# HIV/AIDS AND ADOLESCENTS: KNOWLEDGE, ATTITUDE AND PRACTICE IN SECONDARY SCHOOL ADOLESCENTS IN LUSAKA



**BY**

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# DECLARATION

**I hereby declare that this dissertation represents my own work and has not been presented either wholly or in part for a degree at University of Zambia or any other university**

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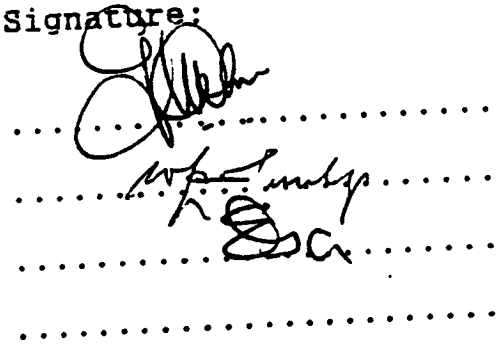
APPROVAL

This dissertation of Dr. Kasonde G. Mulenga Mwinga is approved as fulfilling the requirement for the award of the degree of Master of medicine in Paediatrics by the University of Zambia.

Signature: Date:



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# ABSTRACT

The HIV/AIDS pandemic has markedly increased the morbidity and mortality of people worldwide. In Zambia the number of cases of HIV/AIDS have been rapidly increasing, the main mode of transmission being heterosexual.

In the last few years, there has been a significant increase in the number of adolescents worldwide infected with HIV. Adolescents and young adults comprise one of the fastest growing categories of AIDS cases. Half of the people with HIV worldwide are said to have been infected between the ages of 15 and 24 years. In Zambia the rates of newly acquired HIV infection are highest in the 15 to 24 year olds. Many adolescents in Zambia engage in HIV risk behaviour. Prevention of HIV/AIDS among adolescents has thus become an important public health priority. School based HIV prevention strategies have been effective in decreasing HIV risk behaviours among adolescents.

In this light, a cross sectional study to evaluate the knowledge, attitude and practice of secondary school adolescents was conducted. The performance of Anti-AIDS clubs was also discussed. Data was collected using a self administered questionnaire, focus group discussions and open interviews. Quantitative data was stored and analysed using EPI INFO statistical software.

From the study results, overall level of knowledge on HIV and its transmission is good. Misconceptions about HIV/AIDS transmission exist. Negative attitudes towards people with HIV/AIDS are relatively low. A significant percentage of the adolescents are sexually active and the mean age at sexual *debut* is 13 years. Majority of sexually active adolescents had multiple partners in the previous year. Condom use is inadequate and inconsistent. Females seemed less inclined to discuss their involvement in sexual activity than males. The chief sources of HIV/AIDS information is the media, friends and Anti-AIDS clubs. Most adolescents communicate about HIV prevention mainly with friends/peers. Anti-AIDS club membership is low and self reported benefit from club activities is poor.

From the study findings it would be necessary to develop peer-led HIV education programs in schools. Improved dialogue and improved health workers input in health education is needed. HIV education should be supplemented with sustainable behavioural change strategies. Culturally sensitive and sex specific techniques should be used to collect data on sensitive issues like sexual behaviour among adolescents. Studies to critically evaluate the impact of the present anti-AIDS strategies among adolescents should be designed.

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# CHAPTER ONE

## 1.0 INTRODUCTION/BACKGROUND

### 1.1 HISTORY OF ACQUIRED IMMUNO-DEFICIENCY SYNDROME (AIDS)

AIDS was first recognised in the world in 1981 when unusual clusters of *Pneumocystis carinii* pneumonia and Kaposi's sarcoma were reported in previously healthy homosexual men in New York City, Los Angeles and San Francisco (CDC 1981). Two years later, the causative agent now termed Human Immuno-deficiency Virus (HIV) was isolated allowing for the development of the HIV antibody test in 1985. With the development of the antibody test, researchers embarked on looking at different aspects of the HIV/AIDS problem.

### 1.2 HIV TRANSMISSION AND TRENDS

Epidemiologic studies indicate that the majority of HIV infections are transmitted sexually, parenterally and vertically from mother to child, the main mode being sexual (Friedland, Klein 1987; Piot et al 1988). Although homosexual transmission was initially the predominant mode of spread in developed countries, heterosexual transmission is increasing (Lancet 1993; 1994). In the developing world heterosexual transmission has been the major mode of transmission. Heterosexual transmission has put adolescents and young women at risk, leading to a significant increase in the number of adolescents with HIV (Quinn 1995).

## 1.3 GLOBAL SITUATION OF HIV/AIDS

The HIV/AIDS pandemic has markedly increased the morbidity and mortality of people worldwide. The United Nations AIDS program (UNAIDS) estimates that there are about 22.6 million people in the world currently living with HIV/AIDS and the cumulative number of deaths among HIV infected persons is 6.4 million.

Of all the people living with HIV/AIDS, 14 million are said to be in Sub Saharan Africa, that is, 63 percent of total infections in the world (UNAIDS 1996).

## 1.4 HIV/AIDS IN ZAMBIA

HIV has spread rapidly through most of urban Africa and is now threatening rural Africa as well (Feldman et al 1997; NASTLP 1997). Zambia, a sub-Saharan African country with a population of 7.8 million people (CSO 1990), estimated in 1993 that the number of HIV infected adults was probably between 600,000 and 700,000 persons (Fylkesnes et al 1994). Demographic projections in 1995 estimated that 853,000 adults were infected, that is, 17 percent of the adult population (Kumbutso 1997). The cases of AIDS Related Complex (ARC) and AIDS in this country have been rapidly increasing. The first case was reported in 1984 (Msiska 1993) and by December 1994, the cumulative cases reported were 32,491 (NASTLP 1997, see figure one). Currently, the Ministry of Health in Zambia shows that there are 42,447 cumulative reported cases (NASTLP 1997). The true figure is probably much higher due to the problem of under reporting. The tremendous and very rapid rise in ARC and AIDS cases has been seen in all age groups, the highest number being between the ages of 19 and 39 years (See figure two). The male to female ratio of the reported cases is approximately 1:1. Transmission of HIV in Zambia is predominantly heterosexual (Sichone et al 1997).

## 1.5 HIV/AIDS AND ADOLESCENTS

In the last few years there has been a significant increase in the number of adolescents worldwide infected with HIV (Campbell 1994; Quinn 1995; Trad 1994). Together with young adults, adolescents comprise one of the fastest growing categories of AIDS cases (Nikopoulos 1995).

According to the World Health Organization, half of the people with HIV worldwide were infected between the ages of 15 and 24 years (Hein 1995). HIV infections in Africa are being seen in early teens and peaking before the age of 25 years (Sichone et al 1997). In Zambia, the cumulative number of ARC/AIDS among adolescents is five percent of the total figures but the rates of newly acquired HIV infection are said to be highest in the 15 to 24 year Olds (Sichone et al 1997). In this age group, females seem to acquire HIV infection at an earlier age than the males. Given the long latency period between HIV infection and clinical symptoms, it is also likely that many of the 20 to 29 year Olds diagnosed with ARC and AIDS were probably infected with HIV during adolescence. Indeed, many adolescents in Zambia engage in behaviours that place them at risk for HIV infection (Feldman 1995, Feldman et al 1993; 1997). Prevention of HIV/AIDS among adolescents is increasingly recognised as an important public health priority (Rotheram-Borus et al 1995).

## 1.6 TREATMENT OF HIV/AIDS

There is no cure for HIV/AIDS. Current treatments reduce the viral load and suppress symptoms. Drugs available for this include zidovudine (AZT), 3TC and more recently protease inhibitors. Therapeutic cocktails with combinations of these drugs particularly in early infection are currently being administered in on going clinical trials with some promising results. However, the results are not yet conclusive and currently HIV/AIDS has no effective long term treatment.

# CUMULATIVE ARC/AIDS REPORTED CASES IN ZAMBIA

## 1984 - 1994

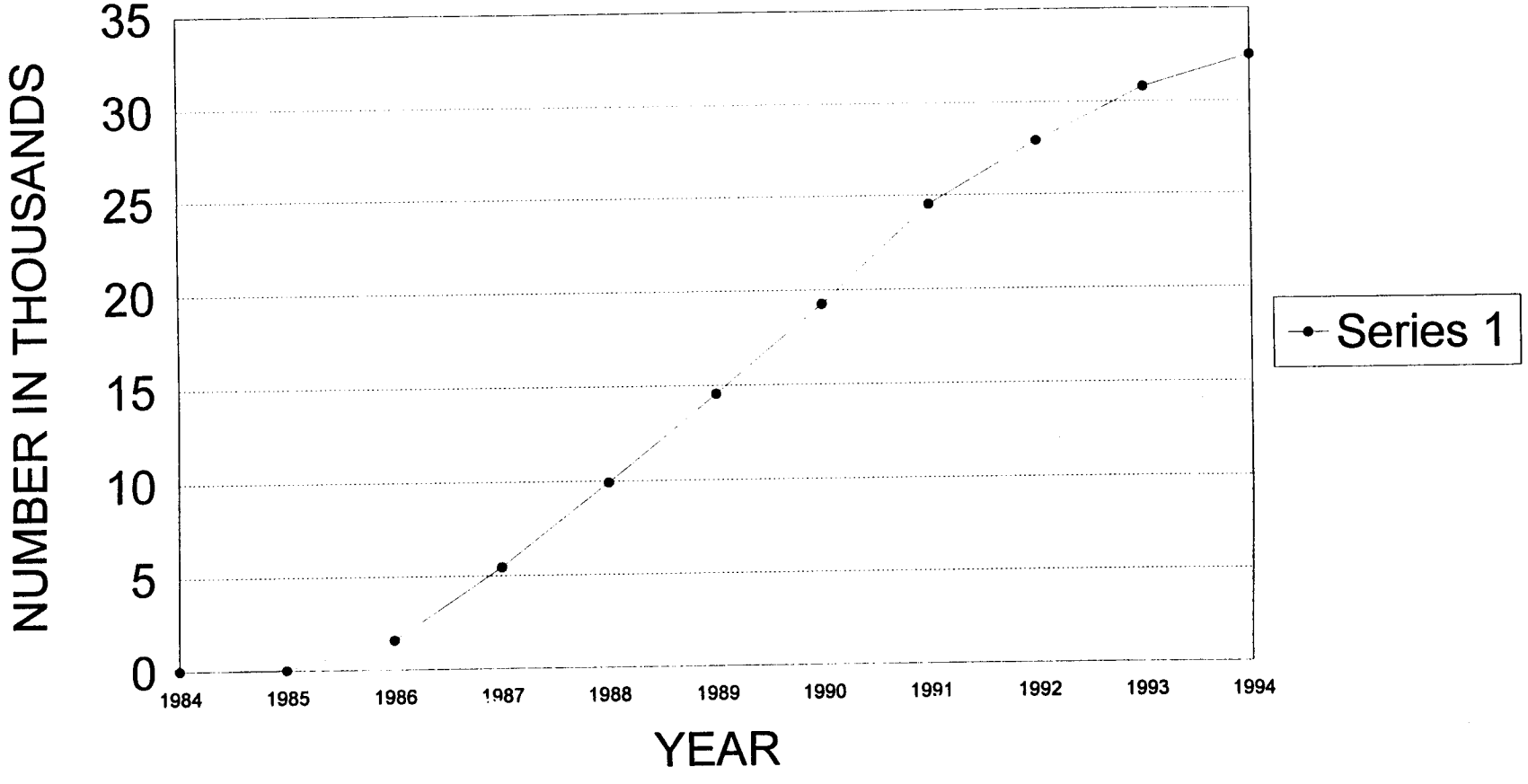


FIGURE 1
SOURCE: MOH (NASTLP)

ZAMBIA: ARC/AIDS REPORTED CASES: CUMULATIVE TOTALS:
BY AGE - GROUP AND SEX (DECEMBER, 1996)

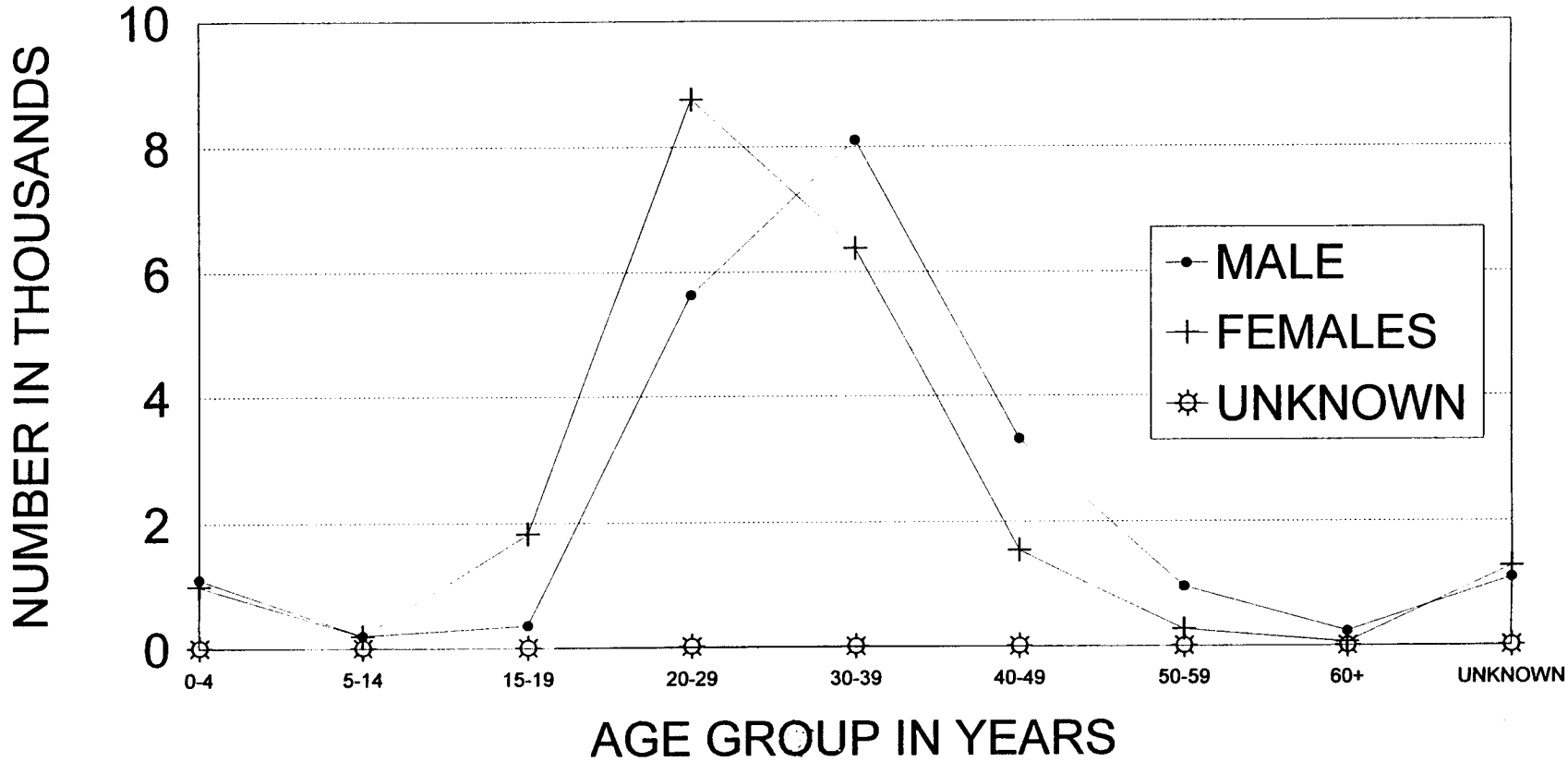


FIGURE 2
SOURCE: MOH (NASTLP)

## 1.7 AIDS VACCINES

Despite the search for an effective anti-AIDS vaccine having been ongoing from 1987 to date, there are still no conclusive results.

## 1.8 PREVENTION OF HIV/AIDS

Prevention of HIV/AIDS is currently one of the most daunting health problems in the world today. With no cure for HIV/AIDS and no effective vaccine available, only prevention of transmission of HIV would be effective in significantly slowing the spread of AIDS.

### 1.8.1 School Based Programs

Since the population affected have different patterns and standards of behaviours, different approaches are required to prevent or reduce the prevalence of HIV associated risky behaviours. The chief approach for prevention of risky behaviours is through education. School based educational programmes are an important approach to primary prevention. In the United States, they have been effective in helping students avoid smoking and alcohol (Rundall, Bruwold 1988).

Studies have also suggested that HIV knowledge and school-based instructions may play a role in reducing the levels of drug injection behaviours among high school students (Holtzman et al 1991). Other studies suggest that school-based HIV education and knowledge may be contributing factors in reducing certain risk behaviours that can lead to HIV transmission among secondary school youths (Holtzman et al 1994). School based programs have also shown that an increased level of knowledge about HIV/AIDS infection leads to increased tolerance towards students with AIDS (Newman et al 1993).

Adolescence is the age around which most people are confronted with the possibility of indulging in HIV risk behaviour like unprotected sexual intercourse and drug abuse. Behaviour patterns once established are difficult to change. Preventive programmes targeted at populations before and/or at the time of making decisions concerning HIV risk associated behaviour are therefore of high priority in AIDS prevention.

### 1.8.2 Zambia

HIV prevention strategies targeted at young people in schools include the Anti AIDS Clubs (AAC), KARA Counselling Outreach Program and more recently, the incorporation of HIV/AIDS education in the school curriculum. The media has also played a role in raising awareness of HIV/AIDS. The Anti-AIDS clubs were introduced in schools in 1987 and are supported by a project The Family Health Trust of Zambia. The clubs are there to support young people who want to avoid AIDS and teach their friends about AIDS. They also help support people with HIV and AIDS. The clubs are run by young people with the help of a patron. AACs represent one of the most extensive HIV prevention strategies aimed at young people in Zambia today.

# CHAPTER TWO

## 2.0 LITERATURE REVIEW

### 2.1 HIV KNOWLEDGE AND ADOLESCENTS

Knowledge, Attitude and Practice (KAP) studies done in different parts of the world have shown varied degrees of HIV knowledge among the adolescent population. A recent Western world study done in secondary schools confirmed good awareness of HIV/AIDS risks (Coulard & Lariven 1995). In Thailand, a survey of 1981 students over six months in 1990-91 showed knowledge and attitudes to be generally good (Paisalachapong et al 1992).

In India one study done among the youth showed that Indian adolescents have limited knowledge about human sexuality and AIDS (Tikoo et al 1995). Studies done in Russia and Saudi Arabia both showed inadequate knowledge about sexuality and AIDS prevention (Lunin et al 1995 ; Abolfotouh 1995). Both studies showed much misinformation about the subject.

#### 2.1.1 Regional Studies

A study done in Zimbabwe and one in Tanzania showed a high level of HIV/AIDS knowledge (Campbell, Mbizvo 1994 ; Saidi et al 1991). The Zimbabwean study was conducted amongst 511 male adolescents aged 11 to 19 from urban and rural secondary schools using a self administered questionnaire. The Tanzanian study involved 481 secondary school pupils from four government schools. In this study, knowledge was found to increase with age. While knowledge of sexual transmission of HIV was generally high, and prevalence of misconceptions about modes of transmission was very low, knowledge of non-sexual means of transmission (transfusions, injections, vertical) was

lacking. Although 80 percent of pupils in this study mentioned reduction of number of sexual partners as a means of AIDS prevention, only 22 percent mentioned condom use and less than five percent reported that they had ever used a condom.

In contrast to the above mentioned studies, a study done among sexually active adolescents in Kenya showed a low level of awareness on AIDS (Lema & Hassan 1994). Another study done in Tanzania showed that overall knowledge level of HIV/AIDS was low (Ndeki et al 1994). The KAP studies done in Tanzania by Ndeki et al 1994 and Saidi et al 1991 showed contrasting results about HIV/AIDS knowledge of adolescents. The earlier study showed high levels of knowledge while the one done three years later indicated poor knowledge. This apparent discrepancy could be due to the fact that the earlier study was done in secondary schools while the latter one involved primary school adolescents. Since knowledge increased with age in the secondary school study, it would be expected that primary school pupils being younger than those in secondary schools, would be less knowledgeable about HIV/AIDS than the secondary school adolescents. Another problem in comparing the two studies is that the sample sizes in the studies are significantly different. The primary school sample involved 18 schools with 2026 pupils while the secondary school sample involved only four schools with 481 pupils.

### 2.1.2 Zambian Literature

In this country there is no available published data which has analysed HIV/AIDS knowledge among adolescents in secondary schools. However unpublished data indicate that misconceptions about HIV/AIDS are common in this age group (Macwang'i 1993; Mudenda 1992).

## 2.2 SOURCES OF HIV/AIDS KNOWLEDGE

In America, AIDS video education is a major mode of providing information about the spread and prevention of HIV (Stevenson, Davies 1994). It is the most popular and

effective medium for informing the adolescent population (Stevenson et al 1995). The media was the chief source of information in one study done in Thailand (Paisalachapong et al 1992) and in one in Uganda (Bagarukayo 1991). In a Zimbabwean study, up to 75 percent of the study population reported that they received information through the media and only 31 percent got it from their teachers (Campbell, Mbizvo 1994). A Ugandan study involving 311 school pupils indicated that radio and newspapers were the commonest sources of AIDS information (Bagarukayo 1991). School based AIDS education has also played a significant role on providing HIV/AIDS knowledge in schools in different parts of the world (Sunwood et al 1995). Students reported having been exposed to several sources of AIDS information in a study done in Tanzania (Ndeki et al 1994).

In Zambia, one unpublished study showed that the sources of information on matters of sexuality among young people were varied, including schools, churches, and clubs like Anti-AIDS Clubs (Mudenda 1992). There were no other studies available for review on sources of HIV/AIDS information in this age group.

## 2.3 ATTITUDES CONCERNING HIV/AIDS

Attitudes towards HIV/AIDS are varied in different study populations. In a study done in Uganda with groups from various sections of the community, it was found that feelings of blame exist and condoms are generally not trusted for HIV prevention (Konde-Lule et al 1993). There are no published studies in Zambia on attitudes among secondary school adolescents.

## 2.4 ADOLESCENTS AND SEXUAL BEHAVIOUR

### 2.4.1 Initiation Of Sexual Activity

A number of studies have indicated that adolescents are initiating sexual activity at an early age. A national survey in the United States of America (USA), in 1990 showed that the

majority of 17-year-Olds and about half of 16-year-Olds had initiated sexual activity. In this study males initiated sexual activity at a younger age than females (Leigh et al 1994). A study done in Viborg showed that one third of the school children studied had sexual intercourse and of these, one seventh had their sexual *debut* before the age of 15 (Rasmussen, Knudsen 1994). In Sweden one study showed that the median age at sexual *debut* was about 17 years (Klanger 1993). Some studies have shown a decrease in the age of sexual initiation in recent cohorts of adolescents (Moss 1994; Graham 1994). In Zambia age at first sexual intercourse is about 16 years (Gaisie et al 1992).

### 2.4.2 HIV Associated Risk Behaviour

Sexual risk acts associated with HIV/AIDS transmission (unprotected sexual intercourse with multiple partners of unknown serostatus) are typically initiated by late adolescents, with many youths engaging in sexual relations earlier (Rotheram-Borus et al 1995). Another study done in USA indicated that a substantial number of adolescents, including many as young as 11, engage in high risk sexual behaviour (Barone et al 1996).

HIV risk associated behaviour is also common among Zambian adolescents (Feldman 1995; Feldman et al 1993; 1997). Heterosexual contact has been quoted to be the leading mode of HIV transmission in adolescents (McCabe et al 1993).

## 2.5 SEXUALLY TRANSMITTED DISEASES (STDs) AND ADOLESCENTS

In Los Angeles, one study showed that of all age groups, teenagers have the highest rates of sexually transmitted diseases (Maxwell et al 1995). In a study done in Kenya, adolescents formed 27.6 percent of people attending the STD and Skin clinic (Lema, Hassan 1994). The prevalence of STDs among adolescents in Zambia has not been estimated in available publications. A study done in America concluded that syphilis in an adolescent is a risk factor for HIV infection (McCabe et al 1994).

Among the factors associated with transmission of HIV, STDs have been one of the most widely researched and discussed. It is thought that the two infections mutually facilitate each other in terms of transmissibility (Quinn 1995). A study done in USA on adolescents and syphilis indicated that syphilis in an adolescent is a risk factor for HIV infection (McCabe et al 1994).

## 2.6 COMMUNICATION ABOUT HIV/AIDS PREVENTION

A Tanzanian study indicated that students who reported frequent exposure to AIDS information or who frequently talked to others about AIDS were more knowledgeable regarding AIDS than students who reported less frequent exposure to AIDS information and communication (Ndeki et al 1994).

In Zambia, information on issues of sexuality among secondary school pupils is said to be unevenly imparted and does not satisfy pupils expectations of what they should know (Mudenda 1992). The percentage of pupils communicating with their families and their peers is not established among the reviewed papers in Zambia.

There is no published report available on the impact of Anti-AIDS clubs in Zambian schools. Personal contact revealed that an unpublished report on "Evaluation of the Anti-AIDS Project" was written for the project in 1990 (Chiboola 1990). The report involved three primary schools, three secondary schools, one tertiary institution and three non school areas. Results from the KAP report showed a good level of HIV knowledge. Almost half the respondents expressed an attitude of blame, denial, stigmatization and passivity towards people with AIDS. The Anti-AIDS project was said to have managed to implement planned activities and to a great extent met operational objectives. The recommendations from the report included provision of personnel to train patron and Anti-AIDS club members in basic principles of health education and communication skills.

# CHAPTER THREE

## 3.0 OBJECTIVES

### 3.1 GENERAL OBJECTIVE

To evaluate the knowledge, attitude, and practice concerning HIV/AIDS among adolescents in secondary schools in Lusaka.

### 3.2 SPECIFIC OBJECTIVES

1. To assess the level of knowledge on HIV/AIDS.
2. To determine the chief sources of HIV/AIDS knowledge.
3. To assess attitudes concerning HIV/AIDS.
4. To determine the magnitude HIV risk associated behaviour.
5. To determine the proportion of adolescents communicating about HIV/AIDS with their peers and relatives.
6. To describe the pattern of sexual behaviour in members and non members of the Anti-AIDS clubs.
7. To make recommendations to the Anti-AIDS Project and the government department involved in planning of school based HIV prevention programs.

# CHAPTER FOUR

## 4.0 RATIONALE

Among the target groups for HIV prevention strategies, adolescents are an important group as they are less likely to be infected and they also represent the future generation.

For effective prevention programmes to be implemented, baseline information of the knowledge, attitudes, beliefs and practices of the target populations are essential. Ideally, surveys for such information should be done at regular intervals in order to assess the impact of the effected strategies.

There are no published surveys of HIV related knowledge and attitude among the adolescent populations in Zambia. Of the two published studies on sexual behaviour in Zambian adolescents, only one targeted the secondary school going adolescents (Feldman et al 1993;1997). This study only involved Lusaka Urban schools. No published study has involved schools in the three rural districts of Lusaka.

Information from this study will therefore be relevant in the planning and implementation of school based HIV prevention programmes both in the urban as well as in the rural districts. It will also provide an assessment of the impact of Anti-AIDS clubs in Lusaka and assist the Anti-AIDS Project in future strategies in the fight against AIDS.

# CHAPTER FIVE

## 5.0 MATERIAL AND METHODS

### 5.1 DESIGN ARCHITECTURE

This was primarily a descriptive cross sectional study of adolescents in Lusaka district in Zambia. The study was conducted using a KAP survey questionnaire, focus group discussions (FGDs), and face to face interviews.

The KAP questionnaire method was chosen because it is a reliable and valid method of collecting quantitative descriptive data world over. A scale reliability and construct validity study among school children in a neighbouring country showed that KAP questionnaires are a useful method in AIDS-related surveys and evaluation studies among school children if survey instruments are adapted to reflect the local and cultural context Since the survey questionnaire would only give quantitative data on pupils knowledge, attitude and practice, qualitative data was needed to understand the reasons behind the described information. FGDs and interviews, being extensively used methods for qualitative data collection, were thus used in this study.

### 5.2 STUDY SITE

The study was conducted in secondary schools in Lusaka region. Lusaka, the capital city of Zambia is divided into four districts under the Ministry of Education, three rural and one urban district. Among the secondary schools, there are eight government run schools, four government aided schools and thirteen private schools in Lusaka Urban District. The three rural districts have a total of seven schools which are government run/aided. All these schools cater for a population of 1,428,000 in Lusaka (CSO, 1991).

## 5.3 STUDY POPULATION

1. Adolescents aged between eleven years and nineteen years attending government secondary schools in Lusaka rural district were selected as eligible for the study. A representative sample was chosen from this population. An additional sample was chosen from Lusaka urban district government schools. There are 4,170 pupils attending the government secondary schools in the rural districts and 12,967 attending the urban ones.

2. Six key informants who were running Anti-AIDS clubs in the chosen schools were interviewed.

3. The Anti-AIDS Project manager of Family Health Trust was also interviewed.

## 5.4 SAMPLING AND SAMPLE SIZE

### 5.4.1 Schools

The main study area was conveniently chosen as Lusaka rural because no studies of this nature had been done there previously. Of the three rural districts, two were chosen by random sampling. A random sample of schools in these two districts was done from the Ministry of Education list of secondary schools. From these two rural districts, four schools were randomly selected out of the seven schools government run or aided schools.

To be able to compare rural and urban school adolescents' KAP, two schools from Lusaka urban district where previous studies had been done, were included in the study sample. These schools were randomly selected from the Ministry of Education list of secondary schools in Lusaka in Lusaka urban district.

### 5.4.2 Subjects

The main study subjects were selected by systematic sampling from class lists in the chosen schools. Both males and females aged between eleven years and nineteen from all classes in grades eight to twelve were eligible for study. The other key informants were conveniently chosen as patrons of the Anti-AIDS clubs in the chosen schools and the manager of the Anti-AIDS Project under which these clubs fall.

### 5.4.3 Sampling Bias

One of the biases in this study is the site being secondary schools may not represent the out of school adolescents. One may argue that school children have access to more information than those out of school and hence their awareness may be higher than the general adolescent community. Since they are mainly pre-occupied with school, their chances engaging in high risk behaviour may be lower than their counterparts in the community. This bias could have been minimized by including a community survey in the study. This was not done however, due to constraints in resources. For the same reason, private secondary schools were also not represented in the sample.

### 5.4.4 Sample Size

The minimum sample size was calculated to be 138 pupils per school. A minimum of thirty pupils was selected from each grade giving a minimum total of 150 from each of the six schools. The sample size was calculated using EPI-INFO statistical software. Since no published studies have been done previously in secondary school adolescents in rural districts, the sample size calculation was based on the assumption that HIV/AIDS awareness on key issues such as HIV/AIDS transmission and prevention is about five to ten percent. An expected end point frequency of ten percent and a worst acceptable frequency of five percent were used. This gave a sample size of 138 pupils per school with a confidence level of 95 percent. For the purpose of comparison, the same end point frequency was used for urban schools even though these may have a higher end point frequency.

Type I and type II error: To be able to compare awareness variables between schools, the sample size calculation was based on the prevalence per school. The probability of type I or type II error was therefore minimized.

## 5.5 STUDY PROCEDURE

The survey was conducted by the researcher with the help of two research assistants. A written consent was obtained from the Ministry of Education. The school administration gave consent upon receiving a letter of introduction from the Ministry of Education Provincial Education Officer Lusaka Region. Verbal consent was also obtained from the subjects involved.

### 5.5.1 Survey Questionnaire

A survey questionnaire probing knowledge, attitude and practice concerning HIV/AIDS was prepared after consultation with other professionals. The main question frame was adapted from a questionnaire used by UNICEF in 1993 in a different population. The questions were altered to suit the study population and additional questions were added to cover the aims of this study.

### 5.5.2 Questionnaire Administration

Although the questionnaire was primarily self-administered, the researcher gave an introduction and explained key issues at the beginning of each of the survey sessions. The researcher and the assistants remained on site to attend to any further queries. To minimize the number of uncompleted questionnaires, the papers were collected immediately after being completed and checked for completeness. Incomplete questionnaires were given back for completion. The questionnaires were confidential.

### 5.5.3 Questionnaire Pre-test

After selection of the schools in the study sample, the prepared questionnaire was pretested in a government school within the study area but outside the earmarked sample. Following analysis of the pretest, the questionnaire was altered and pretested in another school outside the study sample in the same population. The final survey questionnaire was prepared after the second pretest. This was then administered to the target schools.

### 5.5.4 Focus Group Discussions

Qualitative data was collected using focus group discussions and in depth interviews. To ensure collection of appropriate and quality data, a comprehensive focus group discussion question line was developed with the help of a sociologist. The questions were based on the aims of the study. One FGD was carried out in each of the chosen schools. A trained and widely experienced facilitator conducted the discussions in the presence of the researcher. An independent facilitator was used to conduct the FGDs in this study so that researcher bias could be eliminated.

**Participants of FGDs:** The FGDs participants were chosen randomly from grade 12. This grade was chosen conveniently to assess the KAP and the impact of AACs in the final grade of secondary schools. The size of each group was limited to ten adolescents. In order to minimise inhibitions, the six groups were divided as follows:

1. Members of Anti-AIDS club - Girls only
2. Members of Anti-AIDS club - Boys only
3. Members of Anti-AIDS club - Girls and boys
4. Non anti-AIDS club members - Girls only
5. Non anti-AIDS club members - Boys only
6. Non anti-AIDS club members - Girls and boys

The sex variations of the groups were done to allow comparison of discussions between single sex groups and mixed groups.

### 5.5.5 FGD Procedure

The FGDs were conducted in English. The discussions were tape recorded with the participants' permission. Comprehensive notes were taken for the whole discussion. The participants were identified by numbers and no names were mentioned during the discussions. Confidentiality of the discussions was assured. The FGDs lasted one to one and a half hours. Following the FGDs, the facilitator and the researcher clarified misconceptions about HIV/AIDS and answered questions from the participants.

### 5.5.6 Interviews

The interviews with the key informants were conducted by the researcher. One interview was done with each of the patrons of the Anti-AIDS clubs of the chosen schools. The manager of the Anti-AIDS project of the Family Health Trust under which these clubs fall was also interviewed. The interviews were informal but followed a prepared question line.

## 5.6 OUTCOME MEASUREMENT

HIV/AIDS related knowledge and attitude plus involvement in HIV risk behaviours were measured among all the study subjects.

### 5.6.1 Knowledge

Pupils were asked to complete items assessing knowledge about HIV/AIDS transmission. Items on treatment, cure and prevention were also included. The percentage correct was calculated.

### 5.6.2 Attitude

Pupils were asked to complete items on attitude towards people with HIV/AIDS and items on perceived risk of HIV/AIDS. The items were assigned Yes/No/Don't know values. The percentage of negative attitudes and that of perceived risk of HIV was calculated.

### 5.6.3 Behaviour

Questions assessing involvement in sexual intercourse, number of sexual partners and condom use were asked. The items were assigned Yes and No values. The percentage of sexually active adolescents and multiple sexual partners was calculated. The level and the consistency of condom use was also calculated.

### 5.6.4 Sources of HIV/AIDS Information

Pupils were asked to complete items on sex education and sources of HIV/AIDS information. The items were assigned Yes and NO values and the different sources were calculated in terms of percentages.

### 5.6.5 Anti-AIDS Clubs

Questions assessing impact of the Anti-AIDS clubs were assigned Yes and No values. The percentage of self reported benefit in terms of knowledge, attitude and sexual behaviour was calculated.

## 5.7 DATA MANAGEMENT

### 5.7.1 Questionnaires

Information from the questionnaire was stored and analysed using EPI-INFO statistical software. Prevalence data was drawn on all the variables collected. Chi squares and p values were calculated across some of the values. To calculate the difference in the study variables between the schools, odds ratios and their confidence limits were calculated.

### 5.7.2 FGDs and Interviews

The tape recorded FGDs were transcribed and the transcriptions were edited. Analysis of the transcripts followed standard qualitative techniques. Broad themes were identified and categorised. The interviews were also analysed by qualitative analysis.

# CHAPTER SIX

## 6.0 RESULTS

### Time Frame

Data collection for the study took place over a period of four weeks. The first week was used to contact the schools and the key informants. Arrangements for the sampling procedure were also made. The questionnaires were administered during the following two weeks. The last week was dedicated to the focus group discussions and the key informants' interviews.

### Schools

The two districts selected from Lusaka rural were Chongwe and Kafue. Four schools were chosen in these two districts and two from Lusaka urban district. The names of the schools and their characteristics are in table one.

**Table 1: Selected sample of schools**

| SCHOOL | STATUS | SEX | DISTRICT |
|---|---|---|---|
| KAFUE BOYS | MISSION RUN | ALL BOYS | KAFUE |
| NABOYE | GOVERNMENT | CO-EDUCATION | KAFUE |
| KASISI GIRLS | MISSION RUN | ALL GIRLS | CHONGWE |
| CHONGWE | GOVERNMENT | CO-EDUCATION | CHONGWE |
| MUNALI SENIOR | GOVERNMENT | CO-EDUCATION | LUSAKA URBAN |
| ARAKAN | GOVERNMENT | CO-EDUCATION | LUSAKA URBAN |

## RESULTS OF QUESTIONNAIRES

A total of 978 questionnaires were administered to the study subjects. Seven of the subjects did not hand back the given questionnaires. 61 questionnaires were excluded because the subjects were over 19 years. Out of the administered questionnaires, 910 questionnaires were available for analysis (93 percent).

From the analysed sample, the following results were obtained;

### 6.1. Demographic Data

a) **Number of Questionnaires per School:** The number of questionnaires per school are given in table two.

**Table 2: Number of questionnaires per school**

| NAME OF SCHOOL | NUMBER OF QUESTIONNAIRES (%) |
|---|---|
| CHONGWE | 172 (18.9%) |
| NABOYE | 174 (19.1%) |
| KAFUE | 172 (18.9%) |
| KASISI | 116 (12.8%) |
| MUNALI | 145 (15.9%) |
| ARAKAN | 131 (14.4%) |
| **TOTAL** | **910 (100%)** |

b) **Sex Distribution:** There were 501 males (55.1%) and 409 females (44.9%). The male to female ratio was almost equal (1.2:1).

c) **Age Range:** The age ranged from 11 years to 19 years. The mean age was 16.4 years. The median age for males was 17 years and for females 16 years. When quartile ranges were compared for the two groups, there was no significant difference detected (male=16 to 18 years : female=15 to 17 years). Figure three shows age distribution of the study subjects.

d) **Distribution by Grade:** The education level of the respondents is given in table three.

**Table 3: Grade distribution of respondents**

| GRADE | NUMBER OF RESPONDENTS (%) |
|---|---|
| EIGHT | 168 (18.5%) |
| NINE | 164 (18.0%) |
| TEN | 134 (14.7%) |
| ELEVEN | 276 (30.3%) |
| TWELVE | 168 (18.5%) |
| **TOTAL** | **910 (100%)** |

f) **Ethno linguistic Groups:** Out of the 905 who responded to the question, 29.8 percent were Bemba speaking, 24.1 percent were Tonga and 17.5 percent were Nyanja speaking. 28.7 percent were from other ethno linguistic groups.

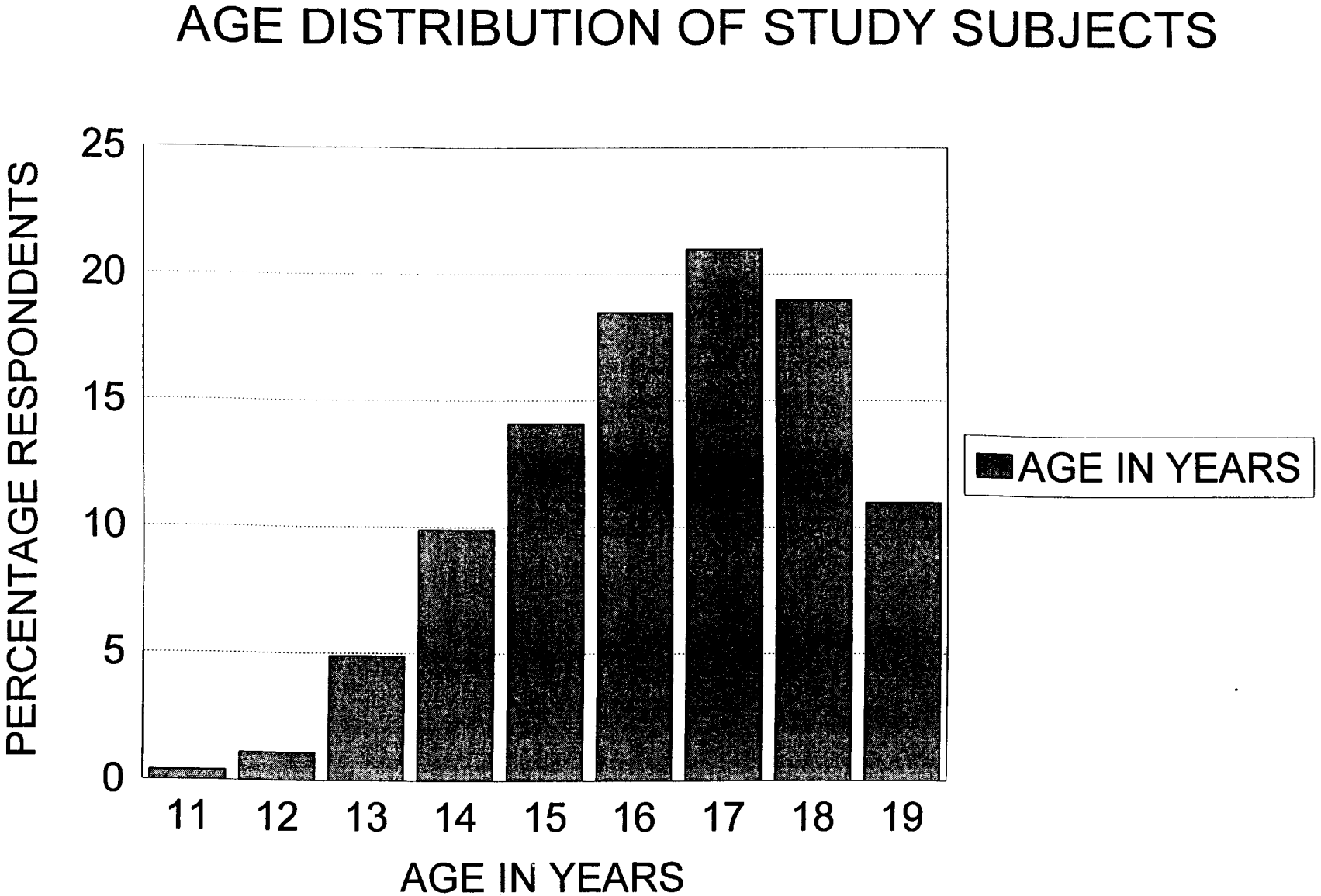
AGE DISTRIBUTION OF STUDY SUBJECTS
PERCENTAGE RESPONDENTS
25
20
15
10
5
0
11
12
13
14
15
16
17
18
19
AGE IN YEARS
AGE IN YEARS

FIGURE 3

g) **Religious Affiliations:** 98.9 percent of the total respondents (903) were Christians and the rest belonged to other religions. Of the Christians, the commonest churches were Catholic (32.7%), Seventh Day Adventists (17.1%) and United Church of Zambia (13%). The rest of the pupils (37.2%) were from other churches.

h) **Frequency of church attendance:** Weekly church attendance among the 751 respondents was very high (83.2%). 14.2 percent reported attending church at least once a month.

I) **Guardians:** Parents were the guardians of 80.4 percent of the total respondents (907). Other guardians included mainly siblings and other relatives.

j) **Residential area and area of upbringing:** 59 percent of the total respondents lived in high density residential areas whilst 37 percent lived in medium or low density areas. 94 percent of the respondents currently live in towns along the line of rail. Most of the respondents had been brought up in urban areas (87.5%)

## 6.2 HIV/AIDS Knowledge

### 6.2.1 HIV Transmission

a) Responses about the main routes of transmission are given in the table four.

**Table 4: Main routes of HIV transmission**

| ROUTE | YES HIGH RISK | YES LOW RISK | NO | DO NOT KNOW |
|---|---|---|---|---|
| SEMEN (n=883) | 91.1% | 2.5% | 5.4% | 1.0% |
| VAGINAL SECRETIONS (n=886) | 87.6% | 5.6% | 4.1% | 2.7% |
| BLOOD TRANSFUSION (n=886) | 72.6% | 18.6% | 6.3% | 2.5% |

Sexual transmission was correctly recognised a high risk route of HIV transmission by the majority of respondents.

b) Skin piercing instruments: These were recognised as having a risk of transmission of HIV by the majority of the respondents. This risk which is relatively lower than that of the major routes, was however identified as high risk by most of the respondents (table 5).

**Table 5: Skin piercing instruments and HIV transmission**

| INSTRUMENT | YES HIGH RISK | YES LOW RISK | NO | DO NOT KNOW |
|---|---|---|---|---|
| UNSTERILISED NEEDLES | 74.8% | 15.1% | 7.8% | 2.3% |
| TRADITIONAL HEALERS USING UNSTERILE INSTRUMENTS | 70.0% | 13.3% | 12.0% | 4.7% |
| SHARING RAZOR BLADES | 64.6% | 30.8% | 2.9% | 1.6% |

Other modes assessed that involve skin penetration were mosquito bites and ear piercing. 84 percent of the respondents knew that mosquito and other insect bites do not transmit HIV. 25.3 percent said HIV could be transmitted by having ears pierced.

c) **Casual contact:** The majority of the respondents (84.8%) knew that casual contact does not transmit HIV.

**Overall impression of knowledge on HIV transmission**

The level of knowledge about HIV transmission was good (67 percent). Males were more aware that semen and vaginal secretions were high risk modes of transmission than the females (Semen: Chi sq.=9.34, p=0.025. Vaginal secretions: Chi sq.=27.22, p=0.000005). Although members of the Anti-AIDS clubs were more aware of semen being a high risk mode of transmission than non members (Chi sq.=12.99, p=0.0046), they were less aware that unscreened blood is highly infectious. Stratification of results

by age and by grade showed no significant difference in level of knowledge concerning the main modes of transmission. Comparison of knowledge on major modes of transmission between the two co education schools in the urban district against the two co-education schools in the rural district showed that the respondents in the rural schools had a higher percentage of knowledge than their urban counterparts though the confidence limits are very wide (Semen: Odds ratio=2.88, 95% C.I.=0.66-17.27; Vaginal secretions: Odds ratio=2.71, 95% C.I.=0.59-16.70) When the two urban co education schools were compared against each other, Munali had a higher percentage level of knowledge than Arakan (Semen: Odds ratio=7.53, 95% C.I.=1.62-70.07; Vaginal secretions: Odds ratio=15.49; 95%C.I.=2.20-665.80). Comparison of the two rural co-education schools against each other showed that Naboye had a higher level of knowledge than Chongwe (Semen=Odds ratio=0.23, 95% C.I.=0.00-2.42; Vaginal secretions, Odds ratio=0.19; 95% C.I.=0.00-1.75).

### 6.3 Attitude towards HIV/AIDS

Although 97.9 percent of the total respondents (887) knew a person with HIV may look healthy but can pass the virus to other people, only 51.6 percent knew that a person with HIV may be asymptomatic. 70 percent said that all people with HIV infection will eventually develop AIDS. The majority of the respondents indicated that there was no cure for HIV (82.3%) and AIDS (78.6%).

**Condoms:** Condoms were said to interfere with sexual pleasure by 41.2% of the total respondents (879). They were seen as not being effective in preventing spread of HIV/AIDS by 69.4 percent of the total respondents (887). The percentage of females who thought that condoms were effective in preventing HIV (22.9%) was significantly higher than the males (Chi Sq.=6, p=0.0178). There was no significant difference between Anti-AIDS club members and non members in this regard (Chi sq.=2.97, p=0.08).

**AIDS free period in HIV infection:** This period was noted to be from days to years and sometimes never. Most of the respondents said that the duration one to five years (65.4%).

**Attitude towards people with AIDS:** The percentage of respondents with feelings of negativity towards people with AIDS was 24 percent. 26.4 percent thought that most people with AIDS deserve to suffer as they have probably lived bad lives.

Members of the Anti-AIDS clubs when compared to non members were less likely to think that HIV infected people should have equal opportunities in life as everybody else (Chi square=17.87, p=0.0001). They were also more likely to say that most people with AIDS deserve to suffer as they had probably lived bad lives (Chi sq.=29.44, p=0.0000004). 32 percent of Anti-AIDS club members compared to 45 percent of non members indicated that people with AIDS should not be isolated (Chi sq.=12.36, p=0.002).

### 6.4 Proximity of HIV/AIDS

Whilst only 38.9 percent of respondents currently knew a person with AIDS, 51.2 percent knew a person who had died of AIDS (n=886). Only 35.4% had ever supported a person with either HIV or AIDS

There was a significant difference between the percentage of pupils who had ever helped people with HIV/AIDS in terms of anti-AIDS club membership. In this study, among those who knew a person with AIDS, members of the Anti-AIDS clubs compared to non members were less likely to have helped support such a person (p=0.000014).

### 6.5 Sexual Behaviour

Out of 905 respondents, 397 (43.9%) percent had history of previous sexual contact. The mean age at sexual *debut* was 12.9 years. More males (77.3%) than females (22.7%) reported history of previous sexual experience. The median age for initiation of sexual intercourse was 14 years for males and 15 years for females. When quartile ranges were compared for the two populations, there was no significant difference detected (male 10 to 18 years : females 13 to 16 years).

The grade distribution of pupils who had history of previous sexual contact is given in figure four.

Among respondents who go to church, weekly attenders had a lower percentage of having had sex before compared to monthly church attenders (Chi sq.=6.64, p=0.009). Anti-AIDS club members had a higher percentage of self reported history of sexual intercourse than non club members (Chi sq.=12.51, p value=0.00040).

a) **STDs and Adolescents:** 2.6 percent of sexually exposed adolescents in the study reported history of a sexually transmitted disease.

b) **Number of Sexual Partners:** From the respondents who had previous sexual experience, 61.3 percent had regular sexual partners. There was no significant difference between the males and females in this regard (Chi sq.=1.72, p=0.19). Multiple partners in the previous month were reported in 47.6 percent, females being more likely than males to have had more than one partner (Chi sq.=29.9, p=0.00000005). Anti-AIDS club members had a higher rate of multiple partners than non club members. This difference reached statistical significance (Chi sq.=65.8, p=0.0000). The number of sexual partners in the past year was one (12.4%), two (53.7%) and three (22.3%). 76 percent reported history of multiple partners.

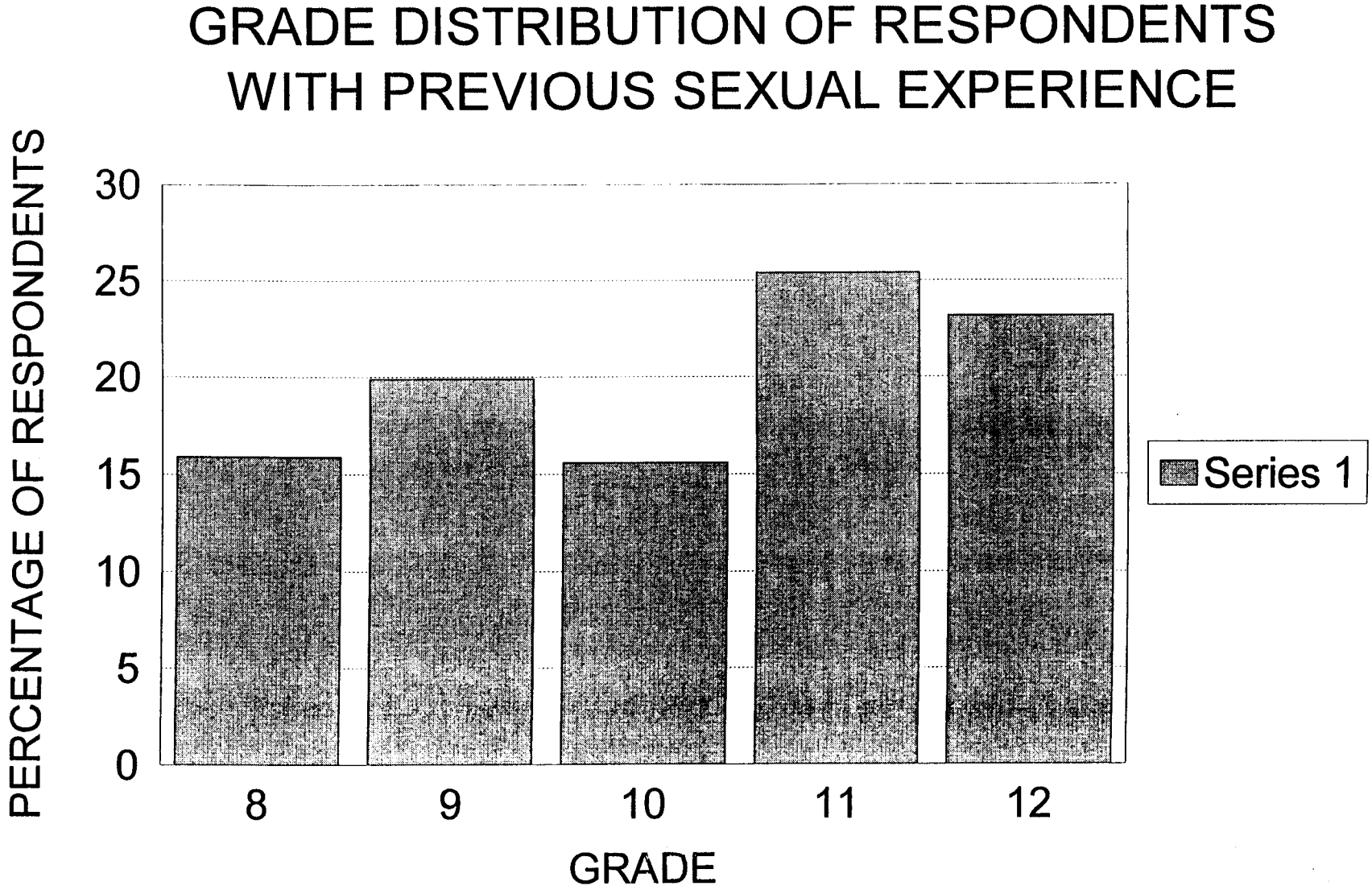
GRADE DISTRIBUTION OF RESPONDENTS WITH PREVIOUS SEXUAL EXPERIENCE
PERCENTAGE OF RESPONDENTS
30
25
20
15
10
5
0
8
9
10
11
12
GRADE
Series 1

FIGURE 4

c) **Condom use:** Among the sexually experienced adolescents, 43.5 percent had history of condom use. Problems with use of the condoms were reported in 28.9 percent. Majority of the respondents always used condoms with regular partner/s (57.7%) and with other partners (64.6%). Very few never used condoms with regular sexual partner/s. The rest of the respondents used them "sometimes". 74.6 percent said they would use condoms more often if they were easily available.

There was no significant difference in knowledge of risk of sexual transmission of HIV between those who had used condoms during sexual intercourse and those who had not. Sexually experienced Anti-AIDS club members had a significantly higher rate of condom use than non members ($p=0.00000$). They were also more consistent in condom use than non members were (Chi sq.$=91.53$, $p=0.00000$). They had less problems with the condom (Chi sq.$=25.31$, $p=0.00000$) and expressed willingness to use condoms more often of they were available (Chi sq.$=8.84$, $p=0.012$).

## 6.6 Sources of Sex and HIV/AIDS Education

The chief sources of sex education are given in the table below.

**Table 6: Sources of sex education**

| SEX EDUCATOR | PERCENTAGE RESPONDENTS |
|---|---|
| FRIENDS | 92.1% |
| TEACHERS | 88.3% |
| HEALTH WORKERS | 73.2% |
| PARENTS | 65.2% |

Sex education is most frequently done by friends. Parents were involved in sex education for about two thirds of the respondents.

The sources of HIV/AIDS information are shown in table seven.

**Table 7: Sources of HIV/AIDS information**

| SOURCE | PERCENTAGE RESPONDENTS |
|---|---|
| FRIENDS | 93.2% |
| TEACHERS | 85.9% |
| HEALTH WORKERS | 85.2% |
| PARENTS | 75.8% |
| ANTI-AIDS CLUBS | 91.8% |
| PRINT MEDIA | 90.0% |
| RADIO | 96.9% |
| TELEVISION AND VIDEO | 91.5% |

The media both print and audio-visual, play an important role in HIV/AIDS education (91.2%). Anti-AIDS clubs are identified as sources of information by 91.8 percent of the respondents. Friends also appear to be a major source of information.

Information received concerning HIV/AIDS had changed the sexual attitude in 79.4 percent respondents, beliefs in 74.5 percent and the sexual behaviour in 76.5 percent.

### 6.7 HIV/AIDS Prevention

a) **Communication:** 90 percent of the total respondents were communicating with their friends/peers about HIV/AIDS prevention. Only 44 percent were communicating with family members. The respondents who were communicating with friends/peers had a significantly higher level of knowledge about the risks of sexual transmission than those who were not communicating with friends/peers groups (Chi sq. = 11.73, p=0.008). However, there was no significant difference in knowledge between those who communicated with family members and those who did not.

b) **Anti-AIDS campaigns:** 88.7 percent thought it was a good idea to have AIDS awareness campaigns at school but only 46.3 percent had participated in any anti-AIDS campaigns.

There was a significant difference between Anti-AIDS club members and non members in terms of participation in Anti- AIDS campaigns. Non club members were more likely to have participated in Anti-AIDS campaigns compared to members (Chi sq. = 5.05, p=0.025).

c) **Premarital sex:** 56.7 percent of the total respondents believed in not having premarital sex. There was a significant difference when this was stratified against Anti-AIDS club membership. A higher percentage of members believed in not having premarital sex (Chi sq. = 32.02, p=00000002).

d) **Risk of HIV:** Perceived risk of HIV was felt in 37. 1 percent and this was significantly higher in those with a history of previous sexual contact. This difference reached statistical significance (Chi sq. = 13.28, p=0.0013).

e) **Change in KAP:** 58.4 percent reported significant change in sexual attitude due to the advent of AIDS. Information received concerning HIV/AIDS had changed the sexual attitude of 79.4 percent of respondents. Beliefs about HIV/AIDS were reported as changed following information by 74.5 percent. Sexual behaviour was also reported as changed by information by 76.5 percent.

### 6.8 ANTI-AIDS CLUBS

Only 195 of the 743 respondents were members of the anti-AIDS club (26.2%). Although 46.3 percent respondents said they participate in Anti-AIDS campaigns, only 24.7 percent said they had benefited from any anti-AIDS club activity. A higher percentage of Anti-AIDS club members than non members reported benefiting from these activities (Chi sq.=79.09, p=0.00000). Anti-AIDS club activity had changed the knowledge of 81.3 percent respondents, the attitude of 79.3 percent, the beliefs of 80.1 percent and the sexual behaviour of 78.2 percent of the respondents. A higher percentage of non members of the Anti-AIDS club than members reported change in sexual behaviour (61.5% : 77.5% Chi sq.=18.63, p=0.000016).

### 6.9 FOCUS GROUP DISCUSSIONS

Six focus group discussions were held. Four groups consisted of eight participants each and two groups had nine each. The total number of participants was 50. Of these, 25 were male and 25 were females (male:female ratio=1:1). The age range was 15 years to 22 years. The mean age was 18 years. Eight of the participants were over the age limit of the study. This was due to an unexpected sampling error. The discussions lasted from one to one and a half hours. From the discussions the following information was obtained:

### 6.9.1 Knowledge about HIV/AIDS

#### a) Facts and myths

Virtually all the participants knew of the existence of HIV/AIDS. The groups knew that HIV stands for Human Immuno-deficiency Virus and AIDS stands for Acquired Immuno-deficiency Syndrome. They defined HIV as:

*" the virus which causes AIDS."*
*"a very dangerous virus."*
*"the virus which destroys the immune system of the person suffering from AIDS."*

AIDS was defined as:

*"a collection of many diseases."*
*"a sexually transmitted disease."*
*"a killer disease."*

Two of the groups mentioned some aspects of immunology.

*"The disease kills your immune system, that is, any disease that comes by you are likely to get it."*

*"At the time AIDS develops, most of the white cells are eaten up. The immune system is made to be weak. The chances of the person surviving are very slim."*

The participants knew that there was a difference between HIV/AIDS. Only two people thought that it was one and the same thing.

In one of the six discussion groups, some participants said that AIDS existed even a long time ago but only that people did not know it. Others had the following to say:

*"___ the difference was that a long time ago the "statistics were low as compared to today."*

*"The disease existed long before but people were not into sex very much at that time. Nowadays, people are very much into sex."*

*"People that time were uncivilised and any time they would die of AIDS they would blame it on witch-craft."*

*"Even in those days the disease had no cure."*

This thought was not discussed in any of the other groups.

**Asymptomatic carriers:** All the groups mentioned that a person with HIV in the early stages may be completely asymptomatic.

*"A person who has got the virus can be very healthy. He can be looking like everybody else."*

**b) Modes of transmission**

**I. Sex:** Knowledge on the main modes of transmission was good. In all groups the highest risk was said to be heterosexual contact. Oral sex and anal sex were mentioned as risks in one of the groups.

*"The risk is high in oral sex."*
*"In anal sex the risk is equally high."*

Although homosexuality was mentioned in one discussion it was not thought to be a mode of HIV transmission.

**ii. Blood:** Knowledge that HIV can be transmitted through blood and blood infected instruments was high among participants. Majority were aware of the risks of blood transfusion. They were also weary of receiving blood from the hospital as they did not trust the effectiveness of the screening process.

*"Not all the blood can be detected that it is containing the virus."*
*"In an emergency doctors sometimes panic and give blood which may not be tested."*
*"They give injections anyhow."*

The greatest fear of blood transfusion lay in the fact that these adolescents were aware of the "window period".

*"It is like if you get HIV today and you go for a test after two months, maybe the test can come negative but when you go after three months it may come out as positive."*

*"I am sure even the doctors, I don't think the machine they use would be able to tell the blood is infected if there is a period of two months after you have contracted the disease."*

**iii. Skin piecing instruments:** Tattoos made by traditional healers, razor blades and other sharp instruments were recognised as potential transmitters of HIV. However a lot of people thought that if the instrument is left outside for a period of time the virus will die and the instrument will be safe to use.

**iv. Mother to child transmission:** Many of the young people were aware that a mother can pass HIV infection to her child. There was variation in the actual time of HIV transmission between mother and child. Some thought that this could only occur during birth while others thought it could occur even before birth. Transmission during lactation was not mentioned in any group.

Most of the young people thought that HIV in a mother always results in infection in the child. Although a few people tried to explain that this was not the case, they were met with unbelief.

*"I think it was a miracle. It is very surprising. The child is carried inside the mother who has HIV and the child comes out negative."*

*"There is no possibility of the unborn child being born negative was because the child was getting blood from the mother."*

**v. Kissing:** The infectivity of saliva was a controversial issue among the participants.

*"Recent researchers are saying that you can get AIDS when you have a passionate kiss."*

*"The virus is present in mucus and that it can be spread through saliva."*

*"AIDS is sometimes acquired from kissing."*

Although some thought that kissing definitely can transmit HIV, others thought that this only occurs when there is a sore in the mouth and blood is exchanged.

*"HIV if found in saliva but you can only get when there are sores in your mouth. No matter how long you can be kissing, you still cannot get the virus unless you have sores in the mouth."*

*"If the tongue has got sores , that is, when you cut that person when you are kissing and there is transmission of blood* (then you can get HIV)."

*"If you take a lot of saliva which is equal to 2.5 litres from a person who is suffering from AIDS then you can get it. May I just say you cannot get 2.5 litres of saliva by kissing a person once or many times."*

Most participants said that they have been taught that casual contact or day to day activities cannot transmit HIV. When probed further it was found that although this message was widespread, many did not trust the message. Fear of transmission through everyday contact made them weary of associating with people with HIV/AIDS.

**c) Cure and Treatment**

Majority of the participants said there was no cure for HIV/AIDS. A few mentioned hearing of people treated with herbal medication who eventually got *"cured"*.

A lot of people thought that treatments in the early stages of the disease were helpful although not curative. The treatments mentioned included diet, drugs and exchange blood transfusion. Two participants mentioned the use of baboon derived bone marrow.

**d) Symptoms of HIV/AIDS**

Most of the youth were well aware of the symptoms of HIV/AIDS. The most frequently mentioned symptoms were wasting, thinning and discolouration of the hair, skin changes, and recurrent illnesses. The three conditions most associated with HIV were herpes zoster, tuberculosis and persistent diarrhoea. Enlarged lymph glands were mentioned in two of the discussions.

**e) HIV/AIDS prevention**

**I. Abstinence:** Abstaining from sex was echoed repeatedly as the best way of preventing HIV/AIDS.

*"The best thing is just to abstain from sexual intercourse."*
*"The best way is just to keep away from sex."*
*"You can have a boy-friend or a girl-friend but you should not be having sex until marriage."*

Premarital sex was frowned upon in the two "all girls" discussion groups.

**ii. Condom Use:** Although a condom was generally recognised as a way of preventing AIDS for those who could not abstain, its effectiveness was under question. Advertisement of condoms in schools was seen by some as a way of encouraging youths

to indulge in sex.

*"I don't agree with what the Anti-AIDS people have brought up about the advertising of condoms. The only thing we do is advertise maximum condoms for maximum pleasure and maximum protection. I don't think these things have any restriction."*

*"What I know is that condoms are not safe and they are not even good for us people. When you look at the diameter of the sperm; I am not sure; but it is about 0.1 microbes But when you look at the virus which is in the sperm it is about 0.005, something like that. This means that it can pass through the condom. Condoms are not good at all."*

*"The way the condom is made is just like the way the shirt is made. There are some lines there. It is only that our eyes cannot see. If you use the microscope, you will see that the condom is just like the way the shirt is made. Now the virus is very small. The virus will still pass through that condom. That is why the condom was not made for prevention of AIDS. It was just meant for prevention of pregnancies."*

Some people saw condoms as the only way to curtail HIV transmission.

*"They should try by all means when they are having sex to use a condom."*

Others thought sticking to one faithful partner was the answer.

*"It is actually very true that we have to relieve ourselves by having sex. In any case we are supposed to take precautions by using a condom and know the girl that you are going out with."*

**iii. Sticking to one faithful partner:** This was thought to be an alternative for those who could not abstain but even then condom use was encouraged.

**iv. Masturbation:** A minority mentioned masturbation as a way of preventing sexual transmission of HIV.

*"Since some people have higher capacity of sexual feelings, we should just be masturbating."*

Masturbation was associated with many negative feelings.

*"Masturbation is not good because one can be psychologically affected if h continued masturbating. You are actually destroying your manhood."*

**f) HIV high risk groups**

The youth was said to be at risk by all the groups. The reasons for this included the following:

*"The danger of AIDS is not preached to them and they remain ignorant about HIV."*

*"Youth are preparing for their marriages. When they are preparing for marriage, they have to do all sorts of things like having sex. Most of them want to know that they are capable of a girl and so forth. So if they are not taught about this AIDS disease, they may have it in the process of practising."*

*"Also the ignorance of using condoms. Most of the youth lose control when they are drunk. They get over drunk and they involve themselves in sexual activities and they don't even want to use a condom."*

In one "all male" discussion group female youths were thought to be more at risk because they exchange sex for money. In the same group out of school youths were thought to be more at risk than those in schools because they are not as exposed to information as school youths are. AIDS was associated mostly with people who were promiscuous.

### 6.9.2 Experiences about and attitude towards AIDS patients

Most of the youth knew people who had AIDS or had died of AIDS. Out of the 50 participants only one had never seen a person with AIDS. Almost all families represented had been affected in some way by AIDS. A lot discussed experiences of nursing AIDS patients in their homes.

Most of the adolescents in the discussions feared contracting AIDS from the patient they were in contact with. They were also scared of AIDS patients who are severely wasted and very ill. A lot of the adolescents felt great pity for people with AIDS. A significant proportion in all the groups however, thought that most people with AIDS deserve to suffer as they have led promiscuous lives.

Although most youths said they were told that casual contact does not transmit HIV, in reality they did not want to "take any chances with their lives" and were weary of being in contact with people with AIDS.

### 6.9.3 Sexual behaviour

From the six discussion groups, the two "all female" groups claimed to be abstaining from sex. Among the all male groups some of the boys said that they were having sex but that they used condoms to protect themselves from HIV. In all the groups the participants knew a lot of "other youth" who were sexually active.

### 6.9.4 Anti-AIDS Clubs

Discussion on the effectiveness of Anti-AIDS clubs raised a lot of mixed feelings particularly in the groups that comprised Anti-AIDS club members. The general feeling was that these clubs are not as effective as they should be. Some the reasons given for this were:

*"People in the committee have less knowledge about the whole thing. So they find that it is very difficult to teach others about it."*

*"The clubs lack support from Anti-AIDS project."*

*"Our patron is to busy to run the club effectively"*

*"Many of us pupils are too busy to join club"*

Some pupils said they had gained from the club activities and their behaviour and attitude towards sex had changed as a result of the information received:

*"They have taught me not to use condoms because they are not safe."*

*"It has changed my behaviour in the sense that I didn't think much about caring for those people who were very much sick with AIDS."*

*"There are a lot of people who have come to realise that out of womanising or prostitution, there is AIDS."*

*"I can say that the club has helped me change and all the information I have got is from them and the health people. I have got the information that you can't get AIDS through shaking hands, drinking from the same cup and other things. At first I was scared to shake the hands of one with HIV."*

*"Before we used to have sex anyhow but nowadays we are careful, we use condoms"*

Some pupils said that despite the knowledge many youth were still engaging in *"high risk behaviour"*

Most of the pupils in the discussions expressed the need for medical personnel, preferably doctors to teach them about AIDS. If the doctors could not teach all the pupils, at least they should teach the Anti-AIDS club members and the patrons. In two of the groups integration of AIDS lessons in the teaching curriculum was proposed. Parents were noted to be poor anti-AIDS educators due to *"tradition"* but the pupils felt that they should put more effort in teaching their children about HIV/AIDS to supplement the education given by Anti-AIDS clubs.

### 6.9.5 Sources of HIV/AIDS information

From the discussions the chief sources of HIV/AIDS information is through the media. Friends also contribute a lot to HIV/AIDS education. To some students, the Anti-AIDS

clubs play a significant role in HIV education. Pupils in all the six discussions groups would like to have medical personnel tell them about HIV/AIDS. They feel that this would dispel some of the misconceptions held and would clarify a lot of their unanswered questions.

### 6.10 INTERVIEWS

The key people interviewed were patrons of the Anti-AIDS clubs and the manager of the Anti-AIDS project under which these clubs fall. Six interviews were held with the Anti-AIDS club patrons. Of the six, three were males and three females. Duration of being a patron ranged from two years to six years, the average being three and a half years. Out of the six only two patrons had received any Anti-AIDS prevention education. The rest were teachers with an interest in AIDS education but had not been afforded a chance to undergo any training.

Two of the clubs were started six years ago, three started four years ago and one two years ago. All but one club are currently registered with the Family Health Trust. The club membership is 20 for four of the clubs and 40 for the other two. Membership is voluntary but the numbers are restricted by the patrons so that they have a "manageable" group. Four of the clubs meet weekly for about an hour and the other two meet twice a week. Activities reported during the previous year were mainly debates between members and drama presentations in the schools. The patrons in most of the schools reported significantly more activities than the focus group discussions elicited.

Among the problems faced in the running of the clubs, time and money were the most important. Some patrons were running more than one club as well as having a full time teaching schedule.

All the patrons said that the pupils' knowledge of HIV/AIDS had changed as a result of Anti-AIDS club activities. Improvement in the level of knowledge is assessed by quizzes given to pupils periodically. Although all the patrons said that they could not be sure of actual change in sexual behaviour, they indicated that the number of pregnancies had decreased and the demand for condoms had increased. Two of the schools did not distribute condoms and one of these did not even discuss their use.

The achievements cited were increased awareness of HIV/AIDS issues and the development of peer educators among the club members.

The patrons who had not undergone any formal AIDS education or counselling courses felt the need to have them. One felt that there was need to integrate HIV/AIDS education in the school curriculum. None of these schools had an AIDS curriculum in place.

**The Anti-AIDS Project:** The Anti-AIDS clubs in Zambia are affiliated to the Anti-AIDS Project through registration. This facilitates follow up with HIV/AIDS education materials and periodic visits from the project. Each registered club receives a newsletter thrice a year. Every member gets a membership card and a suitable booklet or leaflet. A club magazine is produced every year. The project also runs a video and a resource library. The clubs are basically self administering and do not receive financial support from the project. Assessment of club activities is done by cards filled in for re-registration, once a year. The current register has 1,800 clubs in and out of schools throughout Zambia.

# CHAPTER SEVEN

## 7.0 DISCUSSION

### 7.1 KNOWLEDGE OF HIV/AIDS

There was a high level of knowledge about HIV and AIDS in secondary school going adolescents in Lusaka particularly concerning the main routes of HIV transmission. This reflects the high level of HIV educational activities in Lusaka. The role of skin piercing instruments in HIV transmission may have been overemphasised leading to these routes being considered as high risk sources by many of these young people. The insignificance of casual contact as a transmission route is quite well understood by the youths (84.8 percent). Misconceptions about HIV/AIDS although low, still exist.

In this study, females were less aware of the risk of sexual transmission of HIV than males. A study done in government secondary schools in Tanzania and several other studies in developing countries have reported that females are less informed about HIV/AIDS than male counterparts (Saidi et al 1991; Tikoo et al 1995). Sex and HIV/AIDS education of the girl child needs to be emphasized.

Although this study showed no significant difference in knowledge between the grades of education, a similar study in Zimbabwe showed that educational level was among the significant predictors of HIV/AIDS knowledge and of modes of its transmission (Campbell, Mbizvo 1994). Another study in India showed that the higher the grade level, the higher the scores on AIDS knowledge (Tikoo et al 1995). A reason for this lack of difference between grades in our study may be the fact that HIV education is available in both primary and secondary schools in Lusaka. Pupils may thus have a high level of knowledge even from junior grades. Exposure to media messages may also play a role in

not having a gap in knowledge between grades.

Comparison of results by school showed different levels of knowledge. This could be a reflection of different levels of school based HIV education programs. The assumption that urban schools would probably have a higher level of knowledge than the rural schools was invalidated by the fact that the two co-educations schools in the rural district had a higher level of knowledge than the two co-education schools in the urban district. It is important to note that the area of residence of most of the study participants is urban and 87.5 percent of the them had lived most of their lives in urban areas. The differences reflected in the study would therefore not reflect differences in exposure between urban and rural areas. Moreover, since only two percent of the urban government secondary school going pupils were sampled compared to 15 percent in the rural area, the results may not be truly reflective of the general urban situation.

The high level of HIV/AIDS knowledge was found in both the quantitative and the qualitative data.

## 7.2 SOURCES OF HIV/AIDS INFORMATION

The main source of HIV/AIDS information is the media, both printed and audio-visual. This is consistent with results of studies done in other countries (Campbell, Mbizvo 1994; Papaevangelou 1993). Publicity through print media, television and radio has been among the chief strategies for HIV prevention in Zambia. This publicity has been successful in raising public awareness of HIV/AIDS.

Friends play a very significant role in both HIV/AIDS and sex education. From this study, respondents who were communicating about HIV/AIDS with their friends/peers had a higher level of knowledge than those who were not. This underscores the importance of having to train adolescents as peer educators for peer-led HIV education programs. Young

people talk about sex and HIV/AIDS mostly with friends and peers as opposed to family. Parents and other family members need to improve their input in sex and HIV/AIDS education.

This would complement the rest of the sources of information. In Zambia, traditional initiation rituals at puberty provide some sex education for adolescents. HIV/AIDS information could also be imparted during these ceremonies.

Since the main source of information is the media which lacks dialogue, there is need for health education that can allow dialogue. Improved health workers' input in health education would play a vital role in lowering the level of misconceptions about transmission of HIV/AIDS. They have a unique role to play and are also able to provide one-on-one counselling. A study on family physicians' support for school based HIV prevention education programs concluded that family physicians can play an important role in designing and implementing HIV education programs (Ryan et al 1993). In another study medical students and persons with AIDS were said to be able to provide school-based AIDS education to early adolescents (Sunwood et al 1995). Information from the focus group discussions indicate that adolescents in this study would greatly appreciate and would benefit from HIV/AIDS education given by doctors and other health workers.

A study done in America stated that HIV prevention programs should go beyond the didactic transfer of factual information and include more interactive teaching strategies to improve adolescents' attitudes toward condoms and to counter negative peer influences and to counter adolescents' perceptions of vulnerability. Physicians in this study were said to be an under-utilised source of HIV prevention information. They have an important role in counselling adolescents about effective HIV prevention methods and dispelling misperceptions which hinder consistent condom use (DiClemente et al 1992).

## 7.3 HIV/AIDS ATTITUDE

Of the total respondents, 81.3 percent said that people who have sex with many different partners are more likely to get AIDS. This among other reasons has led to HIV/AIDS being a highly stigmatised condition. Knowledge that HIV is not transmitted by casual contact has probably helped in having low levels of negative attitudes towards people with HIV/AIDS.

There seems to be poor acceptance of condom use in prevention of HIV/AIDS. This is suggested by the fact that 69.4 percent respondents did not think that condoms were effective in preventing spread of HIV. The fatality of AIDS is well known among adolescents. From the focus group discussions, most of the participants had lived with people with AIDS. Most of these youths were not comfortable with having AIDS patients in their homes. Despite knowing that casual contact does not transmit HIV, they said they did not want to "take any chances with their lives. This implies that knowledge does not necessarily change beliefs and attitudes. Discussion of nursing care of AIDS patients with medical personnel would help to diffuse anxiety in this direction.

## 7.4 SEXUAL BEHAVIOUR

A significant percentage of the adolescent population is sexually experienced (43.9 percent). As sexual activity is initiated by about 13 years of age, HIV/AIDS education should be introduced at an early age. In Zambia, there is a move towards training in primary schools. This needs to be encouraged. Condoms are used inadequately (43.5%) and inconsistently in this age group. This may be due to accessibility as 74.6 percent respondents indicated that they would use condoms more often if they were easily available. While condoms inhibit the transmission of viral pathogens including HIV, their effectiveness as a risk reduction strategy is dependent on appropriate and consistent use. When used correctly and consistently, they are highly effective; when used otherwise, they are not (Roper et al 1993).

A commentary in the American Journal of Public Health in 1993 stated that avoiding sexual intercourse altogether or restricting sex to partners known to be uninfected needs to be promoted as the most effective strategy in HIV/STD prevention (Roper et al 1993). A study done by DiClemente in America in 1993 stated that although sexual abstinence is the most effective method to prevent transmission of HIV and other sexually transmitted disease, few adolescents will adopt abstinence as an HIV prevention strategy (DiClemente 1993). Condoms should thus be made available for sexually active adolescents.

In this study, high level of knowledge of the risk of HIV sexual transmission did not improve condom use. This is consistent with other studies which have shown that knowledge and awareness of HIV risk factors does not necessarily change behaviour (Rotheram-Borus et al 1995). A study among adolescents showed that one intervention model produced a long term increase in knowledge about AIDS but did not produce a long-term reduction in the level of engagement in high risk behaviours (Slonim-Nevo et al 1996). Increasing consistent condom use among adolescents is therefore a formidable challenge. An encouraging message is given by a five year study in which a condom-promoting strategy had a positive effect on the use of condoms (Hausser, Michaud 1994).

Although self reported change in knowledge, attitude and practice was high in this study, it may not necessarily reflect the true situation. A deeper understanding of and an increased attention to factors influencing behaviour is needed for long term behavioural change interventions to be effective. One study in New York concluded that addressing demographic and contextual risk factors (i.e., academic failure, substance abuse, adverse circumstances) involved in AIDS-related behaviours may prove to be a more powerful AIDS-prevention strategy among adolescents than simply teaching facts about AIDS (Walter et al 1993). A study done in Singapore stressed the need for behavioural strategies to be supplemented with efforts to create economic, political and social environments that support behavioural change (Wong 1995).

In this study, as in a similar study in Zimbabwe (Campbell, Mbizvo 1994), individual HIV risk assessment is higher amongst students who reported sexual experience.

Statistics in Zambia show that females get AIDS at an earlier age than males. One reason for this could be that females initiate sexual activity at an earlier age than males. In this study however, significantly less females than males reported history of sexual experience and the mean age at sexual debut was higher in females than in males. One reason for this finding may be incorrect data from the females. Culturally, girls would be more inhibited to reveal sexual endeavours compared to boys. Another inhibiting factor could be the environment for girls attending a strict "all female" convent school. Girls from this school had a significantly lower level of reported sexual experience compared to girls from the co education schools. From the focus group discussions among these girls, although they did not indulge in sex, they knew a lot of other girls in the school who did. Another approach in collecting this sensitive information may have yielded different results.

### 7.5 ANTI-AIDS CLUBS

Anti-AIDS club membership is very low in the study group constituting only about a quarter of the respondents. When the school population is considered the percentage is even lower than this. This gives an overwhelming task to the few members to reach the rest of the school population. Since most of the club activities are targeted towards club members themselves, restriction of membership by the patrons is not beneficial to these youths. If membership has to be restricted, it should be compensated for by increased outreach activities which will involve non members.

Issues of concern in the Anti-AIDS clubs include the level of negative feelings among members towards people with HIV/AIDS. It would be expected that the club members would have a more compassionate approach than the results reveal.

Despite one of the club aims being to help support people with HIV/AIDS, club members were less likely to have helped give such support compared to non club members. This finding was statistically significant even after controlling for those who did not know anyone with HIV/AIDS. Despite the high level of knowledge of HIV transmission, club members had a higher rate of previous sexual experience and multiple partners. It would be important to explore the reasons behind these findings. One possible explanation for these unexpected findings is that since membership to these clubs is voluntary, the findings may reflect self selection of high risk adolescents who are seeking a means to decrease personal risk and to increase their chances of survival. For Anti-AIDS club members to be effective peer educators they have to be role models in avoiding HIV risk behaviours. It would have been of benefit to critically evaluate the impact of the Anti-AIDS clubs on sexual behaviour. It is encouraging to note however that sexually experienced Anti-AIDS club members have a higher rate of condom use, they use condoms more consistently and report less problems with condoms than the non club members. Despite a significant percentage of adolescents saying they do not believe that condoms are effective in spreading the spread of AIDS, the Anti-AIDS club members seem to be practising condom use in a way that would prevent transmission of HIV. The reasons for condom use were not explored in this study.

### 7.6 PREVENTION OF HIV/AIDS

As communication about HIV/AIDS is done mostly with peers, peer education intervention programs should be of high priority in school based HIV prevention programs. The Anti-AIDS project is currently carrying out a peer-led intervention pilot study. The fact that less than half of the study respondents had ever participated in any Anti-AIDS campaigns necessitates the need for compulsory HIV prevention education. One way of reaching the adolescents that the Anti-AIDS clubs may not reach in the school is the integration of HIV education in the school curriculum. A study done among high school students in New York City concluded that school-based teacher delivered AIDS-

preventive curricula may play a role in curtailing transmission of HIV among adolescents (Walter, Vaughan 1993). Although implementation of this strategy is already underway in Zambia, not all schools have yet integrated this. With integration of this education comes the need to educate the teachers and all would be providers of this education.

Systematic HIV education is necessary to lower the level of misconceptions about the condition. School based HIV-prevention efforts are strongly recommended as the major strategy for increasing adolescents' HIV-related knowledge and promoting preventive behaviours (DiClemente 1993). They provide an optimal opportunity to access large numbers of youth. Moreover, most youth attend schools before they initiate the behaviours that may place them at risk for HIV infection.

# CHAPTER EIGHT

## 8.0 CONCLUSION

HIV/AIDS knowledge is high among the adolescents in secondary schools in Lusaka. Misconceptions about HIV/AIDS exist particularly in relation to HIV transmission. The chief sources of HIV/AIDS information are the media and friends. Negative attitudes towards people with HIV/AIDS also exist. Despite the high level of knowledge, HIV risk associated behaviour is prevalent in this age group. A large percentage of school going adolescents in the study area are sexually active. Sexual activity starts in early adolescence and condoms use is inadequate and inconsistent.

Majority of adolescents in schools are communicating about HIV/AIDS with their friends. Less than half of this adolescent population is communicating about HIV prevention with family members.

The Anti-AIDS clubs despite being one of the most extensive anti-AIDS strategies in Zambia, does not appear to be as effective as they could be. Membership is low and from this study, self reported benefit from club activities is poor. The rate of sexual activity and number of sexual partners is higher among club members than non members but the members are more consistent in the use of condoms. However, performance of the clubs could not be critically gauged from this study.

HIV education cannot be done by individual groups of people. A multi-displinary approach would help consolidate ideas.

# CHAPTER NINE

## 9.0 RECOMMENDATIONS

1. Adolescents need to be encouraged and trained to reach out to fellow youths in the fight against AIDS.

2. Education programs which are peer-led should be developed.

3. Dialogue should be given greater attention than previously done in HIV education programs.

4. School based education program should be strongly encouraged.

5. Health workers should be more involved in HIV health education campaigns.

6. HIV prevention knowledge should be supplemented with sustainable behavioural change intervention strategies which will have a long term effect.

7. School and public health authorities should enlist physicians' assistance when planning and implementing HIV education activities.

8. Culturally sensitive and sex specific techniques should be used to collect data on issues like sexual behaviour in adolescents.

9. Studies to critically evaluate the impact of the present Anti-AIDS strategies in adolescents should be designed.

# CHAPTER TEN

## 10.0 LIMITATIONS OF STUDY

### 10.1 SAMPLING TECHNIQUE

The analysed questionnaires were not evenly distributed between the six schools. Two of the schools had less questionnaires than the minimum sample size aimed for in the study (16 percent and five percent respectively). This was due to inaccuracy in the sampling technique. Under sampling of grade ten by 20 percent and over sampling of grade eleven by 65 percent was partly due to the same problem. This problem in sampling technique could have been avoided.

### 10.2 SAMPLING BIAS

Since the sample did not involve private secondary schools and out of school adolescents the results of this study may not be truly representative of the adolescent population as a whole. Time and resources were the limiting factors in this aspect.

### 10.3 VALIDITY OF RESULTS

The validity of the results obtained from the questionnaires could have been checked by testing the consistency of the answers with a retest of the questionnaire in the same study population at a different time. The test-retest reliability could then have been worked out. A limitation of time and resource prevented this. Although the qualitative data collected could be used to check the consistency of information, there may have been contamination as this data was collected in the same population shortly after the survey questionnaire was administered.

### 10.4 IMPACT OF ANTI-AIDS CLUBS

Due to the study design, the impact of Anti-AIDS clubs in changing sexual behaviour could not be evaluated.

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## APPENDIX I

## UNIVERSITY OF ZAMBIA, SCHOOL OF MEDICINE

## SELF ADMINISTERED QUESTIONNAIRE

**CONFIDENTIAL**

Please answer these questions on your own. You do not need to include your name on this questionnaire, as it is not a test, and the results are confidential. Please hand in these questionnaires to the AIDS educator or the researcher.

**DATE OF INTERVIEW** : ../../..  **SCHOOL : .....**

**DATE OF BIRTH** : ../../..  **AGE LAST BIRTHDAY : ...**

**SEX** : MALE ..... 1  FEMALE ..... 2

**GRADE** : .....

**MOTHERS LANGUAGE** :.....

**RELIGION** : ..... ....

**IF CHRISTIAN, WHICH CHURCH DO YOU GO TO : .....**

**HOW OFTEN DO YOU GO TO YOUR PLACE OF WORSHIP ?** (Circle one option)

AT LEAST ONCE/WEEK ..... 1  AT LEAST ONCE/MONTH ..... 2

AT ONCE/YEAR ..... 3  NEVER ..... 4

**WHOM DO YOU LIVE WITH (WHO IS YOUR GUARDIAN) ?** .....

**IN WHICH TOWN HAVE YOU LIVED MOST OF YOUR LIFE ?** .....

**WHERE DO YOU LIVE (HOME ADDRESS)? TOWN/CITY** .....

**AREA/TOWNSHIP** .....

1. **Do you think HIV, the virus which causes AIDS can be spread by any of the following?** Tick one box for each option given.

| | 1 Yes High Risk | 2 Yes Low Risk | 3 No | 4 Do N o t know |
|---|---|---|---|---|
| Saliva / Kissing | | | | |
| Semen (sperm)/sexual inter- course with infected man | | | | |
| Mosquito and insect bites | | | | |
| Vaginal Secretions/sexual intercourse with infected woman | | | | |
| Urine e.g. stepping on urine | | | | |
| Sitting on a dirty toilet seat | | | | |
| Using unsterilized used needles | | | | |
| Being coughed or sneezed upon by someone with HIV | | | | |
| Hugging and kissing on the cheek | | | | |
| Tatoos made by a Traditional Healer using old/unsterile instruments | | | | |
| Shaking hands with an infected person | | | | |
| Tears of an infected person | | | | |
| Blood Transfusion with blood that's not checked for HIV | | | | |
| Masturbation | | | | |
| Sharing tooth brushes | | | | |
| Sharing razor blades | | | | |
| Having ears pierced | | | | |

**2. Please tick the box you feel is correct. In some cases there is no correct answer, so we want you to honestly say how you feel.**

| | 1 Yes or true | 2 Do not Know | 3 No or false |
|---|---|---|---|
| Is there a cure for HIV, the virus which causes AIDS ? | | | |
| A person with HIV may look and feel healthy, but can pass the virus onto other people. | | | |
| Can a person be infected with HIV, and have no symptoms ? | | | |
| Someone who has HIV can still have sex safely, using a condom. | | | |
| Should a person with HIV have the same opportunities in life as everyone. | | | |
| Should people with AIDS be isolated to stop further spread of the disease. | | | |
| Although I have compassion for people with AIDS, I still don't like the idea of being in the same classroom with someone who has it. | | | |
| Most people with AIDS deserve to suffer as they have probably lived immoral lives. | | | |
| Do condoms interfere with sexual pleasure? | | | |
| All people with HIV will eventually develop AIDS. | | | |
| Would you feel comfortable sharing plates and cups with people infected by HIV ? | | | |
| Have you put yourself at risk of HIV infection? | | | |
| People who have sex with many different partners are more likely to get AIDS | | | |
| Are condoms effective in preventing spread of HIV/AIDS ? | | | |
| Can AIDS be cured ? | | | |

**QUESTION 3**

**DO YOU KNOW ANYONE WHO IS HIV POSITIVE BUT NOT ILL AT THE MOMENT?**

Yes ..... 1 No ..... 2 If yes, specify .....

**DO YOU KNOW ANYONE WITH THE DISEASE AIDS?**

Yes ..... 1 No ..... 2 If yes, specify .....

**DO YOU KNOW ANYONE WHO HAS DIED OF AIDS?**

Yes ..... 1 No ..... 2 If yes, specify .....

**HAVE YOU EVER HELPED SUPPORT PEOPLE WITH HIV OR AIDS ?**

Yes ..... 1 No ..... 2

**If your answer is yes then specify the kind of help given and the person/s helped :**

.....

.....

**HOW LONG DOES IT TAKE FOR A PERSON WHO IS HIV POSITIVE TO DEVELOP THE DISEASE AIDS? (Circle correct answer ; there may be more than one correct answer)**

**(a) DAYS** : ..... 1

**(b) WEEKS** : ..... 2

© **MONTHS** : ..... 3

(d) **1 TO 5 YEARS** : .....4

(e) **UP TO 10 YEARS OR MORE:** ..... 5

(f) **SOMETIMES NEVER** : ..... 6

**TICK THE BOX THAT APPLIES TO YOU.**

4. **Have you ever had sex?** Yes ..... (1) No ..... (2)

**If your answer is No, go to Question No. 14.**

**If your answer is yes, please answer the following Questions.**

5. **At what age did you have your first sexual intercourse?**

.....

6. **Have you ever suffered from a sexually transmitted disease?**

Yes ..... (1) No ..... (2)

7. **Do you have a regular sexual partner (e.g. girlfriend or boyfriend)?**

Yes ..... (1) No ..... (2)

8. **Did you have more than one sexual partner in the last month?**

Yes ..... (1) No ..... (2)

**If yes, how many** .....

**9. Number of sexual partners in the past year:** .....

**10. Have you ever used a condom?** Yes ..... (1) No ..... (2)

**If your answer is NO, go to Question 14.**

**If your answer is YES, answer the following questions.**

**11. Have you experienced any problem while using a condom?**

Yes ..... (1) No ..... (2) Do not know ..... (3)

**If yes, specify** .....

.....

**12a. Do you use a condom with your regular partner?**

Never ..... (1) Sometimes ..... (2) Always .....(3)

**12b. Do you use a condom with other partners?**

Never ..... (1) Sometimes ..... (2) Always ..... (3)

**13. If condoms were easily available would you use them more often?**

Yes ..... (1) No ..... (2) Don't know ..... 3

**14. Have you ever been told about sex by :**

**a) Parents/Guardians** Yes ..... (1) No ..... (2)

**b) Brother/Sister** Yes ..... (1) No ..... (2)

c) **Other relative/s** Yes ..... (1) No ..... (2)

**If yes, specify** .....

d) **Friend/s** Yes ..... (1) No ..... (2)

e) **Teacher/s** Yes ..... (1) No ..... (2)

f) **Health worker/s e.g nurse/doctor** Yes ..... (1) No ..... (2)

**If yes, specify** .....

g) **Other** Yes .... (1) No .....(2)

**If yes, specify** .....

**If your answer to any of the above is yes then specify what you learned from the source.**

.....

.....

.....

15. **Have you ever had any anti-AIDS education (e.g. talks, formal discussions)?**

Yes ..... (1) No ..... (2)

**If yes, where was this?** .....

.....

16. **Sources of HIV/AIDS information**

a) **Parents/Guardians** Yes ..... (1) No ..... (2)

b) **Other family members/relatives** Yes ..... (1) No ..... (2

| | | |
|---|---|---|
| | **If yes specify** | ..... |
| c) | **Friends** | Yes ..... (1) No ..... (2) |
| d) | **Teachers** | Yes ..... (1) No ..... (2) |
| e) | **Health workers eg nurse/doctor** | Yes ..... (1) No ..... (2) |
| | **If yes, specify:** | ..... |
| f) | **Books** | Yes..... (1) No ..... (2) |
| | **Magazines** | Yes ..... (1) No ..... (2) |
| | **Newspapers** | Yes ..... (1) No ..... (2) |
| | **Posters** | Yes ..... (1) No ..... (2) |
| | **Pamphlets** | Yes ..... (1) No ..... (2) |
| g) | **Television** | Yes ..... (1) No ..... (2) |
| | **Radio** | Yes ..... (1) No ..... (2) |
| | **Video** | Yes ..... (1) No ..... (2) |
| h) | **Anti-AIDS club/s** | Yes ..... (1) No ..... (2) |
| I) | **Other** | Yes ..... (1) No ..... (2) |
| | **If yes, specify** | ..... |

**WHAT ARE THE BENEFITS AND/OR LIMITATIONS OF THE ABOVE SOURCES?**

.....

.....

.....

**17. Have you discussed HIV/AIDS prevention with any**

**a) Friends/Peers** Yes ..... (1) No ..... (2)

**b) Family members** Yes ..... (1) No ..... (2)

**18. Do you think it is a good idea )to have an HIV/AIDS awareness campaign at school?** Yes ..... (1) No .....(2)

**How do you think this could be best achieved:** .....

.....

.....

**19. Are you a member of any Anti-AIDS club?**

Yes ..... (1) No ..... (2)

**WHY ?**.....

.....

**20. Have you benefitted from any Anti-AIDS club activity ?**

Yes .... (1) No .... (2)

**If yes specify activity and benefit :** .....

.....

.....

**21. Do you participate in any Anti- AIDS campaigns ?**

Yes ..... (1) No ..... (2)

**If yes, elaborate :** .....

.....

**22. Do you believe in avoidance of sex before marriage ?**

Yes ..... (1) No ..... (2)

**23. Do you feel at risk from HIV?**

Yes ..... (1) No .....(2) Don't Know .....(3)

**Why?** .....

.....

**24. Has the advent of AIDS helped you change your attitude towards sex?**

1) Not at all 2) Slightly

3) Moderately 4) Very much

5) I'm not sure

**25. Has the information you have received concerning HIV/AIDS affected your:**

**a) sexual attitude** : Yes ... (1) No ... (2)

**b) sexual beliefs** : Yes ... (1) No ... (2)

**c) sexual behaviour** : Yes ... (1) No ... (2)

**If yes, specify** .....

.....

.....

**26. Have Anti-AIDS club activities affected your:**

**a) knowledge of HIV/AIDS ?**

Yes ..... (1) No ..... (2)

**b) attitude towards HIV/AIDS ?**

Yes ..... (1) No ..... (2)

**c) beliefs concerning HIV/AIDS ?**

Yes ..... (1) No ..... (2)

**d) sexual behaviour ?**

Yes ..... (1) No ..... (2)

**If your answer to any of the above is yes then please elaborate**

.....

.....

.....

## END OF QUESTIONNAIRE

## THANK YOU FOR YOUR EFFORT

**APPENDIX II**

# FOCUS GROUP DISCUSSIONS:

# QUESTION LINE

## 1. KNOWLEDGE

a) WHAT DO YOU KNOW ABOUT HIV OR AIDS?

b) DIFFERENCE BETWEEN HIV AND AIDS

c) CAUSES

d) PREVENTION

f) WHO IS AT RISK OF GETTING HIV? Why or why not?

g) SYMPTOMS OF HIV AND SYMPTOMS OF AIDS?

h) SOURCES OF HIV/AIDS INFORMATION

- Type of information

_ Was information adequate or not?

- What kind of information would you desire?

## 2. ATTITUDE

a) DO YOU KNOW ANYONE WITH HIV/AIDS?

b) WHAT ARE YOUR FEELINGS ABOUT PEOPLE WITH HIV/AIDS?

c) WHY DO YOU FEEL LIKE THAT?

## 3. PREVENTION

a) HOW CAN YOU PREVENT YOURSELVES FROM GETTING HIV?

b) ANY CHANGES IN BEHAVIOUR?

c) WHAT CAN - THE COMMUNITY DO?

- THE GOVERNMENT DO?

- OTHER ORGANISATIONS DO?

- SCHOOLS DO?

## 4. ANTI-AIDS CLUBS

**TELL ME ABOUT ANTI-AIDS CLUBS**

a) WHAT TYPE OF INFORMATION HAVE YOU RECEIVED FROM THE CLUBS?

b) HOW HAS THIS INFORMATION HELPED OR NOT HELPED?

c) WHAT ARE THE BENEFITS OF THE CLUBS?

d) WHAT ARE THE LIMITATIONS OF THE CLUBS?

e) WHAT ARE THE SOLUTIONS TO THESE PROBLEMS?

**MEMBERSHIP**

a) MEMBER OR NOT? WHY?

b) IF NON MEMBER, DO YOU PLAN TO JOIN? WHY?

c) IF MEMBER, WHEN DID YOU JOIN THE CLUB?

d) WHAT ACTIVITIES DOES THE CLUB DO?

e) WHAT IS YOUR PERSONAL INVOLVEMENT IN CLUB ACTIVITIES?

f) WHAT ARE YOUR SUGGESTIONS FOR THE FUTURE?

## APPENDIX III

## INTERVIEW GUIDE FOR PATRONS OF ANTI-AIDS CLUBS

1. WHEN WAS THE ANTI-AIDS CLUB FIRST STARTED IN YOUR SCHOOL?
2. IS THE CLUB REGISTERED WITH THE FAMILY HEALTH TRUST?
3. HOW MANY REGISTERED MEMBERS DOES THE CLUB HAVE?
4. HOW OFTEN DOES THE CLUB MEET?
5. WHAT ACTIVITIES WAS THE CLUB INVOLVED IN THE PAST ONE YEAR?
6. HOW LONG HAVE YOU BEEN PATRON OF THIS CLUB?
7. WHO ARE THE PREVIOUS PATRONS AND WHERE ARE THEY?
8. HAVE YOU UNDERGONE ANY ANTI-AIDS PREVENTION TRAINING?

   If yes, when and where?
9. DO YOU FEEL ADEQUATELY EQUIPPED TO RUN THIS CLUB?
10. WHAT DRAWBACKS DO YOU FACE IN RUNNING THE CLUB?
11. DO YOU THINK THE ANTI-AIDS CLUB IS HAVING AN IMPACT IN CHANGING : HIV/AIDS KNOWLEDGE?

    ATTITUDE OF PUPILS TOWARDS HIV/AIDS?

    BELIEFS CONCERNING HIV/AIDS?

    SEXUAL BEHAVIOUR AMONG PUPILS?
12. WHAT PLANS TO YOU HAVE FOR THIS COMING YEAR, TO STRENGTHEN THE RUNNING OF YOUR CLUB?
13. WHAT DO YOU NEED TO ACHIEVE YOUR GOALS?