupils' awareness of HIV and AIDS in upper basic schools of Zambia. The information is to be used for academic purposes only and the responses will therefore, be treated with confidentiality.

Instructions.

a) Do not write your name on this questionnaire.

b) Indicate your answers by writing them on the spaces provided or putting a tick against the correct response.

Questions.

1. Does the school have a library?
   a. Yes [ ]
   b. No [ ]

2. Do you have any literature on HIV and AIDS in your library?
   a. Yes [ ]
   b. No [ ]

3. If the answer to question 2 above is 'yes', is it transcribed into Braille?
   a. Yes [ ]
   b. No [ ]

4. Do the visually impaired learners in upper grades have access to the information on HIV and AIDS in the school?
   a. Yes [ ]
   b. No [ ]

5. If your answer to question 4 above is 'yes', how do they access it?........................................
6. Does the school have programmes that enlighten the visually impaired learners on HIV/AIDS matters?
   a. Yes [ ]
   b. No [ ]

7. If your answer to question 6 above is ‘yes’ what programmes are these?..........................

8. Do members of the public come to sensitize learners with visual impairments on HIV/AIDS in your school?
   a. Yes [ ]
   b. No[ ]

9. Does the Ministry of Education provide learners with visual impairment Brailled HIV and AIDS material?
   a. Yes [ ]
   b. No [ ]

10. How do the learners with visual impairment learn about HIV and AIDS?
    ..............................................................................................................................

11. In which ways do you think awareness of HIV and AIDS can be enhanced among the visually impaired pupils?
    ..............................................................................................................................

THANK YOU FOR YOUR PARTICIPATION
Appendix B: Questionnaire for the Visually Impaired Learners in Upper Basic Schools of Zambia

Dear Respondent,

You have been selected to respond to a questionnaire on the visually impaired pupils' awareness of HIV and AIDS in upper basic schools. The information is to be used for academic purposes and the responses will therefore, be treated with confidentiality.

Instructions.

a) Do not write your name on this questionnaire.

b) To answer the questions, put a tick against the correct response or write the answer on the lines provided.

Questions.

1. Have you ever heard of the condition known as HIV and AIDS either here at school or at home?
   a. Yes [ ]
   b. No [ ]

2. Who normally talks about it to you?
   a. Teachers [ ]
   b. Parents [ ]

3. Does your school have any books in Braille on HIV and AIDS?
   a. Yes [ ]
   b. No [ ]

4. Do your teachers help in explaining how HIV and AIDS is contracted?
   a. Yes [ ]
   b. No [ ]

5. Do you think you receive enough information on HIV and AIDS in the school?
a. Yes [ ]

b. No [ ]

6. If your answer to question 5 is 'No', what do you think should be done to enable you have more information on the subject…………………………………………………………………………………………………………………………………………………………………………………………………………

THANK YOU FOR YOUR PARTICIPATION
Appendix C: Focus Group Discussion Guide for the Visually Impaired Pupils

1. What is HIV? ........................................................................................................................................

2. What is AIDS? ....................................................................................................................................... 

3. Mention three (3) ways in which people get the AIDS virus ............................................................... 

4. Give any symptoms of AIDS that you know. ....................................................................................... 

5. Mention ways of preventing HIV infection. .......................................................................................... 

6. Indicate whether the following are:

   a. high risk   b. low risk or   c. no risk activities in terms of HIV infection.

   i. Blood donation ............................................................... 

   ii. Having unprotected sex with a sex worker .................... 

   iii. Using a public latrine................................................... 

   iv. Caring for AIDS patients............................................. 

   v) Having many sexual partners ................................. 

   vi) Going to school with an HIV infected person............. 

   vii) Not having sexual intercourse............................

THANK YOU FOR YOUR PARTICIPATION
Appendix D: Consent Form for Respondents

You have been selected to participate in a research to investigate visually impaired pupils' awareness of HIV and AIDS in upper basic schools of the Zambia. You are therefore, requested to read through this form and if you agree to the stated conditions, sign below.

Conditions

1. Your views will be considered confidential. As such your name will not be written down during the research or used in the final report.

2. In this research study, you will be required to fill in a questionnaire or participate in Focused Group Discussion for about 20-30 minutes.

3. You will be required to answer some oral questions on the visually impaired learners' awareness of HIV and AIDS in upper basic schools and the researcher will use an audio cassette recorder to record the proceedings accurately.

4. As for questionnaires, you will be required to fill them in according to the given instructions.

Name ......................................................................................................................................

Signature .................................................................................................................................

Date........................................................................................................................................

THE END